CHAPTER

05

TIME LIMITS/ MAINTENANCE CHECKS

CHAPTER 05
TIME LIMITS/MAINTENANCE CHECKS

Subject/Page	Date	COC
05-EFFECTIVE PAGES		
1 thru 17	Feb 15/2025	
18	BLANK	
05-CONTENTS		
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O 2	Feb 15/2025	
O 3	Feb 15/2025	
4	Jun 15/2018	
5	Oct 15/2024	
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7	Oct 15/2024	
O 8	Feb 15/2025	
O 9	Feb 15/2025	
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O 30	Feb 15/2025	
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05-CONTENTS (cont)		
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213	Feb 15/2015	

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Subject/Page	Date	COC
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212	Feb 15/2022	

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263	Oct 15/2024	

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228	Jun 15/2016	

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213	Jun 15/2021	
214	Jun 15/2021	
215	Jun 15/2018	
216	Feb 15/2018	
217	Feb 15/2018	
218	BLANK	
05-42-03		
201	Feb 15/2015	
202	Oct 15/2015	
203	Oct 15/2021	
204	Oct 15/2021	

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Subject/Page	Date	COC
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214	Oct 15/2023	
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216	Oct 15/2015	
217	Jun 15/2016	
218	Oct 15/2015	
219	Oct 15/2023	
220	Oct 15/2023	
221	Oct 15/2015	
222	Oct 15/2015	
05-42-05		
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202	Oct 15/2015	
203	Oct 15/2015	
204	Oct 15/2015	
R 205	Feb 15/2025	
R 206	Feb 15/2025	
R 207	Feb 15/2025	
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209	Oct 15/2015	
05-42-05 (cont)		
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202	Jun 15/2023	
203	Jun 15/2023	
204	Jun 15/2023	
205	Jun 15/2023	
R 206	Feb 15/2025	
R 207	Feb 15/2025	
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05-51-01		
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213	Jun 15/2023	
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217	Oct 15/2024	
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O 219	Feb 15/2025	
O 220	Feb 15/2025	
R 221	Feb 15/2025	
O 222	Feb 15/2025	
R 223	Feb 15/2025	
O 224	Feb 15/2025	
R 225	Feb 15/2025	
O 226	Feb 15/2025	
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R 228	Feb 15/2025	
O 229	Feb 15/2025	
O 230	Feb 15/2025	
O 231	Feb 15/2025	
232	BLANK	
05-51-04		
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207	Oct 15/2024	
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05-51-07		
R 201	Feb 15/2025	
R 202	Feb 15/2025	
R 203	Feb 15/2025	
R 204	Feb 15/2025	
O 205	Feb 15/2025	
R 206	Feb 15/2025	
R 207	Feb 15/2025	

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Subject/Page	Date	COC
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R 210	Feb 15/2025	
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212	Oct 15/2022	
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R 203	Feb 15/2025	
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R 206	Feb 15/2025	
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R 208	Feb 15/2025	
O 209	Feb 15/2025	
R 210	Feb 15/2025	
O 211	Feb 15/2025	
O 212	Feb 15/2025	
R 213	Feb 15/2025	
R 214	Feb 15/2025	
R 215	Feb 15/2025	
R 216	Feb 15/2025	
A 217	Feb 15/2025	
A 218	Feb 15/2025	
A 219	Feb 15/2025	
A 220	Feb 15/2025	
05-51-09		
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202	Oct 15/2021	
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05-51-13		
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R 202	Feb 15/2025	
203	Oct 15/2018	
R 204	Feb 15/2025	
05-51-14		
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202	Oct 15/2014	
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207	Oct 15/2016	
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202	Oct 15/2024	
203	Feb 15/2016	
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205	Oct 15/2017	
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05-51-18		
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202	Jun 15/2024	
R 203	Feb 15/2025	
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R 206	Feb 15/2025	
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221	Oct 15/2022	
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05-51-21		
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R 202	Feb 15/2025	
R 203	Feb 15/2025	
R 204	Feb 15/2025	
R 205	Feb 15/2025	
R 206	Feb 15/2025	

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Subject/Page	Date	COC
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R 209	Feb 15/2025	
R 210	Feb 15/2025	
R 211	Feb 15/2025	
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05-51-27		
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R 207	Feb 15/2025	
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202	Feb 15/2019	
203	Feb 15/2017	
204	Jun 15/2015	
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202	Oct 15/2023	
203	Oct 15/2023	
05-51-31 (cont)		
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205	Oct 15/2023	
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05-51-32		
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202	Feb 15/2021	
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204	Jun 15/2024	
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05-51-44		
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05-51-47		
201	Oct 15/2014	
202	Oct 15/2014	
05-51-48		
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05-51-51		
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R 202	Feb 15/2025	
R 203	Feb 15/2025	
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R 205	Feb 15/2025	
R 206	Feb 15/2025	
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202	Oct 15/2017	
203	Oct 15/2017	
204	Oct 15/2017	

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Subject/Page	Date	COC
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R 204	Feb 15/2025	
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05-51-68		
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O 211	Feb 15/2025	
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05-51-81		
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R 205	Feb 15/2025	
R 206	Feb 15/2025	
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05-51-92		
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05-51-95		
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R 217	Feb 15/2025	
R 218	Feb 15/2025	
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601	Feb 15/2024	
602	Feb 15/2024	
603	Oct 15/2015	
604	Oct 15/2017	
605	Oct 15/2017	
606	Oct 15/2015	
607	Oct 15/2015	
608	Oct 15/2017	
609	Oct 15/2017	

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Subject/Page	Date	COC
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629	Jun 15/2024	
630	Oct 15/2024	
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621	Feb 15/2020	
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623	Feb 15/2020	
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625	Feb 15/2020	
R 626	Feb 15/2025	
R 627	Feb 15/2025	
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R 629	Feb 15/2025	
630	Feb 15/2021	
R 631	Feb 15/2025	

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Subject/Page	Date	COC
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05-55-24		
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05-55-26		
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603	Oct 15/2015	

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Subject/Page	Date	COC
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05-55-40		
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612	Oct 15/2019	
613	Oct 15/2019	
614	Oct 15/2019	

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05-EFFECTIVE PAGES

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Subject/Page	Date	COC
05-55-42 (cont)		
615	Jun 15/2023	
616	Feb 15/2024	
617	Jun 15/2023	
618	Jun 15/2023	
619	Jun 15/2023	
620	Jun 15/2023	
05-55-43		
601	Oct 15/2014	
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628	Jun 15/2024	
629	Oct 15/2023	
05-55-43 (cont)		
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638	Feb 15/2024	
639	Oct 15/2023	
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642	Oct 15/2023	
05-55-44		
601	Nov 15/2022	
602	Feb 15/2024	
603	Feb 15/2024	
604	Feb 15/2024	
605	Oct 15/2019	
606	Oct 15/2019	
607	Nov 15/2022	
608	Feb 15/2024	
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611	Oct 15/2019	
612	Nov 15/2022	
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616	Oct 15/2019	
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622	Feb 15/2024	
05-55-44 (cont)		
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637	Jun 15/2020	
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05-55-45		
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612	Nov 15/2022	
613	Feb 15/2024	
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615	Feb 15/2024	
616	Feb 15/2020	
617	Feb 15/2020	
618	Nov 15/2022	
619	Feb 15/2024	

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Subject/Page	Date	COC
05-55-45 (cont)		
620	Feb 15/2024	
621	Feb 15/2024	
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636	Oct 15/2023	
05-55-46		
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05-55-46 (cont)		
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R 621	Feb 15/2025	
R 622	Feb 15/2025	
623	Oct 15/2024	
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05-55-47		
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607	Oct 15/2019	
608	Oct 15/2019	
05-55-54		
601	Oct 15/2020	
R 602	Feb 15/2025	
603	Oct 15/2020	
604	Oct 15/2020	
R 605	Feb 15/2025	
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608	Oct 15/2020	
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621	Oct 15/2020	
05-55-54 (cont)		
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05-56-01		
201	Jun 15/2023	
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204	Oct 15/2015	
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05-56-02		
201	Jun 15/2020	
202	Jun 15/2020	
203	Jun 15/2020	
204	Oct 15/2015	
205	Oct 15/2015	
206	Oct 15/2015	
207	Nov 15/2022	
208	Oct 15/2022	
209	Oct 15/2022	
210	Jun 15/2020	
211	Jun 15/2020	
212	BLANK	
05-56-03		
R 201	Feb 15/2025	
R 202	Feb 15/2025	
R 203	Feb 15/2025	
O 204	Feb 15/2025	
205	Oct 15/2015	
206	Oct 15/2015	
207	Oct 15/2015	
208	Oct 15/2015	
05-56-04		
201	Oct 15/2019	
202	Oct 15/2014	
203	Feb 15/2016	
204	Oct 15/2015	
205	Oct 15/2015	
206	BLANK	

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Subject/Page	Date	COC	Subject/Page	Date	COC	Subject/Page	Date	COC
05-56-05								
201	Nov 15/2022							
202	Oct 15/2022							
203	Oct 15/2022							
204	Oct 15/2022							
205	Oct 15/2022							
206	Oct 15/2022							
207	Jun 15/2020							
208	Jun 15/2020							
209	Jun 15/2020							
210	Jun 15/2020							
211	Jun 15/2020							
212	Jun 15/2020							

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CHAPTER 05
TIME LIMITS/MAINTENANCE CHECKS

SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
TIME LIMITS/MAINTENANCE CHECKS - MAINTENANCE PRACTICES	05-00-00		201	LOM ALL
Airworthiness Limitation Precautions TASK 05-00-00-910-802			201	LOM ALL
Enhanced Zonal Inspection Program (EZAP) Precautions TASK 05-00-00-910-804			202	LOM ALL
ZONE 100 - LOWER FUSELAGE - MAINTENANCE PRACTICES	05-41-01		201	LOM ALL
EXTERNAL - ZONAL (GV): Lower Fuselage TASK 05-41-01-210-801			201	LOM ALL
INTERNAL - ZONAL (GV): RADOME TASK 05-41-01-210-802			206	LOM ALL
INTERNAL - ZONAL (GV): Area Forward of Nose Wheel Well TASK 05-41-01-210-803			209	LOM ALL
INTERNAL - ZONAL (GV): Area Above and Outboard of Nose Wheel Well TASK 05-41-01-210-804			212	LOM ALL
INTERNAL - ZONAL (GV): Electrical and Electronics Compartment TASK 05-41-01-210-805			217	LOM ALL
INTERNAL - ZONAL (GV): ELECTRICAL AND ELECTRONICS COMPARTMENT ACCESS DOOR TASK 05-41-01-210-806			221	LOM ALL
INTERNAL - ZONAL (GV): FORWARD CARGO COMPARTMENT TASK 05-41-01-210-807			223	LOM ALL
INTERNAL - ZONAL (GV): FORWARD CARGO COMPARTMENT TASK 05-41-01-210-808			226	LOM ALL
INTERNAL - ZONAL (GV): FORWARD CARGO COMPARTMENT TASK 05-41-01-210-809			229	LOM ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
EXTERNAL - ZONAL (GV): FORWARD CARGO DOOR SURROUND STRUCTURE FITTINGS AND STOPS TASK 05-41-01-210-810			232	LOM ALL
INTERNAL - ZONAL (GV): Area Below Forward Cargo Compartment TASK 05-41-01-210-811			234	LOM ALL
INTERNAL - ZONAL (GV): Air Conditioning Distribution Bay TASK 05-41-01-210-812			237	LOM ALL
INTERNAL - ZONAL (GV): AREA ABOVE CENTER SECTION WING BOX TASK 05-41-01-210-813			240	LOM ALL
INTERNAL - ZONAL (GV): Pressure Deck Above Main Landing Gear Wheel Well TASK 05-41-01-210-814			240	LOM ALL
INTERNAL - ZONAL (GV): Keel Beam (Part) Sta 540 to 727 TASK 05-41-01-210-815			243	LOM ALL
INTERNAL - ZONAL (GV): CENTER SECTION WING BOX TASK 05-41-01-210-816			248	LOM ALL
INTERNAL - ZONAL (GV): AFT CARGO COMPARTMENT TASK 05-41-01-210-817			251	LOM ALL
INTERNAL - ZONAL (GV): AFT CARGO COMPARTMENT TASK 05-41-01-210-818			254	LOM ALL
INTERNAL - ZONAL (GV): AFT CARGO COMPARTMENT TASK 05-41-01-210-819			257	LOM ALL
EXTERNAL - ZONAL (GV): AFT CARGO DOOR SURROUND STRUCTURE FITTINGS AND STOPS TASK 05-41-01-210-820			260	LOM ALL
INTERNAL - ZONAL (GV): AFT CARGO COMPARTMENT VACUUM WASTE COMPARTMENT TASK 05-41-01-210-821			262	LOM ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
INTERNAL - ZONAL (GV): Area Below Aft Cargo Compartment TASK 05-41-01-210-822			264	LOM ALL
INTERNAL - ZONAL (GV): Aft Cargo Compartment Equipment Bay TASK 05-41-01-210-823			267	LOM ALL
EXTERNAL - ZONAL (GV): WING TO BODY FAIRING TASK 05-41-01-210-824			270	LOM ALL
INTERNAL - ZONAL (GV): Lower Wing to Body Fairing - Forward of Wing Box TASK 05-41-01-210-825			273	LOM ALL
INTERNAL - ZONAL (GV): Lower Wing to Body Fairing - Under Wing Box TASK 05-41-01-210-826			279	LOM ALL
INTERNAL - ZONAL (GV): Lower Wing to Body Fairing - Aft of Wheel Well TASK 05-41-01-210-827			283	LOM ALL
INTERNAL - ZONAL (GV): LOWER WING TO BODY FAIRING - AFT OF WHEEL WELL TASK 05-41-01-210-828			287	LOM ALL
INTERNAL - ZONAL (GV): ABOVE WING, WING TO BODY FAIRING - RIGHT TASK 05-41-01-210-829			289	LOM ALL
INTERNAL - ZONAL (GV): ABOVE WING, WING TO BODY FAIRING - LEFT TASK 05-41-01-210-830			291	LOM ALL
INTERNAL - DETAILED: CENTER WING REAR SPAR VAPOR WEB TASK 05-41-01-211-802			293	LOM 412, 415, 416, 420, 422-433
ZONE 200 - UPPER FUSELAGE - MAINTENANCE PRACTICES	05-41-02		201	LOM ALL
EXTERNAL - ZONAL (GV): FLIGHT CONTROL COMPARTMENT TASK 05-41-02-210-801			201	LOM ALL
INTERNAL - ZONAL (GV): FLIGHT CONTROL COMPARTMENT TASK 05-41-02-210-802			203	LOM ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
INTERNAL - ZONAL (GV): Flight Control Compartment TASK 05-41-02-210-803			207	LOM ALL
EXTERNAL - ZONAL (GV): PASSENGER COMPARTMENT - AFT OF CONTROL COMPARTMENT TO FWD ENTRY DOOR TASK 05-41-02-210-804			215	LOM ALL
INTERNAL - ZONAL (GV): PASSENGER COMPARTMENT - SECTION 41, STA 270 TO STA 360 TASK 05-41-02-210-805			217	LOM ALL
INTERNAL - ZONAL (GV): Passenger Compartment - Aft of Control Compartment to Fwd Entry Door TASK 05-41-02-210-806			220	LOM ALL
EXTERNAL - ZONAL (GV): FORWARD PASSENGER ENTRY DOOR STOPS, LATCHES, AND HINGES TASK 05-41-02-210-807			222	LOM ALL
EXTERNAL - ZONAL (GV): FORWARD GALLEY SERVICE DOOR STOPS, LATCHES, AND HINGES TASK 05-41-02-210-808			224	LOM ALL
EXTERNAL - ZONAL (GV): FORWARD PASSENGER COMPARTMENT - STA 360 TO STA 663.75 TASK 05-41-02-210-810			226	LOM ALL
INTERNAL - ZONAL (GV): FORWARD PASSENGER COMPARTMENT - STA 360 TO STA 663.75 TASK 05-41-02-210-811			228	LOM ALL
INTERNAL - ZONAL (GV): Forward Passenger Compartment - Sta 360 to Sta 663.75 Wet Areas TASK 05-41-02-210-812			230	LOM ALL
INTERNAL - ZONAL (GV): Forward Passenger Compartment - Sta 360 to Sta 663.75 Dry Areas TASK 05-41-02-210-813			232	LOM ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
EXTERNAL - ZONAL (GV): AFT PASSENGER COMPARTMENT - STA 663.75 TO AFT PRESSURE BULKHEAD TASK 05-41-02-210-814			234	LOM ALL; AIRPLANES WITH A CURVED AFT PRESSURE BULKHEAD
INTERNAL - ZONAL (GV): AFT PASSENGER COMPARTMENT - STA 663.75 TO AFT PRESSURE BULKHEAD TASK 05-41-02-210-815			236	LOM ALL; AIRPLANES WITH A CURVED AFT PRESSURE BULKHEAD
INTERNAL - ZONAL (GV): Aft Passenger Compartment - Sta 663.75 to Aft Pressure Bulkhead Wet Area TASK 05-41-02-210-816			238	LOM ALL; AIRPLANES WITH A CURVED AFT PRESSURE BULKHEAD
INTERNAL - ZONAL (GV): Passenger Compartment - Sta 663.75 to Aft Pressure Bulkhead Dry Area TASK 05-41-02-210-817			240	LOM ALL; AIRPLANES WITH A CURVED AFT PRESSURE BULKHEAD
EXTERNAL - ZONAL (GV): AFT PASSENGER ENTRY DOOR STOPS, LATCHES, AND HINGES TASK 05-41-02-210-818			242	LOM ALL
EXTERNAL - ZONAL (GV): AFT GALLEY SERVICE DOOR STOPS, LATCHES, AND HINGES TASK 05-41-02-210-819			244	LOM ALL
EXTERNAL - ZONAL (GV): FLIGHT CONTROL COMPARTMENT WITH SMALL UNMANNED AERIAL SYSTEM (sUAS) TASK 05-41-02-210-836			246	LOM ALL
EXTERNAL - ZONAL (GV): PASSENGER COMPARTMENT - AFT OF CONTROL COMPARTMENT TO FWD ENTRY DOOR WITH SMALL UNMANNED AERIAL SYSTEM (sUAS) TASK 05-41-02-210-829			248	LOM ALL
EXTERNAL - ZONAL (GV): FORWARD PASSENGER COMPARTMENT- STA 360 TO STA 663.75 WITH SMALL UNMANNED AERIAL SYSTEM (sUAS) TASK 05-41-02-210-830			250	LOM ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
EXTERNAL - ZONAL (GV): AFT PASSENGER COMPARTMENT- STA 663.75 TO AFT PRESSURE BULKHEAD WITH SMALL UNMANNED AERIAL SYSTEM (sUAS) TASK 05-41-02-210-831			252	LOM ALL
ZONE 300 - EMPENNAGE - MAINTENANCE PRACTICES	05-41-03		201	LOM ALL
EXTERNAL - ZONAL (GV): AREA AFT OF THE PRESSURE BULKHEAD TASK 05-41-03-210-801			201	LOM ALL; AIRPLANES WITH A CURVED AFT PRESSURE BULKHEAD
INTERNAL - ZONAL (GV): Area Aft of Pressure Bulkhead TASK 05-41-03-210-802			203	LOM ALL; AIRPLANES WITH A CURVED AFT PRESSURE BULKHEAD
INTERNAL - ZONAL (GV): Stabilizer Torsion Box Compartment TASK 05-41-03-210-803			207	LOM ALL
INTERNAL - ZONAL (GV): APU Compartment TASK 05-41-03-210-804			209	LOM ALL
INTERNAL - ZONAL (GV): Tail Cone TASK 05-41-03-210-805			211	LOM ALL
EXTERNAL - ZONAL (GV): VERTICAL FIN AND HORIZONTAL STABILIZER TASK 05-41-03-210-806			213	LOM ALL
EXTERNAL - ZONAL (GV): VERTICAL FIN - DORSAL FIN TASK 05-41-03-210-807			215	LOM ALL
INTERNAL - ZONAL (GV): VERTICAL FIN - LEADING EDGE (ONLY IF HF SYSTEM INSTALLED) TASK 05-41-03-210-808			217	LOM ALL
EXTERNAL - ZONAL (GV): VERTICAL FIN - LEADING EDGE TASK 05-41-03-210-809			220	LOM ALL
INTERNAL - ZONAL (GV): VERTICAL FIN - LEADING EDGE TASK 05-41-03-210-810			222	LOM ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
INTERNAL - ZONAL (GV): Vertical Fin - Front Spar to Rear Spar TASK 05-41-03-210-811			225	LOM ALL
EXTERNAL - ZONAL (GV): VERTICAL FIN - FRONT SPAR TO REAR SPAR TASK 05-41-03-210-812			229	LOM ALL
INTERNAL - ZONAL (GV): Vertical Fin - Rear Spar to Trailing Edge TASK 05-41-03-210-813			231	LOM ALL
EXTERNAL - ZONAL (GV): VERTICAL FIN - REAR SPAR TO TRAILING EDGE TASK 05-41-03-210-814			235	LOM ALL
EXTERNAL - ZONAL (GV): RUDDER TASK 05-41-03-210-815			237	LOM ALL
EXTERNAL - ZONAL (GV): VERTICAL FIN TIP TASK 05-41-03-210-816			239	LOM ALL
EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - LEADING EDGE - LEFT TASK 05-41-03-210-817			241	LOM ALL
EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - FRONT SPAR TO REAR SPAR - LEFT TASK 05-41-03-210-818			243	LOM ALL
INTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - FRONT SPAR TO REAR SPAR - LEFT TASK 05-41-03-210-819			245	LOM ALL
INTERNAL - ZONAL (GV): Horizontal Stabilizer - Rear Spar to Trailing Edge - Left TASK 05-41-03-210-820			247	LOM ALL
EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - REAR SPAR TO TRAILING EDGE - LEFT TASK 05-41-03-210-821			252	LOM ALL
EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - ELEVATOR - LEFT TASK 05-41-03-210-822			254	LOM ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - STABILIZER TIP - LEFT TASK 05-41-03-210-823			256	LOM ALL
EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - LEADING EDGE - RIGHT TASK 05-41-03-210-824			258	LOM ALL
EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - FRONT SPAR TO REAR SPAR - RIGHT TASK 05-41-03-210-825			260	LOM ALL
INTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - FRONT SPAR TO REAR SPAR - RIGHT TASK 05-41-03-210-826			262	LOM ALL
INTERNAL - ZONAL (GV): Horizontal Stabilizer - Rear Spar to Trailing Edge - Right TASK 05-41-03-210-827			264	LOM ALL
EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - REAR SPAR TO TRAILING EDGE - RIGHT TASK 05-41-03-210-828			269	LOM ALL
EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - ELEVATOR - RIGHT TASK 05-41-03-210-829			271	LOM ALL
EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - STABILIZER TIP - RIGHT TASK 05-41-03-210-830			273	LOM ALL
EXTERNAL - ZONAL (GV): VERTICAL FIN - DORSAL FIN WITH SMALL UNMANNED AERIAL SYSTEM (sUAS) TASK 05-41-03-210-835			275	LOM ALL
EXTERNAL - ZONAL (GV): VERTICAL FIN - LEADING EDGE WITH SMALL UNMANNED AERIAL SYSTEM (sUAS) TASK 05-41-03-210-836			277	LOM ALL
EXTERNAL - ZONAL (GV): VERTICAL FIN - FRONT SPAR TO REAR SPAR WITH SMALL UNMANNED AERIAL SYSTEM (sUAS) TASK 05-41-03-210-837			279	LOM ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
EXTERNAL - ZONAL (GV): VERTICAL FIN - REAR SPAR TO TRAILING EDGE WITH SMALL UNMANNED AERIAL SYSTEM (sUAS) TASK 05-41-03-210-838			281	LOM ALL
EXTERNAL - ZONAL (GV): RUDDER WITH SMALL UNMANNED AERIAL SYSTEM (sUAS) TASK 05-41-03-210-839			283	LOM ALL
EXTERNAL - ZONAL (GV): VERTICAL FIN TIP WITH SMALL UNMANNED AERIAL SYSTEM (sUAS) TASK 05-41-03-210-840			285	LOM ALL
EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - LEADING EDGE - LEFT WITH SMALL UNMANNED AERIAL SYSTEM (sUAS) TASK 05-41-03-210-841			287	LOM ALL
EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - LEADING EDGE - RIGHT WITH SMALL UNMANNED AERIAL SYSTEM (sUAS) TASK 05-41-03-210-842			289	LOM ALL
EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - FRONT SPAR TO REAR SPAR - LEFT WITH SMALL UNMANNED AERIAL SYSTEM (sUAS) TASK 05-41-03-210-843			291	LOM ALL
EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - FRONT SPAR TO REAR SPAR - RIGHT WITH SMALL UNMANNED AERIAL SYSTEM (sUAS) TASK 05-41-03-210-844			293	LOM ALL
EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - REAR SPAR TO TRAILING EDGE - LEFT WITH SMALL UNMANNED AERIAL SYSTEM (sUAS) TASK 05-41-03-210-845			295	LOM ALL
EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - REAR SPAR TO TRAILING EDGE - RIGHT WITH SMALL UNMANNED AERIAL SYSTEM (sUAS) TASK 05-41-03-210-846			297	LOM ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - ELEVATOR - LEFT WITH SMALL UNMANNED AERIAL SYSTEM (sUAS) TASK 05-41-03-210-847			298.1	LOM ALL
EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - ELEVATOR - RIGHT WITH SMALL UNMANNED AERIAL SYSTEM (sUAS) TASK 05-41-03-210-848			298.3	LOM ALL
EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - STABILIZER TIP - LEFT WITH SMALL UNMANNED AERIAL SYSTEM (sUAS) TASK 05-41-03-210-849			298.5	LOM ALL
EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - STABILIZER TIP - RIGHT WITH SMALL UNMANNED AERIAL SYSTEM (sUAS) TASK 05-41-03-210-850			298.7	LOM ALL
ZONE 400 - POWER PLANT AND STRUT - MAINTENANCE PRACTICES	05-41-04		201	LOM ALL
EXTERNAL - ZONAL (GV): POWERPLANT NO. 1 TASK 05-41-04-210-801			201	LOM ALL
EXTERNAL - ZONAL (GV): Engine No. 1 TASK 05-41-04-210-802			203	LOM ALL
EXTERNAL - ZONAL (GV): FAN COWL - ENGINE NO. 1 TASK 05-41-04-210-803			206	LOM ALL
EXTERNAL - ZONAL (GV): THRUST REVERSER - ENGINE NO. 1 TASK 05-41-04-210-804			208	LOM ALL
EXTERNAL - ZONAL (GV): Thrust Reverser - Engine No. 1 TASK 05-41-04-210-805			211	LOM ALL
EXTERNAL - ZONAL (GV): POWERPLANT NO. 2 TASK 05-41-04-210-806			214	LOM ALL
EXTERNAL - ZONAL (GV): Engine No. 2 TASK 05-41-04-210-807			216	LOM ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
EXTERNAL - ZONAL (GV): FAN COWL - ENGINE NO. 2 TASK 05-41-04-210-808			219	LOM ALL
EXTERNAL - ZONAL (GV): THRUST REVERSER - ENGINE NO. 2 TASK 05-41-04-210-809			221	LOM ALL
EXTERNAL - ZONAL (GV): Thrust Reverser - Engine No. 2 TASK 05-41-04-210-810			224	LOM ALL
INTERNAL - ZONAL (GV): Forward Strut Fairing - Engine No. 1 TASK 05-41-04-210-811			227	LOM ALL
INTERNAL - ZONAL (GV): Fan Cowl Support Beam - Engine No. 1 TASK 05-41-04-210-812			231	LOM ALL
INTERNAL - ZONAL (GV): Strut Torque Box - Engine No. 1 TASK 05-41-04-210-813			233	LOM ALL
INTERNAL - ZONAL (GV): Aft Strut Fairing - Engine No. 1 TASK 05-41-04-210-814			237	LOM ALL
INTERNAL - ZONAL (GV): Forward Strut Fairing - Engine No. 2 TASK 05-41-04-210-815			242	LOM ALL
INTERNAL - ZONAL (GV): Fan Cowl Support Beam - Engine No. 2 TASK 05-41-04-210-816			246	LOM ALL
INTERNAL - ZONAL (GV): Strut Torque Box - Engine No. 2 TASK 05-41-04-210-817			248	LOM ALL
INTERNAL - ZONAL (GV): Aft Strut Fairing - Engine No. 2 TASK 05-41-04-210-818			252	LOM ALL
ZONE 500 - LEFT WING - MAINTENANCE PRACTICES	05-41-05		201	LOM ALL
EXTERNAL - ZONAL (GV): LEFT WING TASK 05-41-05-210-801			201	LOM ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
EXTERNAL - ZONAL (GV): WINGLET - LEFT WING TASK 05-41-05-210-802			204	LOM ALL
INTERNAL - ZONAL (GV): WINGLET - LEFT WING TASK 05-41-05-210-803			206	LOM ALL
EXTERNAL - ZONAL (GV): LEADING EDGE TO FRONT SPAR - INBD OF NACELLE STRUT - LEFT WING TASK 05-41-05-210-804			208	LOM ALL
INTERNAL - ZONAL (GV): Leading Edge to Front Spar - Inboard of Nacelle Strut - Left Wing TASK 05-41-05-210-805			210	LOM ALL
EXTERNAL - ZONAL (GV): KRUEGER FLAPS NO. 1 AND 2 - LEFT WING TASK 05-41-05-210-806			215	LOM ALL
INTERNAL - ZONAL (GV): KRUEGER FLAPS NO. 1 AND 2 - LEFT WING TASK 05-41-05-210-807			217	LOM ALL
EXTERNAL - ZONAL (GV): LEADING EDGE TO FRONT SPAR - OUTBD OF NACELLE STRUT - LEFT WING TASK 05-41-05-210-808			219	LOM ALL
INTERNAL - ZONAL (GV): Leading Edge to Front Spar - Outboard of Nacelle Strut - Left Wing TASK 05-41-05-210-809			221	LOM ALL
EXTERNAL - ZONAL (GV): SLATS NO. 1, 2, 3, 4 - LEFT WING TASK 05-41-05-210-810			226	LOM ALL
INTERNAL - ZONAL (GV): CENTER FUEL TANK - LEFT WING TASK 05-41-05-210-813			228	LOM ALL
EXTERNAL - ZONAL (GV): CENTER FUEL TANK - LEFT WING TASK 05-41-05-210-814			230	LOM ALL
INTERNAL - ZONAL (GV): MAIN FUEL TANK - LEFT WING TASK 05-41-05-210-815			232	LOM ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
EXTERNAL - ZONAL (GV): MAIN FUEL TANK - LEFT WING TASK 05-41-05-210-816			235	LOM ALL
INTERNAL - ZONAL (GV): SURGE TANK - LEFT WING TASK 05-41-05-210-817			237	LOM ALL
EXTERNAL - ZONAL (GV): SURGE TANK - LEFT WING TASK 05-41-05-210-818			239	LOM ALL
EXTERNAL - ZONAL (GV): DRY BAY - LEFT WING TASK 05-41-05-210-819			241	LOM ALL
INTERNAL - ZONAL (GV): Flap Support No. 4 - Left Wing TASK 05-41-05-210-820			243	LOM ALL
EXTERNAL - ZONAL (GV): FAIRING FLAP SUPPORT NO. 3 - LEFT WING TASK 05-41-05-210-821			246	LOM ALL
INTERNAL - ZONAL (GV): Fairing Flap Support No. 3 - Left Wing TASK 05-41-05-210-822			248	LOM ALL
EXTERNAL - ZONAL (GV): FAIRING FLAP SUPPORT NO. 2 - LEFT WING TASK 05-41-05-210-823			250	LOM ALL
INTERNAL - ZONAL (GV): Fairing Flap Support No. 2 - Left Wing TASK 05-41-05-210-824			252	LOM ALL
EXTERNAL - ZONAL (GV): FAIRING FLAP SUPPORT NO. 1 - LEFT WING TASK 05-41-05-210-825			254	LOM ALL
INTERNAL - ZONAL (GV): Fairing Flap Support No. 1 - Left Wing TASK 05-41-05-210-826			256	LOM ALL
EXTERNAL - ZONAL (GV): REAR SPAR TO LANDING GEAR SUPPORT BEAM - LEFT WING TASK 05-41-05-210-827			258	LOM ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
INTERNAL - ZONAL (GV): REAR SPAR TO LANDING GEAR SUPPORT BEAM - LEFT WING TASK 05-41-05-210-828			260	LOM ALL
EXTERNAL - ZONAL (GV): INBOARD SPOILER NO. 6 - L. WING TASK 05-41-05-210-829			262	LOM ALL
EXTERNAL - ZONAL (GV): INBOARD FLAPS - LEFT WING TASK 05-41-05-210-830			265	LOM ALL
INTERNAL - ZONAL (GV): INBOARD MAIN FLAP - LEFT WING TASK 05-41-05-210-831			267	LOM ALL
EXTERNAL - ZONAL (GV): Rear Spar to T.E. - Outbd of Inbd Flap - Inbd of Fixed T.E. - L. Wing TASK 05-41-05-210-832			269	LOM ALL
EXTERNAL - ZONAL (GV): SPOILERS NO. 1, 2, 3, 4, 5 - LEFT WING TASK 05-41-05-210-833			271	LOM ALL
EXTERNAL - ZONAL (GV): OUTBOARD FLAPS - LEFT WING TASK 05-41-05-210-834			274	LOM ALL
EXTERNAL - ZONAL (GV): FIXED TRAILING EDGE - LEFT WING TASK 05-41-05-210-835			276	LOM ALL
INTERNAL - ZONAL (GV): FIXED TRAILING EDGE - LEFT WING TASK 05-41-05-210-836			278	LOM ALL
INTERNAL - ZONAL (GV): Fixed Trailing Edge - Left Wing TASK 05-41-05-210-837			281	LOM ALL
EXTERNAL - ZONAL (GV): AILERON - LEFT WING TASK 05-41-05-210-838			283	LOM ALL
EXTERNAL - ZONAL (GV): LEADING EDGE TO FRONT SPAR - INBD OF NACELLE STRUT - LEFT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS) TASK 05-41-05-210-839			285	LOM ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
EXTERNAL - ZONAL (GV): LEADING EDGE TO FRONT SPAR - OUTBD OF NACELLE STRUT - LEFT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS) TASK 05-41-05-210-840			287	LOM ALL
EXTERNAL - ZONAL (GV): SLATS NO. 1, 2, 3, 4 - LEFT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS) TASK 05-41-05-210-841			289	LOM ALL
EXTERNAL - ZONAL (GV): CENTER FUEL TANK - LEFT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS) TASK 05-41-05-210-843			291	LOM ALL
EXTERNAL - ZONAL (GV): MAIN FUEL TANK - LEFT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS) TASK 05-41-05-210-844			293	LOM ALL
EXTERNAL - ZONAL (GV): SURGE TANK - LEFT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS) TASK 05-41-05-210-845			295	LOM ALL
EXTERNAL - ZONAL (GV): DRY BAY - LEFT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS) TASK 05-41-05-210-846			297	LOM ALL
EXTERNAL - ZONAL (GV): REAR SPAR TO LANDING GEAR SUPPORT BEAM - LEFT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS) TASK 05-41-05-210-847			298.1	LOM ALL
EXTERNAL - ZONAL (GV): INBOARD SPOILER NO. 6 - L. WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS) TASK 05-41-05-210-848			298.3	LOM ALL
EXTERNAL - ZONAL (GV): INBOARD FLAPS - LEFT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS) TASK 05-41-05-210-849			298.6	LOM ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
EXTERNAL - ZONAL (GV): SPOILERS NO. 1, 2, 3, 4, 5 - LEFT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS) TASK 05-41-05-210-850			298.8	LOM ALL
EXTERNAL - ZONAL (GV): OUTBOARD FLAPS - LEFT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS) TASK 05-41-05-210-851			298.12	LOM ALL
EXTERNAL - ZONAL (GV): FIXED TRAILING EDGE - LEFT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS) TASK 05-41-05-210-852			298.14	LOM ALL
EXTERNAL - ZONAL (GV): AILERON - LEFT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS) TASK 05-41-05-210-853			298.16	LOM ALL
EXTERNAL - ZONAL (GV): WINGLET - LEFT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS) TASK 05-41-05-210-854			298.18	LOM ALL
ZONE 600 - RIGHT WING - MAINTENANCE PRACTICES	05-41-06		201	LOM ALL
EXTERNAL - ZONAL (GV): RIGHT WING TASK 05-41-06-210-801			201	LOM ALL
EXTERNAL - ZONAL (GV): WINGLET - RIGHT WING TASK 05-41-06-210-802			204	LOM ALL
INTERNAL - ZONAL (GV): WINGLET - RIGHT WING TASK 05-41-06-210-803			206	LOM ALL
EXTERNAL - ZONAL (GV): LEADING EDGE TO FRONT SPAR - INBD OF NACELLE STRUT - RIGHT WING TASK 05-41-06-210-804			208	LOM ALL
INTERNAL - ZONAL (GV): Leading Edge to Front Spar - Inbd of Nacelle Strut - Right Wing TASK 05-41-06-210-805			210	LOM ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
EXTERNAL - ZONAL (GV): KRUEGER FLAPS NO. 3 AND 4 - RIGHT WING TASK 05-41-06-210-806			215	LOM ALL
INTERNAL - ZONAL (GV): KRUEGER FLAPS NO. 3 AND 4 - RIGHT WING TASK 05-41-06-210-807			217	LOM ALL
EXTERNAL - ZONAL (GV): LEADING EDGE TO FRONT SPAR - OUTBD OF NACELLE STRUT - RIGHT WING TASK 05-41-06-210-808			219	LOM ALL
INTERNAL - ZONAL (GV): Leading Edge to Front Spar - Outbd of Nacelle Strut - Right Wing TASK 05-41-06-210-809			221	LOM ALL
EXTERNAL - ZONAL (GV): SLATS NO. 5, 6, 7, 8 - RIGHT WING TASK 05-41-06-210-810			226	LOM ALL
INTERNAL - ZONAL (GV): CENTER FUEL TANK - RIGHT WING TASK 05-41-06-210-813			228	LOM ALL
EXTERNAL - ZONAL (GV): CENTER FUEL TANK - RIGHT WING TASK 05-41-06-210-814			230	LOM ALL
INTERNAL - ZONAL (GV): MAIN FUEL TANK - RIGHT WING TASK 05-41-06-210-815			232	LOM ALL
EXTERNAL - ZONAL (GV): MAIN FUEL TANK - RIGHT WING TASK 05-41-06-210-816			235	LOM ALL
INTERNAL - ZONAL (GV): SURGE TANK - RIGHT WING TASK 05-41-06-210-817			237	LOM ALL
EXTERNAL - ZONAL (GV): SURGE TANK - RIGHT WING TASK 05-41-06-210-818			239	LOM ALL
EXTERNAL - ZONAL (GV): DRY BAY - RIGHT WING TASK 05-41-06-210-819			241	LOM ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
INTERNAL - ZONAL (GV): Flap Support No. 5 - Right Wing TASK 05-41-06-210-820			243	LOM ALL
EXTERNAL - ZONAL (GV): FAIRING FLAP SUPPORT NO. 6 - RIGHT WING TASK 05-41-06-210-821			246	LOM ALL
INTERNAL - ZONAL (GV): Fairing Flap Support No. 6 - Right Wing TASK 05-41-06-210-822			248	LOM ALL
EXTERNAL - ZONAL (GV): FAIRING FLAP SUPPORT NO. 7 - RIGHT WING TASK 05-41-06-210-823			250	LOM ALL
INTERNAL - ZONAL (GV): Fairing Flap Support No. 7 - Right Wing TASK 05-41-06-210-824			252	LOM ALL
EXTERNAL - ZONAL (GV): FAIRING FLAP SUPPORT NO. 8 - RIGHT WING TASK 05-41-06-210-825			254	LOM ALL
INTERNAL - ZONAL (GV): Fairing Flap Support No. 8 - Right Wing TASK 05-41-06-210-826			256	LOM ALL
EXTERNAL - ZONAL (GV): REAR SPAR TO LANDING GEAR SUPPORT BEAM - RIGHT WING TASK 05-41-06-210-827			258	LOM ALL
INTERNAL - ZONAL (GV): REAR SPAR TO LANDING GEAR SUPPORT BEAM - RIGHT WING TASK 05-41-06-210-828			260	LOM ALL
EXTERNAL - ZONAL (GV): INBOARD SPOILER NO. 7 - RIGHT WING TASK 05-41-06-210-829			262	LOM ALL
EXTERNAL - ZONAL (GV): INBOARD FLAPS - RIGHT WING TASK 05-41-06-210-830			265	LOM ALL
INTERNAL - ZONAL (GV): INBOARD MAIN FLAP - RIGHT WING TASK 05-41-06-210-831			267	LOM ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
EXTERNAL - ZONAL (GV): Rear Spar to T.E. - Outbd of Inbd Flap - Inbd of Fixed T.E. -Right Wing TASK 05-41-06-210-832			269	LOM ALL
EXTERNAL - ZONAL (GV): SPOILERS NO. 8, 9, 10, 11, 12 - RIGHT WING TASK 05-41-06-210-833			271	LOM ALL
EXTERNAL - ZONAL (GV): OUTBOARD FLAPS - RIGHT WING TASK 05-41-06-210-834			274	LOM ALL
EXTERNAL - ZONAL (GV): FIXED TRAILING EDGE - RIGHT WING TASK 05-41-06-210-835			276	LOM ALL
INTERNAL - ZONAL (GV): FIXED TRAILING EDGE - RIGHT WING TASK 05-41-06-210-836			278	LOM ALL
INTERNAL - ZONAL (GV): Fixed Trailing Edge - Right Wing TASK 05-41-06-210-837			281	LOM ALL
EXTERNAL - ZONAL (GV): AILERON - RIGHT WING TASK 05-41-06-210-838			283	LOM ALL
EXTERNAL - ZONAL (GV): LEADING EDGE TO FRONT SPAR - INBD OF NACELLE STRUT - RIGHT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS) TASK 05-41-06-210-839			285	LOM ALL
EXTERNAL - ZONAL (GV): LEADING EDGE TO FRONT SPAR - OUTBD OF NACELLE STRUT - RIGHT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS) TASK 05-41-06-210-840			287	LOM ALL
EXTERNAL - ZONAL (GV): SLATS NO. 5, 6, 7, 8 - RIGHT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS) TASK 05-41-06-210-841			289	LOM ALL
EXTERNAL - ZONAL (GV): CENTER FUEL TANK - RIGHT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS) TASK 05-41-06-210-843			291	LOM ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
EXTERNAL - ZONAL (GV): MAIN FUEL TANK - RIGHT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS) TASK 05-41-06-210-844			293	LOM ALL
EXTERNAL - ZONAL (GV): SURGE TANK - RIGHT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS) TASK 05-41-06-210-845			295	LOM ALL
EXTERNAL - ZONAL (GV): DRY BAY - RIGHT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS) TASK 05-41-06-210-846			297	LOM ALL
EXTERNAL - ZONAL (GV): REAR SPAR TO LANDING GEAR SUPPORT BEAM - RIGHT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS) TASK 05-41-06-210-847			298.1	LOM ALL
EXTERNAL - ZONAL (GV): INBOARD SPOILER NO. 7 - RIGHT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS) TASK 05-41-06-210-848			298.3	LOM ALL
EXTERNAL - ZONAL (GV): INBOARD FLAPS - RIGHT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS) TASK 05-41-06-210-849			298.6	LOM ALL
EXTERNAL - ZONAL (GV): SPOILERS NO. 8, 9, 10, 11, 12 - RIGHT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS) TASK 05-41-06-210-850			298.8	LOM ALL
EXTERNAL - ZONAL (GV): OUTBOARD FLAPS - RIGHT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS) TASK 05-41-06-210-851			298.12	LOM ALL
EXTERNAL - ZONAL (GV): FIXED TRAILING EDGE - RIGHT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS) TASK 05-41-06-210-852			298.14	LOM ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
EXTERNAL - ZONAL (GV): AILERON - RIGHT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS) TASK 05-41-06-210-853			298.16	LOM ALL
EXTERNAL - ZONAL (GV): WINGLET - RIGHT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS) TASK 05-41-06-210-854			298.18	LOM ALL
ZONE 700 - LANDING GEAR AND LANDING GEAR DOORS - MAINTENANCE PRACTICES	05-41-07		201	LOM ALL
EXTERNAL - ZONAL (GV): Nose Landing Gear and Landing Gear Doors (from Ground) TASK 05-41-07-210-801			201	LOM ALL
EXTERNAL - ZONAL (GV): LEFT MAIN LANDING GEAR AND LANDING GEAR DOORS (FROM GROUND) TASK 05-41-07-210-802			203	LOM ALL
EXTERNAL - ZONAL (GV): Left Main Landing Gear and Landing Gear Doors TASK 05-41-07-210-803			205	LOM ALL
EXTERNAL - ZONAL (GV): RIGHT MAIN LANDING GEAR AND LANDING GEAR DOORS (FROM GROUND) TASK 05-41-07-210-804			208	LOM ALL
EXTERNAL - ZONAL (GV): Right Main Landing Gear and Landing Gear Doors TASK 05-41-07-210-805			210	LOM ALL
ZONE 800 - DOORS (PASSENGER, CREW, CARGO) - MAINTENANCE PRACTICES	05-41-08		201	LOM ALL
EXTERNAL - ZONAL (GV): ENTRY DOORS, SERVICE DOORS, AUTOMATIC OVERWING EXITS, MID-EXIT DOORS, AND CARGO DOORS TASK 05-41-08-210-801			201	LOM ALL
EXTERNAL - ZONAL (GV): FORWARD CARGO DOOR TASK 05-41-08-210-802			203	LOM ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
INTERNAL - ZONAL (GV): FORWARD CARGO DOOR TASK 05-41-08-210-803			205	LOM ALL
EXTERNAL - ZONAL (GV): AFT CARGO DOOR TASK 05-41-08-210-804			208	LOM ALL
INTERNAL - ZONAL (GV): AFT CARGO DOOR TASK 05-41-08-210-805			210	LOM ALL
EXTERNAL - ZONAL (GV): FORWARD PASSENGER DOOR TASK 05-41-08-210-806			213	LOM ALL
INTERNAL - ZONAL (GV): FORWARD PASSENGER DOOR TASK 05-41-08-210-807			216	LOM ALL
EXTERNAL - ZONAL (GV): AUTOMATIC OVERWING EXIT TASK 05-41-08-210-808			218	LOM ALL
INTERNAL - ZONAL (GV): AUTOMATIC OVERWING EXIT TASK 05-41-08-210-809			220	LOM ALL
EXTERNAL - ZONAL (GV): AUTOMATIC OVERWING EXIT TASK 05-41-08-210-810			222	LOM ALL
INTERNAL - ZONAL (GV): AUTOMATIC OVERWING EXIT TASK 05-41-08-210-811			225	LOM ALL
EXTERNAL - ZONAL (GV): AFT PASSENGER DOOR TASK 05-41-08-210-812			227	LOM ALL
INTERNAL - ZONAL (GV): AFT PASSENGER DOOR TASK 05-41-08-210-813			230	LOM ALL
EXTERNAL - ZONAL (GV): FORWARD GALLEY SERVICE DOOR TASK 05-41-08-210-816			233	LOM ALL
INTERNAL - ZONAL (GV): FORWARD GALLEY SERVICE DOOR TASK 05-41-08-210-817			236	LOM ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
EXTERNAL - ZONAL (GV): AUTOMATIC OVERWING EXIT TASK 05-41-08-210-818			239	LOM ALL
INTERNAL - ZONAL (GV): AUTOMATIC OVERWING EXIT TASK 05-41-08-210-819			241	LOM ALL
EXTERNAL - ZONAL (GV): AUTOMATIC OVERWING EXIT TASK 05-41-08-210-820			243	LOM ALL
INTERNAL - ZONAL (GV): AUTOMATIC OVERWING EXIT TASK 05-41-08-210-821			246	LOM ALL
EXTERNAL - ZONAL (GV): AFT GALLEY SERVICE DOOR TASK 05-41-08-210-822			248	LOM ALL
INTERNAL - ZONAL (GV): AFT GALLEY SERVICE DOOR TASK 05-41-08-210-823			251	LOM ALL
ZONE 100 - LOWER FUSELAGE - (EZAP)	05-42-01		201	LOM ALL
Restore: Area Forward of Nose Wheel Well. (EZAP) TASK 05-42-01-100-801			201	LOM ALL
Restore: Areas Behind the Equipment Racks in the Electrical and Electronics Compartment. (EZAP) TASK 05-42-01-100-802			204	LOM ALL
Restore: Area Above and Outboard of Nose Wheel Well. (EZAP) TASK 05-42-01-100-803			208	LOM ALL
Restore: Areas Behind Ceiling and Sidewall Panels in the Aft Cargo Compartment. (EZAP) TASK 05-42-01-100-804			213	LOM ALL
Restore: Area Aft of Forward Cargo Compartment. (EZAP) TASK 05-42-01-100-805			219	LOM ALL
Restore: Area Below Forward Cargo Compartment. (EZAP) TASK 05-42-01-100-806			221	LOM ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
Restore: Areas Behind Ceiling and Sidewalls in the Forward Cargo Compartment. (EZAP) TASK 05-42-01-100-807			224	LOM ALL
Restore: Area in Aft Cargo Compartment. (EZAP) TASK 05-42-01-100-808			229	LOM ALL
Restore: Area Below Aft Cargo Compartment. (EZAP) TASK 05-42-01-100-809			231	LOM ALL
General Visual Inspection: Exposed EWIS in Main Landing Gear Wheel Well. (EZAP) TASK 05-42-01-210-801			234	LOM ALL
General Visual Inspection: Exposed EWIS in the Forward Cargo Compartment. (EZAP) TASK 05-42-01-210-802			237	LOM ALL
General Visual Inspection: Exposed EWIS in the Electrical and Electronics Compartment. (EZAP) TASK 05-42-01-210-803			242	LOM ALL
General Visual Inspection: Exposed EWIS in the Aft Cargo Compartment. (EZAP) TASK 05-42-01-210-804			246	LOM ALL
Detailed Inspection: IDG, APU Starter/Generator, Battery, and External Power Feeder Wiring/ EWIS. (EZAP) TASK 05-42-01-211-801			251	LOM ALL
Detailed Inspection: External Power Feeder Wiring/ EWIS in the area outboard of Nose Wheel Well. (EZAP) TASK 05-42-01-211-802			256	LOM ALL
ZONE 200 - UPPER FUSELAGE - (EZAP)	05-42-02		201	LOM ALL
Restore: Aft Passenger Compartment, Wet Areas, Sta 663.75 to Aft Pressure Bulkhead. (EZAP) TASK 05-42-02-100-801			201	LOM ALL
Restore: Aft Passenger Compartment, Dry Area, Sta 663.75 to Aft Pressure Bulkhead. (EZAP) TASK 05-42-02-100-802			203	LOM ALL
Restore: Forward Passenger Compartment, Wet Areas, Sta 360 to 663.75. (EZAP) TASK 05-42-02-100-803			205	LOM ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
Restore: Forward Passenger Compartment, Dry Area, Sta 360 to 663.75. (EZAP) TASK 05-42-02-100-804			207	LOM ALL
Restore: Areas Aft of Flight Compartment to Forward Entry Door. (EZAP) TASK 05-42-02-100-805			209	LOM ALL
Restore: Area in Flight Compartment from STA 186 to 211, WL 208 to 232. (EZAP) TASK 05-42-02-100-806			211	LOM ALL
General Visual Inspection: Exposed EWIS in the Flight Compartment Excluding Exposed EWIS in the P5, P6 and P18 panels. (EZAP) TASK 05-42-02-210-801			213	LOM ALL
Detailed Inspection: Exposed EWIS in the P5, P6 and P18 panels. (EZAP) TASK 05-42-02-211-801			215	LOM ALL
ZONE 300 - EMPENNAGE - (EZAP)	05-42-03		201	LOM ALL
General Visual Inspection: Exposed EWIS in the Tail Cone. (EZAP) TASK 05-42-03-210-801			201	LOM ALL
Detailed Inspection: APU Starter/Generator Power Feeder Wiring/Ignition Leads/ and connected EWIS in the APU compartment. (EZAP) TASK 05-42-03-211-801			203	LOM ALL
Detailed Inspection: APU Starter/Generator Power Feeder Wiring/EWIS in the area aft of Pressure Bulkhead. (EZAP) TASK 05-42-03-211-802			206	LOM ALL
ZONE 400 - POWER PLANT AND STRUT - (EZAP)	05-42-04		201	LOM ALL
Detailed Inspection: IDG Power Feeder Wiring/EWIS - Engine No. 1. (EZAP) TASK 05-42-04-211-801			201	LOM ALL
Detailed Inspection: IDG Power Feeder Wiring/EWIS - Engine No. 2. (EZAP) TASK 05-42-04-211-802			203	LOM ALL

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Detailed Inspection: Exposed EWIS in the Forward Strut Fairing - Engine No. 1. (EZAP) TASK 05-42-04-211-803			205	LOM ALL
Detailed Inspection: Exposed EWIS in Fan Cowl Support Beam - Engine No. 1. (EZAP) TASK 05-42-04-211-804			208	LOM ALL
Detailed Inspection: Exposed EWIS in Strut Torque Box - Engine No. 1. (EZAP) TASK 05-42-04-211-805			210	LOM ALL
Detailed Inspection: Exposed EWIS in the Forward Strut Fairing - Engine No. 2. (EZAP) TASK 05-42-04-211-806			214	LOM ALL
Detailed Inspection: Exposed EWIS in Fan Cowl Support Beam - Engine No. 2. (EZAP) TASK 05-42-04-211-807			217	LOM ALL
Detailed Inspection: Exposed EWIS in Strut Torque Box - Engine No. 2. (EZAP) TASK 05-42-04-211-808			219	LOM ALL
ZONE 500 - LEFT WING - (EZAP)	05-42-05		201	LOM ALL
Detailed Inspection: Exposed EWIS in the area from Leading Edge to Front Spar - Left Wing. (EZAP) TASK 05-42-05-211-801			201	LOM ALL
Detailed Inspection: Exposed EWIS in the area from Leading Edge to Front Spar - Left Wing. (EZAP) TASK 05-42-05-211-802			205	LOM ALL
Detailed Inspection: Exposed EWIS in the area from Rear Spar to Main Landing Gear Support Beam - Left Wing. (EZAP) TASK 05-42-05-211-803			211	LOM ALL
Detailed Inspection: Exposed EWIS in the area from Rear Spar to Trailing Edge - Left Wing. (EZAP) TASK 05-42-05-211-804			213	LOM ALL

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ZONE 600 - RIGHT WING - (EZAP)	05-42-06		201	LOM ALL
Detailed Inspection: Exposed EWIS in the area from Leading Edge to Front Spar - Inboard of Nacelle Strut - Right Wing. (EZAP) TASK 05-42-06-211-801			201	LOM ALL
Detailed Inspection: Exposed EWIS in the area from Leading Edge to Front Spar - Right Wing. (EZAP) TASK 05-42-06-211-802			206	LOM ALL
Detailed Inspection: Exposed EWIS in the area from Rear Spar to Main Landing Gear Support Beam - Right Wing. (EZAP) TASK 05-42-06-211-803			212	LOM ALL
Detailed Inspection: Exposed EWIS in the area from Rear Spar to Trailing Edge - Right Wing. (EZAP) TASK 05-42-06-211-804			214	LOM ALL
HARD LANDING OR OVERWEIGHT/HARD LANDING OR HIGH DRAG/SIDE LOAD CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-01		201	LOM ALL
Phase IA Inspection TASK 05-51-01-210-801			203	LOM ALL
Phase IB Inspection TASK 05-51-01-210-805			215	LOM ALL
Phase II Inspection TASK 05-51-01-210-802			224	LOM ALL
SEVERE OR UNUSUAL TURBULENCE, EXCESSIVE MANEUVER, BUFFET OR SPEEDS MORE THAN DESIGN LIMITS - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-04		201	LOM ALL
Severe or Unusual Turbulence, Excessive Maneuver, Buffet, or Speeds More than the Design Limits Conditional Inspection TASK 05-51-04-210-801			201	LOM ALL

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HIGH ENERGY STOP/HEAT DAMAGE CONDITION - MAINTENANCE PRACTICES	05-51-07		201	LOM ALL
High Energy Stop TASK 05-51-07-210-801			201	LOM ALL
Heat Damage Inspection (Ammonium Persulfate Solution) TASK 05-51-07-280-801			211	LOM ALL
Tire Removal After Overspeed Landing TASK 05-51-07-000-801			213	LOM ALL
FLAP/SLAT DOWN OVERSPEED OR ABOVE 20,000 FEET CONDITION - MAINTENANCE PRACTICES	05-51-08		201	LOM ALL
Phase I Inspection TASK 05-51-08-210-801			208	LOM ALL
Phase II Inspection TASK 05-51-08-210-802			210	LOM ALL
OVERWEIGHT TAXI - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-09		201	LOM ALL
Phase I Inspection TASK 05-51-09-212-801			202	LOM ALL
Phase 2 Inspection TASK 05-51-09-210-801			202	LOM ALL
DRAGGED ENGINE NACELLE/FAN BLADE OUT/ENGINE SEIZURE/THRUST REVERSER AND ATTACH POINTS DAMAGE - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-10		201	LOM ALL
Dragged Engine Nacelle/Fan Blade Out/Engine Seizure/Engine and Strut Damage Conditional Inspection TASK 05-51-10-210-801			202	LOM ALL
GALLEY SPILLAGE - MAINTENANCE PRACTICES	05-51-13		201	LOM ALL
Galley Spill Conditional - Inspection TASK 05-51-13-211-801			201	LOM ALL
MERCURY SPILLAGE CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-14		201	LOM ALL
Mercury Spillage Conditional Inspection TASK 05-51-14-210-801			201	LOM ALL

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BRAKE SEIZURE CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-15		201	LOM ALL
Brake Seizure Conditional Inspection TASK 05-51-15-210-801			201	LOM ALL
FLAT SPOTTED TIRES - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-16		201	LOM ALL
Flat Spotted Tires Conditional Inspection TASK 05-51-16-210-801			201	LOM ALL
WHEEL BEARING FAILURE/DAMAGE CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-17		201	LOM ALL
Wheel Bearing Failure TASK 05-51-17-210-801			201	LOM ALL
Heat Damage Inspection of the Axle TASK 05-51-17-210-802			203	LOM ALL
BIRD/HAIL STRIKE CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-18		201	LOM ALL
Bird Strike and In-flight Hail Strike Conditional Inspection TASK 05-51-18-210-801			201	LOM ALL
Hail Strike on the Ground Conditional Inspection TASK 05-51-18-212-801			205	LOM ALL
LIGHTNING STRIKE CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-19		201	LOM ALL
Phase I Examination TASK 05-51-19-210-804			203	LOM ALL
Phase II Inspection TASK 05-51-19-210-805			209	LOM ALL
Inspection and Operational Check of Radio and Navigation Systems TASK 05-51-19-710-801			217	LOM ALL
FILIFORM CONDITION ON EXTERIOR DECORATIVE SURFACES (CONDITIONAL INSPECTION)	05-51-21		201	LOM ALL
Filiform Corrosion - (Conditional Inspection) TASK 05-51-21-210-801			201	LOM ALL

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HYDRAULIC FLUID REACTION WITH TITANIUM - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-22		201	LOM ALL
Inspection of Titanium Parts When Contaminated With Fire-Resistant Hydraulic Fluid TASK 05-51-22-210-801			201	LOM ALL
CABIN OVERPRESSURE CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-24		201	LOM ALL
Cabin Overpressurization Conditional Inspection TASK 05-51-24-200-801			201	LOM ALL
EXTREME DUST OR SAND CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-27		201	LOM ALL
Extreme Dust or Sand Conditional Inspection TASK 05-51-27-210-801			201	LOM ALL
ICE OR SNOW CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-28		201	LOM ALL
Ice or Snow Condition Maintenance Practices TASK 05-51-28-210-801			201	LOM ALL
EXCEEDING MAXIMUM NOSE LANDING GEAR TOWING ANGLE OR MAXIMUM TOWING LOAD (CONDITIONAL INSPECTION) - MAINTENANCE PRACTICES	05-51-29		201	LOM ALL
Phase I Inspection TASK 05-51-29-200-801			201	LOM ALL
Phase II Inspection TASK 05-51-29-200-802			203	LOM ALL
VOLCANIC ASH CONDITION - MAINTENANCE PRACTICES	05-51-31		201	LOM ALL
Volcanic Ash Operational Encounter Conditional Inspection TASK 05-51-31-210-801			201	LOM ALL
Volcanic Ash Ground Fallout Conditional Inspection TASK 05-51-31-200-801			218	LOM ALL

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TAIL STRIKE/SKID CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-32		201	LOM ALL
Tail Strike Inspection TASK 05-51-32-210-801			201	LOM ALL
Tail Skid Inspection TASK 05-51-32-210-802			203	LOM ALL
HOT AIR DUCT RUPTURE CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-34		201	LOM ALL
Airplane Structure Hot Air Duct Rupture Conditional Inspection TASK 05-51-34-210-801			201	LOM ALL
Nacelle Structure Hot Air Duct Rupture Conditional Inspection TASK 05-51-34-200-802			201	LOM ALL
OVERWEIGHT LANDING - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-35		201	LOM ALL
Overweight Landing Inspection TASK 05-51-35-210-801			203	LOM ALL
WINGLET STRIKE CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-36		201	LOM ALL
Winglet Strike Inspection TASK 05-51-36-210-801			201	LOM ALL
NOSE LANDING GEAR AND FORWARD FUSELAGE - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-37		201	LOM ALL
Phase I Inspection TASK 05-51-37-200-806			202	LOM ALL
Phase II Inspection TASK 05-51-37-200-803			205	LOM ALL
ENGINE BLADE OUT - EE BAY AND FLIGHT DECK PANELS- MAINTENANCE PRACTICES	05-51-42		201	LOM ALL
Engine Blade Out - General Visual Check TASK 05-51-42-210-802			201	LOM ALL

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Engine Blade Out - EE Bay and Flight Deck Panels Inspection TASK 05-51-42-200-802			202	LOM ALL
NACELLE/STRUT PRESSURE RELIEF DOORS OPEN CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-44		201	LOM ALL
Examine the Nacelle/Strut Structure TASK 05-51-44-200-801			201	LOM ALL
Examine the Pneumatic Ducts TASK 05-51-44-210-801			201	LOM ALL
LANDING GEAR OPERATION ABOVE DESIGN SPEED CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-47		201	LOM ALL
Landing Gear Operation Above Design Speed Condition, Conditional Inspection TASK 05-51-47-210-801			201	LOM ALL
FUEL IMBALANCE EXCEEDANCE CONDITIONAL INSPECTION - MAINTENANCE PRACTICE	05-51-48		201	LOM ALL
Fuel Imbalance Exceedance - Conditional Inspection TASK 05-51-48-211-801			201	LOM ALL
Extreme High Wind Event - Conditional Inspection	05-51-51		201	LOM ALL
Extreme High Wind Event - Conditional Inspection TASK 05-51-51-200-801			201	LOM ALL
Heavy Water Spray from Tires During Takeoff and Landing - Conditional Inspection	05-51-52		201	LOM ALL
Heavy Water Spray from Tires During Takeoff and Landing - Inspection/Check TASK 05-51-52-200-801			201	LOM ALL
INTERIOR ICE CONDITION - MAINTENANCE PRACTICES	05-51-53		201	LOM ALL
Interior Ice Removal TASK 05-51-53-210-801			201	LOM ALL

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TIRE TREAD LOSS OR TIRE BURST - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-54		201	LOM ALL
Tire Tread Loss or Tire Burst Conditional Inspection TASK 05-51-54-210-801			201	LOM ALL
SMOKE OR FUMES IN CABIN - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-56		201	LOM ALL
Smoke or Fumes in Cabin (Conditional Inspection) TASK 05-51-56-200-801			201	LOM ALL
ACID OR VACUUM WASTE SYSTEM SPILLAGE CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-57		201	LOM ALL
Corrosion Removal After Acid Spills TASK 05-51-57-000-802			201	LOM ALL
GROUND HANDLING EQUIPMENT HITS AIRPLANE OR PART DEPARTS AIRPLANE (CONDITIONAL INSPECTION) - MAINTENANCE PRACTICES	05-51-59		201	LOM ALL
Ground Handling Equipment Hits the Airplane or Part Departs the Airplane Inspection TASK 05-51-59-200-801			202	LOM ALL
AIRFRAME VIBRATION CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-67		201	LOM ALL
Conditional Inspection TASK 05-51-67-280-801			201	LOM ALL
MAIN LANDING GEAR SHIMMY/VIBRATION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-68		201	LOM ALL
Phase I Inspection TASK 05-51-68-210-801			201	LOM ALL
Phase II Inspection TASK 05-51-68-210-802			205	LOM ALL

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CONDITIONED AIR PACK OUTLET DUCT SYSTEM FAILURE - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-80		201	LOM ALL
Conditioned Air Pack Outlet Conditional Inspection TASK 05-51-80-210-801			201	LOM ALL
CABIN DEPRESSURIZATION CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-81		201	LOM ALL
Cabin Depressurization Conditional - Inspection TASK 05-51-81-210-801			201	LOM ALL
IN-FLIGHT WINDMILLING - MAINTENANCE PRACTICES	05-51-90		201	LOM ALL
In-Flight Windmilling Inspection TASK 05-51-90-200-801			201	LOM ALL
EXCESSIVE CABIN PRESSURE LEAKAGE - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-91		201	LOM ALL
Cabin Pressure Leak Test TASK 05-51-91-790-801			201	LOM ALL
COLD-SOAKED FUEL FROST – MAINTENANCE PRACTICES	05-51-92		201	LOM ALL
Cold-Soaked Fuel Frost Maintenance TASK 05-51-92-660-801			201	LOM ALL
DRY CHEMICAL FIRE EXTINGUISHER USED - MAINTENANCE PRACTICES	05-51-95		201	LOM ALL
Cleaning After Dry Chemical Fire Extinguisher Used TASK 05-51-95-100-801			201	LOM ALL
RUNWAY/TAXIWAY EXCURSIONS - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-96		201	LOM ALL
Phase I Inspection TASK 05-51-96-210-801			202	LOM ALL
Phase II Inspection TASK 05-51-96-210-802			202	LOM ALL

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External Doors Bonding Jumper	05-51-97		201	LOM ALL
Bonding Jumper - Inspection/Check TASK 05-51-97-200-801			201	LOM ALL
NITROGEN GENERATION SYSTEM (NGS) OXYGEN ENRICHED AIR (OEA) EXHAUST PORT FUEL LEAK CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-98		201	LOM 406, 407, 412, 415, 422-434, 437-447, 450-999; LOM 402, 404, 411, 416, 420 POST SB 737-47-1003
Nitrogen Generation System (NGS) Fuel Leak Conditional Inspection TASK 05-51-98-210-801			201	LOM 406, 407, 412, 415, 422-434, 437-447, 450-999; LOM 402, 404, 411, 416, 420 POST SB 737-47-1003
HIRF/LIGHTNING - FLIGHT CONTROLS BOND STRAPS - INSPECTION/CHECK	05-55-08		601	LOM ALL
Rudder Bonding Strap HIRF/Lightning Inspection TASK 05-55-08-200-801			601	LOM ALL
Aileron Bonding Straps HIRF/Lightning Inspection TASK 05-55-08-200-802			604	LOM ALL
Leading Edge Flap Bonding Straps HIRF/Lightning Inspection TASK 05-55-08-200-803			608	LOM ALL
Spoiler Bonding Straps HIRF/Lightning Inspection TASK 05-55-08-200-804			613	LOM ALL
Elevator Bonding Straps HIRF/Lightning Inspection TASK 05-55-08-200-805			621	LOM ALL
Strut Bonding Straps HIRF/Lightning Inspection TASK 05-55-08-200-806			624	LOM ALL
Air Conditioning Pack Compartment Door Bonding Straps HIRF/Lightning Inspection TASK 05-55-08-200-807			628	LOM ALL
Main Landing Gear Door Bonding Straps HIRF/Lightning Inspection TASK 05-55-08-200-808			632	LOM ALL

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HIRF/LIGHTNING - ENGINE WIRING HARNESSES - INSPECTION/CHECK	05-55-10		601	LOM ALL
Engine Wiring Harness HIRF/Lightning - General Visual Inspection TASK 05-55-10-200-801			601	LOM ALL
Engine Wiring Harness HIRF/Lightning - Detailed Visual Inspection TASK 05-55-10-220-801			604	LOM ALL
Connector Inspection - Thrust Reverser - Left Engine TASK 05-55-10-200-802			635	LOM ALL
Connector Inspection - Thrust Reverser - Right Engine TASK 05-55-10-200-803			639	LOM ALL
HIRF/LIGHTNING - ENGINE BOND STRAPS - INSPECTION/CHECK	05-55-11		601	LOM ALL
Engine Bonding Straps HIRF/Lightning Inspection TASK 05-55-11-200-801			601	LOM ALL
HIRF/LIGHTNING - INSIDE THE PRESSURE VESSEL - INSPECTION	05-55-15		601	LOM ALL
Detailed Visual Inspection - Connectors Inside the Pressure Vessel TASK 05-55-15-200-804			601	LOM ALL
Detailed Visual Inspection - Connector Pigtails Inside the Pressure Vessel TASK 05-55-15-200-805			626	LOM ALL
General Visual Inspection - Wiring at Connectors Inside the Pressure Vessel TASK 05-55-15-200-806			650	LOM ALL
HIRF/LIGHTNING CONNECTORS ON LEFT SIDE OF THE AIRPLANE - DETAILED VISUAL INSPECTION/CHECK	05-55-23		601	LOM ALL
Detailed Visual Inspection - L/HIRF Protection Components - Left Wheel Well TASK 05-55-23-200-802			601	LOM ALL
Detailed Visual Inspection - L/HIRF Protection Components - Left Wing To Body Fairing TASK 05-55-23-200-803			605	LOM ALL

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Detailed Visual Inspection - L/HIRF Protection Components - Left Wing Trailing Edge TASK 05-55-23-200-804			608	LOM ALL
Detailed Visual Inspection - L/HIRF Protection Components - Left Wing Leading Edge TASK 05-55-23-200-805			612	LOM ALL
Detailed Visual Inspection - L/HIRF Protection Components - Strut Disconnect - Left Engine TASK 05-55-23-200-806			616	LOM ALL
HIRF/LIGHTNING CONNECTORS ON RIGHT SIDE OF THE AIRPLANE - DETAILED VISUAL INSPECTION/CHECK	05-55-24		601	LOM ALL
Detailed Visual Inspection - L/HIRF Protection Components - Right Wheel Well TASK 05-55-24-200-802			601	LOM ALL
Detailed Visual Inspection - L/HIRF Protection Components - Right Wing To Body Fairing TASK 05-55-24-200-803			605	LOM ALL
Detailed Visual Inspection - L/HIRF Protection Components - Right Wing Trailing Edge TASK 05-55-24-200-804			608	LOM ALL
Detailed Visual Inspection - L/HIRF Protection Components - Right Wing Leading Edge TASK 05-55-24-200-805			612	LOM ALL
Detailed Visual Inspection - L/HIRF Protection Components - Strut Disconnect - Right Engine TASK 05-55-24-200-806			616	LOM ALL
HIRF/LIGHTNING WIRE BUNDLES ON LEFT SIDE OF THE AIRPLANE - GENERAL VISUAL INSPECTION/CHECK	05-55-25		601	LOM ALL
Wire Bundle Inspection Left Wheel Well TASK 05-55-25-200-802			601	LOM ALL
Wire Bundle Inspection - Left Wing To Body Fairing TASK 05-55-25-200-803			605	LOM ALL
Wire Bundle Inspection - Left Wing Trailing Edge TASK 05-55-25-200-804			608	LOM ALL

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Wire Bundle Inspection - Left Wing Leading Edge TASK 05-55-25-200-805			612	LOM ALL
Wire Bundle Inspection - Strut Disconnect - Left Engine TASK 05-55-25-200-806			616	LOM ALL
HIRF/LIGHTNING WIRE BUNDLES ON RIGHT SIDE OF THE AIRPLANE - GENERAL VISUAL INSPECTION/CHECK	05-55-26		601	LOM ALL
Wire Bundle Inspection - Right Wheel Well TASK 05-55-26-200-802			601	LOM ALL
Wire Bundle Inspection - Right Wing To Body Fairing TASK 05-55-26-200-803			605	LOM ALL
Wire Bundle Inspection - Right Wing Trailing Edge TASK 05-55-26-200-804			608	LOM ALL
Wire Bundle Inspection - Right Wing Leading Edge TASK 05-55-26-200-805			612	LOM ALL
Wire Bundle Inspection - Strut Disconnect - Right Engine TASK 05-55-26-200-806			616	LOM ALL
HIRF/LIGHTNING CONNECTORS - APU/RUDDER CONTROL - INSPECTION	05-55-30		601	LOM ALL
Connector Inspection - (Stabilizer Trim Compartment) TASK 05-55-30-200-801			601	LOM ALL
Connector Inspection - (APU Compartment) TASK 05-55-30-200-802			606	LOM ALL
Connector Inspection - Tailcone Access Compartment TASK 05-55-30-200-803			610	LOM ALL
Connector Inspection - (Vertical Stabilizer) TASK 05-55-30-200-804			614	LOM ALL

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HIRF/LIGHTNING PROTECTION - LEFT SIDE CONNECTORS - INSPECTION	05-55-40		601	LOM ALL
Bond Resistance Test of Connector - Left Wheel Well TASK 05-55-40-200-802			601	LOM ALL
Bond Resistance Test of Connector - Left Wing To Body Fairing TASK 05-55-40-200-803			606	LOM ALL
Bond Resistance Test of Connector - Left Wing Trailing Edge TASK 05-55-40-200-804			610	LOM ALL
Bond Resistance Test of Connector - Left Wing Leading Edge TASK 05-55-40-200-805			615	LOM ALL
Bond Resistance Test of Connector - Strut Disconnect - Left Engine TASK 05-55-40-200-806			621	LOM ALL
Left Side Connectors - Troubleshooting TASK 05-55-40-810-801			626	LOM ALL
HIRF/LIGHTNING PROTECTION - RIGHT SIDE CONNECTORS - INSPECTION	05-55-41		601	LOM ALL
Bond Resistance Test of Connector - Right Wheel Well TASK 05-55-41-200-802			601	LOM ALL
Bond Resistance Test of Connector - Right Wing To Body Fairing TASK 05-55-41-200-803			606	LOM ALL
Bond Resistance Test of Connector - Right Wing Trailing Edge TASK 05-55-41-200-804			610	LOM ALL
Bond Resistance Test of Connector - Right Wing Leading Edge TASK 05-55-41-200-805			615	LOM ALL
Bond Resistance Test of Connector - Strut Disconnect - Right Engine TASK 05-55-41-200-806			623	LOM ALL
Right Side Connectors - Troubleshooting TASK 05-55-41-810-801			628	LOM ALL

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HIRF/LIGHTNING CONNECTORS - EMPENNAGE - FUNCTIONAL CHECK	05-55-42		601	LOM ALL
Bond Resistance Test of Connector - Stabilizer Trim Compartment TASK 05-55-42-200-804			601	LOM ALL
Bond Resistance Test of Connector - Tailcone Access Compartment TASK 05-55-42-200-802			609	LOM ALL
Bond Resistance Test of Connector - Vertical Stabilizer TASK 05-55-42-200-805			615	LOM 427-431, 450, 465-999
Empennage - Troubleshooting TASK 05-55-42-810-801			619	LOM ALL
HIRF/LIGHTNING PROTECTION - CONNECTORS INSIDE THE PRESSURE VESSEL - INSPECTION	05-55-43		601	LOM ALL
Bond Resistance Test of Connector - Forward Access Area TASK 05-55-43-200-801			602	LOM ALL
Bond Resistance Test of Connector - Nose Wheel Well TASK 05-55-43-200-802			606	LOM ALL
Bond Resistance Test of Connector - Main Equipment Center TASK 05-55-43-200-803			612	LOM ALL
Bond Resistance Test of Connector - Forward Cargo Compartment, Forward TASK 05-55-43-200-804			618	LOM ALL
Bond Resistance Test of Connector - Forward Cargo Compartment, Aft TASK 05-55-43-200-805			626	LOM ALL
Bond Resistance Test of Connector - Flight Compartment TASK 05-55-43-200-807			632	LOM ALL
Bond Resistance Test of Connector - Passenger Compartment, Forward TASK 05-55-43-200-808			637	LOM ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
H/L PROTECTION - LRT - LEFT SIDE WIRE BUNDLES - FUNCTIONAL CHECK	05-55-44		601	LOM ALL
Loop Resistance Test of Wire Bundle - Left Main Landing Gear Wheel Well TASK 05-55-44-200-801			601	LOM ALL
Loop Resistance Test of Wire Bundle - Left Wing to Body Fairing TASK 05-55-44-200-802			607	LOM ALL
Loop Resistance Test of Wire Bundle - Left Wing Trailing Edge TASK 05-55-44-200-803			612	LOM ALL
Loop Resistance Test of Wire Bundle - Left Wing Leading Edge TASK 05-55-44-200-804			618	LOM ALL
Loop Resistance Test of Wire Bundle - Strut Disconnect - Left Engine TASK 05-55-44-200-805			625	LOM ALL
Loop Resistance Test of Wire Bundle - Left Wing to Body Fairing TASK 05-55-44-200-806			633	LOM ALL
H/L PROTECTION -LRT- RIGHT SIDE WIRE BUNDLES - FUNCTIONAL CHECK	05-55-45		601	LOM ALL
Loop Resistance Test of Wire Bundle - Right Main Landing Gear Wheel Well TASK 05-55-45-200-801			601	LOM ALL
Loop Resistance Test of Wire Bundle - Right Wing to Body Fairing TASK 05-55-45-200-802			607	LOM ALL
Loop Resistance Test of Wire Bundle - Right Wing Trailing Edge TASK 05-55-45-200-803			612	LOM ALL
Loop Resistance Test of Wire Bundle - Right Wing Leading Edge TASK 05-55-45-200-804			618	LOM ALL
Loop Resistance Test of Wire Bundle - Strut Disconnect - Right Engine TASK 05-55-45-200-805			625	LOM ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
Loop Resistance Test of Wire Bundle - Right Wing to Body Fairing TASK 05-55-45-200-806			632	LOM ALL
H/L PROTECTION -LRT- EMPENNAGE WIRE BUNDLES INSPECTION	05-55-46		601	LOM ALL
Loop Resistance Test of Wire Bundle - Stabilizer Trim Compartment TASK 05-55-46-200-801			601	LOM ALL
Loop Resistance Test of Wire Bundle - Tailcone Access Compartment TASK 05-55-46-200-802			606	LOM ALL
Loop Resistance Test of Wire Bundle - Vertical Stabilizer TASK 05-55-46-200-803			614	LOM 427-431, 450, 465-999
Loop Resistance Test of Wire Bundle - Tailcone Strobe Light TASK 05-55-46-200-804			619	LOM 402, 404, 406, 407, 411, 412, 415, 416, 422-434, 437-447, 450-999; LOM 420 POST SB 737-33-1146
HIRF/LIGHTNING CONNECTORS - LRT- PRESSURE VESSEL - FUNCTIONAL CHECK	05-55-47		601	LOM ALL
Loop Resistance Test of Wire Bundle - LRRA TASK 05-55-47-200-801			601	LOM ALL
HIRF/LIGHTNING - FQIS WIRING AND BONDING - INSPECTION	05-55-54		601	LOM ALL
FQIS Wiring And Bonding - Inspection TASK 05-55-54-200-801			601	LOM ALL
FQIS - Out Tank Connectors - Electrical Bonding Resistance Check TASK 05-55-54-200-802			610	LOM ALL
FQIS Wiring And Bonding - Fault Isolation TASK 05-55-54-810-805			615	LOM ALL
HIRF/LIGHTNING JOINT RESISTANCE MEASUREMENT - MAINTENANCE PRACTICES	05-56-01		201	LOM ALL
Joint Resistance Measurement TASK 05-56-01-760-801			201	LOM ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
HIRF/LIGHTNING - LOOP RESISTANCE TESTER (LRT)/EXLRT - MAINTENANCE PRACTICES	05-56-02		201	LOM ALL
LRT Lid Standard Measurement TASK 05-56-02-200-801			201	LOM ALL
ExLRT Standard Measurement TASK 05-56-02-200-802			207	LOM ALL
HIRF/LIGHTNING LOOP RESISTANCE MEASUREMENT - MAINTENANCE PRACTICES	05-56-03		201	LOM ALL
Loop Resistance Measurement TASK 05-56-03-200-801			201	LOM ALL
HIRF/LIGHTNING - JOINT RESISTANCE MEASUREMENT - MAINTENANCE PRACTICES	05-56-04		201	LOM ALL
Joint Resistance Measurement TASK 05-56-04-200-801			201	LOM ALL
HIRF/LIGHTNING LOOP RESISTANCE MEASUREMENT AND JOINT RESISTANCE MEASUREMENT - MAINTENANCE PRACTICES	05-56-05		201	LOM ALL
Loop Resistance and Joint Resistance Measurement TASK 05-56-05-200-801			201	LOM ALL

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-00-00-910-802

1. Airworthiness Limitation Precautions

A. General

(1) Critical Design Configuration Control Limitations (CDCCLs)

(a) All occurrences of CDCCLs found in this chapter of the AMM are identified by this note after each applicable CDCCL design feature:

1) NOTE: CDCCL - Refer to the task: Airworthiness Limitation Precautions, TASK 05-00-00-910-802, for important information on Critical Design Configuration Control Limitations (CDCCLs).

(b) Design features that are CDCCLs are defined and controlled by Special Federal Aviation Regulation (SFAR) 88, and can be found in Section 9 of the Maintenance Planning Data (MPD) document. CDCCLs are a means of identifying certain design configuration features intended to preclude a fuel tank ignition source for the operational life of the airplane. CDCCLs are mandatory and cannot be changed or deleted without the approval of the FAA Oversight Office that is responsible for the airplane model Type Certificate. A critical fuel tank ignition source prevention feature may exist in the fuel system and its related installation or in systems that, if a failure condition were to develop, could interact with the fuel system in such a way that an unsafe condition would develop without this limitation. Strict adherence to configuration, methods, techniques, and practices as prescribed is required to ensure the CDCCL is complied with. Any use of parts, methods, techniques or practices not contained in the applicable CDCCL must be approved by the FAA Oversight Office that is responsible for the airplane model Type Certificate.

(2) Airworthiness Limitation Instructions (ALIs)

(a) All occurrences of fuel tank system ALIs found in this chapter of the AMM are identified by this note after each applicable ALI inspection feature:

1) NOTE ALI - Refer to the task: Airworthiness Limitation Precautions, TASK 05-00-00-910-802, for important information on airworthiness limitation instructions (ALIs).

(b) Inspection features that are ALIs are defined and controlled by Special Federal Aviation Regulation (SFAR) 88, and can be found in Section 9 of the Maintenance Planning Data (MPD) document. These ALIs identify inspection features related to fuel tank ignition source prevention which must be done to maintain the design level of safety for the operational life of the airplane. These inspection features are mandatory and cannot be changed or deleted without the approval of the FAA Oversight Office that is responsible for the airplane model Type Certificate. Strict adherence to methods, techniques and practices as prescribed is required to ensure the ALI is complied with. Any use of methods, techniques or practices not contained in these ALIs must be approved by the FAA Oversight Office that is responsible for the airplane model Type Certificate.

B. Location Zones

Zone	Area
100	Lower Half of Fuselage
200	Upper Half of Fuselage
500	Left Wing
600	Right Wing

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C. Critical Design Configuration Control Limitations (CDCCLs)

SUBTASK 05-00-00-910-038

WARNING	OBEY THE MANUFACTURER'S PROCEDURES WHEN YOU DO MAINTENANCE THAT HAS AN EFFECT ON A CDCCL. IF YOU DO NOT OBEY THE PROCEDURES, IT CAN INCREASE THE RISK OF A SOURCE OF FUEL TANK IGNITION. INJURIES TO PERSONNEL, AND DAMAGE TO EQUIPMENT CAN OCCUR IF THERE IS A FIRE OR EXPLOSION.

(1) Make sure you follow the procedures for items identified as CDCCLs.

D. Airworthiness Limitation Instructions (ALIs)

SUBTASK 05-00-00-910-039

WARNING	OBEY THE MANUFACTURER'S PROCEDURES WHEN YOU DO MAINTENANCE THAT HAS AN EFFECT ON AN ALI. IF YOU DO NOT OBEY THE PROCEDURES, IT CAN INCREASE THE RISK OF A SOURCE OF FUEL TANK IGNITION. INJURIES TO PERSONNEL, AND DAMAGE TO EQUIPMENT CAN OCCUR IF THERE IS A FIRE OR EXPLOSION.

(1) Make sure you follow the procedures for items identified as ALIs.

END OF TASK

EWIS

TASK 05-00-00-910-804

2. Enhanced Zonal Inspection Program (EZAP) Precautions

A. General

(1) Enhanced Zonal Analysis Procedure (EZAP) and associated Electrical Wiring Interconnection System (EWIS)

(a) Enhanced Zonal Analysis Procedure (EZAP) is an analytical procedure required by Part 25, Appendix H, Section H25.5(a)(1) that identifies the physical and environmental conditions contained in each zone of an airplane, analyzes the effects of these conditions on electrical wiring and components, and assesses the possibilities for smoke and fire. The end result of the analysis are inspection and restoration tasks in the form of EWIS ICA.

(b) Electrical Wiring Interconnection System (EWIS): means any wire, power feeder, wiring device, or combination of these, including termination devices, installed in any area of the airplane for the purpose of transmitting electrical energy, including data and signals, between two or more intended termination points. EWIS is defined in full by 14 CFR section 25.1701.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(c) The Zonal Inspection Program includes a general visual and, if required, physical check of the general condition and security of attachment of the accessible systems and structures items contained in defined zones. This includes checks for degradation such as chafing of tubing, loose duct supports, damage to wiring and connected EWIS, cable and pulley wear, fluid leaks, electrical bonding, general condition of fasteners, inadequate drainage, etc., and general corrosion, not covered in the MSG-3 analysis. The zonal inspection is not intended as a quality assurance after maintenance check for determining proper reassembly of systems, components, structures, or powerplants. The zonal program packages a number of General Visual (GV) Inspections into one or more zonal inspections. The program includes any GV inspection tasks required to assure security of attachment and general condition of any system or structural items within the zone.

(2) Equivalent Tools, Fixtures, Test Equipment, and Consumable Materials

(a) When the procedures in this manual identify tools, equipment, and consumable materials, you can use equivalent alternatives. If you use alternative tools, equipment, or consumable materials, make sure that they give the same results and are as safe to the parts and personnel as the tools, equipment, or consumable materials specified in the procedure.

B. References

Reference	Title
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)

C. Protection of EWIS During Maintenance, Repair and Alterations

SUBTASK 05-00-00-910-006

WARNING

OBEY THE MANUFACTURER'S PROCEDURES WHEN YOU DO EZAP MAINTENANCE, OR MAINTENANCE THAT HAS AN EFFECT ON EWIS. IF YOU DO NOT OBEY THE PROCEDURES, IT CAN INCREASE THE RISK OF AN IGNITION SOURCE FOR FIRES. INJURIES TO PERSONS, AND DAMAGE TO EQUIPMENT CAN OCCUR.

(1) Make sure you follow the procedures for items identified as EZAP.

(2) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-01-210-801

1. **EXTERNAL - ZONAL (GV): Lower Fuselage**
(Figure 201)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required Enhanced Zonal Analysis Procedure (EZAP) - derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
110	Subzone - Body Station 130 to Station 396
120	Subzone - Body Station 396 to Body Station 540
130	Subzone - Body Station 540.00 to Body Station 727.00
140	Subzone - Body Station 727.00 to Body Station 1016.00

D. Zonal Inspection

SUBTASK 05-41-01-210-048

(1) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

SUBTASK 05-41-01-210-050

(2) Perform an external zonal inspection (GV) of the lower fuselage. The nose landing gear wheel well and main landing gear wheel well are also included. Inspection is accomplished from the ground, without the use of stands or ladders. No additional access panels required (EZAP).

SUBTASK 05-41-01-910-021

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to Electrical Wiring Interconnect Systems (EWIS) during maintenance.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Lower Half of Fuselage General Visual (External)
Figure 201/05-41-01-990-801 (Sheet 1 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

NOSE LANDING GEAR WHEEL WELL
(VIEW IN THE FORWARD DIRECTION)

A

NOSE LANDING GEAR WHEEL WELL
(VIEW IN THE AFT DIRECTION)

A

K75955 S0006584031_V2

Lower Half of Fuselage General Visual (External)
Figure 201/05-41-01-990-801 (Sheet 2 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

LEFT MAIN LANDING GEAR WHEEL WELL

B

C

1341201 S0006584032_V3

Lower Half of Fuselage General Visual (External)
Figure 201/05-41-01-990-801 (Sheet 3 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

RIGHT MAIN LANDING GEAR WHEEL WELL

D

L06035 S0006584033_V3

Lower Half of Fuselage General Visual (External)
Figure 201/05-41-01-990-801 (Sheet 4 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-01-210-802

2. INTERNAL - ZONAL (GV): RADOME

(Figure 202)

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
53-52-00-010-802	Nose Radome - Open (P/B 201)
53-52-00-410-802	Nose Radome - Close (P/B 201)

B. Location Zones

Zone	Area
111	Radome

C. Access Panels

Number	Name/Location
111	Radome

D. Zonal Inspection

SUBTASK 05-41-01-010-002

(1) Open this access panel:

Number	Name/Location
111	Radome

(a) Do this task: Nose Radome - Open, TASK 53-52-00-010-802.

SUBTASK 05-41-01-210-002

(2) Do a zonal inspection of the internal area of the radome.

SUBTASK 05-41-01-410-002

(3) Close this access panel:

Number	Name/Location
111	Radome

(a) Do this task: Nose Radome - Close, TASK 53-52-00-410-802.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Nose Radome General Visual (Internal)
Figure 202/05-41-01-990-802 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

B

2810272 S0000646427_V1

Nose Radome General Visual (Internal)
Figure 202/05-41-01-990-802 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-01-210-803

3. INTERNAL - ZONAL (GV): Area Forward of Nose Wheel Well

(Figure 203)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required Enhanced Zonal Analysis Procedure (EZAP) - derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
112	Area Forward of Nose Landing Gear Wheel Well

D. Access Panels

Number	Name/Location
112A	Forward Access Door

E. Zonal Inspection

SUBTASK 05-41-01-010-003

(1) Open this access panel:

Number	Name/Location
112A	Forward Access Door

SUBTASK 05-41-01-210-003

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

SUBTASK 05-41-01-210-051

(3) Perform an internal zonal inspection (GV) of the area forward of the nose wheel well - Section 41, Sta 178 to Sta 224.8 (EZAP).

SUBTASK 05-41-01-910-002

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to Electrical Wiring Interconnect Systems (EWIS) during maintenance.

SUBTASK 05-41-01-410-003

(5) Close this access panel:

Number	Name/Location
112A	Forward Access Door

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FORWARD OF NOSE LANDING GEAR WHEEL WELL
(VIEW IN THE FORWARD DIRECTION)

A

K94804 S0006584037_V2

Forward of Nose Landing Gear Wheel Well General Visual (Internal)
Figure 203/05-41-01-990-803 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FORWARD OF NOSE LANDING GEAR WHEEL WELL BULKHEAD (STA 224.8)
(VIEW IN THE AFT DIRECTION)

B

K94821 S0006584038_V2

Forward of Nose Landing Gear Wheel Well General Visual (Internal)
Figure 203/05-41-01-990-803 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-01-210-804

4. INTERNAL - ZONAL (GV): Area Above and Outboard of Nose Wheel Well
(Figure 204)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)
53-14-01-020-801	Nose Wheel Well Access Panels - Removal (P/B 401)
53-14-01-420-801	Nose Wheel Well Access Panels - Installation (P/B 401)

C. Location Zones

Zone	Area
113	Area Above and Outboard of Nose Landing Gear Wheel Well - Left
114	Area Above and Outboard of Nose Landing Gear Wheel Well - Right

D. Access Panels

Number	Name/Location
113AC	Fwd Nose Wheel Well Upper Access Panel
113AW	Forward Nose Wheel Well Panel
113BW	Forward Nose Wheel Well Panel
114AC	Fwd Nose Wheel Well Upper Access Panel
114AW	Forward Nose Wheel Well Panel
114BW	Forward Nose Wheel Well Panel

E. Zonal Inspection

SUBTASK 05-41-01-010-004

(1) Open these access panels:

Number	Name/Location
113AC	Fwd Nose Wheel Well Upper Access Panel
113AW	Forward Nose Wheel Well Panel
113BW	Forward Nose Wheel Well Panel
114AC	Fwd Nose Wheel Well Upper Access Panel
114AW	Forward Nose Wheel Well Panel
114BW	Forward Nose Wheel Well Panel

(a) Do this task: Nose Wheel Well Access Panels - Removal, TASK 53-14-01-020-801.

SUBTASK 05-41-01-210-004

(2) Do this task: Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

(a) Do an internal zonal inspection (GV) of the area above and outboard of the nose wheel well (EZAP).

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-41-01-910-001

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

SUBTASK 05-41-01-410-004

(4) Close these access panels:

Number	Name/Location
113AC	Fwd Nose Wheel Well Upper Access Panel
113AW	Forward Nose Wheel Well Panel
113BW	Forward Nose Wheel Well Panel
114AC	Fwd Nose Wheel Well Upper Access Panel
114AW	Forward Nose Wheel Well Panel
114BW	Forward Nose Wheel Well Panel

(a) Do this task: Nose Wheel Well Access Panels - Installation, TASK 53-14-01-420-801.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Above and Outboard of the Nose Landing Gear Wheel Well General Visual (Internal)
Figure 204/05-41-01-990-804 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Above and Outboard of the Nose Landing Gear Wheel Well General Visual (Internal)
Figure 204/05-41-01-990-804 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

ABOVE THE NOSE LANDING GEAR WHEEL WELL
(VIEW IN THE UP DIRECTION)

C

K94475 S0006584042_V4

Above and Outboard of the Nose Landing Gear Wheel Well General Visual (Internal)
Figure 204/05-41-01-990-804 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-01-210-805

5. INTERNAL - ZONAL (GV): Electrical and Electronics Compartment

(Figure 205)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required Enhanced Zonal Analysis Procedure (EZAP) - derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
117	Electrical and Electronics Compartment - Left
118	Electrical and Electronics Compartment - Right

D. Access Panels

Number	Name/Location
117A	Electronic Equipment Access Door
117BL	Forward Airstair Door

E. Zonal Inspection

SUBTASK 05-41-01-010-005

(1) Open these access panels:

Number	Name/Location
117A	Electronic Equipment Access Door
117BL	Forward Airstair Door

NOTE: Forward airstair drip pan access panel must be removed if airstair installed. Access panel 117BL is only for airplanes with airstairs installed.

SUBTASK 05-41-01-210-005

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

SUBTASK 05-41-01-210-053

(3) Perform an internal zonal inspection (GV) of the electrical and electronics compartment (EZAP).

SUBTASK 05-41-01-910-004

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to Electrical Wiring Interconnect Systems (EWIS) during maintenance.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-41-01-410-005

(5) Close these access panels:

Number	Name/Location
117A	Electronic Equipment Access Door
117BL	Forward Airstair Door

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

ELECTRICAL AND ELECTRONICS COMPARTMENT
(VIEW IN THE FORWARD DIRECTION)

A

K94950 S0006584044_V3

Electrical and Electronics Compartment General Visual (Internal)
Figure 205/05-41-01-990-805 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

ELECTRICAL AND ELECTRONICS COMPARTMENT
(VIEW IN THE AFT DIRECTION)

A

K94973 S0006584045_V3

Electrical and Electronics Compartment General Visual (Internal)
Figure 205/05-41-01-990-805 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-01-210-806

6. INTERNAL - ZONAL (GV): ELECTRICAL AND ELECTRONICS COMPARTMENT ACCESS DOOR

(Figure 206)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
117	Electrical and Electronics Compartment - Left
118	Electrical and Electronics Compartment - Right

B. Access Panels

Number	Name/Location
117AW	Equipment Access Door Cover

C. Zonal Inspection

SUBTASK 05-41-01-010-006

(1) Open this access panel:

Number	Name/Location
117AW	Equipment Access Door Cover

SUBTASK 05-41-01-210-006

(2) Do a General Visual inspection of the electrical and electronics compartment access door.

SUBTASK 05-41-01-410-006

(3) Close this access panel:

Number	Name/Location
117AW	Equipment Access Door Cover

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

ELECTRICAL EQUIPMENT ACCESS DOOR, 117A

A

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Electrical Equipment Access Door General Visual (Internal)
Figure 206/05-41-01-990-806

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-01-210-807

7. INTERNAL - ZONAL (GV): FORWARD CARGO COMPARTMENT

(Figure 207)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
121	Forward Cargo Compartment - Left
122	Forward Cargo Compartment - Right

B. Access Panels

Number	Name/Location
821	Forward Cargo Door

C. Zonal Inspection

SUBTASK 05-41-01-010-007

(1) Open this access panel:

Number	Name/Location
821	Forward Cargo Door

NOTE: No Cargo liners removed.

SUBTASK 05-41-01-210-007

(2) Do a General Visual inspection of the forward cargo compartment - Section 43, Sta 396 to forward cargo compartment aft bulkhead.

SUBTASK 05-41-01-410-007

(3) Close this access panel:

Number	Name/Location
821	Forward Cargo Door

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

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Forward Cargo Compartment General Visual (Internal)
Figure 207/05-41-01-990-807 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FORWARD CARGO COMPARTMENT
(FORWARD SIDE)

B

K67355 S0006584050_V2

Forward Cargo Compartment General Visual (Internal)
Figure 207/05-41-01-990-807 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-01-210-808

8. INTERNAL - ZONAL (GV): FORWARD CARGO COMPARTMENT

(Figure 208)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
121	Forward Cargo Compartment - Left
122	Forward Cargo Compartment - Right

B. Access Panels

Number	Name/Location
821	Forward Cargo Door

C. Zonal Inspection

SUBTASK 05-41-01-010-008

(1) Open this access panel:

Number	Name/Location
821	Forward Cargo Door

NOTE: Ceiling panels removal required.

SUBTASK 05-41-01-210-008

(2) Do a General Visual inspection of the area above the forward cargo compartment - Section 43, Sta 396 to forward cargo compartment aft bulkhead.

SUBTASK 05-41-01-410-008

(3) Close this access panel:

Number	Name/Location
821	Forward Cargo Door

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Forward Cargo Compartment General Visual (Internal) (Ceiling Liners Removed)
Figure 208/05-41-01-990-808 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FORWARD CARGO COMPARTMENT
(FORWARD SIDE)

B

K68684 S0006584053_V2

Forward Cargo Compartment General Visual (Internal) (Ceiling Liners Removed)
Figure 208/05-41-01-990-808 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-01-210-809

9. INTERNAL - ZONAL (GV): FORWARD CARGO COMPARTMENT

(Figure 209)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
121	Forward Cargo Compartment - Left
122	Forward Cargo Compartment - Right

B. Access Panels

Number	Name/Location
821	Forward Cargo Door

C. Zonal Inspection

SUBTASK 05-41-01-010-009

(1) Open this access panel:

Number	Name/Location
821	Forward Cargo Door

NOTE: Sidewall panels removal required.

SUBTASK 05-41-01-210-009

(2) Do a General Visual inspection of the forward cargo compartment - Section 43, Sta 396 to forward cargo compartment aft bulkhead.

SUBTASK 05-41-01-410-009

(3) Close this access panel:

Number	Name/Location
821	Forward Cargo Door

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Forward Cargo Compartment General Visual (Internal) (Sidewall Liners and Insulation Removed)
Figure 209/05-41-01-990-809 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FORWARD CARGO COMPARTMENT
(FORWARD SIDE)

B

K70175 S0006584056_V2

Forward Cargo Compartment General Visual (Internal) (Sidewall Liners and Insulation Removed)
Figure 209/05-41-01-990-809 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-01-210-810

10. EXTERNAL - ZONAL (GV): FORWARD CARGO DOOR SURROUND STRUCTURE FITTINGS AND STOPS

(Figure 210)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
122	Forward Cargo Compartment - Right

B. Access Panels

Number	Name/Location
821	Forward Cargo Door

C. Zonal Inspection

SUBTASK 05-41-01-010-010

(1) Open this access panel:

Number	Name/Location
821	Forward Cargo Door

SUBTASK 05-41-01-210-010

(2) Do a General Visual inspection of the forward cargo door surround structure fittings and stops - Section 43, Sta 460.

SUBTASK 05-41-01-410-010

(3) Close this access panel:

Number	Name/Location
821	Forward Cargo Door

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

L06002 S0006584058_V2

Fittings and Stops - Forward Cargo Door Surround Structure General Visual (External)
Figure 210/05-41-01-990-810

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-01-210-811

11. INTERNAL - ZONAL (GV): Area Below Forward Cargo Compartment

(Figure 211)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required Enhanced Zonal Analysis Procedure (EZAP) - derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
123	Forward Cargo Compartment - Left
124	Forward Cargo Compartment - Right

D. Access Panels

Number	Name/Location
821	Forward Cargo Door

E. Zonal Inspection

SUBTASK 05-41-01-010-011

(1) Open this access panel:

Number	Name/Location
821	Forward Cargo Door

NOTE: Center floor panels removal required. Cargo loading system removed/displaced as required.

SUBTASK 05-41-01-210-011

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

SUBTASK 05-41-01-210-054

(3) Perform an internal zonal inspection (GV) of the area below the forward cargo compartment - Section 43, Sta 396 to forward cargo compartment aft bulkhead (EZAP).

SUBTASK 05-41-01-910-005

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to Electrical Wiring Interconnect Systems (EWIS) during maintenance.

SUBTASK 05-41-01-410-011

(5) Close this access panel:

Number	Name/Location
821	Forward Cargo Door

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K70466 S0006584060_V2

Below the Forward Cargo Compartment General Visual (Internal) (Floor Panels Removed)
Figure 211/05-41-01-990-811 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FORWARD CARGO COMPARTMENT
(FORWARD SIDE)

B

K70472 S0006584061_V2

Below the Forward Cargo Compartment General Visual (Internal) (Floor Panels Removed)
Figure 211/05-41-01-990-811 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-01-210-812

12. INTERNAL - ZONAL (GV): Air Conditioning Distribution Bay

(Figure 212)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)
25-52-17-000-801	Forward Cargo Compartment Aft Bulkhead Liner - Removal (P/B 401)
25-52-17-400-801	Forward Cargo Compartment Aft Bulkhead Liner - Installation (P/B 401)

C. Location Zones

Zone	Area
125	Air Conditioning Distribution Bay - Left
126	Air Conditioning Distribution Bay - Right

D. Access Panels

Number	Name/Location
821	Forward Cargo Door

E. Zonal Inspection

SUBTASK 05-41-01-010-012

(1) Open this access panel:

Number	Name/Location
821	Forward Cargo Door

SUBTASK 05-41-01-020-003

(2) Remove the forward cargo compartment aft bulkhead center panel. Do this task: Forward Cargo Compartment Aft Bulkhead Liner - Removal, TASK 25-52-17-000-801.

SUBTASK 05-41-01-210-012

(3) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

(4) Perform an internal zonal inspection (GV) of the air conditioning distribution bay - Section 43, forward cargo compartment bulkhead to Sta 540. (EZAP)

SUBTASK 05-41-01-910-006

(5) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-41-01-420-003

(6) Install the forward cargo compartment aft bulkhead center panel. Do this task: Forward Cargo Compartment Aft Bulkhead Liner - Installation, TASK 25-52-17-400-801.

SUBTASK 05-41-01-410-012

(7) Close this access panel:

Number	Name/Location
821	Forward Cargo Door

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FORWARD CARGO COMPARTMENT
(AFT SIDE)

A

K72789 S0006584063_V2

Aft of Forward Cargo Compartment General Visual (Internal) (Aft Bulkhead Center Panel Removed)
Figure 212/05-41-01-990-812

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-01-210-813

13. INTERNAL - ZONAL (GV): AREA ABOVE CENTER SECTION WING BOX

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
135	Area Above Wing Center Section, Body Station 540 to Body Station 663.75 - Left
136	Area Above Wing Center Section, Body Station 540 to Body Station 663.75 - Right

B. Zonal Inspection

NOTE: Floor panels removal required. Insulation as required.

SUBTASK 05-41-01-210-013

(1) Do a General Visual inspection of the area above the center section wing box - Section 44, Sta 540 to Sta 663.75.

——— END OF TASK ———

EWIS

TASK 05-41-01-210-814

14. INTERNAL - ZONAL (GV): Pressure Deck Above Main Landing Gear Wheel Well

(Figure 213)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required Enhanced Zonal Analysis Procedure (EZAP) - derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
137	Area Above M.L.G. Wheel Well, Body Station 663.75 to Body Station 727 - Left
138	Area Above M.L.G. Wheel Well, Body Station 663.75 Body Station 727 - Right

D. Zonal Inspection

NOTE: Floor panels removal required.

SUBTASK 05-41-01-210-014

(1) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

SUBTASK 05-41-01-210-055

(2) Perform an internal zonal inspection (GV) of the pressure deck above the main landing gear wheel well - Section 44, Sta 663.75 to Sta 727 (EZAP).

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-41-01-910-007

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to Electrical Wiring Interconnect Systems (EWIS) during maintenance.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

L07042 S0006584066_V3

Passenger Compartment (Sta 663.75-727) General Visual (Internal) (Floor Panels and Insulation Removed)
Figure 213/05-41-01-990-813

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-01-210-815

15. INTERNAL - ZONAL (GV): Keel Beam (Part) Sta 540 to 727

(Figure 214)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
06-41-00-010-801	Open Access Panel 192CR (P/B 201)
06-41-00-410-801	Close Access Panel 192CR (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
139	Keel Beam, (Part) Body Station 540.00 to Body Station 727.00

D. Access Panels

Number	Name/Location
192CL	ECS Access Door
192CR	ECS Access Door

E. Zonal Inspection

SUBTASK 05-41-01-010-013

(1) To open access panel 192CR, refer to: Open Access Panel 192CR, TASK 06-41-00-010-801

Open these access panels:

Number	Name/Location
192CL	ECS Access Door
192CR	ECS Access Door

SUBTASK 05-41-01-210-015

(2) Do the zonal inspection following the procedures in TASK 05-00-00-910-804.

(3) Perform an internal zonal inspection (GV) of the keel beam (part) Sta 540 to 727 - Section 44. (EZAP)

SUBTASK 05-41-01-910-008

(4) Refer to TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

SUBTASK 05-41-01-410-013

(5) To close access panel 192CR, refer to: Close Access Panel 192CR, TASK 06-41-00-410-801

Close these access panels:

Number	Name/Location
192CL	ECS Access Door
192CR	ECS Access Door

ECCN 9E991 BOEING PROPRIETARY - See title page for details

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(VIEW IN THE AFT DIRECTION)

K80115 S0006584068_V2

Keel Beam (Sta 540-727) General Visual (Internal)
Figure 214/05-41-01-990-814 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K81569 S0006584069_V2

Keel Beam (Sta 540-727) General Visual (Internal)
Figure 214/05-41-01-990-814 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

WHEEL WELL

D

K93707 S0006584070_V2

Keel Beam (Sta 540-727) General Visual (Internal)
Figure 214/05-41-01-990-814 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-01-210-816

16. INTERNAL - ZONAL (GV): CENTER SECTION WING BOX

(Figure 215)

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
28-11-31-000-801	Center Tank Access Door Removal (P/B 401)
28-11-31-400-801	Center Tank Access Door - Installation (P/B 401)

B. Location Zones

Zone	Area
131	Center Section Wing Box, Body Station 540.00 to Body Station 663.75 - Left
132	Center Section Wing Box, Body Station 540.00 to Body Station 663.75 - Right

C. Access Panels

Number	Name/Location
131AB	Center Tank Access
192CL	ECS Access Door

D. Zonal Inspection

SUBTASK 05-41-01-010-014

(1) Open this access panel:

(TASK 28-11-31-000-801)

Number	Name/Location
131AB	Center Tank Access

SUBTASK 05-41-01-010-029

(2) Open this access panel:

Number	Name/Location
192CL	ECS Access Door

SUBTASK 05-41-01-210-016

(3) Do a General Visual inspection of the center section wing box - Section 44, Sta 540 to Sta 663.75.

SUBTASK 05-41-01-410-014

(4) Close this access panel:

(TASK 28-11-31-400-801)

Number	Name/Location
131AB	Center Tank Access

SUBTASK 05-41-01-410-029

(5) Close this access panel:

Number	Name/Location
192CL	ECS Access Door

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Center Section Wing Box General Visual (Internal)
Figure 215/05-41-01-990-815 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

CENTER SECTION WING BOX

B

K81581 S0006584073_V2

Center Section Wing Box General Visual (Internal)
Figure 215/05-41-01-990-815 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-01-210-817

17. INTERNAL - ZONAL (GV): AFT CARGO COMPARTMENT

(Figure 216)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
141	Aft Cargo Compartment - Left
142	Aft Cargo Compartment - Right

B. Access Panels

Number	Name/Location
822	Aft Cargo Door

C. Zonal Inspection

SUBTASK 05-41-01-010-015

(1) Open this access panel:

Number	Name/Location
822	Aft Cargo Door

NOTE: No cargo liners removed.

SUBTASK 05-41-01-210-017

(2) Do a General Visual inspection of the aft cargo compartment - Section 46 and 47 (part), Sta 727 to Sta 947.5.

SUBTASK 05-41-01-410-015

(3) Close this access panel:

Number	Name/Location
822	Aft Cargo Door

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K77931 S0006584075_V2

Aft Cargo Compartment General Visual (Internal)
Figure 216/05-41-01-990-816 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K77978 S0006584076_V2

Aft Cargo Compartment General Visual (Internal)
Figure 216/05-41-01-990-816 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-01-210-818

18. INTERNAL - ZONAL (GV): AFT CARGO COMPARTMENT

(Figure 217)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
141	Aft Cargo Compartment - Left
142	Aft Cargo Compartment - Right

B. Access Panels

Number	Name/Location
822	Aft Cargo Door

C. Zonal Inspection

SUBTASK 05-41-01-010-016

(1) Open this access panel:

Number	Name/Location
822	Aft Cargo Door

NOTE: Upper angled sidewall and ceiling panels removal required.

SUBTASK 05-41-01-210-018

(2) Do a General Visual inspection of the aft cargo compartment - Section 46 and 47 (part), Sta 727 to Sta 947.5.

SUBTASK 05-41-01-410-016

(3) Close this access panel:

Number	Name/Location
822	Aft Cargo Door

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K97443 S0006584078_V2

Aft Cargo Compartment General Visual (Internal) (Upper Angled Sidewall and Ceiling Panels Removed)
Figure 217/05-41-01-990-817 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

**AFT CARGO COMPARTMENT
(FORWARD SIDE)**

B

K97453 S0006584079_V2

**Aft Cargo Compartment General Visual (Internal) (Upper Angled Sidewall and Ceiling Panels Removed)
Figure 217/05-41-01-990-817 (Sheet 2 of 2)**

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-01-210-819

19. INTERNAL - ZONAL (GV): AFT CARGO COMPARTMENT

(Figure 218)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
141	Aft Cargo Compartment - Left
142	Aft Cargo Compartment - Right

B. Access Panels

Number	Name/Location
822	Aft Cargo Door

C. Zonal Inspection

SUBTASK 05-41-01-010-017

(1) Open this access panel:

Number	Name/Location
822	Aft Cargo Door

NOTE: Sidewall panels removal required.

SUBTASK 05-41-01-210-019

(2) Do a General Visual inspection of the aft cargo compartment - Section 46 and 47 (part), Sta 727 to Sta 947.5.

SUBTASK 05-41-01-410-017

(3) Close this access panel:

Number	Name/Location
822	Aft Cargo Door

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K78591 S0006584081_V3

Aft Cargo Compartment General Visual (Internal) (Sidewall Liners Removed)
Figure 218/05-41-01-990-818 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K80000 S0006584082_V3

Aft Cargo Compartment General Visual (Internal) (Sidewall Liners Removed)
Figure 218/05-41-01-990-818 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-01-210-820

20. EXTERNAL - ZONAL (GV): AFT CARGO DOOR SURROUND STRUCTURE FITTINGS AND STOPS

(Figure 219)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
142	Aft Cargo Compartment - Right

B. Access Panels

Number	Name/Location
822	Aft Cargo Door

C. Zonal Inspection

SUBTASK 05-41-01-010-018

(1) Open this access panel:

Number	Name/Location
822	Aft Cargo Door

SUBTASK 05-41-01-210-020

(2) Do a General Visual inspection of the aft cargo door surround structure fittings and stops - Section 46, Sta 827.

SUBTASK 05-41-01-410-018

(3) Close this access panel:

Number	Name/Location
822	Aft Cargo Door

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K76836 S0006584084_V2

Fittings and Stops - Aft Cargo Door Surround Structure General Visual (External)
Figure 219/05-41-01-990-819

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-01-210-821

21. INTERNAL - ZONAL (GV): AFT CARGO COMPARTMENT VACUUM WASTE COMPARTMENT

(Figure 220)

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
25-52-20-000-801	Waste Tank Enclosure Panel - Removal (P/B 401)
25-52-20-400-801	Waste Tank Enclosure Panel - Installation (P/B 401)

B. Location Zones

Zone	Area
141	Aft Cargo Compartment - Left

C. Access Panels

Number	Name/Location
822	Aft Cargo Door

D. Zonal Inspection

SUBTASK 05-41-01-010-019

(1) Open this access panel:

Number	Name/Location
822	Aft Cargo Door

SUBTASK 05-41-01-020-001

(2) Remove the vacuum waste compartment panels. Do this task: Waste Tank Enclosure Panel - Removal, TASK 25-52-20-000-801.

SUBTASK 05-41-01-210-021

(3) Do a General Visual inspection of the aft cargo compartment vacuum waste compartment.

SUBTASK 05-41-01-420-001

(4) Install the vacuum waste compartment panels. Do this task: Waste Tank Enclosure Panel - Installation, TASK 25-52-20-400-801.

SUBTASK 05-41-01-410-019

(5) Close this access panel:

Number	Name/Location
822	Aft Cargo Door

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Aft Cargo Compartment - Vacuum Waste Compartment General Visual (Internal)
Figure 220/05-41-01-990-820

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-01-210-822

22. INTERNAL - ZONAL (GV): Area Below Aft Cargo Compartment

(Figure 221)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required Enhanced Zonal Analysis Procedure (EZAP) - derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
143	Area Below Aft Cargo Compartment - Left
144	Area Below Aft Cargo Compartment - Right

D. Access Panels

Number	Name/Location
822	Aft Cargo Door

E. Zonal Inspection

SUBTASK 05-41-01-010-020

(1) Open this access panel:

Number	Name/Location
822	Aft Cargo Door

NOTE: Center floor panels removal required. Cargo loading system removed/displaced as required.

SUBTASK 05-41-01-210-022

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

SUBTASK 05-41-01-210-056

(3) Perform an internal zonal inspection (GV) of the area below the aft cargo compartment - Section 46 and 47 (part), Sta 727 to Sta 947.5 (EZAP).

SUBTASK 05-41-01-910-009

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to Electrical Wiring Interconnect Systems (EWIS) during maintenance.

SUBTASK 05-41-01-410-020

(5) Close this access panel:

Number	Name/Location
822	Aft Cargo Door

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Below the Aft Cargo Compartment General Visual (Internal) (Floor Panels Removed)
Figure 221/05-41-01-990-821 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

AFT CARGO COMPARTMENT
(FORWARD SIDE)

B

K97467 S0006584089_V2

Below the Aft Cargo Compartment General Visual (Internal) (Floor Panels Removed)
Figure 221/05-41-01-990-821 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-01-210-823

23. INTERNAL - ZONAL (GV): Aft Cargo Compartment Equipment Bay

(Figure 222)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)
25-52-19-000-801	Aft Cargo Compartment Aft Bulkhead Liner - Removal (P/B 401)
25-52-19-400-801	Aft Cargo Compartment Aft Bulkhead Liner - Installation (P/B 401)

C. Location Zones

Zone	Area
145	Aft Cargo Compartment Equipment Bay - Left
146	Aft Cargo Compartment Equipment Bay - Right

D. Access Panels

Number	Name/Location
822	Aft Cargo Door

E. Zonal Inspection

SUBTASK 05-41-01-010-021

(1) Open this access panel:

Number	Name/Location
822	Aft Cargo Door

SUBTASK 05-41-01-020-002

(2) Remove the aft cargo panels at Sta 947 bulkhead. Do this task: Aft Cargo Compartment Aft Bulkhead Liner - Removal, TASK 25-52-19-000-801.

SUBTASK 05-41-01-210-023

(3) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

(4) Perform an internal zonal inspection (GV) of the aft cargo compartment equipment bay - Section 47, Sta 947.5. to aft pressure bulkhead. (EZAP)

SUBTASK 05-41-01-910-010

(5) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

SUBTASK 05-41-01-420-002

(6) Install the aft cargo panels at Sta 947 bulkhead. Do this task: Aft Cargo Compartment Aft Bulkhead Liner - Installation, TASK 25-52-19-400-801.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-41-01-410-021

(7) Close this access panel:

Number	Name/Location
822	Aft Cargo Door

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Aft Cargo Compartment - Equipment Bay General Visual (Internal) (Endwall Liners Removed)
Figure 222/05-41-01-990-822

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-01-210-824

24. EXTERNAL - ZONAL (GV): WING TO BODY FAIRING

(Figure 223)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
190	Subzone - Wing-to-Body Fairing

B. Zonal Inspection

SUBTASK 05-41-01-210-024

(1) Do a General Visual inspection of the wing to body fairing. Inspection is accomplished from the ground, without the use of stands or ladders. No additional access panels required.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K68795 S0006584093_V2

Wing-to-Body Fairing General Visual (External)
Figure 223/05-41-01-990-823 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

**AFT WING-TO-BODY FAIRING
(LEFT SIDE)**

B

**AFT WING-TO-BODY FAIRING
(RIGHT SIDE)**

B

K68797 S0006584094_V2

**Wing-to-Body Fairing General Visual (External)
Figure 223/05-41-01-990-823 (Sheet 2 of 2)**

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-01-210-825

25. INTERNAL - ZONAL (GV): Lower Wing to Body Fairing - Forward of Wing Box

(Figure 224)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required Enhanced Zonal Analysis Procedure (EZAP) - derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)
21-51-23-000-801	Ram Air Inlet Modulation Panels - Removal (P/B 401)
21-51-23-400-801	Ram Air Inlet Modulation Panels - Installation (P/B 401)

C. Location Zones

Zone	Area
191	Lower Wing-To-Body Fairing - Forward of Wing Box

D. Access Panels

Number	Name/Location
191GL	Ram Air Actuator Panel - Forward
191GR	Ram Air Actuator Panel - Forward
192CL	ECS Access Door
192CR	ECS Access Door

E. Zonal Inspection

SUBTASK 05-41-01-010-022

(1) Open these access panels:

Number	Name/Location
191GL	Ram Air Actuator Panel - Forward
191GR	Ram Air Actuator Panel - Forward
192CL	ECS Access Door
192CR	ECS Access Door

NOTE: Through access provided.

SUBTASK 05-41-01-010-028

(2) To open the forward ram air modulation panel, do this task: Ram Air Inlet Modulation Panels - Removal, TASK 21-51-23-000-801.

SUBTASK 05-41-01-210-025

(3) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

SUBTASK 05-41-01-210-057

(4) Perform an internal zonal inspection (GV) of the lower wing to body fairing - forward of wing box (EZAP).

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-41-01-910-017

(5) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to Electrical Wiring Interconnect Systems (EWIS) during maintenance.

SUBTASK 05-41-01-410-022

(6) Close these access panels:

Number	Name/Location
191GL	Ram Air Actuator Panel - Forward
191GR	Ram Air Actuator Panel - Forward
192CL	ECS Access Door
192CR	ECS Access Door

SUBTASK 05-41-01-410-028

(7) To close the forward ram air modulation panel, do this task: Ram Air Inlet Modulation Panels - Installation, TASK 21-51-23-400-801.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Forward Wing-to-Body Fairing General Visual (Internal)
Figure 224/05-41-01-990-824 (Sheet 1 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K76903 S0006584097_V7

Forward Wing-to-Body Fairing General Visual (Internal)
Figure 224/05-41-01-990-824 (Sheet 2 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

2860653 S0000673394_V3

Forward Wing-to-Body Fairing General Visual (Internal)
Figure 224/05-41-01-990-824 (Sheet 3 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

2860654 S0000673395_V3

Forward Wing-to-Body Fairing General Visual (Internal)
Figure 224/05-41-01-990-824 (Sheet 4 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-01-210-826

26. INTERNAL - ZONAL (GV): Lower Wing to Body Fairing - Under Wing Box

(Figure 225)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required Enhanced Zonal Analysis Procedure (EZAP) - derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
06-41-00-010-801	Open Access Panel 192CR (P/B 201)
06-41-00-410-801	Close Access Panel 192CR (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
192	Lower Wing-To-Body Fairing - Under Wing Box

D. Access Panels

Number	Name/Location
192BL	ECS Ram Air Inlet Mixing Duct Panel - Forward
192BR	ECS Ram Air Inlet Mixing Duct Panel - Forward
192CL	ECS Access Door
192CR	ECS Access Door
192DR	ECS High Pressure Access Door

E. Zonal Inspection

SUBTASK 05-41-01-010-023

(1) To open access panel 192CR, refer to: Open Access Panel 192CR, TASK 06-41-00-010-801

Open these access panels:

Number	Name/Location
192BL	ECS Ram Air Inlet Mixing Duct Panel - Forward
192BR	ECS Ram Air Inlet Mixing Duct Panel - Forward
192CL	ECS Access Door
192CR	ECS Access Door
192DR	ECS High Pressure Access Door

NOTE: Through access provided.

SUBTASK 05-41-01-210-026

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

SUBTASK 05-41-01-210-058

(3) Perform an internal zonal inspection (GV) of the lower wing to body fairing - under the wing box (EZAP).

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-41-01-910-018

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to Electrical Wiring Interconnect Systems (EWIS) during maintenance.

SUBTASK 05-41-01-410-023

(5) To close access panel 192CR, refer to: Close Access Panel 192CR, TASK 06-41-00-410-801

Close these access panels:

Number	Name/Location
192BL	ECS Ram Air Inlet Mixing Duct Panel - Forward
192BR	ECS Ram Air Inlet Mixing Duct Panel - Forward
192CL	ECS Access Door
192CR	ECS Access Door
192DR	ECS High Pressure Access Door

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K66050 S0006584099_V2

Underwing - Wing-to-Body Fairing General Visual (Internal)
Figure 225/05-41-01-990-825 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K75572 S0006584100_V2

Underwing - Wing-to-Body Fairing General Visual (Internal)
Figure 225/05-41-01-990-825 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-01-210-827

27. INTERNAL - ZONAL (GV): Lower Wing to Body Fairing - Aft of Wheel Well

(Figure 226)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required Enhanced Zonal Analysis Procedure (EZAP) - derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
194	Lower Wing-To-Body Fairing - Aft of Wheel Well

D. Access Panels

Number	Name/Location
194AL	Aft Wing To Body Fairing Panel
194AR	Aft Wing To Body Fairing Panel
194BL	Flap Track Lubrication Panel - Aft
194BR	Flap Track Lubrication Panel - Aft
194CL	Aft Wing To Body Fairing Panel
194CR	Aft Wing To Body Fairing Panel
194DL	Aft Wing To Body Fairing Panel
194DR	Aft Wing To Body Fairing Panel
194E	Aft Wing To Body Fairing Panel
194FL	Aft Wing To Body Fairing Panel
194FR	Aft Wing To Body Fairing Panel
194GL	Aft Wing To Body Fairing Panel
194GR	Aft Wing To Body Fairing Panel
194HL	Aft Wing To Body Fairing Panel
194HR	Aft Wing To Body Fairing Panel

E. Zonal Inspection

SUBTASK 05-41-01-010-024

(1) Open these access panels:

Number	Name/Location
194AL	Aft Wing To Body Fairing Panel
194AR	Aft Wing To Body Fairing Panel
194BL	Flap Track Lubrication Panel - Aft
194BR	Flap Track Lubrication Panel - Aft
194CL	Aft Wing To Body Fairing Panel
194CR	Aft Wing To Body Fairing Panel

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

Number	Name/Location
194DL	Aft Wing To Body Fairing Panel
194DR	Aft Wing To Body Fairing Panel
194E	Aft Wing To Body Fairing Panel
194FL	Aft Wing To Body Fairing Panel
194FR	Aft Wing To Body Fairing Panel
194GL	Aft Wing To Body Fairing Panel
194GR	Aft Wing To Body Fairing Panel
194HL	Aft Wing To Body Fairing Panel
194HR	Aft Wing To Body Fairing Panel

SUBTASK 05-41-01-210-027

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

SUBTASK 05-41-01-210-052

(3) Perform an internal zonal inspection (GV) of the lower wing to body fairing - aft of wheel well (EZAP).

SUBTASK 05-41-01-910-019

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to Electrical Wiring Interconnect Systems (EWIS) during maintenance.

SUBTASK 05-41-01-410-024

(5) Close these access panels:

Number	Name/Location
194AL	Aft Wing To Body Fairing Panel
194AR	Aft Wing To Body Fairing Panel
194BL	Flap Track Lubrication Panel - Aft
194BR	Flap Track Lubrication Panel - Aft
194CL	Aft Wing To Body Fairing Panel
194CR	Aft Wing To Body Fairing Panel
194DL	Aft Wing To Body Fairing Panel
194DR	Aft Wing To Body Fairing Panel
194E	Aft Wing To Body Fairing Panel
194FL	Aft Wing To Body Fairing Panel
194FR	Aft Wing To Body Fairing Panel
194GL	Aft Wing To Body Fairing Panel
194GR	Aft Wing To Body Fairing Panel
194HL	Aft Wing To Body Fairing Panel
194HR	Aft Wing To Body Fairing Panel

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K66154 S0006584102_V2

Aft of Wheel Well - Wing-to-Body Fairing General Visual (Internal)
Figure 226/05-41-01-990-826 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K66156 S0006584103_V2

Aft of Wheel Well - Wing-to-Body Fairing General Visual (Internal)
Figure 226/05-41-01-990-826 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-01-210-828

28. INTERNAL - ZONAL (GV): LOWER WING TO BODY FAIRING - AFT OF WHEEL WELL

(Figure 227)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
194	Lower Wing-To-Body Fairing - Aft of Wheel Well

B. Access Panels

Number	Name/Location
194DR	Aft Wing To Body Fairing Panel

C. Zonal Inspection

SUBTASK 05-41-01-010-025

(1) Open this access panel:

Number	Name/Location
194DR	Aft Wing To Body Fairing Panel

NOTE: Through access provided.

SUBTASK 05-41-01-210-028

(2) Do a General Visual inspection of the lower wing to body fairing - aft of wheel well.

SUBTASK 05-41-01-410-025

(3) Close this access panel:

Number	Name/Location
194DR	Aft Wing To Body Fairing Panel

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K76876 S0006584105_V2

Right Aft of Wheel Well - Wing-to-Body Fairing General Visual (Internal)
Figure 227/05-41-01-990-827

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-01-210-829

29. INTERNAL - ZONAL (GV): ABOVE WING, WING TO BODY FAIRING - RIGHT

(Figure 228)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
196	Above Wing, Wing-To-Body Fairing - Right

B. Access Panels

Number	Name/Location
195AR	Wing To Body Fairing - Right Side
195BR	Wing To Body Fairing - Right Side
195CR	Wing To Body Fairings - Right Side

C. Zonal Inspection

SUBTASK 05-41-01-010-026

(1) Open these access panels:

Number	Name/Location
195AR	Wing To Body Fairing - Right Side
195BR	Wing To Body Fairing - Right Side
195CR	Wing To Body Fairings - Right Side

SUBTASK 05-41-01-210-029

(2) Do a General Visual inspection of the above wing, wing to body fairing - right side.

SUBTASK 05-41-01-410-026

(3) Close these access panels:

Number	Name/Location
195AR	Wing To Body Fairing - Right Side
195BR	Wing To Body Fairing - Right Side
195CR	Wing To Body Fairings - Right Side

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Above the Right Wing - Wing-to-Body Fairing General Visual (Internal)
Figure 228/05-41-01-990-828

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-01-210-830

30. INTERNAL - ZONAL (GV): ABOVE WING, WING TO BODY FAIRING - LEFT

(Figure 229)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
195	Above Wing, Wing-To-Body Fairing - Left

B. Access Panels

Number	Name/Location
195AL	Wing To Body Fairing - Left Side
195BL	Wing To Body Fairing - Left Side
195CL	Wing To Body Fairing - Left Side

C. Zonal Inspection

SUBTASK 05-41-01-010-027

(1) Open these access panels:

Number	Name/Location
195AL	Wing To Body Fairing - Left Side
195BL	Wing To Body Fairing - Left Side
195CL	Wing To Body Fairing - Left Side

SUBTASK 05-41-01-210-030

(2) Do a General Visual inspection of the above wing, wing to body fairing - left side.

SUBTASK 05-41-01-410-027

(3) Close these access panels:

Number	Name/Location
195AL	Wing To Body Fairing - Left Side
195BL	Wing To Body Fairing - Left Side
195CL	Wing To Body Fairing - Left Side

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Above the Left Wing - Wing-to-Body Fairing General Visual (Internal)
Figure 229/05-41-01-990-829

ECCN 9E991 BOEING PROPRIETARY - See title page for details

26-CMR-02

LOM 412, 415, 416, 420, 422-433

TASK 05-41-01-211-802

31. INTERNAL - DETAILED: CENTER WING REAR SPAR VAPOR WEB
(Figure 230)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This task is the manufacturer's procedure for compliance with Certification Maintenance Requirement (CMR), 26–CMR-02.

B. Location Zones

Zone	Area
133	Main Landing Gear Wheel Well, Body Station 663.75 to Body Station 727.00 - Left
134	Main Landing Gear Wheel Well, Body Station 663.75 to Body Station 727.00 - Right

C. Detailed Inspection

SUBTASK 05-41-01-211-002

(1) Perform a detailed inspection of the Center Wing Rear Spar Vapor Web for cracking in the fiberglass panel between the vertical structural members. Do the inspection from inside the main gear wheel well.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

1373393 S0000249132_V2

Center Wing Rear Spar Vapor Web
Figure 230/05-41-01-990-832

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-02-210-801

1. **EXTERNAL - ZONAL (GV): FLIGHT CONTROL COMPARTMENT**
(Figure 201)

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right

B. Zonal Inspection

SUBTASK 05-41-02-210-001

(1) Do a General Visual inspection of the flight control compartment - Section 41, Sta 178 to Sta 259.5.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

L05706 S0006584113_V4

Flight Compartment (Sta 178-259.5) General Visual (External)
Figure 201/05-41-02-990-801

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-02-210-802

2. INTERNAL - ZONAL (GV): FLIGHT CONTROL COMPARTMENT

(Figure 202)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right

B. Access Panels

Number	Name/Location
211A	Panel Assy - Control Stand Access
212A	Panel Assy - Control Stand Access

C. Zonal Inspection

NOTE: Control stand access panels 211A and 212A removal required.

SUBTASK 05-41-02-010-007

(1) Open these access panels:

Number	Name/Location
211A	Panel Assy - Control Stand Access
212A	Panel Assy - Control Stand Access

SUBTASK 05-41-02-210-002

(2) Do a General Visual inspection of the flight control compartment - Section 41, Sta 178 to Sta 270.

SUBTASK 05-41-02-010-008

(3) Close these access panels:

Number	Name/Location
211A	Panel Assy - Control Stand Access
212A	Panel Assy - Control Stand Access

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Control Stand - Flight Compartment General Visual (Internal)
Figure 202/05-41-02-990-802 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K78574 S0006584116_V4

Control Stand - Flight Compartment General Visual (Internal)
Figure 202/05-41-02-990-802 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Control Stand - Flight Compartment General Visual (Internal)
Figure 202/05-41-02-990-802 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-02-210-803

3. INTERNAL - ZONAL (GV): Flight Control Compartment

(Figure 203)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required Enhanced Zonal Analysis Procedure (EZAP) - derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right

D. Access Panels

Number	Name/Location
211AF	Panel Assy - Flight Compartment Floor

E. Zonal Inspection

SUBTASK 05-41-02-010-001

(1) Open this access panel:

Number	Name/Location
211AF	Panel Assy - Flight Compartment Floor

NOTE: With access provided. Seats removed. Control stand access panels, overhead and sidewall panels, and floor panel.

SUBTASK 05-41-02-210-003

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

SUBTASK 05-41-02-210-036

(3) Perform an internal zonal inspection (GV) of the flight control compartment - Section 41, STA 178 to STA 270 (EZAP).

SUBTASK 05-41-02-910-007

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to Electrical Wiring Interconnect Systems (EWIS) during maintenance.

SUBTASK 05-41-02-410-001

(5) Close this access panel:

Number	Name/Location
211AF	Panel Assy - Flight Compartment Floor

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FLIGHT COMPARTMENT

A

K96666 S0006584119_V3

Ceiling Panels and Sidewall Console - Flight Compartment General Visual (Internal)
Figure 203/05-41-02-990-803 (Sheet 1 of 7)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

LEFT SIDEWALL CONSOLE

B

LEFT SIDEWALL CONSOLE (PANELS REMOVED)

B

K96802 S0006584120_V3

Ceiling Panels and Sidewall Console - Flight Compartment General Visual (Internal)
Figure 203/05-41-02-990-803 (Sheet 2 of 7)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

RIGHT SIDEWALL CONSOLE

C

RIGHT SIDEWALL CONSOLE (PANELS REMOVED)

C

K97349 S0006584121_V3

Ceiling Panels and Sidewall Console - Flight Compartment General Visual (Internal)
Figure 203/05-41-02-990-803 (Sheet 3 of 7)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

LEFT CEILING PANELS

D

LEFT CEILING PANELS
(PANELS REMOVED)

D

K97386 S0006584122_V2

Ceiling Panels and Sidewall Console - Flight Compartment General Visual (Internal)
Figure 203/05-41-02-990-803 (Sheet 4 of 7)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

RIGHT CEILING PANELS

E

RIGHT CEILING PANELS
(PANELS REMOVED)

E

K97747 S0006584123_V3

Ceiling Panels and Sidewall Console - Flight Compartment General Visual (Internal)
Figure 203/05-41-02-990-803 (Sheet 5 of 7)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FWD

CENTER CEILING PANEL

F

FWD

CENTER CEILING PANEL
(PANEL REMOVED)

F

K97751 S0006584124_V2

Ceiling Panels and Sidewall Console - Flight Compartment General Visual (Internal)
Figure 203/05-41-02-990-803 (Sheet 6 of 7)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FLIGHT COMPARTMENT FLOOR

G

2807074 S0000645360_V1

Ceiling Panels and Sidewall Console - Flight Compartment General Visual (Internal)
Figure 203/05-41-02-990-803 (Sheet 7 of 7)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-02-210-804

4. EXTERNAL - ZONAL (GV): PASSENGER COMPARTMENT - AFT OF CONTROL COMPARTMENT TO FWD ENTRY DOOR

(Figure 204)

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
221	Passenger Compartment - Aft of Control Compartment to Forward Entry Door - Left
222	Passenger Compartment - Aft of Control Compartment to Forward Entry Door - Right

B. Zonal Inspection

SUBTASK 05-41-02-210-004

(1) Do a General Visual inspection of the passenger compartment - aft of the control compartment to forward entry door - left and right - section 41, STA 259.5 to STA 360.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K67409 S0006584126_V4

Passenger Compartment (STA 259.5-360) General Visual (External)
Figure 204/05-41-02-990-804

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-02-210-805

5. INTERNAL - ZONAL (GV): PASSENGER COMPARTMENT - SECTION 41, STA 270 TO STA 360

(Figure 205)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
221	Passenger Compartment - Aft of Control Compartment to Forward Entry Door - Left
222	Passenger Compartment - Aft of Control Compartment to Forward Entry Door - Right

B. Zonal Inspection

SUBTASK 05-41-02-210-005

(1) Do a General Visual inspection of the passenger compartment - left and right - Section 41, STA 270 to STA 360.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

PASSENGER COMPARTMENT
(LEFT SIDE)

A

K99232 S0006584128_V3

Passenger Compartment (Sta 270-360) General Visual (Internal)
Figure 205/05-41-02-990-805 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K99528 S0006584129_V3

Passenger Compartment (Sta 270-360) General Visual (Internal)
Figure 205/05-41-02-990-805 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-02-210-806

6. INTERNAL - ZONAL (GV): Passenger Compartment - Aft of Control Compartment to Fwd Entry Door

(Figure 206)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required Enhanced Zonal Analysis Procedure (EZAP) - derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
221	Passenger Compartment - Aft of Control Compartment to Forward Entry Door - Left
222	Passenger Compartment - Aft of Control Compartment to Forward Entry Door - Right

D. Zonal Inspection

NOTE: With access provided. Galleys and lavs removed. Floor panels, sidewall panels, and ceiling panels removal required.

SUBTASK 05-41-02-210-006

(1) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

SUBTASK 05-41-02-210-037

(2) Perform an internal zonal inspection (GV) of the passenger compartment - aft of the control compartment to forward entry door - left and right - Section 41, Sta 270 to Sta 360 (EZAP).

SUBTASK 05-41-02-910-001

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to Electrical Wiring Interconnect Systems (EWIS) during maintenance.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Passenger Compartment (Sta 270-360) General Visual (Internal) (Panels Removed)
Figure 206/05-41-02-990-806

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-02-210-807

7. EXTERNAL - ZONAL (GV): FORWARD PASSENGER ENTRY DOOR STOPS, LATCHES, AND HINGES

(Figure 207)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
221	Passenger Compartment - Aft of Control Compartment to Forward Entry Door - Left

B. Access Panels

Number	Name/Location
831	Forward Entry Door

C. Zonal Inspection

SUBTASK 05-41-02-010-002

(1) Open this access panel:

Number	Name/Location
831	Forward Entry Door

SUBTASK 05-41-02-210-007

(2) Do a General Visual inspection of the forward passenger entry door stops, latches and hinges - Section 41, Sta 345.

SUBTASK 05-41-02-410-002

(3) Close this access panel:

Number	Name/Location
831	Forward Entry Door

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Door Stops, Latches and Hinges - Forward Entry Door General Visual (External)
Figure 207/05-41-02-990-807

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-02-210-808

8. EXTERNAL - ZONAL (GV): FORWARD GALLEY SERVICE DOOR STOPS, LATCHES, AND HINGES

(Figure 208)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
222	Passenger Compartment - Aft of Control Compartment to Forward Entry Door - Right

B. Access Panels

Number	Name/Location
841	Forward Galley Service Door

C. Zonal Inspection

SUBTASK 05-41-02-010-003

(1) Open this access panel:

Number	Name/Location
841	Forward Galley Service Door

SUBTASK 05-41-02-210-008

(2) Do a General Visual inspection of the forward galley service door stops, latches, and hinges - Section 41, Sta 340.

SUBTASK 05-41-02-410-003

(3) Close this access panel:

Number	Name/Location
841	Forward Galley Service Door

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FORWARD GALLEY SERVICE DOOR

A

K68622 S0006584135_V2

Door Stops, Latches and Hinges - Forward Galley Service Door General Visual (External)
Figure 208/05-41-02-990-808

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-02-210-810

9. EXTERNAL - ZONAL (GV): FORWARD PASSENGER COMPARTMENT - STA 360 TO STA 663.75

(Figure 209)

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
231	Forward Passenger Compartment - Forward Entry Door to Sta 663.75 - Left
232	Forward Passenger Compartment - Forward Entry Door to Sta 663.75 - Right

B. Zonal Inspection

SUBTASK 05-41-02-210-010

(1) Do a General Visual inspection of the forward passenger compartment - Sta 360 to Sta 663.75 - left and right - Section 43 and 44 (part).

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

NOTE:

1 TWO EMERGENCY EXIT DOORS ON 800 AND 900 ONLY

K76414 S0006584138_V3

Passenger Compartment (Sta 360-663.75) General Visual (External)
Figure 209/05-41-02-990-809

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-02-210-811

10. INTERNAL - ZONAL (GV): FORWARD PASSENGER COMPARTMENT - STA 360 TO STA 663.75

(Figure 210)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
231	Forward Passenger Compartment - Forward Entry Door to Sta 663.75 - Left
232	Forward Passenger Compartment - Forward Entry Door to Sta 663.75 - Right

B. Zonal Inspection

SUBTASK 05-41-02-210-011

(1) Do a General Visual inspection of the forward passenger compartment - Sta 360 to Sta 663.75 - left and right - Section 43 and 44 (part).

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

NOTE:

1 TWO EMERGENCY EXIT DOORS ON 800 AND 900 ONLY

PASSENGER COMPARTMENT

A

L03717 S0006584140_V3

Passenger Compartment (Sta 360-663.75) General Visual (Internal)
Figure 210/05-41-02-990-810

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-02-210-812

11. INTERNAL - ZONAL (GV): Forward Passenger Compartment - Sta 360 to Sta 663.75 Wet Areas

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required Enhanced Zonal Analysis Procedure (EZAP) - derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
231	Forward Passenger Compartment - Forward Entry Door to Sta 663.75 - Left
232	Forward Passenger Compartment - Forward Entry Door to Sta 663.75 - Right

D. Zonal Inspection

NOTE: Galleys and lavs removed. Floor panels, sidewall panels, and ceiling panels removal required in areas where galleys and lavs are located.

SUBTASK 05-41-02-210-012

(1) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

SUBTASK 05-41-02-210-038

(2) Perform an internal zonal inspection (GV) of the forward passenger compartment - Sta 360 to Sta 663.75 wet areas (within approximately 20 in. (508 mm) from galley or lav) - left and right - Section 43 and 44 (part) (EZAP).

SUBTASK 05-41-02-910-002

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to Electrical Wiring Interconnect Systems (EWIS) during maintenance.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Passenger Compartment (Sta 360-663.75) General Visual (Internal) (Panels Removed)
Figure 211/05-41-02-990-818

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-02-210-813

12. INTERNAL - ZONAL (GV): Forward Passenger Compartment - Sta 360 to Sta 663.75 Dry Areas

(Figure 212)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required Enhanced Zonal Analysis Procedure (EZAP) - derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
231	Forward Passenger Compartment - Forward Entry Door to Sta 663.75 - Left
232	Forward Passenger Compartment - Forward Entry Door to Sta 663.75 - Right

D. Zonal Inspection

NOTE: Floor panels, sidewall panels, and ceiling panels removal required.

SUBTASK 05-41-02-210-013

(1) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

SUBTASK 05-41-02-210-039

(2) Perform an internal zonal inspection (GV) of the forward passenger compartment - Sta 360 to Sta 663.75 dry area (away from doors, galleys, and lavs) - left and right - Section 43 and 44 (part) (EZAP).

SUBTASK 05-41-02-910-003

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to Electrical Wiring Interconnect Systems (EWIS) during maintenance.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Passenger Compartment (Sta 360-663.75) General Visual (Internal) (Panels Removed)
Figure 212/05-41-02-990-811

ECCN 9E991 BOEING PROPRIETARY - See title page for details

LOM ALL; AIRPLANES WITH A CURVED AFT PRESSURE BULKHEAD

TASK 05-41-02-210-814

13. EXTERNAL - ZONAL (GV): AFT PASSENGER COMPARTMENT - STA 663.75 TO AFT PRESSURE BULKHEAD

(Figure 213)

LOM ALL

NOTE: This inspection is not required if an alternate method of GVI is selected,

LOM ALL; AIRPLANES WITH A CURVED AFT PRESSURE BULKHEAD

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
241	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Left
242	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Right

B. Zonal Inspection

SUBTASK 05-41-02-210-014

(1) Do a General Visual inspection of the aft passenger compartment - Sta 663.75 to the aft pressure bulkhead - left and right - Section 44 (part), 46, and 47, Sta 663.75 to the aft pressure bulkhead.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K76665 S0006584145_V2

Passenger Compartment (Sta 663.75-1042) General Visual (External)
Figure 213/05-41-02-990-812

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-02-210-815

14. INTERNAL - ZONAL (GV): AFT PASSENGER COMPARTMENT - STA 663.75 TO AFT PRESSURE BULKHEAD

(Figure 214)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
241	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Left
242	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Right

B. Zonal Inspection

SUBTASK 05-41-02-210-015

(1) Do a General Visual inspection of the aft passenger compartment - Sta 663.75 to the aft pressure bulkhead - left and right- Section 44 (part), 46 and 47, Sta 663.75 to aft pressure bulkhead.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Passenger Compartment (Sta 663.75-1016) General Visual (Internal)
Figure 214/05-41-02-990-813

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-02-210-816

15. **INTERNAL - ZONAL (GV): Aft Passenger Compartment - Sta 663.75 to Aft Pressure Bulkhead Wet Area**

(Figure 215)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required Enhanced Zonal Analysis Procedure (EZAP) - derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
241	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Left
242	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Right

D. Zonal Inspection

NOTE: Galleys and lavs removed. Floor panels, sidewall panels, and ceiling panels removal required in areas where galleys and lavs are located.

SUBTASK 05-41-02-210-016

(1) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

SUBTASK 05-41-02-210-040

(2) Perform an internal zonal inspection (GV) of the aft passenger compartment - Sta 663.75 to the aft pressure bulkhead wet area (within approximately 20 in. (508 mm) from galley service door, passenger door, galley or lav) - left and right - Section 44 (part), 46, and 47, Sta 663.75 to aft pressure bulkhead (EZAP).

SUBTASK 05-41-02-910-004

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to Electrical Wiring Interconnect Systems (EWIS) during maintenance.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

L05805 S0006584149_V4

Passenger Compartment (Sta 663.75-1016) General Visual (Internal) (Galley, Lavatory and Panels Removed)
Figure 215/05-41-02-990-814

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-02-210-817

16. **INTERNAL - ZONAL (GV): Passenger Compartment - Sta 663.75 to Aft Pressure Bulkhead Dry Area** (Figure 216)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required Enhanced Zonal Analysis Procedure (EZAP) - derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
241	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Left
242	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Right

D. Zonal Inspection

NOTE: Floor panels, sidewall panels, and ceiling panels removal required.

SUBTASK 05-41-02-210-031

(1) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

SUBTASK 05-41-02-210-042

(2) Perform an internal zonal inspection (GV) of the aft passenger compartment - Sta 663.75 to the aft pressure bulkhead dry area (away from doors, galleys and lavs) - left and right - Section 44 (part), 46, and 47, Sta 663.75 to aft pressure bulkhead (EZAP).

SUBTASK 05-41-02-910-006

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to Electrical Wiring Interconnect Systems (EWIS) during maintenance.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

L05822 S0006584151_V3

Passenger Compartment (Sta 663.75-1016) General Visual (Internal) (Panels Removed)
Figure 216/05-41-02-990-815

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-02-210-818

17. EXTERNAL - ZONAL (GV): AFT PASSENGER ENTRY DOOR STOPS, LATCHES, AND HINGES (Figure 217)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
241	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Left

B. Access Panels

Number	Name/Location
834	Aft Entry Door

C. Zonal Inspection

SUBTASK 05-41-02-010-005

(1) Open this access panel:

Number	Name/Location
834	Aft Entry Door

SUBTASK 05-41-02-210-018

(2) Do a General Visual inspection of the aft passenger entry door stops, latches, and hinges - Section 47, Sta 980.

SUBTASK 05-41-02-410-005

(3) Close this access panel:

Number	Name/Location
834	Aft Entry Door

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

AFT ENTRY DOOR

A

K68960 S0006584153_V2

Door Stops, Latches and Hinges - Aft Entry Door General Visual (External)
Figure 217/05-41-02-990-816

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-02-210-819

18. EXTERNAL - ZONAL (GV): AFT GALLEY SERVICE DOOR STOPS, LATCHES, AND HINGES

(Figure 218)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
242	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Right

B. Access Panels

Number	Name/Location
844	Aft Galley Service Door

C. Zonal Inspection

SUBTASK 05-41-02-010-006

(1) Open this access panel:

Number	Name/Location
844	Aft Galley Service Door

SUBTASK 05-41-02-210-019

(2) Do a General Visual inspection of the aft galley service door stops, latches, and hinges - Section 47, Sta 980.

SUBTASK 05-41-02-410-006

(3) Close this access panel:

Number	Name/Location
844	Aft Galley Service Door

——— **END OF TASK** ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

AFT GALLEY SERVICE DOOR

A

K68993 S0006584155_V2

Door Stops, Latches and Hinges - Aft Galley Service Door General Visual (External)
Figure 218/05-41-02-990-817

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-02-210-836

19. EXTERNAL - ZONAL (GV): FLIGHT CONTROL COMPARTMENT WITH SMALL UNMANNED AERIAL SYSTEM (sUAS)

Figure 219

NOTE: Applicable to the 737-700 and 737-800 models.

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
20-10-94-210-801	Automated sUAS Assisted External Zonal GVI Flight Operation (P/B 201)
20-10-94-210-802	Inspect the Automated sUAS Assisted External Zonal GVI Images (P/B 201)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-21125	sUAS - small Unmanned Aircraft System Part #: DCL90-00002 Supplier: FBEM2 Part #: MB-HW-001 Supplier: H2P60

C. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right

D. Zonal Inspection with sUAS

SUBTASK 05-41-02-210-050

(1) Do a General Visual inspection of the flight control compartment - Section 41, Sta 178 to Sta 259.5 using a sUAS, SPL-21125.

(a) Do this task:Automated sUAS Assisted External Zonal GVI Flight Operation, TASK 20-10-94-210-801

(b) Do this task:Inspect the Automated sUAS Assisted External Zonal GVI Images, TASK 20-10-94-210-802

(2) Perform a General Visual inspection of the area where the sUAS was unable to capture images.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

L05706 S0006584113_V4

Flight Compartment (Sta 178-259.5) General Visual (External)
Figure 219/05-41-02-990-833

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-02-210-829

20. EXTERNAL - ZONAL (GV): PASSENGER COMPARTMENT - AFT OF CONTROL COMPARTMENT TO FWD ENTRY DOOR WITH SMALL UNMANNED AERIAL SYSTEM (sUAS)

Figure 220

NOTE: Applicable to the 737-700 and 737-800 models.

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
20-10-94-210-801	Automated sUAS Assisted External Zonal GVI Flight Operation (P/B 201)
20-10-94-210-802	Inspect the Automated sUAS Assisted External Zonal GVI Images (P/B 201)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-21125	sUAS - small Unmanned Aircraft System Part #: DCL90-00002 Supplier: FBEM2 Part #: MB-HW-001 Supplier: H2P60

C. Location Zones

Zone	Area
221	Passenger Compartment - Aft of Control Compartment to Forward Entry Door - Left
222	Passenger Compartment - Aft of Control Compartment to Forward Entry Door - Right

D. Zonal Inspection with sUAS

SUBTASK 05-41-02-210-046

(1) Do a General Visual inspection of the passenger compartment - aft of the control compartment to forward entry door - left and right - section 41, STA 259.5 to STA 360 using a sUAS, SPL-21125.

(a) Do this task:Automated sUAS Assisted External Zonal GVI Flight Operation, TASK 20-10-94-210-801

(b) Do this task:Inspect the Automated sUAS Assisted External Zonal GVI Images, TASK 20-10-94-210-802

(2) Perform a General Visual inspection of the area where the sUAS was unable to capture images.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K67409 S0006584126_V4

Passenger Compartment (Sta 270-360) General Visual (External)
Figure 220/05-41-02-990-829

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-02-210-830

21. EXTERNAL - ZONAL (GV): FORWARD PASSENGER COMPARTMENT- STA 360 TO STA 663.75 WITH SMALL UNMANNED AERIAL SYSTEM (sUAS)

Figure 221

NOTE: Applicable to the 737-700 and 737-800 models.

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
20-10-94-210-801	Automated sUAS Assisted External Zonal GVI Flight Operation (P/B 201)
20-10-94-210-802	Inspect the Automated sUAS Assisted External Zonal GVI Images (P/B 201)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-21125	sUAS - small Unmanned Aircraft System Part #: DCL90-00002 Supplier: FBEM2 Part #: MB-HW-001 Supplier: H2P60

C. Location Zones

Zone	Area
231	Forward Passenger Compartment - Forward Entry Door to Sta 663.75 - Left
232	Forward Passenger Compartment - Forward Entry Door to Sta 663.75 - Right

D. Zonal Inspection with sUAS

SUBTASK 05-41-02-210-047

(1) Do a General Visual inspection of the forward passenger compartment - Sta 360 to Sta 663.75 - left and right - Section 43 and 44 (part) using a sUAS, SPL-21125.

(a) Do this task: Automated sUAS Assisted External Zonal GVI Flight Operation, TASK 20-10-94-210-801

(b) Do this task: Inspect the Automated sUAS Assisted External Zonal GVI Images, TASK 20-10-94-210-802

(2) Perform a General Visual inspection of the area where the sUAS is unable to capture images.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

NOTE:

1 TWO EMERGENCY EXIT DOORS ON 800 AND 900 ONLY

K76414 S0006584138_V3

Passenger Compartment (Sta 360-663.75) General Visual (External)
Figure 221/05-41-02-990-830

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-02-210-831

22. EXTERNAL - ZONAL (GV): AFT PASSENGER COMPARTMENT- STA 663.75 TO AFT PRESSURE BULKHEAD WITH SMALL UNMANNED AERIAL SYSTEM (sUAS)

Figure 222

NOTE: Applicable to the 737-700 and 737-800 models.

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
20-10-94-210-801	Automated sUAS Assisted External Zonal GVI Flight Operation (P/B 201)
20-10-94-210-802	Inspect the Automated sUAS Assisted External Zonal GVI Images (P/B 201)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-21125	sUAS - small Unmanned Aircraft System Part #: DCL90-00002 Supplier: FBEM2 Part #: MB-HW-001 Supplier: H2P60

C. Location Zones

Zone	Area
241	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Left
242	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Right

D. Zonal Inspection with sUAS

SUBTASK 05-41-02-210-048

(1) Do a General Visual inspection of the aft passenger compartment - Sta 663.75 to the aft pressure bulkhead - left and right - Section 44 (part), 46, and 47, Sta 663.75 to the aft pressure bulkhead using a sUAS, SPL-21125.

(a) Do this task: Automated sUAS Assisted External Zonal GVI Flight Operation, TASK 20-10-94-210-801

(b) Do this task: Inspect the Automated sUAS Assisted External Zonal GVI Images, TASK 20-10-94-210-802

(2) Perform a General Visual inspection of the area where the sUAS is unable to capture images.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K76665 S0006584145_V2

Passenger Compartment (Sta 663.75-1016) General Visual (External)
Figure 222/05-41-02-990-831

ECCN 9E991 BOEING PROPRIETARY - See title page for details

LOM ALL; AIRPLANES WITH A CURVED AFT PRESSURE BULKHEAD

TASK 05-41-03-210-801

1. **EXTERNAL - ZONAL (GV): AREA AFT OF THE PRESSURE BULKHEAD**
(Figure 201)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
310	Fuselage - Body Station 1016.00 to Body Station 1217.00

B. Zonal Inspection

SUBTASK 05-41-03-210-001

(1) Do a General Visual inspection of the area aft of the pressure bulkhead. Inspection is accomplished from the ground, without the use of stands or ladders. No additional access panels required.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K68967 S0006584159_V2

Area Aft of Pressure Bulkhead (Sta 1016-1217) General Visual (External)
Figure 201/05-41-03-990-801

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-03-210-802

2. INTERNAL - ZONAL (GV): Area Aft of Pressure Bulkhead
(Figure 202)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required Enhanced Zonal Analysis Procedure (EZAP) - derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
311	Area Aft of Pressure Bulkhead - Left
312	Area Aft of Pressure Bulkhead - Right

D. Access Panels

Number	Name/Location
311BL	Stabilizer Trim Access Door

E. Zonal Inspection

SUBTASK 05-41-03-010-001

(1) Open this access panel:

Number	Name/Location
311BL	Stabilizer Trim Access Door

SUBTASK 05-41-03-210-033

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

SUBTASK 05-41-03-210-042

(3) Perform an internal zonal inspection (GV) of the area aft of pressure bulkhead - Section 48, aft of aft pressure bulkhead to Sta 1088 (EZAP).

SUBTASK 05-41-03-910-005

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to Electrical Wiring Interconnect Systems (EWIS) during maintenance.

SUBTASK 05-41-03-410-001

(5) Close this access panel:

Number	Name/Location
311BL	Stabilizer Trim Access Door

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

A

L04248 S0006584161_V2

Aft Pressure Bulkhead General Visual (Internal)
Figure 202/05-41-03-990-802 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

AFT PRESSURE BULKHEAD
(VIEW IN THE FORWARD DIRECTION)

B

L04388 S0006584162_V2

Aft Pressure Bulkhead General Visual (Internal)
Figure 202/05-41-03-990-802 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

AFT PRESSURE BULKHEAD
(VIEW IN THE AFT DIRECTION)

C

L07041 S0006584163_V2

Aft Pressure Bulkhead General Visual (Internal)
Figure 202/05-41-03-990-802 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

LOM ALL

EWIS

TASK 05-41-03-210-803

3. INTERNAL - ZONAL (GV): Stabilizer Torsion Box Compartment
(Figure 203)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required Enhanced Zonal Analysis Procedure (EZAP) - derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
313	Stabilizer Torsion Box Compartment - Left
314	Stabilizer Torsion Box Compartment - Right

D. Access Panels

Number	Name/Location
311BL	Stabilizer Trim Access Door

E. Zonal Inspection

SUBTASK 05-41-03-010-002

(1) Open this access panel:

Number	Name/Location
311BL	Stabilizer Trim Access Door

SUBTASK 05-41-03-210-035

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

SUBTASK 05-41-03-210-046

(3) Perform an internal zonal inspection (GV) of the stabilizer torsion box compartment - Section 48, Sta 1088 to Sta 1156 (EZAP).

SUBTASK 05-41-03-910-007

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to Electrical Wiring Interconnect Systems (EWIS) during maintenance.

SUBTASK 05-41-03-410-002

(5) Close this access panel:

Number	Name/Location
311BL	Stabilizer Trim Access Door

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Stabilizer Torsion Box Compartment General Visual (Internal)
Figure 203/05-41-03-990-803

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-03-210-804

4. INTERNAL - ZONAL (GV): APU Compartment

(Figure 204)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required Enhanced Zonal Analysis Procedure (EZAP) - derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
315	APU Compartment - Left
316	APU Compartment - Right

D. Access Panels

Number	Name/Location
315A	APU Cowl Door

E. Zonal Inspection

SUBTASK 05-41-03-010-003

(1) Open this access panel:

Number	Name/Location
315A	APU Cowl Door

SUBTASK 05-41-03-210-036

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

SUBTASK 05-41-03-210-043

(3) Perform an internal zonal inspection (GV) of the Auxiliary Power Unit (APU) compartment - Section 48, Sta 1088 to Sta 1156 (EZAP).

SUBTASK 05-41-03-910-008

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to Electrical Wiring Interconnect Systems (EWIS) during maintenance.

SUBTASK 05-41-03-410-003

(5) Close this access panel:

Number	Name/Location
315A	APU Cowl Door

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K69242 S0006584167_V2

APU Compartment - General Visual (Internal)
Figure 204/05-41-03-990-804

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-03-210-805

5. INTERNAL - ZONAL (GV): Tail Cone

(Figure 205)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required Enhanced Zonal Analysis Procedure (EZAP) - derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
317	Tail Cone Compartment - Left
318	Tail Cone Compartment - Right

D. Access Panels

Number	Name/Location
318BR	Tailcone Access Door

E. Zonal Inspection

SUBTASK 05-41-03-010-004

(1) Open this access panel:

Number	Name/Location
318BR	Tailcone Access Door

SUBTASK 05-41-03-210-037

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

SUBTASK 05-41-03-210-044

(3) Perform an internal zonal inspection (GV) of the tail cone - Section 48, Sta 1156 to Sta 1217 (EZAP).

SUBTASK 05-41-03-910-009

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to Electrical Wiring Interconnect Systems (EWIS) during maintenance.

SUBTASK 05-41-03-410-004

(5) Close this access panel:

Number	Name/Location
318BR	Tailcone Access Door

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Tail Cone - General Visual (Internal)
Figure 205/05-41-03-990-805

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-806

6. EXTERNAL - ZONAL (GV): VERTICAL FIN AND HORIZONTAL STABILIZER

(Figure 206)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
320	Subzone - Vertical Fin and Rudder
330	Subzone - Left Horizontal Stabilizer and Elevator
340	Subzone - Right Horizontal Stabilizer and Elevator

B. Zonal Inspection

SUBTASK 05-41-03-210-006

(1) Do a General Visual inspection of the vertical fin and horizontal stabilizer. Inspection is accomplished from the ground, without the use of stands or ladders. No additional access panel required.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Vertical Fin and Horizontal Stabilizer General Visual (External)
Figure 206/05-41-03-990-806

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-807

7. EXTERNAL - ZONAL (GV): VERTICAL FIN - DORSAL FIN

(Figure 207)

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
321	Vertical Fin - Dorsal Fin

B. Zonal Inspection

SUBTASK 05-41-03-210-007

(1) Do a General Visual inspection of the vertical fin - dorsal fin.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K93952 S0006584173_V2

Dorsal Fin - Vertical Fin General Visual (External)
Figure 207/05-41-03-990-807

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-808

8. INTERNAL - ZONAL (GV): VERTICAL FIN - LEADING EDGE (ONLY IF HF SYSTEM INSTALLED)
(Figure 208)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
322	Vertical Fin - Removable Fin Leading Edge

B. Access Panels

Number	Name/Location
322AL	Vertical Fin, Fixed Leading Edge

C. Zonal Inspection

SUBTASK 05-41-03-040-003

WARNING REMOVE THE ELECTRICAL POWER FROM EACH HF COMMUNICATION SYSTEM BEFORE YOU REMOVE THE LEADING EDGE SECTIONS. HF SIGNALS CAN CAUSE ELECTRICAL SHOCKS AND INJURY TO PERSONS.

(1) Open these circuit breakers and install safety tags:

CAPT Electrical System Panel, P18-2

Row	Col	Number	Name
LOM 402, 404, 406, 407, 411, 412, 415, 416, 420, 422-431, 433, 434, 437-447, 450-999			
E	11	C00839	COMMUNICATIONS HF 1

F/O Electrical System Panel, P6-1

Row	Col	Number	Name
LOM 404, 412, 415, 416, 422-426, 433, 434, 439-445, 451-454, 457, 464-999			
D	2	C00857	COMMUNICATIONS HF 2

LOM ALL

These circuit breakers are inoperative and should remain open:

CAPT Electrical System Panel, P18-2

Row	Col	Number	Name
LOM 432			
E	11	C00839	COMMUNICATIONS HF 1 (INOP)

F/O Electrical System Panel, P6-1

Row	Col	Number	Name
LOM 402, 406, 407, 411, 420, 427-432, 437, 438, 446, 447, 450, 455, 456, 458-463			
D	2	C00857	COMMUNICATIONS HF 2 (INOP)

LOM ALL

SUBTASK 05-41-03-010-005

(2) Open this access panel:

Number	Name/Location
322AL	Vertical Fin, Fixed Leading Edge

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-41-03-210-008

(3) Do a General Visual inspection of the vertical fin - leading edge (only if High Frequency (HF) system is installed).

SUBTASK 05-41-03-410-005

(4) Close this access panel:

Number	Name/Location
322AL	Vertical Fin, Fixed Leading Edge

SUBTASK 05-41-03-860-001

(5) Remove the safety tags and close these circuit breakers:

CAPT Electrical System Panel, P18-2

Row	Col	Number	Name
LOM 402, 404, 406, 407, 411, 412, 415, 416, 420, 422-431, 433, 434, 437-447, 450-999			
E	11	C00839	COMMUNICATIONS HF 1

F/O Electrical System Panel, P6-1

Row	Col	Number	Name
LOM 404, 412, 415, 416, 422-426, 433, 434, 439-445, 451-454, 457, 464-999			
D	2	C00857	COMMUNICATIONS HF 2

LOM ALL

These circuit breakers are inoperative and should remain open:

CAPT Electrical System Panel, P18-2

Row	Col	Number	Name
LOM 432			
E	11	C00839	COMMUNICATIONS HF 1 (INOP)

F/O Electrical System Panel, P6-1

Row	Col	Number	Name
LOM 402, 406, 407, 411, 420, 427-432, 437, 438, 446, 447, 450, 455, 456, 458-463			
D	2	C00857	COMMUNICATIONS HF 2 (INOP)

LOM ALL

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K94001 S0006584175_V2

Leading Edge - Vertical Fin General Visual (Internal)
Figure 208/05-41-03-990-808

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-809

9. EXTERNAL - ZONAL (GV): VERTICAL FIN - LEADING EDGE

(Figure 209)

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
322	Vertical Fin - Removable Fin Leading Edge

B. Zonal Inspection

SUBTASK 05-41-03-210-009

(1) Do a General Visual inspection of the vertical fin - leading edge.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K94933 S0006584177_V2

Leading Edge - Vertical Fin General Visual (External)
Figure 209/05-41-03-990-809

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-810

10. INTERNAL - ZONAL (GV): VERTICAL FIN - LEADING EDGE

(Figure 210)

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
SRM 51-10-01	Structural Repair Manual

B. Consumable Materials

Reference	Description	Specification
A02315	Sealant - Low Density, Synthetic Rubber. 2 Part	BMS5-142 Type II

C. Location Zones

Zone	Area
322	Vertical Fin - Removable Fin Leading Edge

D. Access Panels

Number	Name/Location
322B	Vertical Fin, Removable Leading Edge

E. Zonal Inspection

SUBTASK 05-41-03-010-006

(1) Open this access panel:

Number	Name/Location
322B	Vertical Fin, Removable Leading Edge

SUBTASK 05-41-03-210-010

(2) Do a General Visual inspection of the vertical fin - leading edge.

SUBTASK 05-41-03-410-006

(3) Close this access panel:

Number	Name/Location
322B	Vertical Fin, Removable Leading Edge

SUBTASK 05-41-03-390-006

(4) Apply an aerodynamic smoother sealant, A02315, for each applicable panel (SRM 51-10-01).

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K94837 S0006584179_V2

Leading Edge - Vertical Fin General Visual (Internal)
Figure 210/05-41-03-990-810 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K94839 S0006584180_V2

Leading Edge - Vertical Fin General Visual (Internal)
Figure 210/05-41-03-990-810 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-03-210-811

11. INTERNAL - ZONAL (GV): Vertical Fin - Front Spar to Rear Spar

(Figure 211)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required Enhanced Zonal Analysis Procedure (EZAP) - derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)
SRM 51-10-01	Structural Repair Manual

C. Consumable Materials

Reference	Description	Specification
A02315	Sealant - Low Density, Synthetic Rubber. 2 Part	BMS5-142 Type II

D. Location Zones

Zone	Area
323	Vertical Fin - Front Spar To Rear Spar

E. Access Panels

Number	Name/Location
323AL	Vertical Fin, Front Spar Access Door
323BL	Vertical Fin, Forward Fin Access Door
323CL	Vertical Fin, Rear Spar Access Door
323DL	Vertical Fin, Access
323EL	Vertical Fin, Access
323FL	Vertical Fin, Access
323GL	Vertical Fin, Access

F. Zonal Inspection

SUBTASK 05-41-03-010-007

(1) Open these access panels:

Number	Name/Location
323AL	Vertical Fin, Front Spar Access Door
323BL	Vertical Fin, Forward Fin Access Door
323CL	Vertical Fin, Rear Spar Access Door
323DL	Vertical Fin, Access
323EL	Vertical Fin, Access
323FL	Vertical Fin, Access
323GL	Vertical Fin, Access

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-41-03-210-011

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

SUBTASK 05-41-03-210-047

(3) Perform an internal zonal inspection (GV) of the vertical fin - front spar to rear spar (EZAP).

SUBTASK 05-41-03-910-001

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to Electrical Wiring Interconnect Systems (EWIS) during maintenance.

SUBTASK 05-41-03-410-007

(5) Close these access panels:

Number	Name/Location
323AL	Vertical Fin, Front Spar Access Door
323BL	Vertical Fin, Forward Fin Access Door
323CL	Vertical Fin, Rear Spar Access Door
323DL	Vertical Fin, Access
323EL	Vertical Fin, Access
323FL	Vertical Fin, Access
323GL	Vertical Fin, Access

SUBTASK 05-41-03-390-003

(6) Apply an aerodynamic smoother sealant, A02315, for each applicable panel (SRM 51-10-01).

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K94809 S0006584182_V2

Front Spar to Rear Spar - Vertical Fin General Visual (Internal)
Figure 211/05-41-03-990-811 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K94817 S0006584183_V3

Front Spar to Rear Spar - Vertical Fin General Visual (Internal)
Figure 211/05-41-03-990-811 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-812

12. EXTERNAL - ZONAL (GV): VERTICAL FIN - FRONT SPAR TO REAR SPAR

(Figure 212)

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
323	Vertical Fin - Front Spar To Rear Spar

B. Zonal Inspection

SUBTASK 05-41-03-210-012

(1) Do a General Visual inspection of the vertical fin - front spar to rear spar.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K86258 S0006584185_V2

Front Spar to Rear Spar - Vertical Fin General Visual (External)
Figure 212/05-41-03-990-812

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-03-210-813

13. INTERNAL - ZONAL (GV): Vertical Fin - Rear Spar to Trailing Edge

(Figure 213)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required Enhanced Zonal Analysis Procedure (EZAP) - derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)
55-33-31-000-801	Vertical Stabilizer (Fin) Trailing Edge Panels Removal (P/B 401)
55-33-31-400-801	Vertical Stabilizer (Fin) Trailing Edge Panels Installation (P/B 401)

C. Location Zones

Zone	Area
324	Vertical Fin - Rear Spar To Trailing Edge

D. Access Panels

Number	Name/Location
324AL	Vertical Fin, Aft Fin Access Door
324BL	Vertical Fin, Trailing Edge Access
324DL	Trailing Edge Access
324HL	Vertical Fin, Access

E. Zonal Inspection

SUBTASK 05-41-03-010-008

(1) Open these access panels:

(TASK 55-33-31-000-801)

Number	Name/Location
324AL	Vertical Fin, Aft Fin Access Door
324BL	Vertical Fin, Trailing Edge Access
324DL	Trailing Edge Access
324HL	Vertical Fin, Access

SUBTASK 05-41-03-210-013

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

SUBTASK 05-41-03-210-048

(3) Perform an internal zonal inspection (GV) of the vertical fin - rear spar to trailing edge (EZAP).

SUBTASK 05-41-03-910-002

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to Electrical Wiring Interconnect Systems (EWIS) during maintenance.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-41-03-410-008

(5) Close these access panels:

(TASK 55-33-31-400-801)

Number	Name/Location
324AL	Vertical Fin, Aft Fin Access Door
324BL	Vertical Fin, Trailing Edge Access
324DL	Trailing Edge Access
324HL	Vertical Fin, Access

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K84534 S0006584187_V2

Rear Spar to Trailing Edge - Vertical Fin General Visual (Internal)
Figure 213/05-41-03-990-813 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K84499 S0006584188_V2

Rear Spar to Trailing Edge - Vertical Fin General Visual (Internal)
Figure 213/05-41-03-990-813 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-814

14. EXTERNAL - ZONAL (GV): VERTICAL FIN - REAR SPAR TO TRAILING EDGE

(Figure 214)

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
324	Vertical Fin - Rear Spar To Trailing Edge

B. Zonal Inspection

SUBTASK 05-41-03-210-014

(1) Do a General Visual inspection of the vertical fin - rear spar to trailing edge.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Rear Spar to Trailing Edge - Vertical Fin General Visual (External)
Figure 214/05-41-03-990-814

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-815

15. EXTERNAL - ZONAL (GV): RUDDER

(Figure 215)

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
325	Vertical Fin - Rudder

B. Zonal Inspection

SUBTASK 05-41-03-210-015

(1) Do a General Visual inspection of the rudder.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Rudder General Visual (External)
Figure 215/05-41-03-990-815

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-816

16. EXTERNAL - ZONAL (GV): VERTICAL FIN TIP

(Figure 216)

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
326	Vertical Fin - Fin Tip

B. Zonal Inspection

SUBTASK 05-41-03-210-016

(1) Do a General Visual inspection of the vertical fin tip.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K75021 S0006584194_V2

Vertical Fin Tip General Visual (External)
Figure 216/05-41-03-990-816

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-817

17. EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - LEADING EDGE - LEFT

(Figure 217)

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
331	Left Horizontal Stabilizer - Removable Leading Edge

B. Zonal Inspection

SUBTASK 05-41-03-210-017

(1) Do a General Visual inspection of the horizontal stabilizer - leading edge - left.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K64926 S0006584196_V2

Leading Edge - Left Horizontal Stabilizer General Visual (External)
Figure 217/05-41-03-990-817

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-818

18. EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - FRONT SPAR TO REAR SPAR - LEFT

(Figure 218)

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
332	Left Horizontal Stab - Front Spar to Rear Spar, Stab Sta 57.93 to Stab BL 281.81

B. Zonal Inspection

SUBTASK 05-41-03-210-018

(1) Do a General Visual inspection of the horizontal stabilizer - front spar to rear spar - left.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K64947 S0006584198_V2

Front Spar to Rear Spar - Left Horizontal Stabilizer General Visual (External)
Figure 218/05-41-03-990-818

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-819

19. INTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - FRONT SPAR TO REAR SPAR - LEFT

(Figure 219)

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
SRM 51-10-01	Structural Repair Manual

B. Consumable Materials

Reference	Description	Specification
A02315	Sealant - Low Density, Synthetic Rubber. 2 Part	BMS5-142 Type II

C. Location Zones

Zone	Area
332	Left Horizontal Stab - Front Spar to Rear Spar, Stab Sta 57.93 to Stab BL 281.81

D. Access Panels

Number	Name/Location
332AB	Horizontal Stabilizer, Gap Cover, Horizontal Stabilizer to Body
332AT	Horizontal Stabilizer, Gap Cover, Horizontal Stabilizer to Body

E. Zonal Inspection

SUBTASK 05-41-03-010-009

(1) Open these access panels:

Number	Name/Location
332AB	Horizontal Stabilizer, Gap Cover, Horizontal Stabilizer to Body
332AT	Horizontal Stabilizer, Gap Cover, Horizontal Stabilizer to Body

NOTE: As an alternate to the access provided, access panel 332AB can be removed for inspection from lower side of stabilizer.

SUBTASK 05-41-03-210-019

(2) Do a General Visual inspection of the inboard horizontal stabilizer - front spar to rear spar - left.

SUBTASK 05-41-03-410-009

(3) Close these access panels:

Number	Name/Location
332AB	Horizontal Stabilizer, Gap Cover, Horizontal Stabilizer to Body
332AT	Horizontal Stabilizer, Gap Cover, Horizontal Stabilizer to Body

NOTE: Only the access panel that was removed needs to be re-installed.

SUBTASK 05-41-03-390-004

(4) Apply an aerodynamic smoother sealant, A02315, for each applicable panel (SRM 51-10-01).

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Front Spar to Rear Spar - Left Horizontal Stabilizer General Visual (Internal)
Figure 219/05-41-03-990-819

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-03-210-820

20. INTERNAL - ZONAL (GV): Horizontal Stabilizer - Rear Spar to Trailing Edge - Left

(Figure 220)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required Enhanced Zonal Analysis Procedure (EZAP) - derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)
27-31-00-800-802	Remove Pressure from the Elevator Hydraulic Systems A and B (P/B 201)
27-31-00-840-802	Put the Elevator Systems A and B Back to the Condition Before the Pressure Removal (P/B 201)
55-10-11-000-801	Balance Bay Panels Removal (P/B 401)
55-10-11-400-801	Balance Bay Panels Installation (P/B 401)
SRM 51-10-01	Structural Repair Manual

C. Consumable Materials

Reference	Description	Specification
A00247	Sealant - Pressure And Environmental - Chromate Type	BMS5-95
A02315	Sealant - Low Density, Synthetic Rubber. 2 Part	BMS5-142 Type II

D. Location Zones

Zone	Area
333	Left Horizontal Stabilizer - Rear Spar to Trailing Edge

E. Access Panels

Number	Name/Location
333AB	Horizontal Stabilizer, Gap Cover, Horizontal Stabilizer to Body
333AT	Horizontal Stabilizer, Gap Cover, Horizontal Stabilizer to Body
333BB	Horizontal Stabilizer, Access Panel, Trailing Edge
333CB	Horizontal Stabilizer, Access Panel, Trailing Edge
333DB	Horizontal Stabilizer, Access Panel, Trailing Edge
333EB	Horizontal Stabilizer, Access Panel, Trailing Edge
333FB	Horizontal Stabilizer, Access Panel, Trailing Edge

F. Zonal Inspection

SUBTASK 05-41-03-800-002

(1) If hydraulic systems A and B have pressure, do this task: Remove Pressure from the Elevator Hydraulic Systems A and B, TASK 27-31-00-800-802.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-41-03-010-010

(2) Open the applicable trailing edge access panels for the horizontal stabilizer (TASK 55-10-11-000-801).

Open these access panels:

Number	Name/Location
333AB	Horizontal Stabilizer, Gap Cover, Horizontal Stabilizer to Body
333AT	Horizontal Stabilizer, Gap Cover, Horizontal Stabilizer to Body
333BB	Horizontal Stabilizer, Access Panel, Trailing Edge
333CB	Horizontal Stabilizer, Access Panel, Trailing Edge
333DB	Horizontal Stabilizer, Access Panel, Trailing Edge
333EB	Horizontal Stabilizer, Access Panel, Trailing Edge
333FB	Horizontal Stabilizer, Access Panel, Trailing Edge

SUBTASK 05-41-03-210-020

(3) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

SUBTASK 05-41-03-210-049

(4) Perform an internal zonal inspection (GV) of the horizontal stabilizer - rear spar to trailing edge - left (EZAP).

SUBTASK 05-41-03-910-004

(5) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to Electrical Wiring Interconnect Systems (EWIS) during maintenance.

SUBTASK 05-41-03-410-015

(6) Close this access panel:

Number	Name/Location
333AB	Horizontal Stabilizer, Gap Cover, Horizontal Stabilizer to Body

(a) Make sure that the blade seal is installed correctly into the forward track channel.

SUBTASK 05-41-03-410-010

(7) Close the applicable trailing edge access panels for the horizontal stabilizer (TASK 55-10-11-400-801).

Close these access panels:

Number	Name/Location
333AT	Horizontal Stabilizer, Gap Cover, Horizontal Stabilizer to Body
333BB	Horizontal Stabilizer, Access Panel, Trailing Edge
333CB	Horizontal Stabilizer, Access Panel, Trailing Edge
333DB	Horizontal Stabilizer, Access Panel, Trailing Edge
333EB	Horizontal Stabilizer, Access Panel, Trailing Edge
333FB	Horizontal Stabilizer, Access Panel, Trailing Edge

SUBTASK 05-41-03-390-002

(8) Apply an aerodynamic smoother sealant, A00247, or sealant, A02315, for each applicable panel (SRM 51-10-01).

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-41-03-840-002

(9) If hydraulic pressure in systems A and B is necessary to be restored, do this task: Put the Elevator Systems A and B Back to the Condition Before the Pressure Removal, TASK 27-31-00-840-802.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Rear Spar to Trailing Edge - Left Horizontal Stabilizer General Visual (Internal)
Figure 220/05-41-03-990-820 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Rear Spar to Trailing Edge - Left Horizontal Stabilizer General Visual (Internal)
Figure 220/05-41-03-990-820 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-821

21. EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - REAR SPAR TO TRAILING EDGE - LEFT

(Figure 221)

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
333	Left Horizontal Stabilizer - Rear Spar to Trailing Edge

B. Zonal Inspection

SUBTASK 05-41-03-210-021

(1) Do a General Visual inspection of the horizontal stabilizer - rear spar to trailing edge - left.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

L04719 S0006584205_V2

Rear Spar to Trailing Edge - Left Horizontal Stabilizer General Visual (External)
Figure 221/05-41-03-990-821

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-822

22. EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - ELEVATOR - LEFT

(Figure 222)

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
334	Left Horizontal Stabilizer - Elevator

B. Zonal Inspection

SUBTASK 05-41-03-210-022

(1) Do a General Visual inspection of the horizontal stabilizer - elevator - left.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

L04722 S0006584207_V2

Elevator - Left Horizontal Stabilizer General Visual (External)
Figure 222/05-41-03-990-822

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-823

23. EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - STABILIZER TIP - LEFT

(Figure 223)

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
335	Left Horizontal Stabilizer - Tip

B. Zonal Inspection

SUBTASK 05-41-03-210-023

(1) Do a General Visual inspection of the horizontal stabilizer - stabilizer tip -left.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

L04724 S0006584209_V2

Stabilizer Tip - Left Horizontal Stabilizer General Visual (External)
Figure 223/05-41-03-990-823

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-824

24. EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - LEADING EDGE - RIGHT

(Figure 224)

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
341	Right Horizontal Stabilizer - Removable Leading Edge

B. Zonal Inspection

SUBTASK 05-41-03-210-024

(1) Do a General Visual inspection of the horizontal stabilizer - leading edge - right.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K64944 S0006584211_V2

Leading Edge - Right Horizontal Stabilizer General Visual (External)
Figure 224/05-41-03-990-824

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-825

25. EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - FRONT SPAR TO REAR SPAR - RIGHT

(Figure 225)

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
342	Right Horizontal Stab - Front Spar to Rear Spar, Stab Sta 57.93 to Stab BL 281.81

B. Zonal Inspection

SUBTASK 05-41-03-210-025

(1) Do a General Visual inspection of the horizontal stabilizer - front spar to rear spar - right.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K64950 S0006584213_V2

Front Spar to Rear Spar - Right Horizontal Stabilizer General Visual (External)
Figure 225/05-41-03-990-825

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-826

26. INTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - FRONT SPAR TO REAR SPAR - RIGHT

(Figure 226)

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
SRM 51-10-01	Structural Repair Manual

B. Consumable Materials

Reference	Description	Specification
A02315	Sealant - Low Density, Synthetic Rubber. 2 Part	BMS5-142 Type II

C. Location Zones

Zone	Area
342	Right Horizontal Stab - Front Spar to Rear Spar, Stab Sta 57.93 to Stab BL 281.81

D. Access Panels

Number	Name/Location
342AB	Horizontal Stabilizer, Gap Cover - H. Stab. to Body
342AT	Gap Cover, Horizontal Stabilizer

E. Zonal Inspection

SUBTASK 05-41-03-010-011

(1) Open these access panels:

Number	Name/Location
342AB	Horizontal Stabilizer, Gap Cover - H. Stab. to Body
342AT	Gap Cover, Horizontal Stabilizer

NOTE: As an alternate to the access provided, access panel 342AB can be removed for inspection from lower side of stabilizer.

SUBTASK 05-41-03-210-026

(2) Do a General Visual inspection of the inboard horizontal stabilizer - front spar to rear spar - right.

SUBTASK 05-41-03-410-011

(3) Close these access panels:

Number	Name/Location
342AB	Horizontal Stabilizer, Gap Cover - H. Stab. to Body
342AT	Gap Cover, Horizontal Stabilizer

NOTE: Only the access panel that was removed needs to be re-installed.

SUBTASK 05-41-03-390-005

(4) Apply an aerodynamic smoother sealant, A02315, for each applicable panel (SRM 51-10-01).

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Front Spar to Rear Spar - Right Horizontal Stabilizer General Visual (Internal)
Figure 226/05-41-03-990-826

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-03-210-827

27. INTERNAL - ZONAL (GV): Horizontal Stabilizer - Rear Spar to Trailing Edge - Right

(Figure 227)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required Enhanced Zonal Analysis Procedure (EZAP) - derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)
27-31-00-800-802	Remove Pressure from the Elevator Hydraulic Systems A and B (P/B 201)
27-31-00-840-802	Put the Elevator Systems A and B Back to the Condition Before the Pressure Removal (P/B 201)
55-10-11-000-801	Balance Bay Panels Removal (P/B 401)
55-10-11-400-801	Balance Bay Panels Installation (P/B 401)
SRM 51-10-01	Structural Repair Manual

C. Consumable Materials

Reference	Description	Specification
A00247	Sealant - Pressure And Environmental - Chromate Type	BMS5-95
A02315	Sealant - Low Density, Synthetic Rubber. 2 Part	BMS5-142 Type II

D. Location Zones

Zone	Area
343	Right Horizontal Stabilizer - Rear Spar to Trailing Edge

E. Access Panels

Number	Name/Location
343AB	Horizontal Stabilizer, Gap Cover - H. Stab. to Body
343AT	Horizontal Stabilizer, Gap Cover - H. Stab. to Body
343BB	Horizontal Stabilizer, Access Panel - T.E. Area
343CB	Horizontal Stabilizer, Access Panel - T.E. Area
343DB	Horizontal Stabilizer, Access Panel - T.E. Area
343EB	Horizontal Stabilizer, Access Panel - T.E. Area
343FB	Horizontal Stabilizer, Access Panel - T.E. Area

F. Zonal Inspection

SUBTASK 05-41-03-800-001

(1) If hydraulic systems A and B have pressure, do this task: Remove Pressure from the Elevator Hydraulic Systems A and B, TASK 27-31-00-800-802.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-41-03-010-012

(2) Open the applicable trailing edge access panels for the horizontal stabilizer (TASK 55-10-11-000-801).

Open these access panels:

Number	Name/Location
343AB	Horizontal Stabilizer, Gap Cover - H. Stab. to Body
343AT	Horizontal Stabilizer, Gap Cover - H. Stab. to Body
343BB	Horizontal Stabilizer, Access Panel - T.E. Area
343CB	Horizontal Stabilizer, Access Panel - T.E. Area
343DB	Horizontal Stabilizer, Access Panel - T.E. Area
343EB	Horizontal Stabilizer, Access Panel - T.E. Area
343FB	Horizontal Stabilizer, Access Panel - T.E. Area

SUBTASK 05-41-03-210-027

(3) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

SUBTASK 05-41-03-210-050

(4) Perform an internal zonal inspection (GV) of the horizontal stabilizer - rear spar to trailing edge - right (EZAP).

SUBTASK 05-41-03-910-003

(5) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to Electrical Wiring Interconnect Systems (EWIS) during maintenance.

SUBTASK 05-41-03-410-014

(6) Close this access panel:

Number	Name/Location
343AB	Horizontal Stabilizer, Gap Cover - H. Stab. to Body

(a) Make sure that the blade seal is installed correctly into the forward track channel.

SUBTASK 05-41-03-410-012

(7) Close the applicable trailing edge access panels for the horizontal stabilizer (TASK 55-10-11-400-801).

Close these access panels:

Number	Name/Location
343AT	Horizontal Stabilizer, Gap Cover - H. Stab. to Body
343BB	Horizontal Stabilizer, Access Panel - T.E. Area
343CB	Horizontal Stabilizer, Access Panel - T.E. Area
343DB	Horizontal Stabilizer, Access Panel - T.E. Area
343EB	Horizontal Stabilizer, Access Panel - T.E. Area
343FB	Horizontal Stabilizer, Access Panel - T.E. Area

SUBTASK 05-41-03-390-001

(8) Apply an aerodynamic smoother sealant, A00247, or sealant, A02315, for each applicable panel (SRM 51-10-01).

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-41-03-840-001

(9) If hydraulic pressure in systems A and B is necessary to be restored, do this task: Put the Elevator Systems A and B Back to the Condition Before the Pressure Removal, TASK 27-31-00-840-802.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

L04718 S0006584217_V4

Rear Spar to Trailing Edge - Right Horizontal Stabilizer General Visual (Internal)
Figure 227/05-41-03-990-827 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Rear Spar to Trailing Edge - Right Horizontal Stabilizer General Visual (Internal)
Figure 227/05-41-03-990-827 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-828

28. EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - REAR SPAR TO TRAILING EDGE - RIGHT

(Figure 228)

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
343	Right Horizontal Stabilizer - Rear Spar to Trailing Edge

B. Zonal Inspection

SUBTASK 05-41-03-210-028

(1) Do a General Visual inspection of the horizontal stabilizer - rear spar to trailing edge - right.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

L04721 S0006584220_V2

Rear Spar to Trailing Edge - Right Horizontal Stabilizer General Visual (External)
Figure 228/05-41-03-990-828

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-829

29. EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - ELEVATOR - RIGHT

(Figure 229)

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
344	Right Horizontal Stabilizer - Elevator

B. Zonal Inspection

SUBTASK 05-41-03-210-029

(1) Do a General Visual inspection of the horizontal stabilizer - elevator - right.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

L04723 S0006584222_V2

Elevator - Right Horizontal Stabilizer General Visual (External)
Figure 229/05-41-03-990-829

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-830

30. EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - STABILIZER TIP - RIGHT

(Figure 230)

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
345	Right Horizontal Stabilizer - Tip

B. Zonal Inspection

SUBTASK 05-41-03-210-030

(1) Do a General Visual inspection of the horizontal stabilizer - stabilizer tip - right.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Stabilizer Tip - Right Horizontal Stabilizer General Visual (External)
Figure 230/05-41-03-990-830

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-835

31. EXTERNAL - ZONAL (GV): VERTICAL FIN - DORSAL FIN WITH SMALL UNMANNED AERIAL SYSTEM (sUAS)

Figure 231

NOTE: Applicable to the 737-700 and 737-800 models.

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
20-10-94-210-801	Automated sUAS Assisted External Zonal GVI Flight Operation (P/B 201)
20-10-94-210-802	Inspect the Automated sUAS Assisted External Zonal GVI Images (P/B 201)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-21125	sUAS - small Unmanned Aircraft System Part #: DCL90-00002 Supplier: FBEM2 Part #: MB-HW-001 Supplier: H2P60

C. Location Zones

Zone	Area
321	Vertical Fin - Dorsal Fin

D. Zonal Inspection with sUAS

SUBTASK 05-41-03-210-052

(1) Do a General Visual inspection of the vertical fin - dorsal fin using a sUAS, SPL-21125.

(a) Do this task: Automated sUAS Assisted External Zonal GVI Flight Operation, TASK 20-10-94-210-801

(b) Do this task: Inspect the Automated sUAS Assisted External Zonal GVI Images, TASK 20-10-94-210-802

(2) Perform a General Visual inspection of the area where the sUAS is unable to capture images.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K93952 S0006584173_V2

Dorsal Fin - Vertical Fin General Visual (External)
Figure 231/05-41-03-990-834

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ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-836

32. EXTERNAL - ZONAL (GV): VERTICAL FIN - LEADING EDGE WITH SMALL UNMANNED AERIAL SYSTEM (sUAS)

Figure 232

NOTE: Applicable to the 737-700 and 737-800 models.

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
20-10-94-210-801	Automated sUAS Assisted External Zonal GVI Flight Operation (P/B 201)
20-10-94-210-802	Inspect the Automated sUAS Assisted External Zonal GVI Images (P/B 201)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-21125	sUAS - small Unmanned Aircraft System Part #: DCL90-00002 Supplier: FBEM2 Part #: MB-HW-001 Supplier: H2P60

C. Location Zones

Zone	Area
322	Vertical Fin - Removable Fin Leading Edge

D. Zonal Inspection with sUAS

SUBTASK 05-41-03-210-053

(1) Do a General Visual inspection of the vertical fin - leading edge using a sUAS, SPL-21125.

(a) Do this task: Automated sUAS Assisted External Zonal GVI Flight Operation, TASK 20-10-94-210-801

(b) Do this task: Inspect the Automated sUAS Assisted External Zonal GVI Images, TASK 20-10-94-210-802

(2) Perform a General Visual inspection of the area where the sUAS is unable to capture images.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K94933 S0006584177_V2

Leading Edge - Vertical Fin General Visual (External)
Figure 232/05-41-03-990-835

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ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-837

33. EXTERNAL - ZONAL (GV): VERTICAL FIN - FRONT SPAR TO REAR SPAR WITH SMALL UNMANNED AERIAL SYSTEM (sUAS)

Figure 233

NOTE: Applicable to the 737-700 and 737-800 models.

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
20-10-94-210-801	Automated sUAS Assisted External Zonal GVI Flight Operation (P/B 201)
20-10-94-210-802	Inspect the Automated sUAS Assisted External Zonal GVI Images (P/B 201)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-21125	sUAS - small Unmanned Aircraft System Part #: DCL90-00002 Supplier: FBEM2 Part #: MB-HW-001 Supplier: H2P60

C. Location Zones

Zone	Area
323	Vertical Fin - Front Spar To Rear Spar

D. Zonal Inspection with sUAS

SUBTASK 05-41-03-210-054

(1) Do a General Visual inspection of the vertical fin - front spar to rear spar using a sUAS, SPL-21125.

(a) Do this task: Automated sUAS Assisted External Zonal GVI Flight Operation, TASK 20-10-94-210-801

(b) Do this task: Inspect the Automated sUAS Assisted External Zonal GVI Images, TASK 20-10-94-210-802

(2) Perform a General Visual inspection of the area where the sUAS is unable to capture images.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K86258 S0006584185_V2

Front Spar to Rear Spar - Vertical Fin General Visual (External)
Figure 233/05-41-03-990-836

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ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-838

34. EXTERNAL - ZONAL (GV): VERTICAL FIN - REAR SPAR TO TRAILING EDGE WITH SMALL UNMANNED AERIAL SYSTEM (sUAS)

Figure 234

NOTE: Applicable to the 737-700 and 737-800 models.

NOTE: This inspection is not required if an alternate method of inspection is selected.

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
20-10-94-210-801	Automated sUAS Assisted External Zonal GVI Flight Operation (P/B 201)
20-10-94-210-802	Inspect the Automated sUAS Assisted External Zonal GVI Images (P/B 201)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-21125	sUAS - small Unmanned Aircraft System Part #: DCL90-00002 Supplier: FBEM2 Part #: MB-HW-001 Supplier: H2P60

C. Location Zones

Zone	Area
324	Vertical Fin - Rear Spar To Trailing Edge

D. Zonal Inspection with sUAS

SUBTASK 05-41-03-210-055

(1) Do a General Visual inspection of the vertical fin - rear spar to trailing edge using a sUAS, SPL-21125.

(a) Do this task: Automated sUAS Assisted External Zonal GVI Flight Operation, TASK 20-10-94-210-801

(b) Do this task: Inspect the Automated sUAS Assisted External Zonal GVI Images, TASK 20-10-94-210-802

(2) Perform a General Visual inspection of the area where the sUAS is unable to capture images.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Rear Spar to Trailing Edge - Vertical Fin General Visual (External)
Figure 234/05-41-03-990-837

I

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-839

35. EXTERNAL - ZONAL (GV): RUDDER WITH SMALL UNMANNED AERIAL SYSTEM (sUAS)

Figure 235

NOTE: Applicable to the 737-700 and 737-800 models.

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
20-10-94-210-801	Automated sUAS Assisted External Zonal GVI Flight Operation (P/B 201)
20-10-94-210-802	Inspect the Automated sUAS Assisted External Zonal GVI Images (P/B 201)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-21125	sUAS - small Unmanned Aircraft System Part #: DCL90-00002 Supplier: FBEM2 Part #: MB-HW-001 Supplier: H2P60

C. Location Zones

Zone	Area
325	Vertical Fin - Rudder

D. Zonal Inspection with sUAS

SUBTASK 05-41-03-210-057

(1) Do a General Visual inspection of the rudder using a sUAS, SPL-21125.

(a) Do this task: Automated sUAS Assisted External Zonal GVI Flight Operation, TASK 20-10-94-210-801

(b) Do this task: Inspect the Automated sUAS Assisted External Zonal GVI Images, TASK 20-10-94-210-802

(2) Perform a General Visual inspection of the area where the sUAS is unable to capture images.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Rudder General Visual (External)
Figure 235/05-41-03-990-839

I

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-840

36. EXTERNAL - ZONAL (GV): VERTICAL FIN TIP WITH SMALL UNMANNED AERIAL SYSTEM (sUAS)

Figure 236

NOTE: Applicable to the 737-700 and 737-800 models.

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
20-10-94-210-801	Automated sUAS Assisted External Zonal GVI Flight Operation (P/B 201)
20-10-94-210-802	Inspect the Automated sUAS Assisted External Zonal GVI Images (P/B 201)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-21125	sUAS - small Unmanned Aircraft System Part #: DCL90-00002 Supplier: FBEM2 Part #: MB-HW-001 Supplier: H2P60

C. Location Zones

Zone	Area
326	Vertical Fin - Fin Tip

D. Zonal Inspection with sUAS

SUBTASK 05-41-03-210-068

(1) Do a General Visual inspection of the vertical fin tip using a sUAS, SPL-21125.

(a) Do this task: Automated sUAS Assisted External Zonal GVI Flight Operation, TASK 20-10-94-210-801

(b) Do this task: Inspect the Automated sUAS Assisted External Zonal GVI Images, TASK 20-10-94-210-802

(2) Perform a General Visual inspection of the area where the sUAS is unable to capture images.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K75021 S0006584194_V2

Vertical Fin Tip General Visual (External)
Figure 236/05-41-03-990-850

I

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-841

37. EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - LEADING EDGE - LEFT WITH SMALL UNMANNED AERIAL SYSTEM (sUAS)

Figure 237

NOTE: Applicable to the 737-700 and 737-800 models.

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
20-10-94-210-801	Automated sUAS Assisted External Zonal GVI Flight Operation (P/B 201)
20-10-94-210-802	Inspect the Automated sUAS Assisted External Zonal GVI Images (P/B 201)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-21125	sUAS - small Unmanned Aircraft System Part #: DCL90-00002 Supplier: FBEM2 Part #: MB-HW-001 Supplier: H2P60

C. Location Zones

Zone	Area
331	Left Horizontal Stabilizer - Removable Leading Edge

D. Zonal Inspection with sUAS

SUBTASK 05-41-03-210-058

(1) Do a General Visual inspection of the horizontal stabilizer - leading edge - left using a sUAS, SPL-21125.

(a) Do this task: Automated sUAS Assisted External Zonal GVI Flight Operation, TASK 20-10-94-210-801

(b) Do this task: Inspect the Automated sUAS Assisted External Zonal GVI Images, TASK 20-10-94-210-802

(2) Perform a General Visual inspection of the area where the sUAS is unable to capture images.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K64926 S0006584196_V2

Leading Edge - Left Horizontal Stabilizer General Visual (External)
Figure 237/05-41-03-990-840

I

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-842

38. EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - LEADING EDGE - RIGHT WITH SMALL UNMANNED AERIAL SYSTEM (sUAS)

Figure 238

NOTE: Applicable to the 737-700 and 737-800 models.

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
20-10-94-210-801	Automated sUAS Assisted External Zonal GVI Flight Operation (P/B 201)
20-10-94-210-802	Inspect the Automated sUAS Assisted External Zonal GVI Images (P/B 201)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-21125	sUAS - small Unmanned Aircraft System Part #: DCL90-00002 Supplier: FBEM2 Part #: MB-HW-001 Supplier: H2P60

C. Location Zones

Zone	Area
341	Right Horizontal Stabilizer - Removable Leading Edge

D. Zonal Inspection with sUAS

SUBTASK 05-41-03-210-059

(1) Do a General Visual inspection of the horizontal stabilizer - leading edge - right using a sUAS, SPL-21125.

(a) Do this task: Automated sUAS Assisted External Zonal GVI Flight Operation, TASK 20-10-94-210-801

(b) Do this task: Inspect the Automated sUAS Assisted External Zonal GVI Images, TASK 20-10-94-210-802

(2) Perform a General Visual inspection of the area where the sUAS is unable to capture images.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K64944 S0006584211_V2

Leading Edge - Right Horizontal Stabilizer General Visual (External)
Figure 238/05-41-03-990-841

I

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-843

39. EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - FRONT SPAR TO REAR SPAR - LEFT WITH SMALL UNMANNED AERIAL SYSTEM (sUAS)

Figure 239

NOTE: Applicable to the 737-700 and 737-800 models.

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
20-10-94-210-801	Automated sUAS Assisted External Zonal GVI Flight Operation (P/B 201)
20-10-94-210-802	Inspect the Automated sUAS Assisted External Zonal GVI Images (P/B 201)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-21125	sUAS - small Unmanned Aircraft System Part #: DCL90-00002 Supplier: FBEM2 Part #: MB-HW-001 Supplier: H2P60

C. Location Zones

Zone	Area
332	Left Horizontal Stab - Front Spar to Rear Spar, Stab Sta 57.93 to Stab BL 281.81

D. Zonal Inspection with sUAS

SUBTASK 05-41-03-210-060

(1) Do a General Visual inspection of the horizontal stabilizer - front spar to rear spar - left using a sUAS, SPL-21125.

(a) Do this task: Automated sUAS Assisted External Zonal GVI Flight Operation, TASK 20-10-94-210-801

(b) Do this task: Inspect the Automated sUAS Assisted External Zonal GVI Images, TASK 20-10-94-210-802

(2) Perform a General Visual inspection of the area where the sUAS is unable to capture images.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K64947 S0006584198_V2

Front Spar to Rear Spar - Left Horizontal Stabilizer General Visual (External)
Figure 239/05-41-03-990-842

I

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-844

40. EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - FRONT SPAR TO REAR SPAR - RIGHT WITH SMALL UNMANNED AERIAL SYSTEM (sUAS)

Figure 240

NOTE: Applicable to the 737-700 and 737-800 models.

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
20-10-94-210-801	Automated sUAS Assisted External Zonal GVI Flight Operation (P/B 201)
20-10-94-210-802	Inspect the Automated sUAS Assisted External Zonal GVI Images (P/B 201)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-21125	sUAS - small Unmanned Aircraft System Part #: DCL90-00002 Supplier: FBEM2 Part #: MB-HW-001 Supplier: H2P60

C. Location Zones

Zone	Area
342	Right Horizontal Stab - Front Spar to Rear Spar, Stab Sta 57.93 to Stab BL 281.81

D. Zonal Inspection with sUAS

SUBTASK 05-41-03-210-061

(1) Do a General Visual inspection of the horizontal stabilizer - front spar to rear spar - right using a sUAS, SPL-21125.

(a) Do this task: Automated sUAS Assisted External Zonal GVI Flight Operation, TASK 20-10-94-210-801

(b) Do this task: Inspect the Automated sUAS Assisted External Zonal GVI Images, TASK 20-10-94-210-802

(2) Perform a General Visual inspection of the area where the sUAS is unable to capture images.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K64950 S0006584213_V2

Front Spar to Rear Spar - Right Horizontal Stabilizer General Visual (External)
Figure 240/05-41-03-990-843

I

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-845

41. EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - REAR SPAR TO TRAILING EDGE - LEFT WITH SMALL UNMANNED AERIAL SYSTEM (sUAS)

Figure 241

NOTE: Applicable to the 737-700 and 737-800 models.

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
20-10-94-210-801	Automated sUAS Assisted External Zonal GVI Flight Operation (P/B 201)
20-10-94-210-802	Inspect the Automated sUAS Assisted External Zonal GVI Images (P/B 201)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-21125	sUAS - small Unmanned Aircraft System Part #: DCL90-00002 Supplier: FBEM2 Part #: MB-HW-001 Supplier: H2P60

C. Location Zones

Zone	Area
333	Left Horizontal Stabilizer - Rear Spar to Trailing Edge

D. Zonal Inspection with sUAS

SUBTASK 05-41-03-210-062

(1) Do a General Visual inspection of the horizontal stabilizer - rear spar to trailing edge - left using a sUAS, SPL-21125.

(a) Do this task: Automated sUAS Assisted External Zonal GVI Flight Operation, TASK 20-10-94-210-801

(b) Do this task: Inspect the Automated sUAS Assisted External Zonal GVI Images, TASK 20-10-94-210-802

(2) Perform a General Visual inspection of the area where the sUAS is unable to capture images.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

L04719 S0006584205_V2

Rear Spar to Trailing Edge - Left Horizontal Stabilizer General Visual (External)
Figure 241/05-41-03-990-844

I

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-846

42. EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - REAR SPAR TO TRAILING EDGE - RIGHT WITH SMALL UNMANNED AERIAL SYSTEM (sUAS)

Figure 242

NOTE: Applicable to the 737-700 and 737-800 models.

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
20-10-94-210-801	Automated sUAS Assisted External Zonal GVI Flight Operation (P/B 201)
20-10-94-210-802	Inspect the Automated sUAS Assisted External Zonal GVI Images (P/B 201)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-21125	sUAS - small Unmanned Aircraft System Part #: DCL90-00002 Supplier: FBEM2 Part #: MB-HW-001 Supplier: H2P60

C. Location Zones

Zone	Area
343	Right Horizontal Stabilizer - Rear Spar to Trailing Edge

D. Zonal Inspection with sUAS

SUBTASK 05-41-03-210-063

(1) Do a General Visual inspection of the horizontal stabilizer - rear spar to trailing edge - right using a sUAS, SPL-21125.

(a) Do this task: Automated sUAS Assisted External Zonal GVI Flight Operation, TASK 20-10-94-210-801

(b) Do this task: Inspect the Automated sUAS Assisted External Zonal GVI Images, TASK 20-10-94-210-802

(2) Perform a General Visual inspection of the area where the sUAS is unable to capture images.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

L04721 S0006584220_V2

Rear Spar to Trailing Edge - Right Horizontal Stabilizer General Visual (External)
Figure 242/05-41-03-990-845

I

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-847

43. EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - ELEVATOR - LEFT WITH SMALL UNMANNED AERIAL SYSTEM (sUAS)

Figure 243

NOTE: Applicable to the 737-700 and 737-800 models.

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
20-10-94-210-801	Automated sUAS Assisted External Zonal GVI Flight Operation (P/B 201)
20-10-94-210-802	Inspect the Automated sUAS Assisted External Zonal GVI Images (P/B 201)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-21125	sUAS - small Unmanned Aircraft System Part #: DCL90-00002 Supplier: FBEM2 Part #: MB-HW-001 Supplier: H2P60

C. Location Zones

Zone	Area
334	Left Horizontal Stabilizer - Elevator

D. Zonal Inspection with sUAS

SUBTASK 05-41-03-210-064

(1) Do a General Visual inspection of the horizontal stabilizer - elevator - left using a sUAS, SPL-21125.

(a) Do this task: Automated sUAS Assisted External Zonal GVI Flight Operation, TASK 20-10-94-210-801

(b) Do this task: Inspect the Automated sUAS Assisted External Zonal GVI Images, TASK 20-10-94-210-802

(2) Perform a General Visual inspection of the area where the sUAS is unable to capture images.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

L04722 S0006584207_V2

Elevator - Left Horizontal Stabilizer General Visual (External)
Figure 243/05-41-03-990-846

I

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-848

44. EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - ELEVATOR - RIGHT WITH SMALL UNMANNED AERIAL SYSTEM (sUAS)

Figure 244

NOTE: Applicable to the 737-700 and 737-800 models.

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
20-10-94-210-801	Automated sUAS Assisted External Zonal GVI Flight Operation (P/B 201)
20-10-94-210-802	Inspect the Automated sUAS Assisted External Zonal GVI Images (P/B 201)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-21125	sUAS - small Unmanned Aircraft System Part #: DCL90-00002 Supplier: FBEM2 Part #: MB-HW-001 Supplier: H2P60

C. Location Zones

Zone	Area
344	Right Horizontal Stabilizer - Elevator

D. Zonal Inspection with sUAS

SUBTASK 05-41-03-210-065

(1) Do a General Visual inspection of the horizontal stabilizer - elevator - right using a sUAS, SPL-21125.

(a) Do this task: Automated sUAS Assisted External Zonal GVI Flight Operation, TASK 20-10-94-210-801

(b) Do this task: Inspect the Automated sUAS Assisted External Zonal GVI Images, TASK 20-10-94-210-802

(2) Perform a General Visual inspection of the area where the sUAS is unable to capture images.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

L04723 S0006584222_V2

Elevator - Right Horizontal Stabilizer General Visual (External)
Figure 244/05-41-03-990-847

I

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-849

45. EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - STABILIZER TIP - LEFT WITH SMALL UNMANNED AERIAL SYSTEM (sUAS)

Figure 245

NOTE: Applicable to the 737-700 and 737-800 models.

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
20-10-94-210-801	Automated sUAS Assisted External Zonal GVI Flight Operation (P/B 201)
20-10-94-210-802	Inspect the Automated sUAS Assisted External Zonal GVI Images (P/B 201)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-21125	sUAS - small Unmanned Aircraft System Part #: DCL90-00002 Supplier: FBEM2 Part #: MB-HW-001 Supplier: H2P60

C. Location Zones

Zone	Area
335	Left Horizontal Stabilizer - Tip

D. Zonal Inspection with sUAS

SUBTASK 05-41-03-210-066

(1) Do a General Visual inspection of the horizontal stabilizer - stabilizer tip - left using a sUAS, SPL-21125.

(a) Do this task: Automated sUAS Assisted External Zonal GVI Flight Operation, TASK 20-10-94-210-801

(b) Do this task: Inspect the Automated sUAS Assisted External Zonal GVI Images, TASK 20-10-94-210-802

(2) Perform a General Visual inspection of the area where the sUAS is unable to capture images.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

L04724 S0006584209_V2

Stabilizer Tip - Left Horizontal Stabilizer General Visual (External)
Figure 245/05-41-03-990-848

I

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-850

46. EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - STABILIZER TIP - RIGHT WITH SMALL UNMANNED AERIAL SYSTEM (sUAS)

Figure 246

NOTE: Applicable to the 737-700 and 737-800 models.

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
20-10-94-210-801	Automated sUAS Assisted External Zonal GVI Flight Operation (P/B 201)
20-10-94-210-802	Inspect the Automated sUAS Assisted External Zonal GVI Images (P/B 201)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-21125	sUAS - small Unmanned Aircraft System Part #: DCL90-00002 Supplier: FBEM2 Part #: MB-HW-001 Supplier: H2P60

C. Location Zones

Zone	Area
345	Right Horizontal Stabilizer - Tip

D. Zonal Inspection with sUAS

SUBTASK 05-41-03-210-067

(1) Do a General Visual inspection of the horizontal stabilizer- stabilizer tip - right using a sUAS, SPL-21125.

(a) Do this task: Automated sUAS Assisted External Zonal GVI Flight Operation, TASK 20-10-94-210-801

(b) Do this task: Inspect the Automated sUAS Assisted External Zonal GVI Images, TASK 20-10-94-210-802

(2) Perform a General Visual inspection of the area where the sUAS is unable to capture images.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

L04725 S0006584224_V2

Stabilizer Tip - Right Horizontal Stabilizer General Visual (External)
Figure 246/05-41-03-990-849

I

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-04-210-801

1. **EXTERNAL - ZONAL (GV): POWERPLANT NO. 1**
(Figure 201)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
410	Subzone - Engine 1
430	Subzone - Engine 1, Nacelle Strut

B. Zonal Inspection

SUBTASK 05-41-04-210-001

(1) Do a General Visual inspection of engine no. 1 and engine no. 1 strut fairings. Inspection is accomplished from the ground, without the use of stands or ladders. No additional access panels required.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Left Engine (Outer Exterior Surfaces) General Visual (External)
Figure 201/05-41-04-990-801

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-04-210-802

2. EXTERNAL - ZONAL (GV): Engine No. 1

(Figure 202)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required Enhanced Zonal Analysis Procedure (EZAP) - derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
411	Engine 1 - Engine

D. Access Panels

Number	Name/Location
413	Left Fan Cowl, Engine 1
414	Right Fan Cowl, Engine 1
415	Left Thrust Reverser, Engine 1
416	Right Thrust Reverser, Engine 1

E. Zonal Inspection

SUBTASK 05-41-04-010-001

(1) Open these access panels:

Number	Name/Location
413	Left Fan Cowl, Engine 1
414	Right Fan Cowl, Engine 1
415	Left Thrust Reverser, Engine 1
416	Right Thrust Reverser, Engine 1

SUBTASK 05-41-04-210-002

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

SUBTASK 05-41-04-210-035

(3) Perform an external zonal inspection (GV) of the engine no. 1 (EZAP).

SUBTASK 05-41-04-910-001

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to Electrical Wiring Interconnect Systems (EWIS) during maintenance.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-41-04-410-001

(5) Close these access panels:

Number	Name/Location
413	Left Fan Cowl, Engine 1
414	Right Fan Cowl, Engine 1
415	Left Thrust Reverser, Engine 1
416	Right Thrust Reverser, Engine 1

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Left Engine (Inner Exterior Surfaces) General Visual (External)
Figure 202/05-41-04-990-802

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-04-210-803

3. EXTERNAL - ZONAL (GV): FAN COWL - ENGINE NO. 1

(Figure 203)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
413	Engine 1 - Fan Cowl, Left
414	Engine 1 - Fan Cowl, Right

B. Access Panels

Number	Name/Location
413	Left Fan Cowl, Engine 1
414	Right Fan Cowl, Engine 1

C. Zonal Inspection

SUBTASK 05-41-04-010-002

(1) Open these access panels:

Number	Name/Location
413	Left Fan Cowl, Engine 1
414	Right Fan Cowl, Engine 1

SUBTASK 05-41-04-210-003

NOTE: Inner and outer exterior surface.

(2) Do a General Visual inspection of the fan cowl - engine no. 1.

SUBTASK 05-41-04-410-002

(3) Close these access panels:

Number	Name/Location
413	Left Fan Cowl, Engine 1
414	Right Fan Cowl, Engine 1

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Fan Cowl - Left Engine General Visual (External)
Figure 203/05-41-04-990-803

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-04-210-804

4. EXTERNAL - ZONAL (GV): THRUST REVERSER - ENGINE NO. 1

(Figure 204)

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
78-31-00-980-801-F00	Thrust Reverser Operation - Extend (Selection) (P/B 201)
78-31-00-980-802-F00	Thrust Reverser Operation - Retract (Selection) (P/B 201)

B. Location Zones

Zone	Area
415	Engine 1 - Thrust Reverser, Left
416	Engine 1 - Thrust Reverser, Right

C. Zonal Inspection

SUBTASK 05-41-04-210-004

(1) Do a General Visual inspection of the thrust reverser - engine no. 1 in the deployed position.

(a) Do this task: Thrust Reverser Operation - Extend (Selection), TASK 78-31-00-980-801-F00.

SUBTASK 05-41-04-210-032

(2) Do a General Visual inspection of the thrust reverser - engine no. 1 in the stowed position.

(a) Do this task: Thrust Reverser Operation - Retract (Selection), TASK 78-31-00-980-802-F00.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K79081 S0006584234_V2

Thrust Reverser (Stowed and Deployed Position) - Left Engine General Visual (External)
Figure 204/05-41-04-990-804 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Thrust Reverser (Stowed and Deployed Position) - Left Engine General Visual (External)
Figure 204/05-41-04-990-804 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-04-210-805

5. EXTERNAL - ZONAL (GV): Thrust Reverser - Engine No. 1

(Figure 205)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required Enhanced Zonal Analysis Procedure (EZAP) - derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
415	Engine 1 - Thrust Reverser, Left
416	Engine 1 - Thrust Reverser, Right

D. Access Panels

Number	Name/Location
415	Left Thrust Reverser, Engine 1
416	Right Thrust Reverser, Engine 1

E. Zonal Inspection

SUBTASK 05-41-04-010-003

(1) Open these access panels:

Number	Name/Location
415	Left Thrust Reverser, Engine 1
416	Right Thrust Reverser, Engine 1

NOTE: Inner and outer exterior surfaces.

SUBTASK 05-41-04-210-005

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

SUBTASK 05-41-04-210-036

(3) Perform an external zonal inspection (GV) of the thrust reverser - engine no. 1 (EZAP).

SUBTASK 05-41-04-910-002

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to Electrical Wiring Interconnect Systems (EWIS) during maintenance.

SUBTASK 05-41-04-410-003

(5) Close these access panels:

Number	Name/Location
415	Left Thrust Reverser, Engine 1
416	Right Thrust Reverser, Engine 1

ECCN 9E991 BOEING PROPRIETARY - See title page for details

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Thrust Reverser (Inner and Outer Exterior Surfaces) Left Engine - General Visual (External)
Figure 205/05-41-04-990-805

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-04-210-806

6. EXTERNAL - ZONAL (GV): POWERPLANT NO. 2

(Figure 206)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
420	Subzone - Engine 2
440	Subzone - Engine 2, Nacelle Strut

B. Zonal Inspection

SUBTASK 05-41-04-210-006

(1) Do a General Visual inspection of engine no. 2 and engine no. 2 strut fairings. Inspection is accomplished from the ground, without the use of stands or ladders. No additional access panels required.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Right Engine (Outer Exterior Surfaces) General Visual (External)
Figure 206/05-41-04-990-806

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-04-210-807

7. EXTERNAL - ZONAL (GV): Engine No. 2

(Figure 207)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required Enhanced Zonal Analysis Procedure (EZAP) - derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
421	Engine 2 - Engine

D. Access Panels

Number	Name/Location
423	Left Fan Cowl, Engine 2
424	Right Fan Cowl, Engine 2
425	Left Thrust Reverser, Engine 2
426	Right Thrust Reverser, Engine 2

E. Zonal Inspection

SUBTASK 05-41-04-010-004

(1) Open these access panels:

Number	Name/Location
423	Left Fan Cowl, Engine 2
424	Right Fan Cowl, Engine 2
425	Left Thrust Reverser, Engine 2
426	Right Thrust Reverser, Engine 2

SUBTASK 05-41-04-210-007

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

SUBTASK 05-41-04-210-037

(3) Perform an external zonal inspection (GV) of the engine no. 2 (EZAP).

SUBTASK 05-41-04-910-003

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to Electrical Wiring Interconnect Systems (EWIS) during maintenance.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-41-04-410-004

(5) Close these access panels:

Number	Name/Location
423	Left Fan Cowl, Engine 2
424	Right Fan Cowl, Engine 2
425	Left Thrust Reverser, Engine 2
426	Right Thrust Reverser, Engine 2

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Right Engine (Inner Exterior Surfaces) General Visual (External)
Figure 207/05-41-04-990-807

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-04-210-808

8. EXTERNAL - ZONAL (GV): FAN COWL - ENGINE NO. 2

(Figure 208)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
423	Engine 2 - Fan Cowl, Left
424	Engine 2 - Fan Cowl, Right

B. Access Panels

Number	Name/Location
423	Left Fan Cowl, Engine 2
424	Right Fan Cowl, Engine 2

C. Zonal Inspection

SUBTASK 05-41-04-010-005

(1) Open these access panels:

Number	Name/Location
423	Left Fan Cowl, Engine 2
424	Right Fan Cowl, Engine 2

NOTE: Inner and outer exterior surface.

SUBTASK 05-41-04-210-008

(2) Do a General Visual inspection of the fan cowl - engine no. 2.

SUBTASK 05-41-04-410-005

(3) Close these access panels:

Number	Name/Location
423	Left Fan Cowl, Engine 2
424	Right Fan Cowl, Engine 2

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Fan Cowl - Right Engine General Visual (External)
Figure 208/05-41-04-990-808

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-04-210-809

9. EXTERNAL - ZONAL (GV): THRUST REVERSER - ENGINE NO. 2

(Figure 209)

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
78-31-00-980-801-F00	Thrust Reverser Operation - Extend (Selection) (P/B 201)
78-31-00-980-802-F00	Thrust Reverser Operation - Retract (Selection) (P/B 201)

B. Location Zones

Zone	Area
425	Engine 2 - Thrust Reverser, Left
426	Engine 2 - Thrust Reverser, Right

C. Zonal Inspection

SUBTASK 05-41-04-210-009

(1) Do a General Visual inspection of the thrust reverser - engine no. 2 in the deployed position.

(a) Do this task: Thrust Reverser Operation - Extend (Selection), TASK 78-31-00-980-801-F00.

SUBTASK 05-41-04-210-031

(2) Do a General Visual inspection of the thrust reverser - engine no. 2 in the stowed position.

(a) Do this task: Thrust Reverser Operation - Retract (Selection), TASK 78-31-00-980-802-F00.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K79784 S0006584245_V2

Thrust Reverser (Stowed and Deployed Position) - Right Engine General Visual (External)
Figure 209/05-41-04-990-809 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K94184 S0006584246_V2

Thrust Reverser (Stowed and Deployed Position) - Right Engine General Visual (External)
Figure 209/05-41-04-990-809 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-04-210-810

10. EXTERNAL - ZONAL (GV): Thrust Reverser - Engine No. 2

(Figure 210)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required Enhanced Zonal Analysis Procedure (EZAP) - derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
425	Engine 2 - Thrust Reverser, Left
426	Engine 2 - Thrust Reverser, Right

D. Access Panels

Number	Name/Location
425	Left Thrust Reverser, Engine 2
426	Right Thrust Reverser, Engine 2

E. Zonal Inspection

SUBTASK 05-41-04-010-006

(1) Open these access panels:

Number	Name/Location
425	Left Thrust Reverser, Engine 2
426	Right Thrust Reverser, Engine 2

NOTE: Inner and outer exterior surfaces.

SUBTASK 05-41-04-210-010

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

SUBTASK 05-41-04-210-038

(3) Perform an external zonal inspection (GV) of the thrust reverser - engine no. 2 (EZAP).

SUBTASK 05-41-04-910-004

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to Electrical Wiring Interconnect Systems (EWIS) during maintenance.

SUBTASK 05-41-04-410-006

(5) Close these access panels:

Number	Name/Location
425	Left Thrust Reverser, Engine 2
426	Right Thrust Reverser, Engine 2

ECCN 9E991 BOEING PROPRIETARY - See title page for details

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K97437 S0006584248_V2

Thrust Reverser (Inner and Outer Exterior Surfaces) Right Engine - General Visual (External)
Figure 210/05-41-04-990-810

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-04-210-811

11. INTERNAL - ZONAL (GV): Forward Strut Fairing - Engine No. 1

(Figure 211)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required Enhanced Zonal Analysis Procedure (EZAP) - derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
05-51-22-210-801	Inspection of Titanium Parts When Contaminated With Fire-Resistant Hydraulic Fluid (P/B 201)
20-10-51-000-802	Flareless Fittings in Pressurized, Strut, Fuel Tank, and Cargo Areas Installation (P/B 401)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)
54-51-01-400-801	Nacelle Strut Installation (P/B 401)
54-52-01-010-801	Forward Fairing Removal (P/B 401)
54-52-01-410-801	Forward Fairing Installation (P/B 401)
54-52-03-010-801	Wing Junction Fairing - Removal (P/B 401)
54-52-03-410-801	Wing Junction Fairing - Installation (P/B 401)
54-53-01-000-801	Strut Access Panel Removal (P/B 401)
54-53-01-400-801	Strut Access Panel Installation (P/B 401)

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-4304	Set - Borescope, Rigid, ITI USA Part #: 856A1320P07 Supplier: 58828

D. Consumable Materials

Reference	Description	Specification
D00633	Grease - Aircraft General Purpose	BMS3-33

E. Location Zones

Zone	Area
431	Engine 1 - Forward Strut Fairing

F. Access Panels

Number	Name/Location
431AL	Forward Strut Fairing, Left Thrust Reverser Disconnect, Strut 1
431AR	Forward Strut Fairing, Right Thrust Reverser Disconnect, Strut 1
431AT	Forward Strut Fairing, Thumbnail Fairing, Strut 1
431BL	Forward Strut Fairing, Left Mid Strut Fairing, Strut 1

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

Number	Name/Location
431BR	Forward Strut Fairing, Right Mid Strut Fairing, Strut 1
431CL	Forward Strut Fairing, Left Overwing Fairing, Strut 1
431CR	Forward Strut Fairing, Right Overwing Fairing, Strut 1
431DL	Forward Strut Fairing, Left Underwing Fairing, Strut 1
431DR	Forward Strut Fairing, Right Underwing Fairing, Strut 1
431EL	Forward Strut Fairing, Left T.R. Strut Fairing, Strut 1
431ER	Forward Strut Fairing, Right T.R. Strut Fairing, Strut 1

G. Zonal Inspection

SUBTASK 05-41-04-010-007

(1) Open these access panels:

(TASK 54-52-01-010-801, TASK 54-53-01-000-801, and TASK 54-52-03-010-801)

Number	Name/Location
431AL	Forward Strut Fairing, Left Thrust Reverser Disconnect, Strut 1
431AR	Forward Strut Fairing, Right Thrust Reverser Disconnect, Strut 1
431AT	Forward Strut Fairing, Thumbnail Fairing, Strut 1
431BL	Forward Strut Fairing, Left Mid Strut Fairing, Strut 1
431BR	Forward Strut Fairing, Right Mid Strut Fairing, Strut 1
431CL	Forward Strut Fairing, Left Overwing Fairing, Strut 1
431CR	Forward Strut Fairing, Right Overwing Fairing, Strut 1
431DL	Forward Strut Fairing, Left Underwing Fairing, Strut 1
431DR	Forward Strut Fairing, Right Underwing Fairing, Strut 1
431EL	Forward Strut Fairing, Left T.R. Strut Fairing, Strut 1
431ER	Forward Strut Fairing, Right T.R. Strut Fairing, Strut 1

SUBTASK 05-41-04-210-011

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

SUBTASK 05-41-04-210-033

(3) Perform an internal zonal inspection (GV) of the forward strut fairing - engine no. 1 (EZAP).

(a) If hydraulic fluid is found on strut upper spar, examine the hydraulic line fittings/connections in the area to make sure that they are not loose or leaking.

(b) If hydraulic line fitting/connection is found loose or leaking, re-tighten using torque-loosen-torque procedure (TASK 54-51-01-400-801 and TASK 20-10-51-000-802).

(c) If hydraulic fluid is found on upper spar, it is recommended to perform visual inspection of torque box through side access panels 433AL/433AR, and look for hydraulic fluid (coked, wet).

NOTE: Visual inspection can be performed with rigid borescope, COM-4304.

(d) If hydraulic fluid is found in the torque box, it must be cleaned/assessed (TASK 05-51-22-210-801).

1) Refer to INTERNAL - ZONAL (GV): Strut Torque Box - Engine No. 1, TASK 05-41-04-210-813.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-41-04-910-005

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to Electrical Wiring Interconnect Systems (EWIS) during maintenance.

SUBTASK 05-41-04-410-007

(5) Close these access panels:

(TASK 54-52-01-410-801, TASK 54-53-01-400-801, and TASK 54-52-03-410-801)

Number	Name/Location
431AT	Forward Strut Fairing, Thumbnail Fairing, Strut 1
431BL	Forward Strut Fairing, Left Mid Strut Fairing, Strut 1
431BR	Forward Strut Fairing, Right Mid Strut Fairing, Strut 1
431CL	Forward Strut Fairing, Left Overwing Fairing, Strut 1
431CR	Forward Strut Fairing, Right Overwing Fairing, Strut 1
431DL	Forward Strut Fairing, Left Underwing Fairing, Strut 1
431DR	Forward Strut Fairing, Right Underwing Fairing, Strut 1
431EL	Forward Strut Fairing, Left T.R. Strut Fairing, Strut 1
431ER	Forward Strut Fairing, Right T.R. Strut Fairing, Strut 1

SUBTASK 05-41-04-410-015

(6) Do these steps to close the applicable access panels:

(a) Close these access panels:

Number	Name/Location
431AL	Forward Strut Fairing, Left Thrust Reverser Disconnect, Strut 1
431AR	Forward Strut Fairing, Right Thrust Reverser Disconnect, Strut 1

(b) Install the bolts with grease, D00633, on the access panels.

1) Install the two lower bolts and tighten sufficiently to compress the seal before torque.

NOTE: The access panel and seal under panel are installed as one assembly.

a) Make sure that the seal does not have interference with the seal on the thumbnail fairing.

2) Install the four upper bolts.

3) Tighten the bolts to 65 ±15 in-lb (7.3 ±1.7 N·m).

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Forward Strut Fairing - Left Engine General Visual (Internal)
Figure 211/05-41-04-990-811

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-04-210-812

12. INTERNAL - ZONAL (GV): Fan Cowl Support Beam - Engine No. 1

(Figure 212)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required Enhanced Zonal Analysis Procedure (EZAP) - derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)
54-52-01-010-801	Forward Fairing Removal (P/B 401)
54-52-01-410-801	Forward Fairing Installation (P/B 401)

C. Location Zones

Zone	Area
432	Engine 1 - Fan Cowl Support Beam

D. Access Panels

Number	Name/Location
431AT	Forward Strut Fairing, Thumbnail Fairing, Strut 1

E. Zonal Inspection

SUBTASK 05-41-04-010-008

(1) Open this access panel:

(TASK 54-52-01-010-801)

Number	Name/Location
431AT	Forward Strut Fairing, Thumbnail Fairing, Strut 1

SUBTASK 05-41-04-210-012

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

SUBTASK 05-41-04-210-039

(3) Perform an internal zonal inspection (GV) of the fan cowl support beam - engine no. 1 (EZAP).

SUBTASK 05-41-04-910-007

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to Electrical Wiring Interconnect Systems (EWIS) during maintenance.

SUBTASK 05-41-04-410-008

(5) Close this access panel:

(TASK 54-52-01-410-801)

Number	Name/Location
431AT	Forward Strut Fairing, Thumbnail Fairing, Strut 1

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

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Fan Cowl Support Beam - Left Engine General Visual (Internal)
Figure 212/05-41-04-990-812

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-04-210-813

13. INTERNAL - ZONAL (GV): Strut Torque Box - Engine No. 1

(Figure 213)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required Enhanced Zonal Analysis Procedure (EZAP) - derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
05-51-22-210-801	Inspection of Titanium Parts When Contaminated With Fire-Resistant Hydraulic Fluid (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)
54-53-01-000-801	Strut Access Panel Removal (P/B 401)
54-53-01-400-801	Strut Access Panel Installation (P/B 401)
54-55-01-720-802	Strut Seal Plane Access Panels- Functional Test (P/B 201)

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-4304	Set - Borescope, Rigid, ITI USA Part #: 856A1320P07 Supplier: 58828

D. Location Zones

Zone	Area
433	Engine 1 - Strut Torque Box

E. Access Panels

Number	Name/Location
433AL	Strut, Left Aft Dry Bay, Strut 1
433AR	Strut, Right Aft Dry Bay, Strut 1
433AT	Strut, Forward Spar Web, Strut 1
433BT	Strut, Forward Spar Web, Strut 1
433CT	Strut, Upper Spar Web, Strut 1
433DT	Strut, Upper Spar Web, Strut 1

F. Zonal Inspection

SUBTASK 05-41-04-010-009

(1) Open these access panels:

(TASK 54-53-01-000-801)

Number	Name/Location
433AL	Strut, Left Aft Dry Bay, Strut 1

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

Number	Name/Location
433AR	Strut, Right Aft Dry Bay, Strut 1
433AT	Strut, Forward Spar Web, Strut 1
433BT	Strut, Forward Spar Web, Strut 1
433CT	Strut, Upper Spar Web, Strut 1
433DT	Strut, Upper Spar Web, Strut 1

NOTE: It is permitted to leave access panel 433DT installed if visual inspection is performed using a rigid borescope, COM-4304, through side access panels 433AL/433AR.

SUBTASK 05-41-04-210-040

(2) Do the zonal inspection following the procedures in TASK 05-00-00-910-804.

SUBTASK 05-41-04-210-013

(3) Perform an internal zonal inspection (GV) of the strut torque box - engine no. 1 (EZAP).

NOTE: It is permitted to use a rigid borescope, COM-4304, to perform general visual inspection.

NOTE: It is permitted to use a rigid borescope, COM-4304, through side access panels 433AL/433AR to visually examine the bay under panel 433DT without removing 433DT panel.

SUBTASK 05-41-04-211-001

(4) If hydraulic fluid is found during inspection, refer to: Inspection of Titanium Parts When Contaminated With Fire-Resistant Hydraulic Fluid, TASK 05-51-22-210-801.

NOTE: Damage to an access panel can be the cause of breach into the torque box.

(a) If an access panel is found with damage, then replace the defective access panel.

SUBTASK 05-41-04-910-006

(5) Refer to TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

SUBTASK 05-41-04-410-009

(6) Close these access panels:

(TASK 54-53-01-400-801)

Number	Name/Location
433AL	Strut, Left Aft Dry Bay, Strut 1
433AR	Strut, Right Aft Dry Bay, Strut 1
433AT	Strut, Forward Spar Web, Strut 1
433BT	Strut, Forward Spar Web, Strut 1
433CT	Strut, Upper Spar Web, Strut 1
433DT	Strut, Upper Spar Web, Strut 1

SUBTASK 05-41-04-720-001

(7) Do this task to make sure that the access panels do not leak: Strut Seal Plane Access Panels-Functional Test, TASK 54-55-01-720-802.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Strut Torque Box - Left Engine General Visual (Internal)
Figure 213/05-41-04-990-813 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(RIGHT SIDE IS SHOWN, LEFT SIDE IS EQUIVALENT)

D

1 TORQUE BOX SKIN INSTALLATION NOT SHOWN.

L07339 S0006584255_V2

Strut Torque Box - Left Engine General Visual (Internal)
Figure 213/05-41-04-990-813 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-04-210-814

14. INTERNAL - ZONAL (GV): Aft Strut Fairing - Engine No. 1

(Figure 214)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)
54-52-06-010-801	Aft Fairing Access Panel Removal (P/B 401)
54-52-06-410-801	Aft Fairing Access Panel Installation (P/B 401)

C. Location Zones

Zone	Area
434	Engine 1 - Aft Strut Fairing

D. Access Panels

Number	Name/Location
434AL	Aft Strut Fairing, Left Forward Panel, Strut 1
434AR	Aft Strut Fairing, Right Forward Panel, Strut 1
434BL	Aft Strut Fairing, Left Aft Panel, Strut 1
434CL	Aft Strut Fairing, Left Access To Fuel Door, Strut 1

E. Zonal Inspection

SUBTASK 05-41-04-010-010

(1) Open these access panels:

(TASK 54-52-06-010-801)

Number	Name/Location
434AL	Aft Strut Fairing, Left Forward Panel, Strut 1
434AR	Aft Strut Fairing, Right Forward Panel, Strut 1
434BL	Aft Strut Fairing, Left Aft Panel, Strut 1
434CL	Aft Strut Fairing, Left Access To Fuel Door, Strut 1

SUBTASK 05-41-04-210-014

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

(3) Perform an internal zonal inspection (GV) of the aft strut fairing - engine no. 1. (EZAP)

SUBTASK 05-41-04-910-008

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801, for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-41-04-410-010

(5) Close these access panels:

(TASK 54-52-06-410-801)

Number	Name/Location
434AL	Aft Strut Fairing, Left Forward Panel, Strut 1
434AR	Aft Strut Fairing, Right Forward Panel, Strut 1
434BL	Aft Strut Fairing, Left Aft Panel, Strut 1
434CL	Aft Strut Fairing, Left Access To Fuel Door, Strut 1

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K76969 S0006584257_V2

Aft Strut Fairing - Left Engine General Visual (Internal)
Figure 214/05-41-04-990-814 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Aft Strut Fairing - Left Engine General Visual (Internal)
Figure 214/05-41-04-990-814 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K78077 S0006584259_V2

Aft Strut Fairing - Left Engine General Visual (Internal)
Figure 214/05-41-04-990-814 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-04-210-815

15. INTERNAL - ZONAL (GV): Forward Strut Fairing - Engine No. 2

(Figure 215)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required Enhanced Zonal Analysis Procedure (EZAP) - derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
05-51-22-210-801	Inspection of Titanium Parts When Contaminated With Fire-Resistant Hydraulic Fluid (P/B 201)
20-10-51-000-802	Flareless Fittings in Pressurized, Strut, Fuel Tank, and Cargo Areas Installation (P/B 401)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)
54-51-01-400-801	Nacelle Strut Installation (P/B 401)
54-52-01-010-801	Forward Fairing Removal (P/B 401)
54-52-01-410-801	Forward Fairing Installation (P/B 401)
54-52-03-010-801	Wing Junction Fairing - Removal (P/B 401)
54-52-03-410-801	Wing Junction Fairing - Installation (P/B 401)
54-53-01-000-801	Strut Access Panel Removal (P/B 401)
54-53-01-400-801	Strut Access Panel Installation (P/B 401)

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-4304	Set - Borescope, Rigid, ITI USA Part #: 856A1320P07 Supplier: 58828

D. Consumable Materials

Reference	Description	Specification
D00633	Grease - Aircraft General Purpose	BMS3-33

E. Location Zones

Zone	Area
441	Engine 2 - Forward Strut Fairing

F. Access Panels

Number	Name/Location
441AL	Forward Strut Fairing, Left Thrust Reverser Disconnect, Strut 2
441AR	Forward Strut Fairing, Right Thrust Reverser Disconnect, Strut 2
441AT	Forward Strut Fairing, Thumbnail Fairing, Strut 2
441BL	Forward Strut Fairing, Left Mid Strut Fairing, Strut 2

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

Number	Name/Location
441BR	Forward Strut Fairing, Right Mid Strut Fairing, Strut 2
441CL	Forward Strut Fairing, Left Overwing Fairing, Strut 2
441CR	Forward Strut Fairing, Right Overwing Fairing, Strut 2
441DL	Forward Strut Fairing, Left Underwing Fairing, Strut 2
441DR	Forward Strut Fairing, Right Underwing Fairing, Strut 2
441EL	Forward Strut Fairing, Left T.R. Strut Fairing, Strut 2
441ER	Forward Strut Fairing, Right T.R. Strut Fairing, Strut 2

G. Zonal Inspection

SUBTASK 05-41-04-010-011

(1) Open these access panels:

(TASK 54-52-01-010-801, TASK 54-53-01-000-801, and TASK 54-52-03-010-801)

Number	Name/Location
441AL	Forward Strut Fairing, Left Thrust Reverser Disconnect, Strut 2
441AR	Forward Strut Fairing, Right Thrust Reverser Disconnect, Strut 2
441AT	Forward Strut Fairing, Thumbnail Fairing, Strut 2
441BL	Forward Strut Fairing, Left Mid Strut Fairing, Strut 2
441BR	Forward Strut Fairing, Right Mid Strut Fairing, Strut 2
441CL	Forward Strut Fairing, Left Overwing Fairing, Strut 2
441CR	Forward Strut Fairing, Right Overwing Fairing, Strut 2
441DL	Forward Strut Fairing, Left Underwing Fairing, Strut 2
441DR	Forward Strut Fairing, Right Underwing Fairing, Strut 2
441EL	Forward Strut Fairing, Left T.R. Strut Fairing, Strut 2
441ER	Forward Strut Fairing, Right T.R. Strut Fairing, Strut 2

SUBTASK 05-41-04-210-015

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

(3) Perform an internal zonal inspection (GV) of the forward strut fairing - engine no. 2. (EZAP).

(a) If hydraulic fluid is found on strut upper spar, examine the hydraulic line fittings/connections in the area to make sure that they are not loose or leaking.

(b) If hydraulic line fitting/connection is found loose or leaking, re-tighten using torque-loosen-torque procedure (TASK 54-51-01-400-801 and TASK 20-10-51-000-802).

(c) If hydraulic fluid is found on upper spar, it is recommended to perform visual inspection of torque box through side access panels 433AL/433AR, and look for hydraulic fluid (coked, wet).

NOTE: Visual inspection can be performed with rigid borescope, COM-4304.

(d) If hydraulic fluid is found in the torque box, it must be cleaned/assessed (TASK 05-51-22-210-801).

1) Refer to INTERNAL - ZONAL (GV): Strut Torque Box - Engine No. 2, TASK 05-41-04-210-817

SUBTASK 05-41-04-910-009

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801, for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-41-04-410-011

(5) Close these access panels:

(TASK 54-52-01-410-801, TASK 54-53-01-400-801, and TASK 54-52-03-410-801)

Number	Name/Location
441AT	Forward Strut Fairing, Thumbnail Fairing, Strut 2
441BL	Forward Strut Fairing, Left Mid Strut Fairing, Strut 2
441BR	Forward Strut Fairing, Right Mid Strut Fairing, Strut 2
441CL	Forward Strut Fairing, Left Overwing Fairing, Strut 2
441CR	Forward Strut Fairing, Right Overwing Fairing, Strut 2
441DL	Forward Strut Fairing, Left Underwing Fairing, Strut 2
441DR	Forward Strut Fairing, Right Underwing Fairing, Strut 2
441EL	Forward Strut Fairing, Left T.R. Strut Fairing, Strut 2
441ER	Forward Strut Fairing, Right T.R. Strut Fairing, Strut 2

SUBTASK 05-41-04-410-016

(6) Do these steps to close the applicable access panels:

(a) Close these access panels:

Number	Name/Location
441AL	Forward Strut Fairing, Left Thrust Reverser Disconnect, Strut 2
441AR	Forward Strut Fairing, Right Thrust Reverser Disconnect, Strut 2

(b) Install the bolts with grease, D00633, on the access panels.

1) Install the two lower bolts and tighten sufficiently to compress the seal before torque.

NOTE: The access panel and seal under panel are installed as one assembly.

a) Make sure that the seal does not have interference with the seal on the thumbnail fairing.

2) Install the four upper bolts.

3) Tighten the bolts to 65 ±15 in-lb (7.3 ±1.7 N·m).

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

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Forward Strut Fairing - Right Engine General Visual (Internal)
Figure 215/05-41-04-990-815

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-04-210-816

16. INTERNAL - ZONAL (GV): Fan Cowl Support Beam - Engine No. 2

(Figure 216)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required Enhanced Zonal Analysis Procedure (EZAP) - derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)
54-52-01-010-801	Forward Fairing Removal (P/B 401)
54-52-01-410-801	Forward Fairing Installation (P/B 401)

C. Location Zones

Zone	Area
442	Engine 2 - Fan Cowl Support Beam

D. Access Panels

Number	Name/Location
441AT	Forward Strut Fairing, Thumbnail Fairing, Strut 2

E. Zonal Inspection

SUBTASK 05-41-04-010-012

(1) Open this access panel:

(TASK 54-52-01-010-801)

Number	Name/Location
441AT	Forward Strut Fairing, Thumbnail Fairing, Strut 2

SUBTASK 05-41-04-210-016

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

SUBTASK 05-41-04-210-041

(3) Perform an internal zonal inspection (GV) of the fan cowl support beam - engine no. 2 (EZAP).

SUBTASK 05-41-04-910-012

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to Electrical Wiring Interconnect Systems (EWIS) during maintenance.

SUBTASK 05-41-04-410-012

(5) Close this access panel:

(TASK 54-52-01-410-801)

Number	Name/Location
441AT	Forward Strut Fairing, Thumbnail Fairing, Strut 2

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Fan Cowl Support Beam - Right Engine General Visual (Internal)
Figure 216/05-41-04-990-816

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-04-210-817

17. INTERNAL - ZONAL (GV): Strut Torque Box - Engine No. 2

(Figure 217)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required Enhanced Zonal Analysis Procedure (EZAP) - derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
05-51-22-210-801	Inspection of Titanium Parts When Contaminated With Fire-Resistant Hydraulic Fluid (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)
54-53-01-000-801	Strut Access Panel Removal (P/B 401)
54-53-01-400-801	Strut Access Panel Installation (P/B 401)
54-55-01-720-802	Strut Seal Plane Access Panels- Functional Test (P/B 201)

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-4304	Set - Borescope, Rigid, ITI USA Part #: 856A1320P07 Supplier: 58828

D. Location Zones

Zone	Area
443	Engine 2 - Strut Torque Box

E. Access Panels

Number	Name/Location
443AL	Strut, Left Aft Dry Bay, Strut 2
443AR	Strut, Right Aft Dry Bay, Strut 2
443AT	Strut, Forward Spar Web, Strut 2
443BT	Strut, Forward Spar Web, Strut 2
443CT	Strut, Upper Spar Web, Strut 2
443DT	Strut, Upper Spar Web, Strut 2

F. Zonal Inspection

SUBTASK 05-41-04-010-013

(1) Open these access panels:

(TASK 54-53-01-000-801)

Number	Name/Location
443AL	Strut, Left Aft Dry Bay, Strut 2

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

Number	Name/Location
443AR	Strut, Right Aft Dry Bay, Strut 2
443AT	Strut, Forward Spar Web, Strut 2
443BT	Strut, Forward Spar Web, Strut 2
443CT	Strut, Upper Spar Web, Strut 2
443DT	Strut, Upper Spar Web, Strut 2

NOTE: It is permitted to leave access panel 443DT installed if visual inspection is performed using a rigid borescope, COM-4304, through side access panels 443AL/443AR.

SUBTASK 05-41-04-210-042

(2) Do the zonal inspection following the procedures in TASK 05-00-00-910-804.

SUBTASK 05-41-04-210-017

(3) Perform an internal zonal inspection (GV) of the strut torque box - engine no. 2 (EZAP).

NOTE: It is permitted to use a rigid borescope, COM-4304, to perform general visual inspection.

NOTE: It is permitted to use a rigid borescope, COM-4304, through side access panels 443AL/443AR to visually examine the bay under panel 443DT without removing 443DT panel.

SUBTASK 05-41-04-211-002

(4) If hydraulic fluid is found during inspection, refer to: Inspection of Titanium Parts When Contaminated With Fire-Resistant Hydraulic Fluid, TASK 05-51-22-210-801.

NOTE: Damage to an access panel can be the cause of breach into the torque box.

(a) If an access panel is found with damage, then replace the defective access panel.

SUBTASK 05-41-04-910-010

(5) Refer to TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

SUBTASK 05-41-04-410-013

(6) Close these access panels:

(TASK 54-53-01-400-801)

Number	Name/Location
443AL	Strut, Left Aft Dry Bay, Strut 2
443AR	Strut, Right Aft Dry Bay, Strut 2
443AT	Strut, Forward Spar Web, Strut 2
443BT	Strut, Forward Spar Web, Strut 2
443CT	Strut, Upper Spar Web, Strut 2
443DT	Strut, Upper Spar Web, Strut 2

SUBTASK 05-41-04-720-002

(7) Do this task to make sure that the access panels do not leak: Strut Seal Plane Access Panels-Functional Test, TASK 54-55-01-720-802.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Strut Torque Box - Right Engine General Visual (Internal)
Figure 217/05-41-04-990-817 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(LEFT SIDE IS SHOWN, RIGHT SIDE IS EQUIVALENT)

D

1 TORQUE BOX SKIN INSTALLATION NOT SHOWN.

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Strut Torque Box - Right Engine General Visual (Internal)
Figure 217/05-41-04-990-817 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-04-210-818

18. INTERNAL - ZONAL (GV): Aft Strut Fairing - Engine No. 2

(Figure 218)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required Enhanced Zonal Analysis Procedure (EZAP) - derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)
54-52-06-010-801	Aft Fairing Access Panel Removal (P/B 401)
54-52-06-410-801	Aft Fairing Access Panel Installation (P/B 401)

C. Location Zones

Zone	Area
444	Engine 2 - Aft Strut Fairing

D. Access Panels

Number	Name/Location
444AL	Aft Strut Fairing, Left Forward Panel, Strut 2
444AR	Aft Strut Fairing, Right Forward Panel, Strut 2
444BR	Aft Strut Fairing, Right Aft Panel, Strut 2
444CR	Aft Strut Fairing, Right Access To Fuel Door, Strut 2

E. Zonal Inspection

SUBTASK 05-41-04-010-014

(1) Open these access panels:

(TASK 54-52-06-010-801)

Number	Name/Location
444AL	Aft Strut Fairing, Left Forward Panel, Strut 2
444AR	Aft Strut Fairing, Right Forward Panel, Strut 2
444BR	Aft Strut Fairing, Right Aft Panel, Strut 2
444CR	Aft Strut Fairing, Right Access To Fuel Door, Strut 2

SUBTASK 05-41-04-210-018

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

SUBTASK 05-41-04-210-034

(3) Perform an internal zonal inspection (GV) of the aft strut fairing - engine no. 2 (EZAP).

SUBTASK 05-41-04-910-011

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to Electrical Wiring Interconnect Systems (EWIS) during maintenance.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-41-04-410-014

(5) Close these access panels:

(TASK 54-52-06-410-801)

Number	Name/Location
444AL	Aft Strut Fairing, Left Forward Panel, Strut 2
444AR	Aft Strut Fairing, Right Forward Panel, Strut 2
444BR	Aft Strut Fairing, Right Aft Panel, Strut 2
444CR	Aft Strut Fairing, Right Access To Fuel Door, Strut 2

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K78571 S0006584268_V3

Aft Strut Fairing - Right Engine General Visual (Internal)
Figure 218/05-41-04-990-818 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Aft Strut Fairing - Right Engine General Visual (Internal)
Figure 218/05-41-04-990-818 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K78904 S0006584270_V2

Aft Strut Fairing - Right Engine General Visual (Internal)
Figure 218/05-41-04-990-818 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-801

1. **EXTERNAL - ZONAL (GV): LEFT WING**
(Figure 201)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
510	Subzone - Left Wing: Leading Edge, Fwd of Front Spar, Inbd of Strut and Nacelle Gap Cover Area
520	Subzone - Left Wing: Leading Edge, Fwd of Front Spar, Outboard of Strut and Nacelle Gap Cover Area
530	Left Wing - Wing Inspar Area (Fuel Tanks), Inbd of Wing Rib 22, Wing Sta 643.50
540	Subzone - Left Wing, Wing Trailing Edge Flap Track Fairings
550	Subzone - Left Wing: Trailing Edge, Aft of Rear Spar, Inbd of Outboard Trailing Edge Flap
560	Subzone - Left Wing: Trailing Edge , Aft of Rear Spar, Outboard of Inbd Trailing Edge Flap, Inbd of Fixed Trailing Edge
570	Subzone - Left Wing: Fixed Trailing Edge, Outboard of Outboard Flap, Inboard of Wing Tip, Wing Buttock Line 658.17

B. Zonal Inspection

SUBTASK 05-41-05-210-001

(1) Do a General Visual inspection of the left wing. Inspection is accomplished from the ground, without the use of stands or ladders. Control surfaces extended. No additional access panels required.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Left Wing - General Visual (External)
Figure 201/05-41-05-990-801 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(BOTTOM VIEW)

A

L03649 S0006584275_V2

Left Wing - General Visual (External)
Figure 201/05-41-05-990-801 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-802

2. EXTERNAL - ZONAL (GV): WINGLET - LEFT WING

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
527	Left Winglet

B. Zonal Inspection

SUBTASK 05-41-05-210-002

(1) Do a General Visual inspection of the winglet - left wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

3075879 S0000834157_V1

Left Winglet - General Visual (External)
Figure 202/05-41-05-990-855

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-803

3. INTERNAL - ZONAL (GV): WINGLET - LEFT WING

(Figure 203)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
527	Left Winglet

B. Access Panels

Number	Name/Location
527AB	Winglet Access Panel

C. Zonal Inspection

SUBTASK 05-41-05-010-001

(1) Open this access panel:

Number	Name/Location
527AB	Winglet Access Panel

SUBTASK 05-41-05-210-003

(2) Do a General Visual inspection of the winglet - left wing.

SUBTASK 05-41-05-410-001

(3) Close this access panel:

Number	Name/Location
527AB	Winglet Access Panel

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

M48376 S0006584279_V2

Left Winglet - General Visual (Internal)
Figure 203/05-41-05-990-803

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-804

4. EXTERNAL - ZONAL (GV): LEADING EDGE TO FRONT SPAR - INBD OF NACELLE STRUT - LEFT WING

(Figure 204)

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
511	Left Wing - Leading Edge To Front Spar

B. Zonal Inspection

NOTE: Excluding surface under wing to body fairing.

SUBTASK 05-41-05-210-004

(1) Do a General Visual inspection of the leading edge to front spar - inboard of nacelle strut - left wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K94196 S0006584281_V2

Leading Edge to Front Spar (Inboard of Nacelle Strut) Left Wing - General Visual (External)
Figure 204/05-41-05-990-804

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-05-210-805

5. **INTERNAL - ZONAL (GV): Leading Edge to Front Spar - Inboard of Nacelle Strut - Left Wing** (Figure 205)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required Enhanced Zonal Analysis Procedure (EZAP) - derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
511	Left Wing - Leading Edge To Front Spar

D. Access Panels

Number	Name/Location
511AB	Inboard Leading Edge, Lower Removable Panel
511AT	Inboard Leading Edge, Strakelet Upper Panel
511BT	Fairing

E. Zonal Inspection

SUBTASK 05-41-05-010-002

(1) Open these access panels:

Number	Name/Location
511AB	Inboard Leading Edge, Lower Removable Panel
511AT	Inboard Leading Edge, Strakelet Upper Panel
511BT	Fairing

NOTE: Flaps deployed.

SUBTASK 05-41-05-210-005

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

SUBTASK 05-41-05-210-049

(3) Perform an internal zonal inspection (GV) of the leading edge to front spar - inboard of nacelle strut - left wing (EZAP).

SUBTASK 05-41-05-910-001

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to Electrical Wiring Interconnect Systems (EWIS) during maintenance.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-41-05-410-002

(5) Close these access panels:

Number	Name/Location
511AB	Inboard Leading Edge, Lower Removable Panel
511AT	Inboard Leading Edge, Strakelet Upper Panel
511BT	Fairing

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Leading Edge to Front Spar (Inboard of Nacelle Strut) Left Wing - General Visual (Internal)
Figure 205/05-41-05-990-805 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

L05036 S0006584284_V3

Leading Edge to Front Spar (Inboard of Nacelle Strut) Left Wing - General Visual (Internal)
Figure 205/05-41-05-990-805 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

J79854 S0000179705_V2

Leading Edge to Front Spar (Inboard of Nacelle Strut) Left Wing - General Visual (Internal)
Figure 205/05-41-05-990-805 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-806

6. EXTERNAL - ZONAL (GV): KRUEGER FLAPS NO. 1 AND 2 - LEFT WING

(Figure 206)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
512	Left Wing - Krueger Flap No. 2
513	Left Wing - Krueger Flap No. 1

B. Zonal Inspection

SUBTASK 05-41-05-210-006

(1) Do a General Visual inspection of the Krueger flaps no. 1 and 2 - left wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

LEFT WING

K94201 S0006584286_V2

Krueger Flaps No. 1 and 2 General Visual (External)
Figure 206/05-41-05-990-806

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-807

7. INTERNAL - ZONAL (GV): KRUEGER FLAPS NO. 1 AND 2 - LEFT WING

(Figure 207)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
512	Left Wing - Krueger Flap No. 2
513	Left Wing - Krueger Flap No. 1

B. Zonal Inspection

NOTE: Flaps deployed.

SUBTASK 05-41-05-210-007

(1) Do a General Visual inspection of the Krueger flaps no. 1 and 2 - left wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K94202 S0006584288_V2

Krueger Flaps No. 1 and 2 General Visual (Internal)
Figure 207/05-41-05-990-807

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-808

8. EXTERNAL - ZONAL (GV): LEADING EDGE TO FRONT SPAR - OUTBD OF NACELLE STRUT - LEFT WING

(Figure 208)

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
521	Left Wing - Leading Edge to Front Spar

B. Zonal Inspection

NOTE: Slats deployed.

SUBTASK 05-41-05-210-008

(1) Do a General Visual inspection of the leading edge to front spar - outboard of nacelle strut - left wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K94562 S0006584290_V2

Leading Edge to Front Spar (Outboard of Nacelle Strut) Left Wing - General Visual (External)
Figure 208/05-41-05-990-808

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-05-210-809

9. **INTERNAL - ZONAL (GV): Leading Edge to Front Spar - Outboard of Nacelle Strut - Left Wing** (Figure 209)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required Enhanced Zonal Analysis Procedure (EZAP) - derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)
57-41-02-000-801	Leading Edge Access Panel Removal (P/B 201)
57-41-02-400-801	Leading Edge Access Panel Installation (P/B 201)

C. Location Zones

Zone	Area
521	Left Wing - Leading Edge to Front Spar

D. Access Panels

Number	Name/Location
521AAB	Lower Leading Edge Access Panel - Slat Station 508.31
521AB	Outboard Leading Edge Blowout Door - Slat Station 20.04
521ABB	Lower Leading Edge Access Panel-Slat Station 524.31
521BB	Outboard Lower Fixed Leading Edge Access Panel - Slat Station 36.02
521CB	Lower Leading Edge Access Panel - Slat Station 53.95
521DB	Lower Leading Edge Access Panel - Slat Station 71.38
521EB	Lower Leading Edge Access Panel - Slat Station 98.95
521FB	Lower Leading Edge Access Panel - Slat Station 116.32
521GB	Lower Leading Edge Access Panel - Slat Station 125.27
521HB	Lower Leading Edge Access Panel - Slat Station 152.81
521JB	Lower Leading Edge Access Panel - Slat Station 170.20
521KB	Lower Leading Edge Access Panel - Slat Station 188.12
521LB	Lower Leading Edge Access Panel - Slat Station 216.76
521MB	Lower Leading Edge Access Panel - Slat Station 234.65
521NB	Lower Leading Edge Access Panel - Slat Station 252.04
521PB	Lower Leading Edge Access Panel - Slat Station 270.42
521QB	Lower Leading Edge Access Panel - Slat Station 289.17
521RB	Lower Leading Edge Access Panel - Slat Station 307.75
521SB	Lower Leading Edge Access Panel - Slat Station 337.62
521TB	Lower Leading Edge Access Panel - Slat Station 356.14
521UB	Lower Leading Edge Access Panel - Slat Station 374.95
521VB	Lower Leading Edge Access Panel - Slat Station 395.64
521WB	Lower Leading Edge Access Panel - Slat Station 415.79

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

Number	Name/Location
521XB	Lower Leading Edge Access Panel - Slat Station 435.91
521YB	Lower Leading Edge Access Panel - Slat Station 467.98
521ZB	Lower Leading Edge Access Panel - Slat Station 488.05

E. Zonal Inspection

SUBTASK 05-41-05-010-003

(1) Open these access panels:

(TASK 57-41-02-000-801)

Number	Name/Location
521AAB	Lower Leading Edge Access Panel - Slat Station 508.31
521AB	Outboard Leading Edge Blowout Door - Slat Station 20.04
521ABB	Lower Leading Edge Access Panel-Slat Station 524.31
521BB	Outboard Lower Fixed Leading Edge Access Panel - Slat Station 36.02
521CB	Lower Leading Edge Access Panel - Slat Station 53.95
521DB	Lower Leading Edge Access Panel - Slat Station 71.38
521EB	Lower Leading Edge Access Panel - Slat Station 98.95
521FB	Lower Leading Edge Access Panel - Slat Station 116.32
521GB	Lower Leading Edge Access Panel - Slat Station 125.27
521HB	Lower Leading Edge Access Panel - Slat Station 152.81
521JB	Lower Leading Edge Access Panel - Slat Station 170.20
521KB	Lower Leading Edge Access Panel - Slat Station 188.12
521LB	Lower Leading Edge Access Panel - Slat Station 216.76
521MB	Lower Leading Edge Access Panel - Slat Station 234.65
521NB	Lower Leading Edge Access Panel - Slat Station 252.04
521PB	Lower Leading Edge Access Panel - Slat Station 270.42
521QB	Lower Leading Edge Access Panel - Slat Station 289.17
521RB	Lower Leading Edge Access Panel - Slat Station 307.75
521SB	Lower Leading Edge Access Panel - Slat Station 337.62
521TB	Lower Leading Edge Access Panel - Slat Station 356.14
521UB	Lower Leading Edge Access Panel - Slat Station 374.95
521VB	Lower Leading Edge Access Panel - Slat Station 395.64
521WB	Lower Leading Edge Access Panel - Slat Station 415.79
521XB	Lower Leading Edge Access Panel - Slat Station 435.91
521YB	Lower Leading Edge Access Panel - Slat Station 467.98
521ZB	Lower Leading Edge Access Panel - Slat Station 488.05

NOTE: Slats deployed.

SUBTASK 05-41-05-210-009

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

SUBTASK 05-41-05-210-050

(3) Perform an internal zonal inspection (GV) of the leading edge to front spar - outboard of nacelle strut - left wing (EZAP).

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-41-05-910-002

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to Electrical Wiring Interconnect Systems (EWIS) during maintenance.

SUBTASK 05-41-05-410-003

(5) Close these access panels:

(TASK 57-41-02-400-801)

Number	Name/Location
521AAB	Lower Leading Edge Access Panel - Slat Station 508.31
521AB	Outboard Leading Edge Blowout Door - Slat Station 20.04
521ABB	Lower Leading Edge Access Panel-Slat Station 524.31
521BB	Outboard Lower Fixed Leading Edge Access Panel - Slat Station 36.02
521CB	Lower Leading Edge Access Panel - Slat Station 53.95
521DB	Lower Leading Edge Access Panel - Slat Station 71.38
521EB	Lower Leading Edge Access Panel - Slat Station 98.95
521FB	Lower Leading Edge Access Panel - Slat Station 116.32
521GB	Lower Leading Edge Access Panel - Slat Station 125.27
521HB	Lower Leading Edge Access Panel - Slat Station 152.81
521JB	Lower Leading Edge Access Panel - Slat Station 170.20
521KB	Lower Leading Edge Access Panel - Slat Station 188.12
521LB	Lower Leading Edge Access Panel - Slat Station 216.76
521MB	Lower Leading Edge Access Panel - Slat Station 234.65
521NB	Lower Leading Edge Access Panel - Slat Station 252.04
521PB	Lower Leading Edge Access Panel - Slat Station 270.42
521QB	Lower Leading Edge Access Panel - Slat Station 289.17
521RB	Lower Leading Edge Access Panel - Slat Station 307.75
521SB	Lower Leading Edge Access Panel - Slat Station 337.62
521TB	Lower Leading Edge Access Panel - Slat Station 356.14
521UB	Lower Leading Edge Access Panel - Slat Station 374.95
521VB	Lower Leading Edge Access Panel - Slat Station 395.64
521WB	Lower Leading Edge Access Panel - Slat Station 415.79
521XB	Lower Leading Edge Access Panel - Slat Station 435.91
521YB	Lower Leading Edge Access Panel - Slat Station 467.98
521ZB	Lower Leading Edge Access Panel - Slat Station 488.05

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Leading Edge to Front Spar (Outboard of Nacelle Strut) Left Wing - General Visual (Internal)
Figure 209/05-41-05-990-809 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

2942176 S0000718736_V1

Leading Edge to Front Spar (Outboard of Nacelle Strut) Left Wing - General Visual (Internal)
Figure 209/05-41-05-990-809 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-810

10. EXTERNAL - ZONAL (GV): SLATS NO. 1, 2, 3, 4 - LEFT WING

(Figure 210)

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
522	Left Wing - Slat No. 4
523	Left Wing - Slat No. 3
524	Left Wing - Slat No. 2
525	Left Wing - Slat No. 1

B. Zonal Inspection

NOTE: Slats in full extend position.

SUBTASK 05-41-05-210-010

(1) Do a General Visual inspection of the slats no. 1, 2, 3, 4 - left wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Leading Edge Slats No. 1 thru 4 General Visual (External)
Figure 210/05-41-05-990-810

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-813

11. INTERNAL - ZONAL (GV): CENTER FUEL TANK - LEFT WING

(Figure 211)

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
28-11-31-000-801	Center Tank Access Door Removal (P/B 401)
28-11-31-400-801	Center Tank Access Door - Installation (P/B 401)

B. Location Zones

Zone	Area
531	Left Wing - Center Fuel Tank, Rib 1 to Rib 5

C. Access Panels

Number	Name/Location
531AB	Center Tank Access Door - Wing Station 168
531BB	Center Tank Access Door - Wing Station 192

D. Zonal Inspection

SUBTASK 05-41-05-010-005

(1) Open these access panels:

(TASK 28-11-31-000-801)

Number	Name/Location
531AB	Center Tank Access Door - Wing Station 168
531BB	Center Tank Access Door - Wing Station 192

SUBTASK 05-41-05-210-013

(2) Do a General Visual inspection of the center fuel tank - left wing.

SUBTASK 05-41-05-410-005

(3) Close these access panels:

(TASK 28-11-31-400-801)

Number	Name/Location
531AB	Center Tank Access Door - Wing Station 168
531BB	Center Tank Access Door - Wing Station 192

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K87983 S0006584301_V3

Center Fuel Tank - Left Wing General Visual (Internal)
Figure 211/05-41-05-990-813

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-814

12. EXTERNAL - ZONAL (GV): CENTER FUEL TANK - LEFT WING

(Figure 212)

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
531	Left Wing - Center Fuel Tank, Rib 1 to Rib 5

B. Zonal Inspection

NOTE: Excluding surface under wing to body fairing.

SUBTASK 05-41-05-210-014

(1) Do a General Visual inspection of the center fuel tank - left wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K82586 S0006584303_V2

Center Fuel Tank - Left Wing General Visual (External)
Figure 212/05-41-05-990-814

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-815

13. INTERNAL - ZONAL (GV): MAIN FUEL TANK - LEFT WING

(Figure 213)

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
28-11-11-000-801	Main Tank Access Door Removal (P/B 401)
28-11-11-400-801	Main Tank Access Door Installation (P/B 401)

B. Location Zones

Zone	Area
532	Left Wing - Main Tank, Rib 5 to Rib 22, Wing Station 204.25 to Wing BL 643.50

C. Access Panels

Number	Name/Location
532AB	Main Tank Access Door - Wing Station 216
532AZ	Main Tank Inner Access at Rib 6
532BB	Main Tank Access Door - Wing Station 265
532BZ	Main Tank Inner Access at Rib 6
532CB	Main Tank Access Door - Wing Station 290
532DB	Main Tank Access Door - Wing Station 313
532EB	Main Tank Access Door - Wing Station 337
532FB	Main Tank Access Door - Wing Station 367
532GB	Main Tank Access Door - Wing Station 390
532HB	Main Tank Access Door - Wing Station 417
532JB	Main Tank Access Door - Wing Station 443
532KB	Main Tank Access Door - Wing Station 470
532LB	Main Tank Access Door - Wing Station 496
532MB	Main Tank Access Door - Wing Station 523
532NB	Main Tank Access Door - Wing Station 549
532PB	Main Tank Access Door - Wing Station 576
532QB	Main Tank Access Door - Wing Station 602
532RB	Main Tank Access Door - Wing Station 629

D. Zonal Inspection

SUBTASK 05-41-05-010-006

> **CAUTION** DO NOT REMOVE THE TWO DOORS 532AZ AND 532BZ AT THE SAME TIME. DURING THE PROCEDURE, ONE OF THE DOORS MUST STAY INSTALLED WITH ALL FASTENERS IN IT. IF YOU DO NOT OBEY, DAMAGE TO THE RIB 6 CAN OCCUR.

(1) Open these access panels:

(TASK 28-11-11-000-801)

Number	Name/Location
532AB	Main Tank Access Door - Wing Station 216
532AZ	Main Tank Inner Access at Rib 6
532BB	Main Tank Access Door - Wing Station 265

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

Number	Name/Location
532BZ	Main Tank Inner Access at Rib 6
532CB	Main Tank Access Door - Wing Station 290
532DB	Main Tank Access Door - Wing Station 313
532EB	Main Tank Access Door - Wing Station 337
532FB	Main Tank Access Door - Wing Station 367
532GB	Main Tank Access Door - Wing Station 390
532HB	Main Tank Access Door - Wing Station 417
532JB	Main Tank Access Door - Wing Station 443
532KB	Main Tank Access Door - Wing Station 470
532LB	Main Tank Access Door - Wing Station 496
532MB	Main Tank Access Door - Wing Station 523
532NB	Main Tank Access Door - Wing Station 549
532PB	Main Tank Access Door - Wing Station 576
532QB	Main Tank Access Door - Wing Station 602
532RB	Main Tank Access Door - Wing Station 629

SUBTASK 05-41-05-210-015

(2) Do a General Visual inspection of the main fuel tank - left wing.

SUBTASK 05-41-05-410-006

(3) Close these access panels:

(TASK 28-11-11-400-801)

Number	Name/Location
532AB	Main Tank Access Door - Wing Station 216
532AZ	Main Tank Inner Access at Rib 6
532BB	Main Tank Access Door - Wing Station 265
532BZ	Main Tank Inner Access at Rib 6
532CB	Main Tank Access Door - Wing Station 290
532DB	Main Tank Access Door - Wing Station 313
532EB	Main Tank Access Door - Wing Station 337
532FB	Main Tank Access Door - Wing Station 367
532GB	Main Tank Access Door - Wing Station 390
532HB	Main Tank Access Door - Wing Station 417
532JB	Main Tank Access Door - Wing Station 443
532KB	Main Tank Access Door - Wing Station 470
532LB	Main Tank Access Door - Wing Station 496
532MB	Main Tank Access Door - Wing Station 523
532NB	Main Tank Access Door - Wing Station 549
532PB	Main Tank Access Door - Wing Station 576
532QB	Main Tank Access Door - Wing Station 602
532RB	Main Tank Access Door - Wing Station 629

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Main Fuel Tank - Left Wing General Visual (Internal)
Figure 213/05-41-05-990-815

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-816

14. EXTERNAL - ZONAL (GV): MAIN FUEL TANK - LEFT WING

(Figure 214)

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
532	Left Wing - Main Tank, Rib 5 to Rib 22, Wing Station 204.25 to Wing BL 643.50

B. Zonal Inspection

SUBTASK 05-41-05-210-016

(1) Do a General Visual inspection of the main fuel tank - left wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K97181 S0006584307_V3

Main Fuel Tank - Left Wing General Visual (External)
Figure 214/05-41-05-990-816

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-817

15. INTERNAL - ZONAL (GV): SURGE TANK - LEFT WING

(Figure 215)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
533	Left Wing - Surge Tank, Rib 22 to Rib 25, Wing Station 643.50 to Wing BL 616.75

B. Access Panels

Number	Name/Location
533AB	Surge Tank Access Door - Wing Station 655
533BB	Surge Tank Access Door - Wing Station 679
533CB	Surge Tank Access Door - Wing Station 703

C. Zonal Inspection

SUBTASK 05-41-05-010-007

(1) Open these access panels:

Number	Name/Location
533AB	Surge Tank Access Door - Wing Station 655
533BB	Surge Tank Access Door - Wing Station 679
533CB	Surge Tank Access Door - Wing Station 703

SUBTASK 05-41-05-210-017

(2) Do a General Visual inspection of the surge tank - left wing.

SUBTASK 05-41-05-410-007

(3) Close these access panels:

Number	Name/Location
533AB	Surge Tank Access Door - Wing Station 655
533BB	Surge Tank Access Door - Wing Station 679
533CB	Surge Tank Access Door - Wing Station 703

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K97357 S0006584309_V2

Surge Tank - Left Wing General Visual (Internal)
Figure 215/05-41-05-990-817

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-818

16. EXTERNAL - ZONAL (GV): SURGE TANK - LEFT WING

(Figure 216)

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
533	Left Wing - Surge Tank, Rib 22 to Rib 25, Wing Station 643.50 to Wing BL 616.75

B. Zonal Inspection

SUBTASK 05-41-05-210-018

(1) Do a General Visual inspection of the surge tank - left wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K97244 S0006584311_V2

Surge Tank - Left Wing General Visual (External)
Figure 216/05-41-05-990-818

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-819

17. EXTERNAL - ZONAL (GV): DRY BAY - LEFT WING

(Figure 217)

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
534	Left Wing - Dry Bay

B. Zonal Inspection

SUBTASK 05-41-05-210-019

(1) Do a General Visual inspection of the dry bay - left wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K97375 S0006584313_V2

Dry Bay - Left Wing General Visual (External)
Figure 217/05-41-05-990-819

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-05-210-820

18. INTERNAL - ZONAL (GV): Flap Support No. 4 - Left Wing

(Figure 218)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required Enhanced Zonal Analysis Procedure (EZAP) - derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)
27-51-00-860-803	Extend the Trailing Edge Flaps (P/B 201)
27-51-00-860-804	Retract the Trailing Edge Flaps (P/B 201)
53-51-21-000-801	Aft Wing-To-Body Fairing Panel Removal (P/B 401)
53-51-21-400-801	Aft Wing-To-Body Fairing Panel Installation (P/B 401)

C. Location Zones

Zone	Area
133	Main Landing Gear Wheel Well, Body Station 663.75 to Body Station 727.00 - Left
194	Lower Wing-To-Body Fairing - Aft of Wheel Well
541	Left Wing - Fairing Flap Support No. 4

D. Access Panels

Number	Name/Location
194BL	Flap Track Lubrication Panel - Aft

E. Zonal Inspection

SUBTASK 05-41-05-210-047

(1) Extend the trailing edge flaps to the 40-unit position. To extend them, do this task:Extend the Trailing Edge Flaps, TASK 27-51-00-860-803.

SUBTASK 05-41-05-010-008

(2) Open this access panel:

Number	Name/Location
194BL	Flap Track Lubrication Panel - Aft

(a) To open access panel 194BL, refer to task: Aft Wing-To-Body Fairing Panel Removal, TASK 53-51-21-000-801.

SUBTASK 05-41-05-210-039

(3) Do the zonal inspection procedures: Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

(4) Perform an internal zonal inspection (GV) of the flap support no. 4 - left wing - Section 46, STA 727 (EZAP).

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-41-05-910-008

(5) For the protection and caution information that will minimize contamination and accidental damage to Electrical Wiring Interconnect Systems (EWIS) during maintenance, refer to task: Protection of the EWIS During Maintenance, TASK 20-60-07-913-801.

SUBTASK 05-41-05-410-008

(6) Close this access panel:

Number	Name/Location
194BL	Flap Track Lubrication Panel - Aft

(a) To close access panel 194BL, refer to task: Aft Wing-To-Body Fairing Panel Installation, TASK 53-51-21-400-801.

SUBTASK 05-41-05-210-048

(7) Retract the trailing edge flaps to the UP position. To retract them, do this task:Retract the Trailing Edge Flaps, TASK 27-51-00-860-804.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Flap Support Fairing No. 4 General Visual (Internal)
Figure 218/05-41-05-990-820

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-821

19. EXTERNAL - ZONAL (GV): FAIRING FLAP SUPPORT NO. 3 - LEFT WING

(Figure 219)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
542	Left Wing - Fairing Flap Support No. 3

B. Zonal Inspection

NOTE: Flaps extended.

SUBTASK 05-41-05-210-021

(1) Do a General Visual inspection of the fairing flap support no. 3 - left wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Flap Support Fairing No. 3 General Visual (External)
Figure 219/05-41-05-990-821

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-05-210-822

20. INTERNAL - ZONAL (GV): Fairing Flap Support No. 3 - Left Wing

(Figure 220)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required Enhanced Zonal Analysis Procedure (EZAP) - derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
542	Left Wing - Fairing Flap Support No. 3

D. Zonal Inspection

NOTE: Flaps extended, inside of fairing.

SUBTASK 05-41-05-210-022

(1) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

SUBTASK 05-41-05-210-051

(2) Perform an internal zonal inspection (GV) of the fairing flap support no. 3 - left wing (EZAP).

SUBTASK 05-41-05-910-003

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to Electrical Wiring Interconnect Systems (EWIS) during maintenance.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Flap Support Fairing No. 3 General Visual (Internal)
Figure 220/05-41-05-990-822

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-823

21. EXTERNAL - ZONAL (GV): FAIRING FLAP SUPPORT NO. 2 - LEFT WING

(Figure 221)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
543	Left Wing - Fairing Flap Support No. 2

B. Zonal Inspection

NOTE: Flaps extended.

SUBTASK 05-41-05-210-023

(1) Do a General Visual inspection of the fairing flap support no. 2 - left wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Flap Support Fairing No. 2 General Visual (External)
Figure 221/05-41-05-990-823

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-05-210-824

22. INTERNAL - ZONAL (GV): Fairing Flap Support No. 2 - Left Wing

(Figure 222)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required Enhanced Zonal Analysis Procedure (EZAP) - derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
543	Left Wing - Fairing Flap Support No. 2

D. Zonal Inspection

NOTE: Flaps extended, inside of fairing.

SUBTASK 05-41-05-210-024

(1) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

SUBTASK 05-41-05-210-052

(2) Perform an internal zonal inspection (GV) of the fairing flap support no. 2 - left wing (EZAP).

SUBTASK 05-41-05-910-004

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to Electrical Wiring Interconnect Systems (EWIS) during maintenance.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K97552 S0006584323_V3

Flap Support Fairing No. 2 General Visual (Internal)
Figure 222/05-41-05-990-824

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-825

23. EXTERNAL - ZONAL (GV): FAIRING FLAP SUPPORT NO. 1 - LEFT WING

(Figure 223)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
544	Left Wing - Fairing Flap Support No. 1

B. Zonal Inspection

NOTE: Flaps extended.

SUBTASK 05-41-05-210-025

(1) Do a General Visual inspection of the fairing flap support no. 1 - left wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

L07793 S0006584325_V2

Flap Support Fairing No. 1 General Visual (External)
Figure 223/05-41-05-990-825

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-05-210-826

24. INTERNAL - ZONAL (GV): Fairing Flap Support No. 1 - Left Wing

(Figure 224)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required Enhanced Zonal Analysis Procedure (EZAP) - derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
544	Left Wing - Fairing Flap Support No. 1

D. Zonal Inspection

NOTE: Flaps extended, inside of fairing.

SUBTASK 05-41-05-210-026

(1) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

SUBTASK 05-41-05-210-053

(2) Perform an internal zonal inspection (GV) of the fairing flap support no. 1 - left wing (EZAP).

SUBTASK 05-41-05-910-005

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to Electrical Wiring Interconnect Systems (EWIS) during maintenance.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FLAP SUPPORT FAIRING NO. 1

A

L07766 S0006584327_V3

Flap Support Fairing No. 1 General Visual (Internal)
Figure 224/05-41-05-990-826

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-827

25. EXTERNAL - ZONAL (GV): REAR SPAR TO LANDING GEAR SUPPORT BEAM - LEFT WING

(Figure 225)

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
551	Left Wing - Rear Spar To Landing Gear Support Beam

B. Zonal Inspection

NOTE: Excluding surface under wing to body fairing.

SUBTASK 05-41-05-210-027

(1) Do a General Visual inspection of the rear spar to landing gear support beam - left wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Rear Spar to Landing Gear Support Beam - Left Wing General Visual (External)
Figure 225/05-41-05-990-827

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-828

26. INTERNAL - ZONAL (GV): REAR SPAR TO LANDING GEAR SUPPORT BEAM - LEFT WING

(Figure 226)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
551	Left Wing - Rear Spar To Landing Gear Support Beam

B. Access Panels

Number	Name/Location
551AT	Upper Inboard Fixed Trailing Edge Access Panel
551BT	Upper Inboard Fixed Trailing Edge, MLG Actuator Access Panel
551CT	Upper Inboard Fixed Trailing Edge, Structural Pin Access Panel
551DB	Lower Inboard Fixed Trailing Edge, Lube Actuator & MLG Beam Outboard Attach Pin Access Panel
551FB	Lower Inboard Fixed Trailing Edge, Landing Gear Access Panel

C. Zonal Inspection

SUBTASK 05-41-05-010-009

(1) Open these access panels:

Number	Name/Location
551AT	Upper Inboard Fixed Trailing Edge Access Panel
551BT	Upper Inboard Fixed Trailing Edge, MLG Actuator Access Panel
551CT	Upper Inboard Fixed Trailing Edge, Structural Pin Access Panel
551DB	Lower Inboard Fixed Trailing Edge, Lube Actuator & MLG Beam Outboard Attach Pin Access Panel
551FB	Lower Inboard Fixed Trailing Edge, Landing Gear Access Panel

NOTE: Extend the trailing edge flaps and deploy spoilers.

SUBTASK 05-41-05-210-028

(2) Do a General Visual inspection of the rear spar to landing gear support beam - left wing.

SUBTASK 05-41-05-410-009

(3) Close these access panels:

Number	Name/Location
551AT	Upper Inboard Fixed Trailing Edge Access Panel
551BT	Upper Inboard Fixed Trailing Edge, MLG Actuator Access Panel
551CT	Upper Inboard Fixed Trailing Edge, Structural Pin Access Panel
551DB	Lower Inboard Fixed Trailing Edge, Lube Actuator & MLG Beam Outboard Attach Pin Access Panel
551FB	Lower Inboard Fixed Trailing Edge, Landing Gear Access Panel

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

L07678 S0006584331_V4

Rear Spar to Landing Gear Support Beam - Left Wing General Visual (Internal)
Figure 226/05-41-05-990-828

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-829

27. EXTERNAL - ZONAL (GV): INBOARD SPOILER NO. 6 - L. WING

(Figure 227)

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
552	Left Wing - Spoiler No. 6

B. Zonal Inspection

NOTE: Spoiler raised.

SUBTASK 05-41-05-210-029

(1) Do a General Visual inspection of the inboard spoiler no. 6 - left wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

L07627 S0006584334_V2

Inboard Spoiler No. 6 General Visual (External)
Figure 227/05-41-05-990-829 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

L07899 S0006584335_V2

Inboard Spoiler No. 6 General Visual (External)
Figure 227/05-41-05-990-829 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-830

28. EXTERNAL - ZONAL (GV): INBOARD FLAPS - LEFT WING

(Figure 228)

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
553	Left Wing - Inboard Flap

B. Zonal Inspection

NOTE: Flaps extended.

SUBTASK 05-41-05-210-030

(1) Do a General Visual inspection of the inboard flaps - left wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

L03331 S0006584337_V2

Inboard Trailing Edge Flaps - Left Wing General Visual (External)
Figure 228/05-41-05-990-830

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-831

29. INTERNAL - ZONAL (GV): INBOARD MAIN FLAP - LEFT WING

(Figure 229)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
553	Left Wing - Inboard Flap

B. Access Panels

Number	Name/Location
553BB	Inboard Flap - Lower Skin

C. Zonal Inspection

SUBTASK 05-41-05-010-010

(1) Open this access panel:

Number	Name/Location
553BB	Inboard Flap - Lower Skin

NOTE: Flaps extended.

SUBTASK 05-41-05-210-031

(2) Do a General Visual inspection of the inboard main flap - left wing.

SUBTASK 05-41-05-410-010

(3) Close this access panel:

Number	Name/Location
553BB	Inboard Flap - Lower Skin

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(UPPER PANELS REMOVED FOR CLARITY)

A

L03530 S0006584339_V2

Inboard Trailing Edge Main Flap - Left Wing General Visual (Internal)
Figure 229/05-41-05-990-831

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-05-210-832

30. **EXTERNAL - ZONAL (GV): Rear Spar to T.E. - Outbd of Inbd Flap - Inbd of Fixed T.E. - L. Wing**
(Figure 230)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required Enhanced Zonal Analysis Procedure (EZAP) - derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
561	Left Wing - Rear Spar to Trailing Edge, Outboard Of Inboard Flap, Inboard of Fixed Trailing Edge

D. Zonal Inspection

NOTE: Flaps down, spoilers raised.

SUBTASK 05-41-05-210-032

(1) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

SUBTASK 05-41-05-210-054

(2) Perform an external zonal inspection (GV) of the rear spar to trailing edge - outboard of inboard flap - inboard of fixed trailing edge - left wing (EZAP).

SUBTASK 05-41-05-910-006

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to Electrical Wiring Interconnect Systems (EWIS) during maintenance.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

L03957 S0006584341_V2

Rear Spar to Trailing Edge (Outboard of Inboard Flap and Inboard of Fixed Trailing Edge) - Left Wing
Figure 230/05-41-05-990-832

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-833

31. EXTERNAL - ZONAL (GV): SPOILERS NO. 1, 2, 3, 4, 5 - LEFT WING

(Figure 231)

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
562	Left Wing - Spoiler No. 5
563	Left Wing - Spoiler No. 4
564	Left Wing - Spoiler No. 3
565	Left Wing - Spoiler No. 2
566	Left Wing - Spoiler No. 1

B. Zonal Inspection

NOTE: Spoilers raised.

SUBTASK 05-41-05-210-033

(1) Do a General Visual inspection of the spoilers 1, 2, 3, 4, 5 - left wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

L05219 S0006584343_V2

Outboard Spoiler No. 1 thru 5 General Visual (External)
Figure 231/05-41-05-990-833 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

L05224 S0006584344_V2

Outboard Spoiler No. 1 thru 5 General Visual (External)
Figure 231/05-41-05-990-833 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-834

32. EXTERNAL - ZONAL (GV): OUTBOARD FLAPS - LEFT WING

(Figure 232)

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
567	Left Wing - Outboard Flap

B. Zonal Inspection

NOTE: Flaps extended.

SUBTASK 05-41-05-210-034

(1) Do a General Visual inspection of the outboard flaps - left wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

L03382 S0006584346_V2

Outboard Flap - Left Wing General Visual (External)
Figure 232/05-41-05-990-834

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-835

33. EXTERNAL - ZONAL (GV): FIXED TRAILING EDGE - LEFT WING

(Figure 233)

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
571	Left Wing - Fixed Trailing Edge

B. Zonal Inspection

SUBTASK 05-41-05-210-035

(1) Do a General Visual inspection of the fixed trailing edge - left wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Fixed Trailing Edge - Left Wing General Visual (External)
Figure 233/05-41-05-990-835

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-836

34. INTERNAL - ZONAL (GV): FIXED TRAILING EDGE - LEFT WING

(Figure 234)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
571	Left Wing - Fixed Trailing Edge

B. Access Panels

Number	Name/Location
571AB	Lower Outboard Fixed Trailing Edge Access Panel at Deflector Rib
571AT	Upper Outboard Fixed Trailing Edge, Quadrant Bolt Access Panel
571BB	Lower Outboard Fixed Trailing Edge Access Panel
571BT	Upper Outboard Fixed Trailing Edge, Pulley Bolt Access Panel
571CB	Lower Outboard Fixed Trailing Edge Access Panel
571DB	Lower Outboard Fixed Trailing Edge Access Panel
571EB	Lower Outboard Fixed Trailing Edge Wedge Access Panel
571FB	Lower Outboard Fixed Trailing Edge Wedge Access Panel

C. Zonal Inspection

SUBTASK 05-41-05-010-011

(1) Open these access panels:

Number	Name/Location
571AB	Lower Outboard Fixed Trailing Edge Access Panel at Deflector Rib
571AT	Upper Outboard Fixed Trailing Edge, Quadrant Bolt Access Panel
571BB	Lower Outboard Fixed Trailing Edge Access Panel
571BT	Upper Outboard Fixed Trailing Edge, Pulley Bolt Access Panel
571CB	Lower Outboard Fixed Trailing Edge Access Panel
571DB	Lower Outboard Fixed Trailing Edge Access Panel
571EB	Lower Outboard Fixed Trailing Edge Wedge Access Panel
571FB	Lower Outboard Fixed Trailing Edge Wedge Access Panel

SUBTASK 05-41-05-210-036

(2) Do a General Visual inspection of the fixed trailing edge - left wing.

SUBTASK 05-41-05-410-011

(3) Close these access panels:

Number	Name/Location
571AB	Lower Outboard Fixed Trailing Edge Access Panel at Deflector Rib
571AT	Upper Outboard Fixed Trailing Edge, Quadrant Bolt Access Panel
571BB	Lower Outboard Fixed Trailing Edge Access Panel
571BT	Upper Outboard Fixed Trailing Edge, Pulley Bolt Access Panel
571CB	Lower Outboard Fixed Trailing Edge Access Panel
571DB	Lower Outboard Fixed Trailing Edge Access Panel
571EB	Lower Outboard Fixed Trailing Edge Wedge Access Panel
571FB	Lower Outboard Fixed Trailing Edge Wedge Access Panel

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

LEFT WING
(BOTTOM VIEW)

A

L03297 S0000160611_V3

Fixed Trailing Edge - Left Wing General Visual (Internal)
Figure 234/05-41-05-990-836 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

LEFT WING
(TOP VIEW)

A

L07707 S0006584351_V4

Fixed Trailing Edge - Left Wing General Visual (Internal)
Figure 234/05-41-05-990-836 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-05-210-837

35. INTERNAL - ZONAL (GV): Fixed Trailing Edge - Left Wing

(Figure 235)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required Enhanced Zonal Analysis Procedure (EZAP) - derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
571	Left Wing - Fixed Trailing Edge

D. Access Panels

Number	Name/Location
571AB	Lower Outboard Fixed Trailing Edge Access Panel at Deflector Rib
571BB	Lower Outboard Fixed Trailing Edge Access Panel

E. Zonal Inspection

SUBTASK 05-41-05-010-012

(1) Open these access panels:

Number	Name/Location
571AB	Lower Outboard Fixed Trailing Edge Access Panel at Deflector Rib
571BB	Lower Outboard Fixed Trailing Edge Access Panel

NOTE: Aileron control area only.

SUBTASK 05-41-05-210-037

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

SUBTASK 05-41-05-210-055

(3) Perform an internal zonal inspection (GV) of the fixed trailing edge - left wing (EZAP).

SUBTASK 05-41-05-910-007

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to Electrical Wiring Interconnect Systems (EWIS) during maintenance.

SUBTASK 05-41-05-410-012

(5) Close these access panels:

Number	Name/Location
571AB	Lower Outboard Fixed Trailing Edge Access Panel at Deflector Rib
571BB	Lower Outboard Fixed Trailing Edge Access Panel

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Fixed Trailing Edge - Left Wing General Visual (Internal)
Figure 235/05-41-05-990-837

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-838

36. EXTERNAL - ZONAL (GV): AILERON - LEFT WING

(Figure 236)

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
572	Left Wing - Aileron

B. Zonal Inspection

SUBTASK 05-41-05-210-038

(1) Do a General Visual inspection of the aileron - left wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Aileron - Left Wing General Visual (External)
Figure 236/05-41-05-990-838

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-839

37. EXTERNAL - ZONAL (GV): LEADING EDGE TO FRONT SPAR - INBD OF NACELLE STRUT - LEFT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS)

Figure 237

NOTE: Applicable to the 737-700 and 737-800 models.

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: Excluding surface under wing to body fairing.

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
20-10-94-210-801	Automated sUAS Assisted External Zonal GVI Flight Operation (P/B 201)
20-10-94-210-802	Inspect the Automated sUAS Assisted External Zonal GVI Images (P/B 201)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-21125	sUAS - small Unmanned Aircraft System Part #: DCL90-00002 Supplier: FBEM2 Part #: MB-HW-001 Supplier: H2P60

C. Location Zones

Zone	Area
511	Left Wing - Leading Edge To Front Spar

D. Zonal Inspection with sUAS (Top of the Wing)

SUBTASK 05-41-05-210-056

(1) Do a General Visual inspection of the leading edge to front spar - inboard of nacelle strut - left wing using a sUAS, SPL-21125.

(a) Do this task:Automated sUAS Assisted External Zonal GVI Flight Operation, TASK 20-10-94-210-801

(b) Do this task:Inspect the Automated sUAS Assisted External Zonal GVI Images, TASK 20-10-94-210-802

(2) Perform a General Visual inspection of the area where the sUAS was unable to capture images.

E. Zonal Inspection without sUAS (Bottom of the Wing)

SUBTASK 05-41-05-210-071

(1) Perform a General Visual inspection without using a sUAS of the inspection area under the wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

3074899 S0000833334_V1

Leading Edge to Front Spar (Inboard of Nacelle Strut) Left Wing - General Visual Using sUAS (External)
Figure 237/05-41-05-990-840

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-840

38. EXTERNAL - ZONAL (GV): LEADING EDGE TO FRONT SPAR - OUTBD OF NACELLE STRUT - LEFT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS)

Figure 238

NOTE: Applicable to the 737-700 and 737-800 models.

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: Slats deployed.

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
20-10-94-210-801	Automated sUAS Assisted External Zonal GVI Flight Operation (P/B 201)
20-10-94-210-802	Inspect the Automated sUAS Assisted External Zonal GVI Images (P/B 201)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-21125	sUAS - small Unmanned Aircraft System Part #: DCL90-00002 Supplier: FBEM2 Part #: MB-HW-001 Supplier: H2P60

C. Location Zones

Zone	Area
521	Left Wing - Leading Edge to Front Spar

D. Zonal Inspection with sUAS (Top of the Wing)

SUBTASK 05-41-05-210-057

(1) Do a General Visual inspection of the leading edge to front spar - outboard of nacelle strut - left wing using a sUAS, SPL-21125.

(a) Do this task:Automated sUAS Assisted External Zonal GVI Flight Operation, TASK 20-10-94-210-801

(b) Do this task:Inspect the Automated sUAS Assisted External Zonal GVI Images, TASK 20-10-94-210-802

(2) Perform a General Visual inspection of the area where the sUAS was unable to capture images.

E. Zonal Inspection without sUAS (Bottom of the Wing)

SUBTASK 05-41-05-210-072

(1) Perform a General Visual inspection without using a sUAS of the inspection area under the wing

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

3074900 S0000833336_V1

Leading Edge to Front Spar (Outboard of Nacelle Strut) Left Wing - General Visual Using sUAS (External)
Figure 238/05-41-05-990-841

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-841

39. EXTERNAL - ZONAL (GV): SLATS NO. 1, 2, 3, 4 - LEFT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS)

Figure 239

NOTE: Applicable to the 737-700 and 737-800 models.

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: Slats in full extend position.

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
20-10-94-210-801	Automated sUAS Assisted External Zonal GVI Flight Operation (P/B 201)
20-10-94-210-802	Inspect the Automated sUAS Assisted External Zonal GVI Images (P/B 201)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-21125	sUAS - small Unmanned Aircraft System Part #: DCL90-00002 Supplier: FBEM2 Part #: MB-HW-001 Supplier: H2P60

C. Location Zones

Zone	Area
522	Left Wing - Slat No. 4
523	Left Wing - Slat No. 3
524	Left Wing - Slat No. 2
525	Left Wing - Slat No. 1

D. Zonal Inspection with sUAS (Top of the Wing)

SUBTASK 05-41-05-210-058

(1) Do a General Visual inspection of the slats no. 1, 2, 3, 4 - left wing using a sUAS, SPL-21125.

(a) Do this task:Automated sUAS Assisted External Zonal GVI Flight Operation, TASK 20-10-94-210-801

(b) Do this task:Inspect the Automated sUAS Assisted External Zonal GVI Images, TASK 20-10-94-210-802

(2) Perform a General Visual inspection of the area where the sUAS was unable to capture images.

E. Zonal Inspection without sUAS (Bottom of the Wing)

SUBTASK 05-41-05-210-073

(1) Perform a General Visual inspection without using a sUAS of the inspection area under the wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Leading Edge Slats No. 1 thru 4 General Visual Using sUAS (External)
Figure 239/05-41-05-990-844

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-843

40. EXTERNAL - ZONAL (GV): CENTER FUEL TANK - LEFT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS)

Figure 240

NOTE: Applicable to the 737-700 and 737-800 models.

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: Excluding surface under wing to body fairing.

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
20-10-94-210-801	Automated sUAS Assisted External Zonal GVI Flight Operation (P/B 201)
20-10-94-210-802	Inspect the Automated sUAS Assisted External Zonal GVI Images (P/B 201)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-21125	sUAS - small Unmanned Aircraft System Part #: DCL90-00002 Supplier: FBEM2 Part #: MB-HW-001 Supplier: H2P60

C. Location Zones

Zone	Area
531	Left Wing - Center Fuel Tank, Rib 1 to Rib 5

D. Zonal Inspection with sUAS (Top of the Wing)

SUBTASK 05-41-05-210-060

(1) Do a General Visual inspection of the center fuel tank - left wing using a sUAS, SPL-21125.

(a) Do this task:Automated sUAS Assisted External Zonal GVI Flight Operation, TASK 20-10-94-210-801

(b) Do this task:Inspect the Automated sUAS Assisted External Zonal GVI Images, TASK 20-10-94-210-802

(2) Perform a General Visual inspection of the area where the sUAS was unable to capture images.

E. Zonal Inspection without sUAS (Bottom of the Wing)

SUBTASK 05-41-05-210-074

(1) Perform a General Visual inspection without using a sUAS of the inspection area under the wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

3074903 S0000833366_V1

Center Fuel Tank - Left Wing General Visual Using sUAS (External)
Figure 240/05-41-05-990-843

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-844

41. EXTERNAL - ZONAL (GV): MAIN FUEL TANK - LEFT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS)

Figure 241

NOTE: Applicable to the 737-700 and 737-800 models.

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
20-10-94-210-801	Automated sUAS Assisted External Zonal GVI Flight Operation (P/B 201)
20-10-94-210-802	Inspect the Automated sUAS Assisted External Zonal GVI Images (P/B 201)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-21125	sUAS - small Unmanned Aircraft System Part #: DCL90-00002 Supplier: FBEM2 Part #: MB-HW-001 Supplier: H2P60

C. Location Zones

Zone	Area
532	Left Wing - Main Tank, Rib 5 to Rib 22, Wing Station 204.25 to Wing BL 643.50

D. Zonal Inspection with sUAS (Top of the Wing)

SUBTASK 05-41-05-210-061

(1) Do a General Visual inspection of the main fuel tank - left wing using a sUAS, SPL-21125.

(a) Do this task:Automated sUAS Assisted External Zonal GVI Flight Operation, TASK 20-10-94-210-801

(b) Do this task:Inspect the Automated sUAS Assisted External Zonal GVI Images, TASK 20-10-94-210-802

(2) Perform a General Visual inspection of the area where the sUAS was unable to capture images.

E. Zonal Inspection without sUAS (Bottom of the Wing)

SUBTASK 05-41-05-210-076

(1) Perform a General Visual inspection without using a sUAS of the inspection area under the wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

3074905 S0000833373_V1

Main Fuel Tank - Left Wing General Visual Using sUAS (External)
Figure 241/05-41-05-990-845

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-845

42. EXTERNAL - ZONAL (GV): SURGE TANK - LEFT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS)

Figure 242

NOTE: Applicable to the 737-700 and 737-800 models.

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
20-10-94-210-801	Automated sUAS Assisted External Zonal GVI Flight Operation (P/B 201)
20-10-94-210-802	Inspect the Automated sUAS Assisted External Zonal GVI Images (P/B 201)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-21125	sUAS - small Unmanned Aircraft System Part #: DCL90-00002 Supplier: FBEM2 Part #: MB-HW-001 Supplier: H2P60

C. Location Zones

Zone	Area
533	Left Wing - Surge Tank, Rib 22 to Rib 25, Wing Station 643.50 to Wing BL 616.75

D. Zonal Inspection with sUAS (Top of the Wing)

SUBTASK 05-41-05-210-062

(1) Do a General Visual inspection of the surge tank - left wing using a sUAS, SPL-21125.

(a) Do this task:Automated sUAS Assisted External Zonal GVI Flight Operation, TASK 20-10-94-210-801

(b) Do this task:Inspect the Automated sUAS Assisted External Zonal GVI Images, TASK 20-10-94-210-802

(2) Perform a General Visual inspection of the area where the sUAS was unable to capture images.

E. Zonal Inspection without sUAS (Bottom of the Wing)

SUBTASK 05-41-05-210-077

(1) Perform a General Visual inspection without using a sUAS of the inspection area under the wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

3074907 S0000833385_V1

Surge Tank - Left Wing General Visual Using sUAS (External)
Figure 242/05-41-05-990-847

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-846

43. EXTERNAL - ZONAL (GV): DRY BAY - LEFT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS)

Figure 243

NOTE: Applicable to the 737-700 and 737-800 models.

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
20-10-94-210-801	Automated sUAS Assisted External Zonal GVI Flight Operation (P/B 201)
20-10-94-210-802	Inspect the Automated sUAS Assisted External Zonal GVI Images (P/B 201)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-21125	sUAS - small Unmanned Aircraft System Part #: DCL90-00002 Supplier: FBEM2 Part #: MB-HW-001 Supplier: H2P60

C. Location Zones

Zone	Area
534	Left Wing - Dry Bay

D. Zonal Inspection with sUAS (Top of the Wing)

SUBTASK 05-41-05-210-063

(1) Do a General Visual inspection of the dry bay - left wing using a sUAS, SPL-21125.

(a) Do this task:Automated sUAS Assisted External Zonal GVI Flight Operation, TASK 20-10-94-210-801

(b) Do this task:Inspect the Automated sUAS Assisted External Zonal GVI Images, TASK 20-10-94-210-802

(2) Perform a General Visual inspection of the area where the sUAS was unable to capture images.

E. Zonal Inspection without sUAS (Bottom of the Wing)

SUBTASK 05-41-05-210-078

(1) Perform a General Visual inspection without using a sUAS of the inspection area under the wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

3074910 S0000833387_V1

Dry Bay - Left Wing General Visual Using sUAS (External)
Figure 243/05-41-05-990-848

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-847

44. EXTERNAL - ZONAL (GV): REAR SPAR TO LANDING GEAR SUPPORT BEAM - LEFT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS)

Figure 244

NOTE: Applicable to the 737-700 and 737-800 models.

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: Excluding surface under the wing to body fairing.

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
20-10-94-210-801	Automated sUAS Assisted External Zonal GVI Flight Operation (P/B 201)
20-10-94-210-802	Inspect the Automated sUAS Assisted External Zonal GVI Images (P/B 201)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-21125	sUAS - small Unmanned Aircraft System Part #: DCL90-00002 Supplier: FBEM2 Part #: MB-HW-001 Supplier: H2P60

C. Location Zones

Zone	Area
551	Left Wing - Rear Spar To Landing Gear Support Beam

D. Zonal Inspection with sUAS (Top of the Wing)

SUBTASK 05-41-05-210-064

(1) Do a General Visual inspection of the rear spar to landing gear support beam - left wing using a sUAS, SPL-21125.

(a) Do this task:Automated sUAS Assisted External Zonal GVI Flight Operation, TASK 20-10-94-210-801

(b) Do this task:Inspect the Automated sUAS Assisted External Zonal GVI Images, TASK 20-10-94-210-802

(2) Perform a General Visual inspection of the area where the sUAS was unable to capture images.

E. Zonal Inspection without sUAS (Bottom of the Wing)

SUBTASK 05-41-05-210-079

(1) Perform a General Visual inspection without using a sUAS of the inspection area under the wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

3074913 S0000833395_V1

Rear Spar to Landing Gear Support Beam - Left Wing General Visual Using sUAS (External)
Figure 244/05-41-05-990-849

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-848

45. EXTERNAL - ZONAL (GV): INBOARD SPOILER NO. 6 - L. WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS)

Figure 245

NOTE: Applicable to the 737-700 and 737-800 models.

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: Spoiler raised.

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
20-10-94-210-801	Automated sUAS Assisted External Zonal GVI Flight Operation (P/B 201)
20-10-94-210-802	Inspect the Automated sUAS Assisted External Zonal GVI Images (P/B 201)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-21125	sUAS - small Unmanned Aircraft System Part #: DCL90-00002 Supplier: FBEM2 Part #: MB-HW-001 Supplier: H2P60

C. Location Zones

Zone	Area
552	Left Wing - Spoiler No. 6

D. Zonal Inspection with sUAS (Top Surface of Spoiler)

SUBTASK 05-41-05-210-065

(1) Do a General Visual inspection of the inboard spoiler no. 6 - left wing using a sUAS, SPL-21125.

(a) Do this task:Automated sUAS Assisted External Zonal GVI Flight Operation, TASK 20-10-94-210-801

(b) Do this task:Inspect the Automated sUAS Assisted External Zonal GVI Images, TASK 20-10-94-210-802

(2) Perform a General Visual inspection of the area where the sUAS was unable to capture images.

E. Zonal Inspection without sUAS (Bottom Surface and Area Below Spoiler)

SUBTASK 05-41-05-210-085

(1) Perform a General Visual inspection without using a sUAS of the inspection area under the spoiler.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

3076392 S0000833400_V1

Inboard Spoiler No. 6 General Visual Using sUAS (External)
Figure 245/05-41-05-990-850 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Inboard Spoiler No. 6 General Visual Using sUAS (External)
Figure 245/05-41-05-990-850 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-849

46. EXTERNAL - ZONAL (GV): INBOARD FLAPS - LEFT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS)

Figure 246

NOTE: Applicable to the 737-700 and 737-800 models.

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: Flaps extended.

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
20-10-94-210-801	Automated sUAS Assisted External Zonal GVI Flight Operation (P/B 201)
20-10-94-210-802	Inspect the Automated sUAS Assisted External Zonal GVI Images (P/B 201)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-21125	sUAS - small Unmanned Aircraft System Part #: DCL90-00002 Supplier: FBEM2 Part #: MB-HW-001 Supplier: H2P60

C. Location Zones

Zone	Area
553	Left Wing - Inboard Flap

D. Zonal Inspection with sUAS (Top of the Wing)

SUBTASK 05-41-05-210-066

(1) Do a General Visual inspection of the inboard flaps - left wing using a sUAS, SPL-21125.

(a) Do this task:Automated sUAS Assisted External Zonal GVI Flight Operation, TASK 20-10-94-210-801

(b) Do this task:Inspect the Automated sUAS Assisted External Zonal GVI Images, TASK 20-10-94-210-802

(2) Perform a General Visual inspection of the area where the sUAS was unable to capture images.

E. Zonal Inspection without sUAS (Bottom of the Wing)

SUBTASK 05-41-05-210-080

(1) Perform a General Visual inspection without using a sUAS of the inspection area under the wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

3074914 S0000833375_V1

Inboard Trailing Edge Flaps - Left Wing General Visual Using sUAS (External)
Figure 246/05-41-05-990-846

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-850

47. EXTERNAL - ZONAL (GV): SPOILERS NO. 1, 2, 3, 4, 5 - LEFT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS)

Figure 247

NOTE: Applicable to the 737-700 and 737-800 models.

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: Spoilers raised.

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
20-10-94-210-801	Automated sUAS Assisted External Zonal GVI Flight Operation (P/B 201)
20-10-94-210-802	Inspect the Automated sUAS Assisted External Zonal GVI Images (P/B 201)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-21125	sUAS - small Unmanned Aircraft System Part #: DCL90-00002 Supplier: FBEM2 Part #: MB-HW-001 Supplier: H2P60

C. Location Zones

Zone	Area
562	Left Wing - Spoiler No. 5
563	Left Wing - Spoiler No. 4
564	Left Wing - Spoiler No. 3
565	Left Wing - Spoiler No. 2
566	Left Wing - Spoiler No. 1

D. Zonal Inspection with sUAS (Top Surface of Spoiler)

SUBTASK 05-41-05-210-067

(1) Do a General Visual inspection of the spoilers 1, 2, 3, 4, 5 - left wing using a sUAS, SPL-21125.

(a) Do this task:Automated sUAS Assisted External Zonal GVI Flight Operation, TASK 20-10-94-210-801

(b) Do this task:Inspect the Automated sUAS Assisted External Zonal GVI Images, TASK 20-10-94-210-802

(2) Perform a General Visual inspection of the area where the sUAS was unable to capture images.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

E. Zonal Inspection without sUAS (Bottom Surface and Area Below Spoiler)

SUBTASK 05-41-05-210-084

(1) Perform a General Visual inspection without using a sUAS of the inspection area under the spoilers.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

3076408 S0000833404_V1

Outboard Spoiler No. 1 thru 5 General Visual Using sUAS (External)
Figure 247/05-41-05-990-851 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Outboard Spoiler No. 1 thru 5 General Visual Using sUAS (External)
Figure 247/05-41-05-990-851 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-851

48. EXTERNAL - ZONAL (GV): OUTBOARD FLAPS - LEFT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS)

Figure 248

NOTE: Applicable to the 737-700 and 737-800 models.

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: Flaps extended.

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
20-10-94-210-801	Automated sUAS Assisted External Zonal GVI Flight Operation (P/B 201)
20-10-94-210-802	Inspect the Automated sUAS Assisted External Zonal GVI Images (P/B 201)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-21125	sUAS - small Unmanned Aircraft System Part #: DCL90-00002 Supplier: FBEM2 Part #: MB-HW-001 Supplier: H2P60

C. Location Zones

Zone	Area
567	Left Wing - Outboard Flap

D. Zonal Inspection with sUAS (Top of the Wing)

SUBTASK 05-41-05-210-068

(1) Do a General Visual inspection of the outboard flaps - left wing using a sUAS, SPL-21125.

(a) Do this task:Automated sUAS Assisted External Zonal GVI Flight Operation, TASK 20-10-94-210-801

(b) Do this task:Inspect the Automated sUAS Assisted External Zonal GVI Images, TASK 20-10-94-210-802

(2) Perform a General Visual inspection of the area where the sUAS was unable to capture images.

E. Zonal Inspection without sUAS (Bottom of the Wing)

SUBTASK 05-41-05-210-081

(1) Perform a General Visual inspection without using a sUAS of the inspection area under the wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

3074916 S0000833438_V1

Outboard Flap - Left Wing General Visual Using sUAS (External)
Figure 248/05-41-05-990-852

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-852

49. EXTERNAL - ZONAL (GV): FIXED TRAILING EDGE - LEFT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS)

Figure 249

NOTE: Applicable to the 737-700 and 737-800 models.

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
20-10-94-210-801	Automated sUAS Assisted External Zonal GVI Flight Operation (P/B 201)
20-10-94-210-802	Inspect the Automated sUAS Assisted External Zonal GVI Images (P/B 201)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-21125	sUAS - small Unmanned Aircraft System Part #: DCL90-00002 Supplier: FBEM2 Part #: MB-HW-001 Supplier: H2P60

C. Location Zones

Zone	Area
571	Left Wing - Fixed Trailing Edge

D. Zonal Inspection with sUAS (Top of the Wing)

SUBTASK 05-41-05-210-069

(1) Do a General Visual inspection of the fixed trailing edge - left wing using a sUAS, SPL-21125.

(a) Do this task:Automated sUAS Assisted External Zonal GVI Flight Operation, TASK 20-10-94-210-801

(b) Do this task:Inspect the Automated sUAS Assisted External Zonal GVI Images, TASK 20-10-94-210-802

(2) Perform a General Visual inspection of the area where the sUAS was unable to capture images.

E. Zonal Inspection without sUAS (Bottom of the Wing)

SUBTASK 05-41-05-210-082

(1) Perform a General Visual inspection without using a sUAS of the inspection area under the wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Fixed Trailing Edge - Left Wing General Visual Using sUAS (External)
Figure 249/05-41-05-990-854

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-853

50. EXTERNAL - ZONAL (GV): AILERON - LEFT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS)

Figure 250

NOTE: Applicable to the 737-700 and 737-800 models.

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
20-10-94-210-801	Automated sUAS Assisted External Zonal GVI Flight Operation (P/B 201)
20-10-94-210-802	Inspect the Automated sUAS Assisted External Zonal GVI Images (P/B 201)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-21125	sUAS - small Unmanned Aircraft System Part #: DCL90-00002 Supplier: FBEM2 Part #: MB-HW-001 Supplier: H2P60

C. Location Zones

Zone	Area
572	Left Wing - Aileron

D. Zonal Inspection with sUAS (Top of the Wing)

SUBTASK 05-41-05-210-070

(1) Do a General Visual inspection of the aileron - left wing using a sUAS, SPL-21125.

(a) Do this task:Automated sUAS Assisted External Zonal GVI Flight Operation, TASK 20-10-94-210-801

(b) Do this task:Inspect the Automated sUAS Assisted External Zonal GVI Images, TASK 20-10-94-210-802

(2) Perform a General Visual inspection of the area where the sUAS was unable to capture images.

E. Zonal Inspection without sUAS (Bottom of the Wing)

SUBTASK 05-41-05-210-083

(1) Perform a General Visual inspection without using a sUAS of the inspection area under the wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Aileron - Left Wing General Visual Using sUAS (External)
Figure 250/05-41-05-990-853

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-854

51. EXTERNAL - ZONAL (GV): WINGLET - LEFT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS)

Figure 251

NOTE: Applicable to the 737-700 and 737-800 models.

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
20-10-94-210-801	Automated sUAS Assisted External Zonal GVI Flight Operation (P/B 201)
20-10-94-210-802	Inspect the Automated sUAS Assisted External Zonal GVI Images (P/B 201)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-21125	sUAS - small Unmanned Aircraft System Part #: DCL90-00002 Supplier: FBEM2 Part #: MB-HW-001 Supplier: H2P60

C. Location Zones

Zone	Area
527	Left Winglet

D. Zonal Inspection with sUAS

SUBTASK 05-41-05-210-086

(1) Do a General Visual inspection of the winglet - left wing using a sUAS, SPL-21125

(a) Do this task: Automated sUAS Assisted External Zonal GVI Flight Operation, TASK 20-10-94-210-801

(b) Do this task: Inspect the Automated sUAS Assisted External Zonal GVI Images, TASK 20-10-94-210-802

(2) Perform a General Visual inspection of the area where the sUAS was unable to capture images.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

3075879 S0000834157_V1

Left Winglet - General Visual (External)
Figure 251/05-41-05-990-856

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-801

1. EXTERNAL - ZONAL (GV): RIGHT WING

(Figure 201)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
610	Subzone - Right Wing: Leading Edge, Forward of Front Spar, Inboard of Nacelle Strut, Including Gap Cover Area
620	Subzone - Right Wing: Leading Edge, Forward of Front Spar, Outboard of Nacelle Strut
630	Subzone - Right Wing: Inspar Area (Fuel Tanks), Inboard of Wing Rib 22, Wing Station 643.50
640	Subzone - Right Wing: Trailing Edge, Flap Track Fairings
650	Subzone - Right Wing: Trailing Edge, Aft of Rear Spar, Inboard of Outboard Trailing Edge Flap
660	Subzone - Right Wing: Trailing Edge, Aft of Rear Spar, Outboard of Inboard Trailing Edge Flap, Inboard of Fixed Trailing Edge
670	Subzone - Right Wing: Fixed Trailing Edge, Outboard of Outboard Flap, Inboard of Wing Tip, Wing Buttock Line 658.17

B. Zonal Inspection

SUBTASK 05-41-06-210-001

(1) Do a General Visual inspection of the right wing. Inspection is accomplished from the ground, without the use of stands or ladders. Control surfaces extended. No additional access panels required.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Right Wing - General Visual (External)
Figure 201/05-41-06-990-801 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(BOTTOM VIEW)

A

L03646 S0006584360_V2

Right Wing - General Visual (External)
Figure 201/05-41-06-990-801 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-802

2. EXTERNAL - ZONAL (GV): WINGLET - RIGHT WING

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
627	Right Winglet

B. Zonal Inspection

SUBTASK 05-41-06-210-002

(1) Do a General Visual inspection of the winglet - right wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

3075873 S0000834158_V1

Right Winglet - General Visual (External)
Figure 202/05-41-06-990-855

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-803

3. INTERNAL - ZONAL (GV): WINGLET - RIGHT WING

(Figure 203)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
627	Right Winglet

B. Access Panels

Number	Name/Location
627AB	Winglet Access Panel

C. Zonal Inspection

SUBTASK 05-41-06-010-001

(1) Open this access panel:

Number	Name/Location
627AB	Winglet Access Panel

SUBTASK 05-41-06-210-003

(2) Do a General Visual inspection of the winglet - right wing.

SUBTASK 05-41-06-410-001

(3) Close this access panel:

Number	Name/Location
627AB	Winglet Access Panel

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

M48411 S0006584364_V2

Right Winglet - General Visual (Internal)
Figure 203/05-41-06-990-803

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-804

4. EXTERNAL - ZONAL (GV): LEADING EDGE TO FRONT SPAR - INBD OF NACELLE STRUT - RIGHT WING

(Figure 204)

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
611	Right Wing - Leading Edge to Front Spar

B. Zonal Inspection

NOTE: Excluding surface under wing to body fairing.

SUBTASK 05-41-06-210-004

(1) Do a General Visual inspection of the leading edge to front spar - inboard of the nacelle strut - right wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K94197 S0006584366_V2

Leading Edge to Front Spar (Inboard of Nacelle Strut) Right Wing - General Visual (External)
Figure 204/05-41-06-990-804

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-06-210-805

5. **INTERNAL - ZONAL (GV): Leading Edge to Front Spar - Inbd of Nacelle Strut - Right Wing**
(Figure 205)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required Enhanced Zonal Analysis Procedure (EZAP) - derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
611	Right Wing - Leading Edge to Front Spar

D. Access Panels

Number	Name/Location
611AB	Inboard Leading Edge, Lower Removable Access Panel
611AT	Inboard Leading Edge, Strakelet Upper Access Panel
611BT	Fairing

E. Zonal Inspection

SUBTASK 05-41-06-010-002

(1) Open these access panels:

Number	Name/Location
611AB	Inboard Leading Edge, Lower Removable Access Panel
611AT	Inboard Leading Edge, Strakelet Upper Access Panel
611BT	Fairing

NOTE: Flaps deployed.

SUBTASK 05-41-06-210-005

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

SUBTASK 05-41-06-210-049

(3) Perform an internal zonal inspection (GV) of the leading edge to front spar - inboard of the nacelle strut - right wing (EZAP).

SUBTASK 05-41-06-910-002

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to Electrical Wiring Interconnect Systems (EWIS) during maintenance.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-41-06-410-002

(5) Close these access panels:

Number	Name/Location
611AB	Inboard Leading Edge, Lower Removable Access Panel
611AT	Inboard Leading Edge, Strakelet Upper Access Panel
611BT	Fairing

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K94199 S0006584368_V3

Leading Edge to Front Spar (Inboard of Nacelle Strut) Right Wing - General Visual (Internal)
Figure 205/05-41-06-990-805 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

L05527 S0006584369_V3

Leading Edge to Front Spar (Inboard of Nacelle Strut) Right Wing - General Visual (Internal)
Figure 205/05-41-06-990-805 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

L05531 S0006584370_V2

Leading Edge to Front Spar (Inboard of Nacelle Strut) Right Wing - General Visual (Internal)
Figure 205/05-41-06-990-805 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-806

6. EXTERNAL - ZONAL (GV): KRUEGER FLAPS NO. 3 AND 4 - RIGHT WING

(Figure 206)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
612	Right Wing - Krueger Flap No. 3
613	Right Wing - Krueger Flap No. 4

B. Zonal Inspection

SUBTASK 05-41-06-210-006

(1) Do a General Visual inspection of the Krueger flaps no. 3 and 4 - right wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K94204 S0006584372_V2

Krueger Flaps No. 3 and 4 General Visual (External)
Figure 206/05-41-06-990-806

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-807

7. INTERNAL - ZONAL (GV): KRUEGER FLAPS NO. 3 AND 4 - RIGHT WING

(Figure 207)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
612	Right Wing - Krueger Flap No. 3
613	Right Wing - Krueger Flap No. 4

B. Zonal Inspection

NOTE: Flaps deployed.

SUBTASK 05-41-06-210-007

(1) Do a General Visual inspection of the Krueger flaps no. 3 and 4 - right wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

RIGHT WING

K94208 S0006584374_V2

Krueger Flaps No. 3 and 4 General Visual (Internal)
Figure 207/05-41-06-990-807

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-808

8. EXTERNAL - ZONAL (GV): LEADING EDGE TO FRONT SPAR - OUTBD OF NACELLE STRUT - RIGHT WING

(Figure 208)

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
621	Right Wing - Leading Edge to Front Spar

B. Zonal Inspection

NOTE: Slats deployed.

SUBTASK 05-41-06-210-008

(1) Do a General Visual inspection of the leading edge to front spar - outboard of the nacelle strut - right wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K99092 S0006584376_V2

Leading Edge to Front Spar (Outboard of Nacelle Strut) Right Wing - General Visual (External)
Figure 208/05-41-06-990-808

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-06-210-809

9. **INTERNAL - ZONAL (GV): Leading Edge to Front Spar - Outbd of Nacelle Strut - Right Wing**
(Figure 209)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required Enhanced Zonal Analysis Procedure (EZAP) - derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)
57-41-02-000-801	Leading Edge Access Panel Removal (P/B 201)
57-41-02-400-801	Leading Edge Access Panel Installation (P/B 201)

C. Location Zones

Zone	Area
621	Right Wing - Leading Edge to Front Spar

D. Access Panels

Number	Name/Location
621AAB	Lower Leading Edge Access Panel - Slat Station 524.31
621AB	Outboard Leading Edge Blowout Door - Slat Station 20.04
621BB	Outboard Lower Fixed Leading Edge Access Panel - Slat Station 36.02
621CB	Lower Leading Edge Access Panel - Slat Station 53.95
621DB	Lower Leading Edge Access Panel - Slat Station 71.38
621EB	Defuel Access Panel - Slat Station 95.15
621FB	Lower Leading Edge Access Panel - Slat Station 112.52
621GB	Refuel Access Panel - Slat Station 143.27
621HB	Lower Leading Edge Access Panel - Slat Station 170.21
621JB	Lower Leading Edge Access Panel - Slat Station 188.14
621KB	Lower Leading Edge Access Panel - Slat Station 216.71
621LB	Lower Leading Edge Access Panel - Slat Station 234.59
621MB	Lower Leading Edge Access Panel - Slat Station 252.04
621NB	Lower Leading Edge Access Panel - Slat Station 270.63
621PB	Lower Leading Edge Access Panel - Slat Station 289.18
621QB	Lower Leading Edge Access Panel - Slat Station 307.75
621RB	Lower Leading Edge Access Panel - Slat Station 337.62
621SB	Lower Leading Edge Access Panel - Slat Station 356.15
621TB	Lower Leading Edge Access Panel - Slat Station 374.95
621UB	Lower Leading Edge Access Panel - Slat Station 395.64
621VB	Lower Leading Edge Access Panel - Slat Station 415.79
621WB	Lower Leading Edge Access Panel - Slat Station 435.91
621XB	Lower Leading Edge Access Panel - Slat Station 467.98

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

Number	Name/Location
621YB	Lower Leading Edge Access Panel - Slat Station 488.04
621ZB	Lower Leading Edge Access Panel - Slat Station 508.31

E. Zonal Inspection

SUBTASK 05-41-06-010-003

(1) Open these access panels:

(TASK 57-41-02-000-801)

Number	Name/Location
621AAB	Lower Leading Edge Access Panel - Slat Station 524.31
621AB	Outboard Leading Edge Blowout Door - Slat Station 20.04
621BB	Outboard Lower Fixed Leading Edge Access Panel - Slat Station 36.02
621CB	Lower Leading Edge Access Panel - Slat Station 53.95
621DB	Lower Leading Edge Access Panel - Slat Station 71.38
621EB	Defuel Access Panel - Slat Station 95.15
621FB	Lower Leading Edge Access Panel - Slat Station 112.52
621GB	Refuel Access Panel - Slat Station 143.27
621HB	Lower Leading Edge Access Panel - Slat Station 170.21
621JB	Lower Leading Edge Access Panel - Slat Station 188.14
621KB	Lower Leading Edge Access Panel - Slat Station 216.71
621LB	Lower Leading Edge Access Panel - Slat Station 234.59
621MB	Lower Leading Edge Access Panel - Slat Station 252.04
621NB	Lower Leading Edge Access Panel - Slat Station 270.63
621PB	Lower Leading Edge Access Panel - Slat Station 289.18
621QB	Lower Leading Edge Access Panel - Slat Station 307.75
621RB	Lower Leading Edge Access Panel - Slat Station 337.62
621SB	Lower Leading Edge Access Panel - Slat Station 356.15
621TB	Lower Leading Edge Access Panel - Slat Station 374.95
621UB	Lower Leading Edge Access Panel - Slat Station 395.64
621VB	Lower Leading Edge Access Panel - Slat Station 415.79
621WB	Lower Leading Edge Access Panel - Slat Station 435.91
621XB	Lower Leading Edge Access Panel - Slat Station 467.98
621YB	Lower Leading Edge Access Panel - Slat Station 488.04
621ZB	Lower Leading Edge Access Panel - Slat Station 508.31

NOTE: Slats deployed.

SUBTASK 05-41-06-210-009

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

SUBTASK 05-41-06-210-050

(3) Perform an internal zonal inspection (GV) of the leading edge to front spar - outboard of the nacelle strut - right wing (EZAP).

SUBTASK 05-41-06-910-005

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to Electrical Wiring Interconnect Systems (EWIS) during maintenance.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-41-06-410-003

(5) Close these access panels:

(TASK 57-41-02-400-801)

Number	Name/Location
621AAB	Lower Leading Edge Access Panel - Slat Station 524.31
621AB	Outboard Leading Edge Blowout Door - Slat Station 20.04
621BB	Outboard Lower Fixed Leading Edge Access Panel - Slat Station 36.02
621CB	Lower Leading Edge Access Panel - Slat Station 53.95
621DB	Lower Leading Edge Access Panel - Slat Station 71.38
621EB	Defuel Access Panel - Slat Station 95.15
621FB	Lower Leading Edge Access Panel - Slat Station 112.52
621GB	Refuel Access Panel - Slat Station 143.27
621HB	Lower Leading Edge Access Panel - Slat Station 170.21
621JB	Lower Leading Edge Access Panel - Slat Station 188.14
621KB	Lower Leading Edge Access Panel - Slat Station 216.71
621LB	Lower Leading Edge Access Panel - Slat Station 234.59
621MB	Lower Leading Edge Access Panel - Slat Station 252.04
621NB	Lower Leading Edge Access Panel - Slat Station 270.63
621PB	Lower Leading Edge Access Panel - Slat Station 289.18
621QB	Lower Leading Edge Access Panel - Slat Station 307.75
621RB	Lower Leading Edge Access Panel - Slat Station 337.62
621SB	Lower Leading Edge Access Panel - Slat Station 356.15
621TB	Lower Leading Edge Access Panel - Slat Station 374.95
621UB	Lower Leading Edge Access Panel - Slat Station 395.64
621VB	Lower Leading Edge Access Panel - Slat Station 415.79
621WB	Lower Leading Edge Access Panel - Slat Station 435.91
621XB	Lower Leading Edge Access Panel - Slat Station 467.98
621YB	Lower Leading Edge Access Panel - Slat Station 488.04
621ZB	Lower Leading Edge Access Panel - Slat Station 508.31

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Leading Edge to Front Spar (Outboard of Nacelle Strut) Right Wing - General Visual (Internal)
Figure 209/05-41-06-990-809 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

2944292 S0000719871_V1

Leading Edge to Front Spar (Outboard of Nacelle Strut) Right Wing - General Visual (Internal)
Figure 209/05-41-06-990-809 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-810

10. EXTERNAL - ZONAL (GV): SLATS NO. 5, 6, 7, 8 - RIGHT WING

(Figure 210)

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
622	Right Wing - Slat No. 5
623	Right Wing - Slat No. 6
624	Right Wing - Slat No. 7
625	Right Wing - Slat No. 8

B. Zonal Inspection

NOTE: Slats in full extend position.

SUBTASK 05-41-06-210-010

(1) Do a General Visual inspection of the slats no. 5, 6, 7, 8 - right wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K99101 S0006584381_V2

Leading Edge Slats No. 5 thru 8 General Visual (External)
Figure 210/05-41-06-990-810

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-813

11. INTERNAL - ZONAL (GV): CENTER FUEL TANK - RIGHT WING

(Figure 211)

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
28-11-31-000-801	Center Tank Access Door Removal (P/B 401)
28-11-31-400-801	Center Tank Access Door - Installation (P/B 401)

B. Location Zones

Zone	Area
631	Right Wing - Center Fuel Tank, Rib 1 to Rib 5

C. Access Panels

Number	Name/Location
631AB	Center Tank Access Door - Wing Station 168
631BB	Center Tank Access Door - Wing Station 192

D. Zonal Inspection

SUBTASK 05-41-06-010-005

(1) Open these access panels:

(TASK 28-11-31-000-801)

Number	Name/Location
631AB	Center Tank Access Door - Wing Station 168
631BB	Center Tank Access Door - Wing Station 192

SUBTASK 05-41-06-210-013

(2) Do a General Visual inspection of the center fuel tank - right wing.

SUBTASK 05-41-06-410-005

(3) Close these access panels:

(TASK 28-11-31-400-801)

Number	Name/Location
631AB	Center Tank Access Door - Wing Station 168
631BB	Center Tank Access Door - Wing Station 192

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K91849 S0006584387_V3

Center Fuel Tank - Right Wing General Visual (Internal)
Figure 211/05-41-06-990-813

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-814

12. EXTERNAL - ZONAL (GV): CENTER FUEL TANK - RIGHT WING

(Figure 212)

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
631	Right Wing - Center Fuel Tank, Rib 1 to Rib 5

B. Zonal Inspection

NOTE: Excluding surface under wing to body fairing.

SUBTASK 05-41-06-210-014

(1) Do a General Visual inspection of the center fuel tank - right wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K91850 S0006584389_V2

Center Fuel Tank - Right Wing General Visual (External)
Figure 212/05-41-06-990-814

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-815

13. INTERNAL - ZONAL (GV): MAIN FUEL TANK - RIGHT WING

(Figure 213)

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
28-11-11-000-801	Main Tank Access Door Removal (P/B 401)
28-11-11-400-801	Main Tank Access Door Installation (P/B 401)

B. Location Zones

Zone	Area
632	Right Wing - Main Tank, Rib 5 to Rib 22, Wing Station 204.25 to Wing Station 643.50

C. Access Panels

Number	Name/Location
632AB	Main Tank Access Door - Wing Station 216
632AZ	Main Tank Inner Access at Rib 6
632BB	Main Tank Access Door - Wing Station 265
632BZ	Main Tank Inner Access at Rib 6
632CB	Main Tank Access Door - Wing Station 290
632DB	Main Tank Access Door - Wing Station 313
632EB	Main Tank Access Door - Wing Station 337
632FB	Main Tank Access Door - Wing Station 367
632GB	Main Tank Access Door - Wing Station 390
632HB	Main Tank Access Door - Wing Station 417
632JB	Main Tank Access Door - Wing Station 443
632KB	Main Tank Access Door - Wing Station 470
632LB	Main Tank Access Door - Wing Station 496
632MB	Main Tank Access Door - Wing Station 523
632NB	Main Tank Access Door - Wing Station 549
632PB	Main Tank Access Door - Wing Station 576
632QB	Main Tank Access Door - Wing Station 602
632RB	Main Tank Access Door - Wing Station 629

D. Zonal Inspection

SUBTASK 05-41-06-010-006

CAUTION

DO NOT REMOVE THE TWO DOORS 632AZ AND 632BZ AT THE SAME TIME. DURING THE PROCEDURE, ONE OF THE DOORS MUST STAY INSTALLED WITH ALL FASTENERS IN IT. IF YOU DO NOT OBEY, DAMAGE TO THE RIB 6 CAN OCCUR.

(1) Open these access panels:

(TASK 28-11-11-000-801)

Number	Name/Location
632AB	Main Tank Access Door - Wing Station 216
632AZ	Main Tank Inner Access at Rib 6

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

Number	Name/Location
632BB	Main Tank Access Door - Wing Station 265
632BZ	Main Tank Inner Access at Rib 6
632CB	Main Tank Access Door - Wing Station 290
632DB	Main Tank Access Door - Wing Station 313
632EB	Main Tank Access Door - Wing Station 337
632FB	Main Tank Access Door - Wing Station 367
632GB	Main Tank Access Door - Wing Station 390
632HB	Main Tank Access Door - Wing Station 417
632JB	Main Tank Access Door - Wing Station 443
632KB	Main Tank Access Door - Wing Station 470
632LB	Main Tank Access Door - Wing Station 496
632MB	Main Tank Access Door - Wing Station 523
632NB	Main Tank Access Door - Wing Station 549
632PB	Main Tank Access Door - Wing Station 576
632QB	Main Tank Access Door - Wing Station 602
632RB	Main Tank Access Door - Wing Station 629

SUBTASK 05-41-06-210-015

(2) Do a General Visual inspection of the main fuel tank - right wing.

SUBTASK 05-41-06-410-006

(3) Close these access panels:

(TASK 28-11-11-400-801)

Number	Name/Location
632AB	Main Tank Access Door - Wing Station 216
632AZ	Main Tank Inner Access at Rib 6
632BB	Main Tank Access Door - Wing Station 265
632BZ	Main Tank Inner Access at Rib 6
632CB	Main Tank Access Door - Wing Station 290
632DB	Main Tank Access Door - Wing Station 313
632EB	Main Tank Access Door - Wing Station 337
632FB	Main Tank Access Door - Wing Station 367
632GB	Main Tank Access Door - Wing Station 390
632HB	Main Tank Access Door - Wing Station 417
632JB	Main Tank Access Door - Wing Station 443
632KB	Main Tank Access Door - Wing Station 470
632LB	Main Tank Access Door - Wing Station 496
632MB	Main Tank Access Door - Wing Station 523
632NB	Main Tank Access Door - Wing Station 549
632PB	Main Tank Access Door - Wing Station 576
632QB	Main Tank Access Door - Wing Station 602
632RB	Main Tank Access Door - Wing Station 629

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Main Fuel Tank - Right Wing General Visual (Internal)
Figure 213/05-41-06-990-815

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-816

14. EXTERNAL - ZONAL (GV): MAIN FUEL TANK - RIGHT WING

(Figure 214)

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
632	Right Wing - Main Tank, Rib 5 to Rib 22, Wing Station 204.25 to Wing Station 643.50

B. Zonal Inspection

SUBTASK 05-41-06-210-016

(1) Do a General Visual inspection of the main fuel tank - right wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

L02963 S0006584393_V3

Main Fuel Tank - Right Wing General Visual (External)
Figure 214/05-41-06-990-816

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-817

15. INTERNAL - ZONAL (GV): SURGE TANK - RIGHT WING

(Figure 215)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
633	Right Wing - Surge Tank, Rib 22 to Rib 25, Wing Station 643.50 to Wing Buttock Line 616.75

B. Access Panels

Number	Name/Location
633AB	Surge Tank Access Door - Wing Station 655
633BB	Surge Tank Access Door - Wing Station 679
633CB	Surge Tank Access Door - Wing Station 703

C. Zonal Inspection

SUBTASK 05-41-06-010-007

(1) Open these access panels:

Number	Name/Location
633AB	Surge Tank Access Door - Wing Station 655
633BB	Surge Tank Access Door - Wing Station 679
633CB	Surge Tank Access Door - Wing Station 703

SUBTASK 05-41-06-210-017

(2) Do a General Visual inspection of the surge tank - right wing.

SUBTASK 05-41-06-410-007

(3) Close these access panels:

Number	Name/Location
633AB	Surge Tank Access Door - Wing Station 655
633BB	Surge Tank Access Door - Wing Station 679
633CB	Surge Tank Access Door - Wing Station 703

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

L02752 S0006584395_V2

Surge Tank - Right Wing General Visual (Internal)
Figure 215/05-41-06-990-817

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-818

16. EXTERNAL - ZONAL (GV): SURGE TANK - RIGHT WING

(Figure 216)

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
633	Right Wing - Surge Tank, Rib 22 to Rib 25, Wing Station 643.50 to Wing Buttock Line 616.75

B. Zonal Inspection

SUBTASK 05-41-06-210-018

(1) Do a General Visual inspection of the surge tank - right wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

L02983 S0006584397_V2

Surge Tank - Right Wing General Visual (External)
Figure 216/05-41-06-990-818

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-819

17. EXTERNAL - ZONAL (GV): DRY BAY - RIGHT WING

(Figure 217)

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
634	Right Wing - Dry Bay

B. Zonal Inspection

SUBTASK 05-41-06-210-019

(1) Do a General Visual inspection of the dry bay - right wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

L03100 S0006584399_V2

Dry Bay - Right Wing General Visual (External)
Figure 217/05-41-06-990-819

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-06-210-820

18. INTERNAL - ZONAL (GV): Flap Support No. 5 - Right Wing

(Figure 218)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required Enhanced Zonal Analysis Procedure (EZAP) - derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)
27-51-00-860-803	Extend the Trailing Edge Flaps (P/B 201)
27-51-00-860-804	Retract the Trailing Edge Flaps (P/B 201)
53-51-21-000-801	Aft Wing-To-Body Fairing Panel Removal (P/B 401)
53-51-21-400-801	Aft Wing-To-Body Fairing Panel Installation (P/B 401)

C. Location Zones

Zone	Area
134	Main Landing Gear Wheel Well, Body Station 663.75 to Body Station 727.00 - Right
194	Lower Wing-To-Body Fairing - Aft of Wheel Well
641	Right Wing - Fairing Flap Support No. 5

D. Access Panels

Number	Name/Location
194BR	Flap Track Lubrication Panel - Aft

E. Zonal Inspection

SUBTASK 05-41-06-210-047

(1) Extend the trailing edge flaps to the 40–unit position. To extend them, do this task:Extend the Trailing Edge Flaps, TASK 27-51-00-860-803.

SUBTASK 05-41-06-010-008

(2) Open this access panel:

Number	Name/Location
194BR	Flap Track Lubrication Panel - Aft

(a) To open access panel 194BR, refer to task: Aft Wing-To-Body Fairing Panel Removal, TASK 53-51-21-000-801.

SUBTASK 05-41-06-210-039

(3) Do the zonal inspection procedures: Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

(4) Perform an internal zonal inspection (GV) of the flap support fairing no. 5 - right wing - Section 46, STA 727 (EZAP).

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-41-06-910-008

(5) For the protection and caution information that will minimize contamination and accidental damage to Electrical Wiring Interconnect Systems (EWIS) during maintenance, refer to task: Protection of the EWIS During Maintenance, TASK 20-60-07-913-801.

SUBTASK 05-41-06-410-008

(6) Close this access panel:

Number	Name/Location
194BR	Flap Track Lubrication Panel - Aft

(a) To close access panel 194BR, refer to task: Aft Wing-To-Body Fairing Panel Installation, TASK 53-51-21-400-801.

SUBTASK 05-41-06-210-048

(7) Retract the trailing edge flaps to the UP position. To retract them, do this task: Retract the Trailing Edge Flaps, TASK 27-51-00-860-804.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

RIGHT WING

FLAP SUPPORT FAIRING NO. 5

A

L02787 S0006584401_V5

Flap Support Fairing No. 5 General Visual (Internal)
Figure 218/05-41-06-990-820

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-821

19. EXTERNAL - ZONAL (GV): FAIRING FLAP SUPPORT NO. 6 - RIGHT WING

(Figure 219)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
642	Right Wing - Fairing Flap Support No. 6

B. Zonal Inspection

NOTE: Flaps extended.

SUBTASK 05-41-06-210-021

(1) Do a General Visual inspection of the fairing flap support no. 6 - right wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

L03096 S0006584403_V2

Flap Support Fairing No. 6 General Visual (External)
Figure 219/05-41-06-990-821

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-06-210-822

20. INTERNAL - ZONAL (GV): Fairing Flap Support No. 6 - Right Wing

(Figure 220)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required Enhanced Zonal Analysis Procedure (EZAP) - derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
642	Right Wing - Fairing Flap Support No. 6

D. Zonal Inspection

NOTE: Flaps extended, inside of fairing.

SUBTASK 05-41-06-210-022

(1) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

SUBTASK 05-41-06-210-051

(2) Perform an internal zonal inspection (GV) of the fairing flap support no. 6 - right wing (EZAP).

SUBTASK 05-41-06-910-001

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to Electrical Wiring Interconnect Systems (EWIS) during maintenance.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Flap Support Fairing No. 6 General Visual (Internal)
Figure 220/05-41-06-990-822

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-823

21. EXTERNAL - ZONAL (GV): FAIRING FLAP SUPPORT NO. 7 - RIGHT WING

(Figure 221)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
643	Right Wing - Fairing Flap Support No. 7

B. Zonal Inspection

NOTE: Flaps extended.

SUBTASK 05-41-06-210-023

(1) Do a General Visual inspection of the fairing flap support no. 7 - right wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Flap Support Fairing No. 7 General Visual (External)
Figure 221/05-41-06-990-823

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-06-210-824

22. INTERNAL - ZONAL (GV): Fairing Flap Support No. 7 - Right Wing

(Figure 222)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required Enhanced Zonal Analysis Procedure (EZAP) - derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
643	Right Wing - Fairing Flap Support No. 7

D. Zonal Inspection

NOTE: Flaps extended, inside of fairing.

SUBTASK 05-41-06-210-024

(1) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

SUBTASK 05-41-06-210-052

(2) Perform an internal zonal inspection (GV) of the fairing flap support no. 7 - right wing (EZAP).

SUBTASK 05-41-06-910-006

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to Electrical Wiring Interconnect Systems (EWIS) during maintenance.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Flap Support Fairing No. 7 General Visual (Internal)
Figure 222/05-41-06-990-824

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-825

23. EXTERNAL - ZONAL (GV): FAIRING FLAP SUPPORT NO. 8 - RIGHT WING

(Figure 223)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
644	Right Wing - Fairing Flap Support No. 8

B. Zonal Inspection

NOTE: Flaps extended.

SUBTASK 05-41-06-210-025

(1) Do a General Visual inspection of the fairing flap support no. 8 - right wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

L06712 S0006584411_V2

Flap Support Fairing No. 8 General Visual (External)
Figure 223/05-41-06-990-825

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-06-210-826

24. INTERNAL - ZONAL (GV): Fairing Flap Support No. 8 - Right Wing

(Figure 224)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required Enhanced Zonal Analysis Procedure (EZAP) - derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
644	Right Wing - Fairing Flap Support No. 8

D. Zonal Inspection

NOTE: Flaps extended, inside of fairing.

SUBTASK 05-41-06-210-026

(1) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

SUBTASK 05-41-06-210-053

(2) Perform an internal zonal inspection (GV) of the fairing flap support no. 8 - right wing (EZAP).

SUBTASK 05-41-06-910-003

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to Electrical Wiring Interconnect Systems (EWIS) during maintenance.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Flap Support Fairing No. 8 General Visual (Internal)
Figure 224/05-41-06-990-826

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-827

25. EXTERNAL - ZONAL (GV): REAR SPAR TO LANDING GEAR SUPPORT BEAM - RIGHT WING

(Figure 225)

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
651	Right Wing - Rear Spar to Landing Gear Support Beam

B. Zonal Inspection

NOTE: Excluding surface under wing to body fairing.

SUBTASK 05-41-06-210-027

(1) Do a General Visual inspection of the rear spar to landing gear support beam - right wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Rear Spar to Landing Gear Support Beam - Right Wing General Visual (External)
Figure 225/05-41-06-990-827

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-828

26. INTERNAL - ZONAL (GV): REAR SPAR TO LANDING GEAR SUPPORT BEAM - RIGHT WING

(Figure 226)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
651	Right Wing - Rear Spar to Landing Gear Support Beam

B. Access Panels

Number	Name/Location
651AT	Upper Inboard Fixed Trailing Edge Access Panel
651BT	Upper Inboard Fixed Trailing Edge, MLG Actuator Access Panel
651CT	Upper Inboard Fixed Trailing Edge, Structural Pin Access Panel
651DB	Lower Inboard Fixed Trailing Edge, Lube Actuator & MLG Beam Outboard Attach Pin Access Panel
651FB	Lower Inboard Fixed Trailing Edge, Landing Gear Access Panel

C. Zonal Inspection

SUBTASK 05-41-06-010-009

(1) Open these access panels:

Number	Name/Location
651AT	Upper Inboard Fixed Trailing Edge Access Panel
651BT	Upper Inboard Fixed Trailing Edge, MLG Actuator Access Panel
651CT	Upper Inboard Fixed Trailing Edge, Structural Pin Access Panel
651DB	Lower Inboard Fixed Trailing Edge, Lube Actuator & MLG Beam Outboard Attach Pin Access Panel
651FB	Lower Inboard Fixed Trailing Edge, Landing Gear Access Panel

NOTE: Extend the trailing edge flaps and deploy spoilers.

SUBTASK 05-41-06-210-028

(2) Do a General Visual inspection of the rear spar to landing gear support beam - right wing.

SUBTASK 05-41-06-410-009

(3) Close these access panels:

Number	Name/Location
651AT	Upper Inboard Fixed Trailing Edge Access Panel
651BT	Upper Inboard Fixed Trailing Edge, MLG Actuator Access Panel
651CT	Upper Inboard Fixed Trailing Edge, Structural Pin Access Panel
651DB	Lower Inboard Fixed Trailing Edge, Lube Actuator & MLG Beam Outboard Attach Pin Access Panel
651FB	Lower Inboard Fixed Trailing Edge, Landing Gear Access Panel

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

L07393 S0006584417_V4

Rear Spar to Landing Gear Support Beam - Right Wing General Visual (Internal)
Figure 226/05-41-06-990-828

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-829

27. EXTERNAL - ZONAL (GV): INBOARD SPOILER NO. 7 - RIGHT WING

(Figure 227)

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
652	Right Wing - Spoiler No. 7

B. Zonal Inspection

NOTE: Spoiler raised.

SUBTASK 05-41-06-210-029

(1) Do a General Visual inspection of the inboard spoiler no. 7 - right wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

L07603 S0006584420_V2

Inboard Spoiler No. 7 General Visual (External)
Figure 227/05-41-06-990-829 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

B

L07912 S0006584421_V2

Inboard Spoiler No. 7 General Visual (External)
Figure 227/05-41-06-990-829 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-830

28. EXTERNAL - ZONAL (GV): INBOARD FLAPS - RIGHT WING

(Figure 228)

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
653	Right Wing - Inboard Flap

B. Zonal Inspection

NOTE: Flaps extended.

SUBTASK 05-41-06-210-030

(1) Do a General Visual inspection of the inboard flaps - right wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Inboard Trailing Edge Flaps - Right Wing General Visual (External)
Figure 228/05-41-06-990-830

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-831

29. INTERNAL - ZONAL (GV): INBOARD MAIN FLAP - RIGHT WING

(Figure 229)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
653	Right Wing - Inboard Flap

B. Access Panels

Number	Name/Location
653BB	Inboard Flap - Lower Skin

C. Zonal Inspection

SUBTASK 05-41-06-010-010

(1) Open this access panel:

Number	Name/Location
653BB	Inboard Flap - Lower Skin

NOTE: Flaps extended.

SUBTASK 05-41-06-210-031

(2) Do a General Visual inspection of the inboard main flap - right wing.

SUBTASK 05-41-06-410-010

(3) Close this access panel:

Number	Name/Location
653BB	Inboard Flap - Lower Skin

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

L04224 S0006584425_V2

Inboard Trailing Edge Main Flap - Right Wing General Visual (Internal)
Figure 229/05-41-06-990-831

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-06-210-832

30. **EXTERNAL - ZONAL (GV): Rear Spar to T.E. - Outbd of Inbd Flap - Inbd of Fixed T.E. -Right Wing** (Figure 230)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required Enhanced Zonal Analysis Procedure (EZAP) - derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
661	Right Wing - Rear Spar to Trailing Edge, Outboard of Inboard Flap, Inboard of Fixed Trailing Edge

D. Zonal Inspection

NOTE: Flaps down, spoilers raised.

SUBTASK 05-41-06-210-032

(1) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

SUBTASK 05-41-06-210-054

(2) Perform an external zonal inspection (GV) of the rear spar to trailing edge - outboard of inboard flap - inboard of fixed trailing edge - right wing (EZAP).

SUBTASK 05-41-06-910-007

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to Electrical Wiring Interconnect Systems (EWIS) during maintenance.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

L08265 S0006584427_V2

Rear Spar to Trailing Edge (Outboard of Inboard Flap and Inboard of Fixed Trailing Edge) - Right Wing
Figure 230/05-41-06-990-832

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-833

31. EXTERNAL - ZONAL (GV): SPOILERS NO. 8, 9, 10, 11, 12 - RIGHT WING

(Figure 231)

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
662	Right Wing - Spoiler No. 8
663	Right Wing - Spoiler No. 9
664	Right Wing - Spoiler No. 10
665	Right Wing - Spoiler No. 11
666	Right Wing - Spoiler No. 12

B. Zonal Inspection

NOTE: Spoilers Raised

SUBTASK 05-41-06-210-033

(1) Do a General Visual inspection of spoilers no. 8, 9, 10, 11, 12 - right wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

L05221 S0006584429_V2

Outboard Spoiler No. 8 thru 12 General Visual (External)
Figure 231/05-41-06-990-833 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

L05225 S0006584430_V2

Outboard Spoiler No. 8 thru 12 General Visual (External)
Figure 231/05-41-06-990-833 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-834

32. EXTERNAL - ZONAL (GV): OUTBOARD FLAPS - RIGHT WING

(Figure 232)

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
667	Right Wing - Outboard Flap

B. Zonal Inspection

NOTE: Flaps extended.

SUBTASK 05-41-06-210-034

(1) Do a General Visual inspection of the outboard flaps - right wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Outboard Flap - Right Wing General Visual (External)
Figure 232/05-41-06-990-834

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-835

33. EXTERNAL - ZONAL (GV): FIXED TRAILING EDGE - RIGHT WING

(Figure 233)

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
671	Right Wing - Fixed Trailing Edge

B. Zonal Inspection

SUBTASK 05-41-06-210-035

(1) Do a General Visual inspection of the fixed trailing edge - right wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

L03407 S0006584434_V2

Fixed Trailing Edge - Right Wing General Visual (External)
Figure 233/05-41-06-990-835

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-836

34. INTERNAL - ZONAL (GV): FIXED TRAILING EDGE - RIGHT WING

(Figure 234)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
671	Right Wing - Fixed Trailing Edge

B. Access Panels

Number	Name/Location
671AB	Lower Outboard Fixed Trailing Edge Access Panel
671AT	Upper Outboard Fixed Trailing Edge, Quadrant Bolt Access Panel
671BB	Lower Outboard Fixed Trailing Edge Access Panel
671BT	Upper Outboard Fixed Trailing Edge, Pulley Bolt Access Panel
671CB	Lower Outboard Fixed Trailing Edge Access Panel
671DB	Lower Outboard Fixed Trailing Edge Access Panel
671EB	Lower Outboard Fixed Trailing Edge, Wedge Access Panel
671FB	Lower Outboard Fixed Trailing Edge, Wedge Access Panel

C. Zonal Inspection

SUBTASK 05-41-06-010-011

(1) Open these access panels:

Number	Name/Location
671AB	Lower Outboard Fixed Trailing Edge Access Panel
671AT	Upper Outboard Fixed Trailing Edge, Quadrant Bolt Access Panel
671BB	Lower Outboard Fixed Trailing Edge Access Panel
671BT	Upper Outboard Fixed Trailing Edge, Pulley Bolt Access Panel
671CB	Lower Outboard Fixed Trailing Edge Access Panel
671DB	Lower Outboard Fixed Trailing Edge Access Panel
671EB	Lower Outboard Fixed Trailing Edge, Wedge Access Panel
671FB	Lower Outboard Fixed Trailing Edge, Wedge Access Panel

SUBTASK 05-41-06-210-036

(2) Do a General Visual inspection of the fixed trailing edge - right wing.

SUBTASK 05-41-06-410-011

(3) Close these access panels:

Number	Name/Location
671AB	Lower Outboard Fixed Trailing Edge Access Panel
671AT	Upper Outboard Fixed Trailing Edge, Quadrant Bolt Access Panel
671BB	Lower Outboard Fixed Trailing Edge Access Panel
671BT	Upper Outboard Fixed Trailing Edge, Pulley Bolt Access Panel
671CB	Lower Outboard Fixed Trailing Edge Access Panel
671DB	Lower Outboard Fixed Trailing Edge Access Panel
671EB	Lower Outboard Fixed Trailing Edge, Wedge Access Panel
671FB	Lower Outboard Fixed Trailing Edge, Wedge Access Panel

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

RIGHT WING
(BOTTOM VIEW)

A

L03314 S0000160643_V3

Fixed Trailing Edge - Right Wing General Visual (Internal)
Figure 234/05-41-06-990-836 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Fixed Trailing Edge - Right Wing General Visual (Internal)
Figure 234/05-41-06-990-836 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-06-210-837

35. INTERNAL - ZONAL (GV): Fixed Trailing Edge - Right Wing

(Figure 235)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required Enhanced Zonal Analysis Procedure (EZAP) - derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
671	Right Wing - Fixed Trailing Edge

D. Access Panels

Number	Name/Location
671AB	Lower Outboard Fixed Trailing Edge Access Panel
671BB	Lower Outboard Fixed Trailing Edge Access Panel

E. Zonal Inspection

SUBTASK 05-41-06-010-012

(1) Open these access panels:

Number	Name/Location
671AB	Lower Outboard Fixed Trailing Edge Access Panel
671BB	Lower Outboard Fixed Trailing Edge Access Panel

NOTE: Aileron control area only.

SUBTASK 05-41-06-210-037

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

SUBTASK 05-41-06-210-055

(3) Perform an internal zonal inspection (GV) of the fixed trailing edge - right wing (EZAP).

SUBTASK 05-41-06-910-004

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to Electrical Wiring Interconnect Systems (EWIS) during maintenance.

SUBTASK 05-41-06-410-012

(5) Close these access panels:

Number	Name/Location
671AB	Lower Outboard Fixed Trailing Edge Access Panel
671BB	Lower Outboard Fixed Trailing Edge Access Panel

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

L03323 S0006584439_V2

Fixed Trailing Edge - Right Wing General Visual (Internal)
Figure 235/05-41-06-990-837

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-838

36. EXTERNAL - ZONAL (GV): AILERON - RIGHT WING

(Figure 236)

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
672	Right Wing - Aileron

B. Zonal Inspection

SUBTASK 05-41-06-210-038

(1) Do a General Visual inspection of the aileron - right wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

L03330 S0006584441_V3

Aileron - Right Wing General Visual (External)
Figure 236/05-41-06-990-838

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-839

37. EXTERNAL - ZONAL (GV): LEADING EDGE TO FRONT SPAR - INBD OF NACELLE STRUT - RIGHT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS)

Figure 237

NOTE: Applicable to the 737-700 and 737-800 models.

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: Excluding surface under wing to body fairing.

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
20-10-94-210-801	Automated sUAS Assisted External Zonal GVI Flight Operation (P/B 201)
20-10-94-210-802	Inspect the Automated sUAS Assisted External Zonal GVI Images (P/B 201)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-21125	sUAS - small Unmanned Aircraft System Part #: DCL90-00002 Supplier: FBEM2 Part #: MB-HW-001 Supplier: H2P60

C. Location Zones

Zone	Area
611	Right Wing - Leading Edge to Front Spar

D. Zonal Inspection with sUAS (Top of the Wing)

SUBTASK 05-41-06-210-056

(1) Do a General Visual inspection of leading edge to front spar - inboard of the nacelle strut - right wing using a sUAS, SPL-21125.

(a) Do this task:Automated sUAS Assisted External Zonal GVI Flight Operation, TASK 20-10-94-210-801

(b) Do this task:Inspect the Automated sUAS Assisted External Zonal GVI Images, TASK 20-10-94-210-802

(2) Perform a General Visual inspection of the area where the sUAS was unable to capture images.

E. Zonal Inspection without sUAS (Bottom of the Wing)

SUBTASK 05-41-06-210-071

(1) Perform a General Visual inspection without using a sUAS of the inspection area under the wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Leading Edge to Front Spar (Inboard of Nacelle Strut) Right Wing - General Visual Using sUAS (External)
Figure 237/05-41-06-990-839

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-840

38. EXTERNAL - ZONAL (GV): LEADING EDGE TO FRONT SPAR - OUTBD OF NACELLE STRUT - RIGHT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS)

Figure 238

NOTE: Applicable to the 737-700 and 737-800 models.

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: Slats deployed.

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
20-10-94-210-801	Automated sUAS Assisted External Zonal GVI Flight Operation (P/B 201)
20-10-94-210-802	Inspect the Automated sUAS Assisted External Zonal GVI Images (P/B 201)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-21125	sUAS - small Unmanned Aircraft System Part #: DCL90-00002 Supplier: FBEM2 Part #: MB-HW-001 Supplier: H2P60

C. Location Zones

Zone	Area
621	Right Wing - Leading Edge to Front Spar

D. Zonal Inspection with sUAS (Top of the Wing)

SUBTASK 05-41-06-210-057

(1) Do a General Visual inspection of the leading edge to front spar - outboard of the nacelle strut - right wing using a sUAS, SPL-21125.

(a) Do this task:Automated sUAS Assisted External Zonal GVI Flight Operation, TASK 20-10-94-210-801

(b) Do this task:Inspect the Automated sUAS Assisted External Zonal GVI Images, TASK 20-10-94-210-802

(2) Perform a General Visual inspection of the area where the sUAS was unable to capture images.

E. Zonal Inspection without sUAS (Bottom of the Wing)

SUBTASK 05-41-06-210-072

(1) Perform a General Visual inspection without using a sUAS of the inspection area under the wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

3074920 S0000833337_V1

Leading Edge to Front Spar (Outboard of Nacelle Strut) Right Wing - General Visual Using sUAS (External)
Figure 238/05-41-06-990-840

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-841

39. EXTERNAL - ZONAL (GV): SLATS NO. 5, 6, 7, 8 - RIGHT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS)

Figure 239

NOTE: Applicable to the 737-700 and 737-800 models.

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: Slats in full extend position.

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
20-10-94-210-801	Automated sUAS Assisted External Zonal GVI Flight Operation (P/B 201)
20-10-94-210-802	Inspect the Automated sUAS Assisted External Zonal GVI Images (P/B 201)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-21125	sUAS - small Unmanned Aircraft System Part #: DCL90-00002 Supplier: FBEM2 Part #: MB-HW-001 Supplier: H2P60

C. Location Zones

Zone	Area
622	Right Wing - Slat No. 5
623	Right Wing - Slat No. 6
624	Right Wing - Slat No. 7
625	Right Wing - Slat No. 8

D. Zonal Inspection with sUAS (Top of the Wing)

SUBTASK 05-41-06-210-058

(1) Do a General Visual inspection of the slats no. 5, 6, 7, 8 - right wing using a sUAS, SPL-21125.

(a) Do this task:Automated sUAS Assisted External Zonal GVI Flight Operation, TASK 20-10-94-210-801

(b) Do this task:Inspect the Automated sUAS Assisted External Zonal GVI Images, TASK 20-10-94-210-802

(2) Perform a General Visual inspection of the area where the sUAS was unable to capture images.

E. Zonal Inspection without sUAS (Bottom of the Wing)

SUBTASK 05-41-06-210-073

(1) Perform a General Visual inspection without using a sUAS of the inspection area under the wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

3074921 S0000833369_V1

Leading Edge Slats No. 5 thru 8 General Visual Using sUAS (External)
Figure 239/05-41-06-990-843

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-843

40. EXTERNAL - ZONAL (GV): CENTER FUEL TANK - RIGHT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS)

Figure 240

NOTE: Applicable to the 737-700 and 737-800 models.

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: Excluding surface under wing to body fairing.

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
20-10-94-210-801	Automated sUAS Assisted External Zonal GVI Flight Operation (P/B 201)
20-10-94-210-802	Inspect the Automated sUAS Assisted External Zonal GVI Images (P/B 201)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-21125	sUAS - small Unmanned Aircraft System Part #: DCL90-00002 Supplier: FBEM2 Part #: MB-HW-001 Supplier: H2P60

C. Location Zones

Zone	Area
631	Right Wing - Center Fuel Tank, Rib 1 to Rib 5

D. Zonal Inspection with sUAS (Top of the Wing)

SUBTASK 05-41-06-210-060

(1) Do a General Visual inspection of the center fuel tank - right wing using a sUAS, SPL-21125.

(a) Do this task:Automated sUAS Assisted External Zonal GVI Flight Operation, TASK 20-10-94-210-801

(b) Do this task:Inspect the Automated sUAS Assisted External Zonal GVI Images, TASK 20-10-94-210-802

(2) Perform a General Visual inspection of the area where the sUAS was unable to capture images.

E. Zonal Inspection without sUAS (Bottom of the Wing)

SUBTASK 05-41-06-210-075

(1) Perform a General Visual inspection without using a sUAS of the inspection area under the wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

3074923 S0000833367_V1

Center Fuel Tank - Right Wing General Visual Using sUAS (External)
Figure 240/05-41-06-990-842

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-844

41. EXTERNAL - ZONAL (GV): MAIN FUEL TANK - RIGHT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS)

Figure 241

NOTE: Applicable to the 737-700 and 737-800 models.

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
20-10-94-210-801	Automated sUAS Assisted External Zonal GVI Flight Operation (P/B 201)
20-10-94-210-802	Inspect the Automated sUAS Assisted External Zonal GVI Images (P/B 201)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-21125	sUAS - small Unmanned Aircraft System Part #: DCL90-00002 Supplier: FBEM2 Part #: MB-HW-001 Supplier: H2P60

C. Location Zones

Zone	Area
632	Right Wing - Main Tank, Rib 5 to Rib 22, Wing Station 204.25 to Wing Station 643.50

D. Zonal Inspection with sUAS (Top of the Wing)

SUBTASK 05-41-06-210-061

(1) Do a General Visual inspection of the main fuel tank - right wing using a sUAS, SPL-21125.

(a) Do this task:Automated sUAS Assisted External Zonal GVI Flight Operation, TASK 20-10-94-210-801

(b) Do this task:Inspect the Automated sUAS Assisted External Zonal GVI Images, TASK 20-10-94-210-802

(2) Perform a General Visual inspection of the area where the sUAS was unable to capture images.

E. Zonal Inspection without sUAS (Bottom of the Wing)

SUBTASK 05-41-06-210-076

(1) Perform a General Visual inspection without using a sUAS of the inspection area under the wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

3074926 S0000833374_V1

Main Fuel Tank - Right Wing General Visual Using sUAS (External)
Figure 241/05-41-06-990-844

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-845

42. EXTERNAL - ZONAL (GV): SURGE TANK - RIGHT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS)

Figure 242

NOTE: Applicable to the 737-700 and 737-800 models.

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
20-10-94-210-801	Automated sUAS Assisted External Zonal GVI Flight Operation (P/B 201)
20-10-94-210-802	Inspect the Automated sUAS Assisted External Zonal GVI Images (P/B 201)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-21125	sUAS - small Unmanned Aircraft System Part #: DCL90-00002 Supplier: FBEM2 Part #: MB-HW-001 Supplier: H2P60

C. Location Zones

Zone	Area
633	Right Wing - Surge Tank, Rib 22 to Rib 25, Wing Station 643.50 to Wing Buttock Line 616.75

D. Zonal Inspection with sUAS (Top of the Wing)

SUBTASK 05-41-06-210-062

(1) Do a General Visual inspection of the surge fuel tank - right wing using a sUAS, SPL-21125.

(a) Do this task:Automated sUAS Assisted External Zonal GVI Flight Operation, TASK 20-10-94-210-801

(b) Do this task:Inspect the Automated sUAS Assisted External Zonal GVI Images, TASK 20-10-94-210-802

(2) Perform a General Visual inspection of the area where the sUAS was unable to capture images.

E. Zonal Inspection without sUAS (Bottom of the Wing)

SUBTASK 05-41-06-210-077

(1) Perform a General Visual inspection without using a sUAS of the inspection area under the wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

3074927 S0000833386_V1

Surge Tank - Right Wing General Visual Using sUAS (External)
Figure 242/05-41-06-990-846

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-846

43. EXTERNAL - ZONAL (GV): DRY BAY - RIGHT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS)

Figure 243

NOTE: Applicable to the 737-700 and 737-800 models.

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
20-10-94-210-801	Automated sUAS Assisted External Zonal GVI Flight Operation (P/B 201)
20-10-94-210-802	Inspect the Automated sUAS Assisted External Zonal GVI Images (P/B 201)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-21125	sUAS - small Unmanned Aircraft System Part #: DCL90-00002 Supplier: FBEM2 Part #: MB-HW-001 Supplier: H2P60

C. Location Zones

Zone	Area
634	Right Wing - Dry Bay

D. Zonal Inspection with sUAS (Top of the Wing)

SUBTASK 05-41-06-210-063

(1) Do a General Visual inspection of the dry bay - right wing using a sUAS, SPL-21125.

(a) Do this task:Automated sUAS Assisted External Zonal GVI Flight Operation, TASK 20-10-94-210-801

(b) Do this task:Inspect the Automated sUAS Assisted External Zonal GVI Images, TASK 20-10-94-210-802

(2) Perform a General Visual inspection of the area where the sUAS was unable to capture images.

E. Zonal Inspection without sUAS (Bottom of the Wing)

SUBTASK 05-41-06-210-078

(1) Perform a General Visual inspection without using a sUAS of the inspection area under the wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

3074928 S0000833393_V1

Dry Bay - Right Wing General Visual Using sUAS (External)
Figure 243/05-41-06-990-847

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-847

44. EXTERNAL - ZONAL (GV): REAR SPAR TO LANDING GEAR SUPPORT BEAM - RIGHT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS)

Figure 244

NOTE: Applicable to the 737-700 and 737-800 models.

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: Excluding surface under wing to body fairing.

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
20-10-94-210-801	Automated sUAS Assisted External Zonal GVI Flight Operation (P/B 201)
20-10-94-210-802	Inspect the Automated sUAS Assisted External Zonal GVI Images (P/B 201)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-21125	sUAS - small Unmanned Aircraft System Part #: DCL90-00002 Supplier: FBEM2 Part #: MB-HW-001 Supplier: H2P60

C. Location Zones

Zone	Area
651	Right Wing - Rear Spar to Landing Gear Support Beam

D. Zonal Inspection with sUAS (Top of the Wing)

SUBTASK 05-41-06-210-064

(1) Do a General Visual inspection of the rear spar to landing gear support beam - right wing using a sUAS, SPL-21125.

(a) Do this task:Automated sUAS Assisted External Zonal GVI Flight Operation, TASK 20-10-94-210-801

(b) Do this task:Inspect the Automated sUAS Assisted External Zonal GVI Images, TASK 20-10-94-210-802

(2) Perform a General Visual inspection of the area where the sUAS was unable to capture images.

E. Zonal Inspection without sUAS (Bottom of the Wing)

SUBTASK 05-41-06-210-079

(1) Perform a General Visual inspection without using a sUAS of the inspection area under the wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Rear Spar to Landing Gear Support Beam - Right Wing General Visual Using sUAS (External)
Figure 244/05-41-06-990-849

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-848

45. EXTERNAL - ZONAL (GV): INBOARD SPOILER NO. 7 - RIGHT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS)

Figure 245

NOTE: Applicable to the 737-700 and 737-800 models.

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: Spoiler raised.

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
20-10-94-210-801	Automated sUAS Assisted External Zonal GVI Flight Operation (P/B 201)
20-10-94-210-802	Inspect the Automated sUAS Assisted External Zonal GVI Images (P/B 201)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-21125	sUAS - small Unmanned Aircraft System Part #: DCL90-00002 Supplier: FBEM2 Part #: MB-HW-001 Supplier: H2P60

C. Location Zones

Zone	Area
652	Right Wing - Spoiler No. 7

D. Zonal Inspection with sUAS (Top Surface of Spoiler)

SUBTASK 05-41-06-210-065

(1) Do a General Visual inspection of the inboard spoiler no. 7 - right wing using a sUAS, SPL-21125.

(a) Do this task:Automated sUAS Assisted External Zonal GVI Flight Operation, TASK 20-10-94-210-801

(b) Do this task:Inspect the Automated sUAS Assisted External Zonal GVI Images, TASK 20-10-94-210-802

(2) Perform a General Visual inspection of the area where the sUAS was unable to capture images.

E. Zonal Inspection without sUAS (Bottom Surface and Area Below Spoiler)

SUBTASK 05-41-06-210-080

(1) Perform a General Visual inspection without using a sUAS of the inspection area under the spoiler.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

3076384 S0000833402_V1

Inboard Spoiler No. 7 General Visual Using sUAS (External)
Figure 245/05-41-06-990-850 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

3076385 S0000833403_V1

Inboard Spoiler No. 7 General Visual Using sUAS (External)
Figure 245/05-41-06-990-850 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-849

46. EXTERNAL - ZONAL (GV): INBOARD FLAPS - RIGHT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS)

Figure 246

NOTE: Applicable to the 737-700 and 737-800 models.

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: Flaps extended.

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
20-10-94-210-801	Automated sUAS Assisted External Zonal GVI Flight Operation (P/B 201)
20-10-94-210-802	Inspect the Automated sUAS Assisted External Zonal GVI Images (P/B 201)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-21125	sUAS - small Unmanned Aircraft System Part #: DCL90-00002 Supplier: FBEM2 Part #: MB-HW-001 Supplier: H2P60

C. Location Zones

Zone	Area
653	Right Wing - Inboard Flap

D. Zonal Inspection with sUAS (Top of the Wing)

SUBTASK 05-41-06-210-066

(1) Do a General Visual inspection of the inboard flaps - right wing using a sUAS, SPL-21125.

(a) Do this task:Automated sUAS Assisted External Zonal GVI Flight Operation, TASK 20-10-94-210-801

(b) Do this task:Inspect the Automated sUAS Assisted External Zonal GVI Images, TASK 20-10-94-210-802.

(2) Perform a General Visual inspection of the area where the sUAS was unable to capture images.

E. Zonal Inspection without sUAS (Bottom of the Wing)

SUBTASK 05-41-06-210-081

(1) Perform a General Visual inspection without using a sUAS of the inspection area under the wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

3074930 S0000833382_V1

Inboard Trailing Edge Flaps - Right Wing General Visual Using sUAS (External)
Figure 246/05-41-06-990-845

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-850

47. EXTERNAL - ZONAL (GV): SPOILERS NO. 8, 9, 10, 11, 12 - RIGHT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS)

Figure 247

NOTE: Applicable to the 737-700 and 737-800 models.

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: Spoilers Raised.

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
20-10-94-210-801	Automated sUAS Assisted External Zonal GVI Flight Operation (P/B 201)
20-10-94-210-802	Inspect the Automated sUAS Assisted External Zonal GVI Images (P/B 201)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-21125	sUAS - small Unmanned Aircraft System Part #: DCL90-00002 Supplier: FBEM2 Part #: MB-HW-001 Supplier: H2P60

C. Location Zones

Zone	Area
662	Right Wing - Spoiler No. 8
663	Right Wing - Spoiler No. 9
664	Right Wing - Spoiler No. 10
665	Right Wing - Spoiler No. 11
666	Right Wing - Spoiler No. 12

D. Zonal Inspection with sUAS (Top Surface of Spoilers)

SUBTASK 05-41-06-210-067

(1) Do a General Visual inspection of the spoilers no. 8, 9, 10, 11, 12 - right wing using a sUAS, SPL-21125.

(a) Do this task:Automated sUAS Assisted External Zonal GVI Flight Operation, TASK 20-10-94-210-801

(b) Do this task:Inspect the Automated sUAS Assisted External Zonal GVI Images, TASK 20-10-94-210-802

(2) Perform a General Visual inspection of the area where the sUAS was unable to capture images.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

E. Zonal Inspection without sUAS (Bottom Surface and Area Below Spoilers)

SUBTASK 05-41-06-210-082

(1) Perform a General Visual inspection without using a sUAS of the inspection area under the spoilers.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

3076404 S0000833408_V1

Outboard Spoiler No. 8 thru 12 General Visual Using sUAS (External)
Figure 247/05-41-06-990-851 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Outboard Spoiler No. 8 thru 12 General Visual Using sUAS (External)
Figure 247/05-41-06-990-851 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-851

48. EXTERNAL - ZONAL (GV): OUTBOARD FLAPS - RIGHT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS)

Figure 248

NOTE: Applicable to the 737-700 and 737-800 models.

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: Flaps extended.

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
20-10-94-210-801	Automated sUAS Assisted External Zonal GVI Flight Operation (P/B 201)
20-10-94-210-802	Inspect the Automated sUAS Assisted External Zonal GVI Images (P/B 201)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-21125	sUAS - small Unmanned Aircraft System Part #: DCL90-00002 Supplier: FBEM2 Part #: MB-HW-001 Supplier: H2P60

C. Location Zones

Zone	Area
667	Right Wing - Outboard Flap

D. Zonal Inspection with sUAS (Top of the Wing)

SUBTASK 05-41-06-210-068

(1) Do a General Visual inspection of the outboard flaps - right wing using a sUAS, SPL-21125.

(a) Do this task:Automated sUAS Assisted External Zonal GVI Flight Operation, TASK 20-10-94-210-801

(b) Do this task:Inspect the Automated sUAS Assisted External Zonal GVI Images, TASK 20-10-94-210-802

(2) Perform a General Visual inspection of the area where the sUAS was unable to capture images.

E. Zonal Inspection without sUAS (Bottom of the Wing)

SUBTASK 05-41-06-210-083

(1) Perform a General Visual inspection without using a sUAS of the inspection area under the wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Outboard Flap - Right Wing General Visual Using sUAS (External)
Figure 248/05-41-06-990-852

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-852

49. EXTERNAL - ZONAL (GV): FIXED TRAILING EDGE - RIGHT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS)

Figure 249

NOTE: Applicable to the 737-700 and 737-800 models.

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
20-10-94-210-801	Automated sUAS Assisted External Zonal GVI Flight Operation (P/B 201)
20-10-94-210-802	Inspect the Automated sUAS Assisted External Zonal GVI Images (P/B 201)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-21125	sUAS - small Unmanned Aircraft System Part #: DCL90-00002 Supplier: FBEM2 Part #: MB-HW-001 Supplier: H2P60

C. Location Zones

Zone	Area
671	Right Wing - Fixed Trailing Edge

D. Zonal Inspection with sUAS (Top of the Wing)

SUBTASK 05-41-06-210-069

(1) Do a General Visual inspection of the fixed trailing edge - right wing using a sUAS, SPL-21125.

(a) Do this task:Automated sUAS Assisted External Zonal GVI Flight Operation, TASK 20-10-94-210-801

(b) Do this task:Inspect the Automated sUAS Assisted External Zonal GVI Images, TASK 20-10-94-210-802

(2) Perform a General Visual inspection of the area where the sUAS was unable to capture images.

E. Zonal Inspection without sUAS (Bottom of the Wing)

SUBTASK 05-41-06-210-084

(1) Perform a General Visual inspection without using a sUAS of the inspection area under the wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

3074987 S0000833449_V1

Fixed Trailing Edge - Right Wing General Visual Using sUAS (External)
Figure 249/05-41-06-990-854

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-853

50. EXTERNAL - ZONAL (GV): AILERON - RIGHT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS)

Figure 250

NOTE: Applicable to the 737-700 and 737-800 models.

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
20-10-94-210-801	Automated sUAS Assisted External Zonal GVI Flight Operation (P/B 201)
20-10-94-210-802	Inspect the Automated sUAS Assisted External Zonal GVI Images (P/B 201)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-21125	sUAS - small Unmanned Aircraft System Part #: DCL90-00002 Supplier: FBEM2 Part #: MB-HW-001 Supplier: H2P60

C. Location Zones

Zone	Area
672	Right Wing - Aileron

D. Zonal Inspection with sUAS (Top of the Wing)

SUBTASK 05-41-06-210-070

(1) Do a General Visual inspection of the aileron - right wing using a sUAS, SPL-21125.

(a) Do this task:Automated sUAS Assisted External Zonal GVI Flight Operation, TASK 20-10-94-210-801

(b) Do this task:Inspect the Automated sUAS Assisted External Zonal GVI Images, TASK 20-10-94-210-802

(2) Perform a General Visual inspection of the area where the sUAS was unable to capture images.

E. Zonal Inspection without sUAS (Bottom of the Wing)

SUBTASK 05-41-06-210-085

(1) Perform a General Visual inspection without using a sUAS of the inspection area under the wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

3074986 S0000833446_V1

Aileron - Right Wing General Visual Using sUAS (External)
Figure 250/05-41-06-990-853

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-854

51. EXTERNAL - ZONAL (GV): WINGLET - RIGHT WING WITH SMALL UNMANNED AERIAL SYSTEM (sUAS)

Figure 251

NOTE: Applicable to the 737-700 and 737-800 models.

NOTE: This inspection is not required if an alternate method of GVI is selected.

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
20-10-94-210-801	Automated sUAS Assisted External Zonal GVI Flight Operation (P/B 201)
20-10-94-210-802	Inspect the Automated sUAS Assisted External Zonal GVI Images (P/B 201)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-21125	sUAS - small Unmanned Aircraft System Part #: DCL90-00002 Supplier: FBEM2 Part #: MB-HW-001 Supplier: H2P60

C. Location Zones

Zone	Area
627	Right Winglet

D. Zonal Inspection with sUAS

SUBTASK 05-41-06-210-086

(1) Do a General Visual inspection of the winglet - right wing using a sUAS, SPL-21125

(a) Do this task: Automated sUAS Assisted External Zonal GVI Flight Operation, TASK 20-10-94-210-801

(b) Do this task: Inspect the Automated sUAS Assisted External Zonal GVI Images, TASK 20-10-94-210-802

(2) Perform a General Visual inspection of the area where the sUAS was unable to capture images.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

3075873 S0000834158_V1

Right Winglet - General Visual (External)
Figure 251/05-41-06-990-856

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-07-210-801

1. **EXTERNAL - ZONAL (GV): Nose Landing Gear and Landing Gear Doors (from Ground)**
(Figure 201)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required Enhanced Zonal Analysis Procedure (EZAP) - derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
710	Subzone - Landing Gear: Nose Landing Gear and Landing Gear Doors

D. Zonal Inspection

SUBTASK 05-41-07-210-001

(1) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

SUBTASK 05-41-07-210-006

(2) Perform an external zonal inspection (GV) of the nose landing gear and landing gear doors. Inspection is accomplished from the ground, without the use of stands or ladders (EZAP).

SUBTASK 05-41-07-910-001

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to Electrical Wiring Interconnect Systems (EWIS) during maintenance.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K60298 S0006584445_V2

Nose Landing Gear and Landing Gear Doors General Visual (External)
Figure 201/05-41-07-990-801

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-07-210-802

2. EXTERNAL - ZONAL (GV): LEFT MAIN LANDING GEAR AND LANDING GEAR DOORS (FROM GROUND)

(Figure 202)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
730	Subzone - Left Main Landing Gear and Landing Gear Doors

B. Zonal Inspection

SUBTASK 05-41-07-210-002

(1) Do a General Visual inspection of the left main landing gear and landing gear doors. Inspection is accomplished from the ground, without the use of stands or ladders.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Left Main Landing Gear and Landing Gear Doors General Visual (External)
Figure 202/05-41-07-990-802

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-07-210-803

3. EXTERNAL - ZONAL (GV): Left Main Landing Gear and Landing Gear Doors

(Figure 203)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required Enhanced Zonal Analysis Procedure (EZAP) - derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
730	Subzone - Left Main Landing Gear and Landing Gear Doors

D. Zonal Inspection

SUBTASK 05-41-07-210-003

(1) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

SUBTASK 05-41-07-210-007

(2) Perform an external zonal inspection (GV) of the left main landing gear and landing gear doors (EZAP).

SUBTASK 05-41-07-910-002

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to Electrical Wiring Interconnect Systems (EWIS) during maintenance.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K60658 S0006584449_V2

Landing Gear Doors - Left Main Landing Gear General Visual (External)
Figure 203/05-41-07-990-803 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K62597 S0006584450_V2

Landing Gear Doors - Left Main Landing Gear General Visual (External)
Figure 203/05-41-07-990-803 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-07-210-804

4. EXTERNAL - ZONAL (GV): RIGHT MAIN LANDING GEAR AND LANDING GEAR DOORS (FROM GROUND)

(Figure 204)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
740	Subzone - Right Main Landing Gear and Landing Gear Doors

B. Zonal Inspection

SUBTASK 05-41-07-210-004

(1) Do a General Visual inspection of the right main landing gear and landing gear doors. Inspection is accomplished from the ground, without the use of stands or ladders.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Right Main Landing Gear and Landing Gear Doors General Visual (External)
Figure 204/05-41-07-990-804

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-07-210-805

5. EXTERNAL - ZONAL (GV): Right Main Landing Gear and Landing Gear Doors

(Figure 205)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required Enhanced Zonal Analysis Procedure (EZAP) - derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-804	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
740	Subzone - Right Main Landing Gear and Landing Gear Doors

D. Zonal Inspection

SUBTASK 05-41-07-210-005

(1) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-804.

SUBTASK 05-41-07-210-008

(2) Perform an external zonal inspection (GV) of the right main landing gear and landing gear doors (EZAP).

SUBTASK 05-41-07-910-003

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to Electrical Wiring Interconnect Systems (EWIS) during maintenance.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Landing Gear Doors - Right Main Landing Gear General Visual (External)
Figure 205/05-41-07-990-805 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K62599 S0006584455_V2

Landing Gear Doors - Right Main Landing Gear General Visual (External)
Figure 205/05-41-07-990-805 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-08-210-801

1. **EXTERNAL - ZONAL (GV): ENTRY DOORS, SERVICE DOORS, AUTOMATIC OVERWING EXITS, MID-EXIT DOORS, AND CARGO DOORS**

(Figure 201)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
820	Doors - Lower Half of Fuselage - Right Side
830	Subzone - Passenger Compartment Doors, Left
840	Subzone - Passenger Compartment Doors, Right

B. Zonal Inspection

NOTE: Door closed.

SUBTASK 05-41-08-210-001

(1) Do a General Visual inspection of the doors. Inspection is accomplished from the ground, without the use of stands or ladders. No additional access panel is required.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

1 ZONE 832 AND ZONE 842 IS APPLICABLE TO 737-800 AND 737-900 ONLY.

2 ZONE 836 AND ZONE 846 ARE APPLICABLE TO 737-900ER ONLY.

K64197 S0006584459_V5

Doors General Visual (External)
Figure 201/05-41-08-990-801

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-08-210-802

2. EXTERNAL - ZONAL (GV): FORWARD CARGO DOOR

(Figure 202)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
821	Forward Cargo Door

B. Access Panels

Number	Name/Location
821	Forward Cargo Door

C. Zonal Inspection

SUBTASK 05-41-08-010-001

(1) Open this access panel:

Number	Name/Location
821	Forward Cargo Door

SUBTASK 05-41-08-210-002

(2) Do a General Visual inspection of the forward cargo door - Section 43, Sta 460.

SUBTASK 05-41-08-410-001

(3) Close this access panel:

Number	Name/Location
821	Forward Cargo Door

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K64719 S0006584461_V2

Forward Cargo Door General Visual (External)
Figure 202/05-41-08-990-802

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-08-210-803

3. INTERNAL - ZONAL (GV): FORWARD CARGO DOOR

(Figure 203)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
821	Forward Cargo Door

B. Access Panels

Number	Name/Location
821AR	Access Panel on Forward Cargo Door - External
821AZ	Panel Assy - Forward Cargo Door - Protective Pad Liner
821BR	Access Panel on Forward Cargo Door - External
821BZ	Panel Assy - Forward Cargo Door - Handle Box Cover Plate

C. Zonal Inspection

SUBTASK 05-41-08-010-002

(1) Open these access panels:

Number	Name/Location
821AR	Access Panel on Forward Cargo Door - External
821AZ	Panel Assy - Forward Cargo Door - Protective Pad Liner
821BR	Access Panel on Forward Cargo Door - External
821BZ	Panel Assy - Forward Cargo Door - Handle Box Cover Plate

SUBTASK 05-41-08-210-003

(2) Do a General Visual inspection of the forward cargo door - Section 43, Sta 460.

SUBTASK 05-41-08-410-002

(3) Close these access panels:

Number	Name/Location
821AR	Access Panel on Forward Cargo Door - External
821AZ	Panel Assy - Forward Cargo Door - Protective Pad Liner
821BR	Access Panel on Forward Cargo Door - External
821BZ	Panel Assy - Forward Cargo Door - Handle Box Cover Plate

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FORWARD CARGO DOOR
(EXTERIOR VIEW)
A

FORWARD CARGO DOOR
(EXTERIOR VIEW)
(ACCESS PANELS REMOVED)
A

K65863 S0006584463_V2

Forward Cargo Door General Visual (Internal)
Figure 203/05-41-08-990-803 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FORWARD CARGO DOOR
(INTERIOR VIEW)

A

FORWARD CARGO DOOR
(INTERIOR VIEW)
(ACCESS PANELS REMOVED)

A

K77464 S0006584464_V3

Forward Cargo Door General Visual (Internal)
Figure 203/05-41-08-990-803 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-08-210-804

4. EXTERNAL - ZONAL (GV): AFT CARGO DOOR

(Figure 204)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
822	Aft Cargo Door

B. Access Panels

Number	Name/Location
822	Aft Cargo Door

C. Zonal Inspection

SUBTASK 05-41-08-010-003

(1) Open this access panel:

Number	Name/Location
822	Aft Cargo Door

SUBTASK 05-41-08-210-004

(2) Do a General Visual inspection of the aft cargo door - Section 46, Sta 827.

SUBTASK 05-41-08-410-003

(3) Close this access panel:

Number	Name/Location
822	Aft Cargo Door

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K66676 S0006584466_V2

Aft Cargo Door General Visual (External)
Figure 204/05-41-08-990-804

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-08-210-805

5. INTERNAL - ZONAL (GV): AFT CARGO DOOR

(Figure 205)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
822	Aft Cargo Door

B. Access Panels

Number	Name/Location
822AR	Access Panel on Aft Cargo Door - External
822AZ	Panel Assy - Aft Cargo Door - Protective Pad Liner
822BR	Access Panel on Aft Cargo Door
822BZ	Panel Assy - Aft Cargo Door - Handle Box Cover Plate

C. Zonal Inspection

SUBTASK 05-41-08-010-004

(1) Open these access panels:

Number	Name/Location
822AR	Access Panel on Aft Cargo Door - External
822AZ	Panel Assy - Aft Cargo Door - Protective Pad Liner
822BR	Access Panel on Aft Cargo Door
822BZ	Panel Assy - Aft Cargo Door - Handle Box Cover Plate

SUBTASK 05-41-08-210-005

(2) Do a General Visual inspection of the aft cargo door - Section 46, Sta 827.

SUBTASK 05-41-08-410-004

(3) Close these access panels:

Number	Name/Location
822AR	Access Panel on Aft Cargo Door - External
822AZ	Panel Assy - Aft Cargo Door - Protective Pad Liner
822BR	Access Panel on Aft Cargo Door
822BZ	Panel Assy - Aft Cargo Door - Handle Box Cover Plate

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K67116 S0006584468_V2

Aft Cargo Door General Visual (Internal)
Figure 205/05-41-08-990-805 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

AFT CARGO DOOR
(INTERIOR VIEW)

A

AFT CARGO DOOR
(INTERIOR VIEW)
(ACCESS PANELS REMOVED)

A

K77013 S0006584469_V3

Aft Cargo Door General Visual (Internal)
Figure 205/05-41-08-990-805 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-08-210-806

6. EXTERNAL - ZONAL (GV): FORWARD PASSENGER DOOR

(Figure 206)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
831	Forward Entry Door

B. Access Panels

Number	Name/Location
831	Forward Entry Door

C. Zonal Inspection

SUBTASK 05-41-08-010-005

(1) Open this access panel:

Number	Name/Location
831	Forward Entry Door

SUBTASK 05-41-08-210-006

(2) Do a General Visual inspection of the forward passenger door - Section 41, Sta 345.

SUBTASK 05-41-08-410-005

(3) Close this access panel:

Number	Name/Location
831	Forward Entry Door

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FORWARD ENTRY DOOR
(EXTERIOR VIEW)

A

K86272 S0006584471_V2

Forward Entry Door General Visual (External)
Figure 206/05-41-08-990-806 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FORWARD ENTRY DOOR
(INTERIOR VIEW)

A

L02712 S0006584472_V2

Forward Entry Door General Visual (External)
Figure 206/05-41-08-990-806 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-08-210-807

7. INTERNAL - ZONAL (GV): FORWARD PASSENGER DOOR

(Figure 207)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
831	Forward Entry Door

B. Access Panels

Number	Name/Location
831AW	Fwd Entry Door - Door Liner (Cosmetic)
831AZ	Forward Entry Door - Torque Tube Access
831BZ	Forward Entry Door - Handle Box and Cam for Handle Box Access
831CZ	Forward Entry Door - Handle Box Access
831DZ	Forward Entry Door - Gate Hinge Pin Access
831EZ	Forward Entry Door - Gate Hinge Pin Access

C. Zonal Inspection

SUBTASK 05-41-08-010-006

(1) Open these access panels:

Number	Name/Location
831AW	Fwd Entry Door - Door Liner (Cosmetic)
831AZ	Forward Entry Door - Torque Tube Access
831BZ	Forward Entry Door - Handle Box and Cam for Handle Box Access
831CZ	Forward Entry Door - Handle Box Access
831DZ	Forward Entry Door - Gate Hinge Pin Access
831EZ	Forward Entry Door - Gate Hinge Pin Access

SUBTASK 05-41-08-210-007

(2) Do a General Visual inspection of the forward passenger door - Section 41, Sta 345.

SUBTASK 05-41-08-410-006

(3) Close these access panels:

Number	Name/Location
831AW	Fwd Entry Door - Door Liner (Cosmetic)
831AZ	Forward Entry Door - Torque Tube Access
831BZ	Forward Entry Door - Handle Box and Cam for Handle Box Access
831CZ	Forward Entry Door - Handle Box Access
831DZ	Forward Entry Door - Gate Hinge Pin Access
831EZ	Forward Entry Door - Gate Hinge Pin Access

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Forward Entry Door General Visual (Internal)
Figure 207/05-41-08-990-807

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-08-210-808

8. EXTERNAL - ZONAL (GV): AUTOMATIC OVERWING EXIT

(Figure 208)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
832	Left Forward Emergency Exit

B. Access Panels

Number	Name/Location
832	Emergency Exit

C. Zonal Inspection

SUBTASK 05-41-08-010-007

(1) Open this access panel:

Number	Name/Location
832	Emergency Exit

SUBTASK 05-41-08-210-008

(2) Do a General Visual inspection of the automatic overwing exit - Section 44, Sta 589.5.

SUBTASK 05-41-08-410-007

(3) Close this access panel:

Number	Name/Location
832	Emergency Exit

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Left Emergency Exit Door General Visual (External)
Figure 208/05-41-08-990-808

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-08-210-809

9. INTERNAL - ZONAL (GV): AUTOMATIC OVERWING EXIT

(Figure 209)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
832	Left Forward Emergency Exit

B. Access Panels

Number	Name/Location
832AZ	Panel Assy - Emergency Escape Hatch - Door Liner

C. Zonal Inspection

SUBTASK 05-41-08-010-008

(1) Open this access panel:

Number	Name/Location
832AZ	Panel Assy - Emergency Escape Hatch - Door Liner

NOTE: Automatic overwing exit door liner removal required.

SUBTASK 05-41-08-210-009

(2) Do a General Visual inspection of the automatic overwing exit - Section 44, Sta 589.5.

SUBTASK 05-41-08-410-008

(3) Close this access panel:

Number	Name/Location
832AZ	Panel Assy - Emergency Escape Hatch - Door Liner

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

LEFT EMERGENCY EXIT DOOR
(DOOR IN THE CLOSED POSITION
WITH DOOR LINING REMOVED)

A

737-800
(737-900 CONFIGURATION IS EQUIVALENT)

K70301 S0006584478_V2

Left Emergency Exit Door General Visual (Internal)
Figure 209/05-41-08-990-809

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-08-210-810

10. EXTERNAL - ZONAL (GV): AUTOMATIC OVERWING EXIT

(Figure 210)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
833	Left Emergency Exit (STA 627.5)

B. Access Panels

Number	Name/Location
833	Emergency Exit

C. Zonal Inspection

SUBTASK 05-41-08-010-009

(1) Open this access panel:

Number	Name/Location
833	Emergency Exit

SUBTASK 05-41-08-210-010

(2) Do a General Visual inspection of the automatic overwing exit - Section 44, Sta 627.

SUBTASK 05-41-08-410-009

(3) Close this access panel:

Number	Name/Location
833	Emergency Exit

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

737-700
(737-600 CONFIGURATION IS EQUIVALENT)

K64181 S0006584480_V3

Left Emergency Exit Door General Visual (External)
Figure 210/05-41-08-990-810 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

2500692 S0000586229_V1

Left Emergency Exit Door General Visual (External)
Figure 210/05-41-08-990-810 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-08-210-811

11. INTERNAL - ZONAL (GV): AUTOMATIC OVERWING EXIT

(Figure 211)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
833	Left Emergency Exit (STA 627.5)

B. Access Panels

Number	Name/Location
833AZ	Panel Assy - Emergency Escape Hatch - Door Liner

C. Zonal Inspection

SUBTASK 05-41-08-010-010

(1) Open this access panel:

Number	Name/Location
833AZ	Panel Assy - Emergency Escape Hatch - Door Liner

NOTE: Automatic overwing exit door liner removal required.

SUBTASK 05-41-08-210-011

(2) Do a General Visual inspection of the automatic overwing exit - Section 44, Sta 627.

SUBTASK 05-41-08-410-010

(3) Close this access panel:

Number	Name/Location
833AZ	Panel Assy - Emergency Escape Hatch - Door Liner

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

LEFT EMERGENCY EXIT DOOR
(DOOR IN THE CLOSED POSITION WITH DOOR LINING REMOVED)

A

737-700
(OTHER MODELS CONFIGURATION IS EQUIVALENT)

K66011 S0006584482_V2

Left Emergency Exit Door General Visual (Internal)
Figure 211/05-41-08-990-811

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-08-210-812

12. EXTERNAL - ZONAL (GV): AFT PASSENGER DOOR

(Figure 212)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
834	Left Aft Entry Door

B. Access Panels

Number	Name/Location
834	Aft Entry Door

C. Zonal Inspection

SUBTASK 05-41-08-010-011

(1) Open this access panel:

Number	Name/Location
834	Aft Entry Door

SUBTASK 05-41-08-210-012

(2) Do a General Visual inspection of the aft passenger door - Section 47, Sta 980.

SUBTASK 05-41-08-410-011

(3) Close this access panel:

Number	Name/Location
834	Aft Entry Door

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K86197 S0006584484_V2

Aft Entry Door General Visual (External)
Figure 212/05-41-08-990-812 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

AFT ENTRY DOOR
(INTERIOR VIEW)

A

L02735 S0006584485_V2

Aft Entry Door General Visual (External)
Figure 212/05-41-08-990-812 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-08-210-813

13. INTERNAL - ZONAL (GV): AFT PASSENGER DOOR

(Figure 213)

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
52-13-31-000-802	Aft Entry Door Lining Removal (P/B 401)
52-13-31-400-802	Aft Entry Door Lining Installation (P/B 401)
SOPM 20-50-19	General Sealing

B. Consumable Materials

Reference	Description	Specification
A00247	Sealant - Pressure And Environmental - Chromate Type	BMS5-95

C. Location Zones

Zone	Area
834	Left Aft Entry Door

D. Access Panels

Number	Name/Location
834AW	Aft Entry Door - Door Liner
834AZ	Aft Entry Door - Torque Tube Access
834BZ	Aft Entry Door - Handle Box and Cam for Handle Box Access
834CZ	Aft Entry Door - Handle Box Access
834DZ	Aft Entry Door - Lower Hinge Access
834EZ	Aft Entry Door - Upper Hinge Access
834FZ	Aft Entry Door - Torque Tube Access
834GZ	AFT Entry Door - Torque Tube Access

E. Zonal Inspection

SUBTASK 05-41-08-010-027

(1) Do this task: Aft Entry Door Lining Removal, TASK 52-13-31-000-802.

SUBTASK 05-41-08-010-012

(2) Open these access panels:

Number	Name/Location
834AW	Aft Entry Door - Door Liner
834AZ	Aft Entry Door - Torque Tube Access
834BZ	Aft Entry Door - Handle Box and Cam for Handle Box Access
834CZ	Aft Entry Door - Handle Box Access
834DZ	Aft Entry Door - Lower Hinge Access
834EZ	Aft Entry Door - Upper Hinge Access

SUBTASK 05-41-08-010-028

(3) Remove these access doors:

Number	Name/Location
834FZ	Aft Entry Door - Torque Tube Access
834GZ	AFT Entry Door - Torque Tube Access

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(a) Remove a pressure fay surface seal that was previously applied between the mating surfaces of the cover plate and the inner skin (SOPM 20-50-19).

(b) Remove a parting agent that was previously applied on the mating surfaces of the cover plate (SOPM 20-50-19).

SUBTASK 05-41-08-210-013

(4) Do a General Visual inspection of the aft passenger door - Section 47, Sta 980.

SUBTASK 05-41-08-410-036

(5) Install these access doors:

Number	Name/Location
834FZ	Aft Entry Door - Torque Tube Access
834GZ	AFT Entry Door - Torque Tube Access

(a) Apply a parting agent to the mating surfaces of the cover plate (SOPM 20-50-19).

(b) Apply a pressure fay surface seal with sealant, A00247, between the mating surfaces of the cover plate and the inner skin (SOPM 20-50-19).

(c) Install the cover plate onto the door structure with the bolts and the washers.

1) If a new bolt is to be used, make sure that the grip length is the same as the original bolt.

NOTE: Grip length is important.

SUBTASK 05-41-08-410-012

(6) Close these access panels:

Number	Name/Location
834AW	Aft Entry Door - Door Liner
834AZ	Aft Entry Door - Torque Tube Access
834BZ	Aft Entry Door - Handle Box and Cam for Handle Box Access
834CZ	Aft Entry Door - Handle Box Access
834DZ	Aft Entry Door - Lower Hinge Access
834EZ	Aft Entry Door - Upper Hinge Access

SUBTASK 05-41-08-410-027

(7) Do this task: Aft Entry Door Lining Installation, TASK 52-13-31-400-802.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K86781 S0006584487_V3

Aft Entry Door General Visual (Internal)
Figure 213/05-41-08-990-813

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-08-210-816

14. EXTERNAL - ZONAL (GV): FORWARD GALLEY SERVICE DOOR

(Figure 214)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
841	Forward Galley Service Door

B. Access Panels

Number	Name/Location
841	Forward Galley Service Door

C. Zonal Inspection

SUBTASK 05-41-08-010-015

(1) Open this access panel:

Number	Name/Location
841	Forward Galley Service Door

SUBTASK 05-41-08-210-016

(2) Do a General Visual inspection of the forward galley service door - Section 41, Sta 340.

SUBTASK 05-41-08-410-015

(3) Close this access panel:

Number	Name/Location
841	Forward Galley Service Door

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FORWARD GALLEY SERVICE DOOR
(EXTERIOR VIEW)

A

K87183 S0006584491_V2

Forward Galley Service Door General Visual (External)
Figure 214/05-41-08-990-814 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FORWARD GALLEY SERVICE DOOR
(INTERIOR VIEW)

A

L02774 S0006584492_V2

Forward Galley Service Door General Visual (External)
Figure 214/05-41-08-990-814 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-08-210-817

15. INTERNAL - ZONAL (GV): FORWARD GALLEY SERVICE DOOR

(Figure 215)

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
SOPM 20-50-19	General Sealing

B. Consumable Materials

Reference	Description	Specification
A00247	Sealant - Pressure And Environmental - Chromate Type	BMS5-95

C. Location Zones

Zone	Area
841	Forward Galley Service Door

D. Access Panels

Number	Name/Location
841AW	Fwd Galley Service Door - Door Liner (Cosmetic)
841AZ	Forward Galley Service Door - Torque Tube Access
841BZ	Forward Galley Service Door - Handle Box and Cam for Handle Box Access
841CZ	Forward Galley Service Door - Handle Box Access
841DZ	Forward Galley Service Door - Lower Hinge Access
841EZ	Forward Galley Service Door - Upper Hinge Access
841FZ	Forward Galley Service Door - Torque Tube Access
841GZ	Forward Galley Service Door - Torque Tube Access

E. Zonal Inspection

SUBTASK 05-41-08-010-016

(1) Open these access panels:

Number	Name/Location
841AW	Fwd Galley Service Door - Door Liner (Cosmetic)
841AZ	Forward Galley Service Door - Torque Tube Access
841BZ	Forward Galley Service Door - Handle Box and Cam for Handle Box Access
841CZ	Forward Galley Service Door - Handle Box Access
841DZ	Forward Galley Service Door - Lower Hinge Access
841EZ	Forward Galley Service Door - Upper Hinge Access

SUBTASK 05-41-08-010-029

(2) Remove these access doors:

Number	Name/Location
841FZ	Forward Galley Service Door - Torque Tube Access
841GZ	Forward Galley Service Door - Torque Tube Access

(a) Remove a pressure fay surface seal that was previously applied between the mating surfaces of the cover plate and the inner skin (SOPM 20-50-19).

(b) Remove a parting agent that was previously applied on the mating surfaces of the cover plate (SOPM 20-50-19).

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-41-08-210-017

(3) Do a General Visual inspection of the forward galley service door - Section 41, Sta 340.

SUBTASK 05-41-08-410-034

(4) Install these access doors:

Number	Name/Location
841FZ	Forward Galley Service Door - Torque Tube Access
841GZ	Forward Galley Service Door - Torque Tube Access

(a) Apply a parting agent to the mating surfaces of the cover plate (SOPM 20-50-19).

(b) Apply a pressure fay surface seal with sealant, A00247, between the mating surfaces of the cover plate and the inner skin (SOPM 20-50-19).

(c) Install the cover plate onto the door structure with the bolts and the washers.

1) If a new bolt is to be used, make sure that the grip length is the same as the original bolt.

NOTE: Grip length is important.

SUBTASK 05-41-08-410-016

(5) Close these access panels:

Number	Name/Location
841AW	Fwd Galley Service Door - Door Liner (Cosmetic)
841AZ	Forward Galley Service Door - Torque Tube Access
841BZ	Forward Galley Service Door - Handle Box and Cam for Handle Box Access
841CZ	Forward Galley Service Door - Handle Box Access
841DZ	Forward Galley Service Door - Lower Hinge Access
841EZ	Forward Galley Service Door - Upper Hinge Access

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FORWARD GALLEY SERVICE DOOR
(LINING REMOVED)

A

K87076 S0006584494_V3

Forward Galley Service Door General Visual (Internal)
Figure 215/05-41-08-990-815

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-08-210-818

16. EXTERNAL - ZONAL (GV): AUTOMATIC OVERWING EXIT

(Figure 216)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
842	Right Forward Emergency Exit

B. Access Panels

Number	Name/Location
842	Emergency Exit

C. Zonal Inspection

SUBTASK 05-41-08-010-017

(1) Open this access panel:

Number	Name/Location
842	Emergency Exit

SUBTASK 05-41-08-210-018

(2) Do a General Visual inspection of the automatic overwing exit - Section 44, Sta 589.5.

SUBTASK 05-41-08-410-017

(3) Close this access panel:

Number	Name/Location
842	Emergency Exit

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

RIGHT EMERGENCY EXIT DOOR

A

737-800
(737-900 CONFIGURATION IS EQUIVALENT)

K67081 S0006584496_V2

Right Emergency Exit Door General Visual (External)
Figure 216/05-41-08-990-816

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-08-210-819

17. INTERNAL - ZONAL (GV): AUTOMATIC OVERWING EXIT

(Figure 217)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
842	Right Forward Emergency Exit

B. Access Panels

Number	Name/Location
842AZ	Panel Assy - Emergency Escape Hatch - Door Liner

C. Zonal Inspection

SUBTASK 05-41-08-010-018

(1) Open this access panel:

Number	Name/Location
842AZ	Panel Assy - Emergency Escape Hatch - Door Liner

NOTE: Automatic overwing exit door liner removal required.

SUBTASK 05-41-08-210-019

(2) Do a General Visual inspection of the automatic overwing exit - Section 44, Sta 589.5.

SUBTASK 05-41-08-410-018

(3) Close this access panel:

Number	Name/Location
842AZ	Panel Assy - Emergency Escape Hatch - Door Liner

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

RIGHT EMERGENCY EXIT DOOR
(DOOR IN THE CLOSED POSITION WITH DOOR LINING REMOVED)

A

737-800
(737-900 CONFIGURATION IS EQUIVALENT)

K70328 S0006584498_V3

Right Emergency Exit Door General Visual (Internal)
Figure 217/05-41-08-990-817

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-08-210-820

18. EXTERNAL - ZONAL (GV): AUTOMATIC OVERWING EXIT

(Figure 218)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
843	Right Emergency Exit (STA 627.5)

B. Access Panels

Number	Name/Location
843	Emergency Exit

C. Zonal Inspection

SUBTASK 05-41-08-010-019

(1) Open this access panel:

Number	Name/Location
843	Emergency Exit

SUBTASK 05-41-08-210-020

(2) Do a General Visual inspection of the automatic overwing exit - Section 44, Sta 627.

SUBTASK 05-41-08-410-019

(3) Close this access panel:

Number	Name/Location
843	Emergency Exit

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Right Emergency Exit Door General Visual (External)
Figure 218/05-41-08-990-818 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

RIGHT EMERGENCY EXIT DOOR

A

737-800
(737-900 CONFIGURATION IS EQUIVALENT)

2500698 S0000586230_V1

Right Emergency Exit Door General Visual (External)
Figure 218/05-41-08-990-818 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-08-210-821

19. INTERNAL - ZONAL (GV): AUTOMATIC OVERWING EXIT

(Figure 219)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
843	Right Emergency Exit (STA 627.5)

B. Access Panels

Number	Name/Location
843AZ	Panel Assy - Emergency Escape Hatch - Door Liner

C. Zonal Inspection

SUBTASK 05-41-08-010-020

(1) Open this access panel:

Number	Name/Location
843AZ	Panel Assy - Emergency Escape Hatch - Door Liner

NOTE: Automatic overwing exit door liner removal required.

SUBTASK 05-41-08-210-021

(2) Do a General Visual inspection of the automatic overwing exit - Section 44, Sta 627.

SUBTASK 05-41-08-410-020

(3) Close this access panel:

Number	Name/Location
843AZ	Panel Assy - Emergency Escape Hatch - Door Liner

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

RIGHT EMERGENCY EXIT DOOR
(DOOR IN THE CLOSED POSITION WITH DOOR LINING REMOVED)

A

737-700
(OTHER MODELS CONFIGURATION IS EQUIVALENT)

K66052 S0006584502_V2

Right Emergency Exit Door General Visual (Internal)
Figure 219/05-41-08-990-819

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-08-210-822

20. EXTERNAL - ZONAL (GV): AFT GALLEY SERVICE DOOR

(Figure 220)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
844	Aft Galley Service Door

B. Access Panels

Number	Name/Location
844	Aft Galley Service Door

C. Zonal Inspection

SUBTASK 05-41-08-010-021

(1) Open this access panel:

Number	Name/Location
844	Aft Galley Service Door

SUBTASK 05-41-08-210-022

(2) Do a General Visual inspection of the aft galley service door - Section 47, Sta 980.

SUBTASK 05-41-08-410-021

(3) Close this access panel:

Number	Name/Location
844	Aft Galley Service Door

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

AFT GALLEY SERVICE DOOR
(EXTERIOR VIEW)

A

K85754 S0006584504_V2

Aft Galley Service Door General Visual (External)
Figure 220/05-41-08-990-820 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

AFT GALLEY SERVICE DOOR
(INTERIOR VIEW)

A

L02806 S0006584505_V2

Aft Galley Service Door General Visual (External)
Figure 220/05-41-08-990-820 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-08-210-823

21. INTERNAL - ZONAL (GV): AFT GALLEY SERVICE DOOR

(Figure 221)

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
SOPM 20-50-19	General Sealing

B. Consumable Materials

Reference	Description	Specification
A00247	Sealant - Pressure And Environmental - Chromate Type	BMS5-95

C. Location Zones

Zone	Area
844	Aft Galley Service Door

D. Access Panels

Number	Name/Location
844AW	Aft Galley Service Door - Door Liner (Cosmetic)
844AZ	Aft Galley Service Door - Torque Tube Access
844BZ	Aft Galley Service Door - Handle Box and Cam for Handle Box Access
844CZ	Aft Galley Service Door - Handle Box Access
844DZ	Aft Galley Service Door - Lower Hinge Access
844EZ	Aft Galley Service Door - Upper Hinge Access
844FZ	Aft Galley Service Door - Torque Tube Access
844GZ	Aft Galley Service Door - Torque Tube Access

E. Zonal Inspection

SUBTASK 05-41-08-010-022

(1) Open these access panels:

Number	Name/Location
844AW	Aft Galley Service Door - Door Liner (Cosmetic)
844AZ	Aft Galley Service Door - Torque Tube Access
844BZ	Aft Galley Service Door - Handle Box and Cam for Handle Box Access
844CZ	Aft Galley Service Door - Handle Box Access
844DZ	Aft Galley Service Door - Lower Hinge Access
844EZ	Aft Galley Service Door - Upper Hinge Access

SUBTASK 05-41-08-010-030

(2) Remove these access doors:

Number	Name/Location
844FZ	Aft Galley Service Door - Torque Tube Access
844GZ	Aft Galley Service Door - Torque Tube Access

(a) Remove a pressure fay surface seal that was previously applied between the mating surfaces of the cover plate and the inner skin (SOPM 20-50-19).

(b) Remove a parting agent that was previously applied on the mating surfaces of the cover plate (SOPM 20-50-19).

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-41-08-210-023

(3) Do a General Visual inspection of the aft galley service door - Section 47, Sta 980.

SUBTASK 05-41-08-410-035

(4) Install these access doors:

Number	Name/Location
844FZ	Aft Galley Service Door - Torque Tube Access
844GZ	Aft Galley Service Door - Torque Tube Access

(a) Apply a parting agent to the mating surfaces of the cover plate (SOPM 20-50-19).

(b) Apply a pressure fay surface seal with sealant, A00247, between the mating surfaces of the cover plate and the inner skin (SOPM 20-50-19).

(c) Install the cover plate onto the door structure with the bolts and the washers.

1) If a new bolt is to be used, make sure that the grip length is the same as the original bolt.

NOTE: Grip length is important.

SUBTASK 05-41-08-410-022

(5) Close these access panels:

Number	Name/Location
844AW	Aft Galley Service Door - Door Liner (Cosmetic)
844AZ	Aft Galley Service Door - Torque Tube Access
844BZ	Aft Galley Service Door - Handle Box and Cam for Handle Box Access
844CZ	Aft Galley Service Door - Handle Box Access
844DZ	Aft Galley Service Door - Lower Hinge Access
844EZ	Aft Galley Service Door - Upper Hinge Access

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K87169 S0006584507_V3

Aft Galley Service Door General Visual (Internal)
Figure 221/05-41-08-990-821

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-01-100-801

1. **Restore: Area Forward of Nose Wheel Well. (EZAP)**
Figure 201

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. Location Zones

Zone	Area
112	Area Forward of Nose Landing Gear Wheel Well

C. Access Panels

Number	Name/Location
112A	Forward Access Door

D. Procedure

SUBTASK 05-42-01-010-001

(1) Open this access panel:

Number	Name/Location
112A	Forward Access Door

SUBTASK 05-42-01-160-001

(2) Do the task, Cleaning to Remove Combustible Material, Task 20-60-02-100-801.

(3) Restore (Clean) area forward of Nose Wheel Well. (EZAP)

SUBTASK 05-42-01-910-018

(4) Refer to 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

SUBTASK 05-42-01-410-001

(5) Close this access panel:

Number	Name/Location
112A	Forward Access Door

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FORWARD OF NOSE LANDING GEAR WHEEL WELL
(VIEW IN THE FORWARD DIRECTION)

A

MPD ITEM
20-290-00

1960464 S0000372832_V2

Area Forward of Nose Wheel Well
Figure 201/05-42-01-990-801 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FORWARD OF NOSE LANDING GEAR WHEEL WELL BULKHEAD (STA 224.8)
(VIEW IN THE AFT DIRECTION)

B

MPD ITEM
20-290-00

1967232 S0000373019_V2

Area Forward of Nose Wheel Well
Figure 201/05-42-01-990-801 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-01-100-802

2. Restore: Areas Behind the Equipment Racks in the Electrical and Electronics Compartment. (EZAP)

Figure 202

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. Location Zones

Zone	Area
117	Electrical and Electronics Compartment - Left
118	Electrical and Electronics Compartment - Right

C. Access Panels

Number	Name/Location
117A	Electronic Equipment Access Door
117BL	Forward Airstair Door
121JW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD
121KW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FILTER COVER
121LW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FAN COVER
122HW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FAN COVER

D. Procedure

SUBTASK 05-42-01-010-002

(1) Open these access panels:

Number	Name/Location
117A	Electronic Equipment Access Door
117BL	Forward Airstair Door
121JW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD
121KW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FILTER COVER
121LW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FAN COVER
122HW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FAN COVER

NOTE: Access panel 117BL is only for airplanes with airstairs installed. Alternate access behind E2, E3 and E4 electronics racks is through 121JW, 121KW, 121LW and 122HW panels.

SUBTASK 05-42-01-160-003

(2) Do the task Cleaning to Remove Combustible Material, Task 20-60-02-100-801.

(3) Restore (Clean) areas behind the equipment racks in the Electrical and Electronics Compartment, and inside the Airstair Compartment (if installed). (EZAP)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-42-01-910-003

(4) Refer to 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during Maintenance.

SUBTASK 05-42-01-410-002

(5) Close these access panels:

Number	Name/Location
117A	Electronic Equipment Access Door
117BL	Forward Airstair Door
121JW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD
121KW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FILTER COVER
121LW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FAN COVER
122HW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FAN COVER

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

ELECTRICAL AND ELECTRONICS COMPARTMENT
(VIEW IN THE FORWARD DIRECTION)

MPD ITEM
20-310-00

A

1960798 S0000372853_V3

Electrical and Electronics Compartment
Figure 202/05-42-01-990-802 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

ELECTRICAL AND ELECTRONICS COMPARTMENT
(VIEW IN THE AFT DIRECTION)

A

MPD ITEM
20-310-00

1960811 S0000372879_V3

Electrical and Electronics Compartment
Figure 202/05-42-01-990-802 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-01-100-803

3. Restore: Area Above and Outboard of Nose Wheel Well. (EZAP)

Figure 203

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
53-14-01-020-801	Nose Wheel Well Access Panels - Removal (P/B 401)
53-14-01-420-801	Nose Wheel Well Access Panels - Installation (P/B 401)

C. Location Zones

Zone	Area
113	Area Above and Outboard of Nose Landing Gear Wheel Well - Left
114	Area Above and Outboard of Nose Landing Gear Wheel Well - Right

D. Access Panels

Number	Name/Location
113AC	Fwd Nose Wheel Well Upper Access Panel
113AW	Forward Nose Wheel Well Panel
113BW	Forward Nose Wheel Well Panel
114AC	Fwd Nose Wheel Well Upper Access Panel
114AW	Forward Nose Wheel Well Panel
114BW	Forward Nose Wheel Well Panel

E. Procedure

SUBTASK 05-42-01-010-003

(1) Open these access panels:

Number	Name/Location
113AC	Fwd Nose Wheel Well Upper Access Panel
113AW	Forward Nose Wheel Well Panel
113BW	Forward Nose Wheel Well Panel
114AC	Fwd Nose Wheel Well Upper Access Panel
114AW	Forward Nose Wheel Well Panel
114BW	Forward Nose Wheel Well Panel

NOTE: Remove/displace insulation blankets as required.

(a) Do this task: Nose Wheel Well Access Panels - Removal, TASK 53-14-01-020-801.

SUBTASK 05-42-01-160-002

(2) Do the task Cleaning to Remove Combustible Material, Task 20-60-02-100-801.

(3) Restore (Clean) area above and outboard of Nose Wheel Well. (EZAP)

SUBTASK 05-42-01-910-002

(4) Refer to 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during Maintenance.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-42-01-410-003

(5) Close these access panels:

Number	Name/Location
113AC	Fwd Nose Wheel Well Upper Access Panel
113AW	Forward Nose Wheel Well Panel
113BW	Forward Nose Wheel Well Panel
114AC	Fwd Nose Wheel Well Upper Access Panel
114AW	Forward Nose Wheel Well Panel
114BW	Forward Nose Wheel Well Panel

(a) Do this task: Nose Wheel Well Access Panels - Installation, TASK 53-14-01-420-801.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

MPD ITEM
20-300-00

1960498 S0000372859_V2

Nose Landing Gear Wheel Well
Figure 203/05-42-01-990-804 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

NOSE LANDING GEAR WHEEL WELL
(OUTBOARD, LEFT SIDE)

B

MPD ITEM
20-300-00

1960514 S0000372860_V2

Nose Landing Gear Wheel Well
Figure 203/05-42-01-990-804 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

ABOVE THE NOSE LANDING GEAR WHEEL WELL
(VIEW IN THE UP DIRECTION)

C

MPD ITEM
20-300-00

1960524 S0000372861_V2

Nose Landing Gear Wheel Well
Figure 203/05-42-01-990-804 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-01-100-804

4. **Restore: Areas Behind Ceiling and Sidewall Panels in the Aft Cargo Compartment. (EZAP)**

Figure 204

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. Location Zones

Zone	Area
141	Aft Cargo Compartment - Left
142	Aft Cargo Compartment - Right

C. Procedure

NOTE: Ceiling and sidewall panels removal required.

SUBTASK 05-42-01-160-007

(1) Do the task, Cleaning to Remove Combustible Material, Task 20-60-02-100-801.

(2) Restore (Clean) areas behind ceiling and sidewall panels in the Aft Cargo Compartment. (EZAP)

SUBTASK 05-42-01-910-012

(3) Refer to 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

AFT CARGO COMPARTMENT
(AFT SIDE)
(UPPER ANGLED SIDEWALL AND CEILING PANELS REMOVED)

A

FWD

MPD ITEM
20-370-00

1961618 S0000372868_V3

Aft Cargo Compartment
Figure 204/05-42-01-990-805 (Sheet 1 of 5)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

AFT CARGO COMPARTMENT
(FORWARD SIDE)
(UPPER ANGLED SIDEWALL AND CEILING PANELS REMOVED)

B

MPD ITEM
20-370-00

1961622 S0000372869_V3

Aft Cargo Compartment
Figure 204/05-42-01-990-805 (Sheet 2 of 5)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

AFT CARGO COMPARTMENT
(AFT SIDE)
(SIDEWALL LINERS REMOVED)

A

MPD ITEM
20-370-00

1961633 S0000372870_V3

Aft Cargo Compartment
Figure 204/05-42-01-990-805 (Sheet 3 of 5)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

MPD ITEM
20-370-00

1961643 S0000372872_V3

Aft Cargo Compartment
Figure 204/05-42-01-990-805 (Sheet 4 of 5)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

AFT CARGO COMPARTMENT
(VACUUM WASTE COMPARTMENT PANELS REMOVED)

C

MPD ITEM
20-370-00

1961678 S0000372873_V3

Aft Cargo Compartment
Figure 204/05-42-01-990-805 (Sheet 5 of 5)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-01-100-805

5. **Restore: Area Aft of Forward Cargo Compartment. (EZAP)**

Figure 205

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. Location Zones

Zone	Area
125	Air Conditioning Distribution Bay - Left
126	Air Conditioning Distribution Bay - Right

C. Access Panels

Number	Name/Location
121EW	Panel Assy - Fwd Cargo Compartment Aft Bulkhead
121HW	Panel Assy - FWD Cargo Compartment Aft Bulkhead
122GW	Panel Assy - FWD Cargo Compartment Aft Bulkhead

D. Procedure

SUBTASK 05-42-01-010-004

(1) Open these access panels:

Number	Name/Location
121EW	Panel Assy - Fwd Cargo Compartment Aft Bulkhead
121HW	Panel Assy - FWD Cargo Compartment Aft Bulkhead
122GW	Panel Assy - FWD Cargo Compartment Aft Bulkhead

SUBTASK 05-42-01-160-006

(2) Do the task, Cleaning to Remove Combustible Material, Task 20-60-02-100-801.

(3) Restore (Clean) area aft of Forward Cargo Compartment. (EZAP)

SUBTASK 05-42-01-910-011

(4) Refer to 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

SUBTASK 05-42-01-410-004

(5) Close these access panels:

Number	Name/Location
121EW	Panel Assy - Fwd Cargo Compartment Aft Bulkhead
121HW	Panel Assy - FWD Cargo Compartment Aft Bulkhead
122GW	Panel Assy - FWD Cargo Compartment Aft Bulkhead

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FORWARD CARGO COMPARTMENT
(AFT SIDE)
(AFT BULKHEAD CENTER PANEL REMOVED)

A

MPD ITEM
20-350-00

1961540 S0000372881_V2

Area Aft of Forward Cargo Compartment
Figure 205/05-42-01-990-806

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-01-100-806

6. Restore: Area Below Forward Cargo Compartment. (EZAP)

Figure 206

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. Location Zones

Zone	Area
123	Forward Cargo Compartment - Left
124	Forward Cargo Compartment - Right

C. Procedure

NOTE: Center floor panels removal required. Cargo loading system removed/displaced as required.

SUBTASK 05-42-01-160-005

(1) Do the task, Cleaning to Remove Combustible Material, Task 20-60-02-100-801.

(2) Restore (Clean) area below Forward Cargo Compartment. (EZAP)

SUBTASK 05-42-01-910-010

(3) Refer to 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FORWARD CARGO COMPARTMENT
(AFT SIDE)
(FLOOR PANELS REMOVED)

A

MPD ITEM
20-340-00

1961517 S0000372914_V3

Area Below Forward Cargo Compartment
Figure 206/05-42-01-990-807 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FORWARD CARGO COMPARTMENT
(FORWARD SIDE)
(FLOOR PANELS REMOVED)

B

MPD ITEM
20-340-00

1961522 S0000372915_V2

Area Below Forward Cargo Compartment
Figure 206/05-42-01-990-807 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-01-100-807

7. Restore: Areas Behind Ceiling and Sidewalls in the Forward Cargo Compartment. (EZAP)

Figure 207

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. Location Zones

Zone	Area
121	Forward Cargo Compartment - Left
122	Forward Cargo Compartment - Right

C. Procedure

NOTE: Ceiling and sidewall panels removal required.

SUBTASK 05-42-01-160-004

(1) Do the task, Cleaning to Remove Combustible Material, Task 20-60-02-100-801

(2) Restore (Clean) areas behind ceiling and sidewalls in the Forward Cargo Compartment. (EZAP)

SUBTASK 05-42-01-910-008

(3) Refer to 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FWD

FORWARD CARGO COMPARTMENT
(AFT SIDE)
(CEILING LINERS REMOVED)

A

MPD ITEM
20-330-00

1961455 S0000372953_V2

Areas Behind Ceiling and Sidewalls in the Forward Cargo Compartment
Figure 207/05-42-01-990-810 (Sheet 1 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FORWARD CARGO COMPARTMENT
(FORWARD SIDE)
(CEILING LINERS REMOVED)

B

MPD ITEM
20-330-00

1961461 S0000372955_V3

Areas Behind Ceiling and Sidewalls in the Forward Cargo Compartment
Figure 207/05-42-01-990-810 (Sheet 2 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FORWARD CARGO COMPARTMENT
(AFT SIDE)
(SIDEWALL LINERS REMOVED)

C

MPD ITEM
20-330-00

2190170 S0000372956_V2

Areas Behind Ceiling and Sidewalls in the Forward Cargo Compartment
Figure 207/05-42-01-990-810 (Sheet 3 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FORWARD CARGO COMPARTMENT
(FORWARD SIDE)
(SIDEWALL LINERS REMOVED)

B

MPD ITEM
20-330-00

1961478 S0000372957_V3

Areas Behind Ceiling and Sidewalls in the Forward Cargo Compartment
Figure 207/05-42-01-990-810 (Sheet 4 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-01-100-808

8. Restore: Area in Aft Cargo Compartment. (EZAP)

Figure 208

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. Location Zones

Zone	Area
145	Aft Cargo Compartment Equipment Bay - Left
146	Aft Cargo Compartment Equipment Bay - Right

C. Procedure

NOTE: Removal of aft cargo panels at Sta. 947 bulkhead required.

SUBTASK 05-42-01-160-009

(1) Do the task, Cleaning to Remove Combustible Material, Task 20-60-02-100-801.

(2) Restore (Clean) area in Aft Cargo Compartment. (EZAP)

SUBTASK 05-42-01-910-015

(3) Refer to 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

AFT CARGO COMPARTMENT
(AFT SIDE)
(ENDWALL LINERS REMOVED)

A

FWD

MPD ITEM
20-390-00

1961931 S0000372961_V2

Aft Cargo Compartment
Figure 208/05-42-01-990-811

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-01-100-809

9. Restore: Area Below Aft Cargo Compartment. (EZAP)

Figure 209

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. Location Zones

Zone	Area
143	Area Below Aft Cargo Compartment - Left
144	Area Below Aft Cargo Compartment - Right

C. Procedure

NOTE: Center floor panels removal required. Cargo loading system (if installed) removed/displaced as required.

SUBTASK 05-42-01-160-008

(1) Do the task, Cleaning to Remove Combustible Material, Task 20-60-02-100-801.

(2) Restore (Clean) area below Aft Cargo Compartment. (EZAP)

SUBTASK 05-42-01-910-014

(3) Refer to 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FWD

AFT CARGO COMPARTMENT
(AFT SIDE)
(FLOOR PANELS REMOVED)

A

MPD ITEM
20-380-00

1961874 S0000372967_V3

Area Below Aft Cargo Compartment
Figure 209/05-42-01-990-813 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

AFT CARGO COMPARTMENT
(FORWARD SIDE)
(FLOOR PANELS REMOVED)

B

MPD ITEM
20-380-00

1961889 S0000372970_V3

Area Below Aft Cargo Compartment
Figure 209/05-42-01-990-813 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-01-210-801

10. **General Visual Inspection: Exposed EWIS in Main Landing Gear Wheel Well. (EZAP)**

Figure 210

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. Location Zones

Zone	Area
133	Main Landing Gear Wheel Well, Body Station 663.75 to Body Station 727.00 - Left
134	Main Landing Gear Wheel Well, Body Station 663.75 to Body Station 727.00 - Right

C. Inspection

NOTE: Through main landing gear opening.

SUBTASK 05-42-01-210-001

(1) Do the inspection, General Visual Inspection of EWIS, Task 20-60-04-100-801.

(2) Inspect (General Visual) all exposed EWIS in the Main Landing Gear Wheel Well. (EZAP)

SUBTASK 05-42-01-910-019

(3) Refer to 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

LEFT MAIN LANDING GEAR WHEEL WELL

MPD ITEM
20-360-00

1961554 S0000372918_V2

Inspect (General Visual) - Exposed EWIS Main Landing Gear Wheel Well
Figure 210/05-42-01-990-808 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

RIGHT MAIN LANDING GEAR WHEEL WELL

MPD ITEM
20-360-00

1961558 S0000372919_V2

Inspect (General Visual) - Exposed EWIS Main Landing Gear Wheel Well
Figure 210/05-42-01-990-808 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-01-210-802

11. General Visual Inspection: Exposed EWIS in the Forward Cargo Compartment. (EZAP)

Figure 211

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. Location Zones

Zone	Area
121	Forward Cargo Compartment - Left
122	Forward Cargo Compartment - Right

C. Inspection

NOTE: Ceiling and sidewall panels removal required.

SUBTASK 05-42-01-210-002

(1) Do the inspection, General Visual Inspection of EWIS, Task 20-60-04-100-801.

(2) Inspect (General Visual) all exposed EWIS in the Forward Cargo Compartment. (EZAP)

SUBTASK 05-42-01-910-005

(3) Refer to 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FORWARD CARGO COMPARTMENT
(AFT SIDE)
(CEILING LINERS REMOVED)

A

FWD

MPD ITEM
20-335-00

1961509 S0000372943_V2

Inspect (General Visual) - Exposed EWIS Forward Cargo Compartment (Ceiling Liners Removed)
Figure 211/05-42-01-990-809 (Sheet 1 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FORWARD CARGO COMPARTMENT
(FORWARD SIDE)
(CEILING LINERS REMOVED)

B

MPD ITEM
20-335-00

1961502 S0000372944_V3

Inspect (General Visual) - Exposed EWIS Forward Cargo Compartment (Ceiling Liners Removed)
Figure 211/05-42-01-990-809 (Sheet 2 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

MPD ITEM
20-335-00

1961473 S0000372945_V3

Inspect (General Visual) - Exposed EWIS Forward Cargo Compartment (Ceiling Liners Removed)
Figure 211/05-42-01-990-809 (Sheet 3 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FORWARD CARGO COMPARTMENT
(FORWARD SIDE)
(SIDEWALL LINERS REMOVED)

B

MPD ITEM
20-335-00

1961495 S0000372946_V3

Inspect (General Visual) - Exposed EWIS Forward Cargo Compartment (Ceiling Liners Removed)
Figure 211/05-42-01-990-809 (Sheet 4 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-01-210-803

12. **General Visual Inspection: Exposed EWIS in the Electrical and Electronics Compartment. (EZAP)**

Figure 212

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. Location Zones

Zone	Area
117	Electrical and Electronics Compartment - Left
118	Electrical and Electronics Compartment - Right

C. Access Panels

Number	Name/Location
117A	Electronic Equipment Access Door
121JW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD
121KW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FILTER COVER
121LW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FAN COVER
122HW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FAN COVER

D. Inspection

SUBTASK 05-42-01-010-005

(1) Open these access panels:

Number	Name/Location
117A	Electronic Equipment Access Door
121JW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD
121KW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FILTER COVER
121LW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FAN COVER
122HW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FAN COVER

NOTE: Access through panels 121JW, 121KW, 121LW and 122HW is from Forward Cargo Compartment.

SUBTASK 05-42-01-210-003

(2) Do the inspection, General Visual Inspection of EWIS, Task 20-60-04-100-801.

(3) Inspect (General Visual) all exposed EWIS in the Electrical and Electronics Compartment excluding the IDG, APU starter/generator, battery, and external power feeder wiring and connected EWIS. (EZAP)

SUBTASK 05-42-01-910-009

(4) Refer to 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-42-01-410-005

(5) Close these access panels:

Number	Name/Location
117A	Electronic Equipment Access Door
121JW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD
121KW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FILTER COVER
121LW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FAN COVER
122HW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FAN COVER

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

ELECTRICAL AND ELECTRONICS COMPARTMENT
(VIEW IN THE FORWARD DIRECTION)

MPD ITEM
20-325-00

A

1961433 S0000372962_V2

Inspect (General Visual) - Exposed EWIS In Electrical and Electronics Compartment
Figure 212/05-42-01-990-812 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

ELECTRICAL AND ELECTRONICS COMPARTMENT
(VIEW IN THE AFT DIRECTION)

A

MPD ITEM
20-325-00

1961439 S0000372965_V2

Inspect (General Visual) - Exposed EWIS In Electrical and Electronics Compartment
Figure 212/05-42-01-990-812 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-01-210-804

13. General Visual Inspection: Exposed EWIS in the Aft Cargo Compartment. (EZAP)

Figure 213

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. Location Zones

Zone	Area
141	Aft Cargo Compartment - Left
142	Aft Cargo Compartment - Right

C. Inspection

NOTE: Ceiling and sidewall panels removal required.

SUBTASK 05-42-01-210-004

(1) Do the inspection, General Visual Inspection of EWIS, Task 20-60-04-100-801.

(2) Inspect (General Visual) all exposed EWIS in the Aft Cargo Compartment. (EZAP)

SUBTASK 05-42-01-910-013

(3) Refer to 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

AFT CARGO COMPARTMENT
(AFT SIDE)
(UPPER ANGLED SIDEWALL AND CEILING PANELS REMOVED)

A

FWD

MPD ITEM
20-375-00

1961686 S0000372977_V2

Inspect (General Visual) - Exposed EWIS In Aft Cargo Compartment (Upper Angled Sidewall and Ceiling Panels Removed)
Figure 213/05-42-01-990-814 (Sheet 1 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

AFT CARGO COMPARTMENT
(AFT SIDE)
(SIDEWALL LINERS REMOVED)

A

MPD ITEM
20-375-00

1961699 S0000372992_V3

Inspect (General Visual) - Exposed EWIS In Aft Cargo Compartment (Upper Angled Sidewall and Ceiling Panels Removed)
Figure 213/05-42-01-990-814 (Sheet 2 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

AFT CARGO COMPARTMENT
(FORWARD SIDE)
(UPPER ANGLED SIDEWALL AND CEILING PANELS REMOVED)

B

MPD ITEM
20-375-00

1961692 S0000372980_V3

Inspect (General Visual) - Exposed EWIS In Aft Cargo Compartment (Upper Angled Sidewall and Ceiling Panels Removed)
Figure 213/05-42-01-990-814 (Sheet 3 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

MPD ITEM
20-375-00

1961703 S0000372994_V3

Inspect (General Visual) - Exposed EWIS In Aft Cargo Compartment (Upper Angled Sidewall and Ceiling Panels Removed)
Figure 213/05-42-01-990-814 (Sheet 4 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-01-211-801

14. Detailed Inspection: IDG, APU Starter/Generator, Battery, and External Power Feeder Wiring/ EWIS. (EZAP)

Figure 214

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. Location Zones

Zone	Area
117	Electrical and Electronics Compartment - Left
118	Electrical and Electronics Compartment - Right

C. Access Panels

Number	Name/Location
117A	Electronic Equipment Access Door
121JW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD
121KW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FILTER COVER
121LW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FAN COVER
122HW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FAN COVER

D. Inspection

SUBTASK 05-42-01-010-007

(1) Open these access panels:

Number	Name/Location
117A	Electronic Equipment Access Door
121JW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD
121KW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FILTER COVER
121LW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FAN COVER
122HW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FAN COVER

NOTE: Access through panels 121JW, 121KW, 121LW and 122HW is from Forward Cargo Compartment.

SUBTASK 05-42-01-211-002

(2) Do the inspection, Detailed Inspection of EWIS, Task 20-60-03-100-801.

(3) Inspect (Detailed) the IDG, APU starter/generator, battery, and external power feeder wiring and connected EWIS. (EZAP)

SUBTASK 05-42-01-910-006

(4) Refer to 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-42-01-410-007

(5) Close these access panels:

Number	Name/Location
117A	Electronic Equipment Access Door
121JW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD
121KW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FILTER COVER
121LW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FAN COVER
122HW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FAN COVER

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

ELECTRICAL AND ELECTRONICS COMPARTMENT
(VIEW IN THE FORWARD DIRECTION)
(FORWARD CARGO COMPARTMENT ACCESS PANELS REMOVED)

A

MPD ITEM
20-320-00

1961092 S0000373386_V3

Electrical and Electronics Compartment (view in the forward direction)
Figure 214/05-42-01-990-817 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

LEFT SIDE OF ELECTRONICS COMPARTMENT

B

MPD ITEM
20-320-00

1961126 S0000373387_V3

Electrical and Electronics Compartment (view in the forward direction)
Figure 214/05-42-01-990-817 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

RIGHT SIDE OF ELECTRONICS COMPARTMENT

C

MPD ITEM
20-320-00

1961132 S0000373388_V3

Electrical and Electronics Compartment (view in the forward direction)
Figure 214/05-42-01-990-817 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-01-211-802

15. Detailed Inspection: External Power Feeder Wiring/ EWIS in the area outboard of Nose Wheel Well. (EZAP)

Figure 215

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
53-14-01-020-801	Nose Wheel Well Access Panels - Removal (P/B 401)
53-14-01-420-801	Nose Wheel Well Access Panels - Installation (P/B 401)

C. Location Zones

Zone	Area
114	Area Above and Outboard of Nose Landing Gear Wheel Well - Right

D. Access Panels

Number	Name/Location
112A	Forward Access Door
114AC	Fwd Nose Wheel Well Upper Access Panel
114AW	Forward Nose Wheel Well Panel
114BW	Forward Nose Wheel Well Panel

E. Inspection

SUBTASK 05-42-01-010-006

(1) Open this access panel:

Number	Name/Location
112A	Forward Access Door

SUBTASK 05-42-01-010-009

(2) Open these access panels:

Number	Name/Location
114AC	Fwd Nose Wheel Well Upper Access Panel
114AW	Forward Nose Wheel Well Panel
114BW	Forward Nose Wheel Well Panel

(a) Do this task: Nose Wheel Well Access Panels - Removal, TASK 53-14-01-020-801.

SUBTASK 05-42-01-211-001

(3) Do the inspection, Detailed Inspection of EWIS, Task 20-60-03-100-801

(4) Inspect (Detailed) the external power feeder wiring and connected EWIS in the area outboard of Nose Wheel Well (Right Side). (EZAP)

SUBTASK 05-42-01-910-007

(5) Refer to 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-42-01-410-006

(6) Close this access panel:

Number	Name/Location
112A	Forward Access Door

SUBTASK 05-42-01-410-009

(7) Close these access panels:

Number	Name/Location
114AC	Fwd Nose Wheel Well Upper Access Panel
114AW	Forward Nose Wheel Well Panel
114BW	Forward Nose Wheel Well Panel

(a) Do this task: Nose Wheel Well Access Panels - Installation, TASK 53-14-01-420-801.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

MPD ITEM
20-305-00

1960766 S0000373381_V3

EWIS in Area Outboard of Nose Wheel Well - Right Side
Figure 215/05-42-01-990-816

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-02-100-801

1. **Restore: Aft Passenger Compartment, Wet Areas, Sta 663.75 to Aft Pressure Bulkhead. (EZAP)**
Figure 201

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task

B. Location Zones

Zone	Area
241	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Left
242	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Right

C. Procedure

NOTE: Galleys and lavs removed. Removal of sidewall panels, ceiling panels and return air grilles required in areas where galleys and lavs are located.

SUBTASK 05-42-02-160-006

(1) Do the task, Cleaning to Remove Combustible Material, Task 20-60-02-100-801.

(2) Restore (Clean) areas above ceiling, and behind sidewalls and return air grilles in Aft Passenger Compartment, Wet Areas, Sta. 663.75 to Aft Pressure Bulkhead. (EZAP)

SUBTASK 05-42-02-910-005

(3) Refer to 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

PASSENGER COMPARTMENT
(LAVS, GALLEYS, CEILING, SIDEWALL PANELS, AND RETURN AIR GRILLES REMOVED)

A

1962205 S0000372972_V4

Passenger Compartment
Figure 201/05-42-02-990-801

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-02-100-802

2. Restore: Aft Passenger Compartment, Dry Area, Sta 663.75 to Aft Pressure Bulkhead. (EZAP)

Figure 202

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. Location Zones

Zone	Area
241	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Left
242	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Right

C. Procedure

NOTE: Removal of sidewall panels, ceiling panels and return air grilles required.

SUBTASK 05-42-02-160-005

(1) Do the task, Cleaning to Remove Combustible Material, Task 20-60-02-100-801.

(2) Restore (Clean) areas above ceiling, and behind sidewalls and return air grilles in Aft Passenger Compartment, Dry Area, Sta. 663.75 to Aft Pressure Bulkhead. (EZAP)

SUBTASK 05-42-02-910-004

(3) Refer to 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

PASSENGER COMPARTMENT
(SIDEWALL PANELS, CEILING PANELS AND RETURN AIR GRILLES REMOVED)

A

1962201 S0000372975_V3

Passenger Compartment
Figure 202/05-42-02-990-802

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-02-100-803

3. **Restore: Forward Passenger Compartment, Wet Areas, Sta 360 to 663.75. (EZAP)**

Figure 203

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
20-60-02-100-801	Cleaning to Remove Combustible Material (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
231	Forward Passenger Compartment - Forward Entry Door to Sta 663.75 - Left
232	Forward Passenger Compartment - Forward Entry Door to Sta 663.75 - Right

D. Procedure

NOTE: Galleys and lavatories removed. Removal of sidewall panels, ceiling panels and return air grilles required in areas where galleys and lavatories are located.

SUBTASK 05-42-02-160-004

(1) Do the task, Cleaning to Remove Combustible Material, TASK 20-60-02-100-801.

(2) Restore (Clean) areas above ceiling, and behind sidewalls and return air grilles in Forward Passenger Compartment, Wet Areas, Sta. 360 to 663.75. (EZAP)

SUBTASK 05-42-02-910-003

(3) Refer to TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

PASSENGER COMPARTMENT
(LAVS, GALLEYS, CEILING, SIDEWALL PANELS, AND RETURN AIR GRILLES REMOVED)

MPD ITEM
53-400-00

A

2795593 S0000637884_V2

Passenger Compartment
Figure 203/05-42-02-990-803

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-02-100-804

4. Restore: Forward Passenger Compartment, Dry Area, Sta 360 to 663.75. (EZAP)

Figure 204

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. Location Zones

Zone	Area
231	Forward Passenger Compartment - Forward Entry Door to Sta 663.75 - Left
232	Forward Passenger Compartment - Forward Entry Door to Sta 663.75 - Right

C. Procedure

NOTE: Removal of sidewall panels, ceiling panels and return air grilles required.

SUBTASK 05-42-02-160-003

(1) Do the task, Cleaning to Remove Combustible Material, Task 20-60-02-100-801.

(2) Restore (Clean) areas above ceiling, and behind sidewalls and return air grilles in Forward Passenger Compartment, Dry Area, Sta. 360 to 663.75. (EZAP)

SUBTASK 05-42-02-910-002

(3) Refer to 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

PASSENGER COMPARTMENT
(SIDEWALL PANELS, CEILING PANELS AND RETURN AIR GRILLES REMOVED)

A

1962195 S0000372989_V2

Passenger Compartment
Figure 204/05-42-02-990-804

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-02-100-805

5. Restore: Areas Aft of Flight Compartment to Forward Entry Door. (EZAP)

Figure 205

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. Location Zones

Zone	Area
221	Passenger Compartment - Aft of Control Compartment to Forward Entry Door - Left
222	Passenger Compartment - Aft of Control Compartment to Forward Entry Door - Right

C. Procedure

NOTE: With access provided. Galleys and lavs removed. Ceiling and sidewall panels removal required.

SUBTASK 05-42-02-160-002

(1) Do the task, Cleaning to Remove Combustible Material, Task 20-60-02-100-801.

(2) Restore (Clean) areas above ceiling, behind sidewalls and under the raceway cover plates on both sides of the passenger compartment, aft of Flight Compartment to forward entry door. (EZAP)

SUBTASK 05-42-02-910-001

(3) Refer to 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

1962198 S0000372990_V2

Passenger Compartment
Figure 205/05-42-02-990-805

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-02-100-806

6. Restore: Area in Flight Compartment from STA 186 to 211, WL 208 to 232. (EZAP)

(Figure 206)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
20-60-02-100-801	Cleaning to Remove Combustible Material (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right

D. Procedure

NOTE: Accessible areas forward and above the rudder pedals including areas under rudder pedal healrest access panels.

SUBTASK 05-42-02-160-001

(1) Do this task: Cleaning to Remove Combustible Material, TASK 20-60-02-100-801.

SUBTASK 05-42-02-100-008

(2) Restore (clean) area in the flight compartment from STA 186 to 211, WL 208 to 232 (EZAP).

SUBTASK 05-42-02-910-006

(3) Refer to TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to Electrical Wiring Interconnect Systems (EWIS) during maintenance.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FLIGHT COMPARTMENT

1 FORWARD AND ABOVE RUDDER PEDALS INCLUDING AREAS UNDER RUDDER PEDAL HEELREST ACCESS PANELS.

1961952 S0000372993_V5

Flight Compartment
Figure 206/05-42-02-990-806

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-02-210-801

7. **General Visual Inspection: Exposed EWIS in the Flight Compartment Excluding Exposed EWIS in the P5, P6 and P18 panels. (EZAP)**
(Figure 207)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
20-60-04-100-801	General Visual Inspection of EWIS (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right

D. Inspection

NOTE: With access provided. Seats removed. Control stand access panels, overhead & sidewall panels, glareshield, instruments/panels removal required.

SUBTASK 05-42-02-210-001

(1) Do this task: General Visual Inspection of EWIS, TASK 20-60-04-100-801.

SUBTASK 05-42-02-210-002

(2) Inspect (General Visual) all exposed EWIS in the Flight Compartment excluding exposed EWIS in the P5, P6 and P18 panels. (EZAP)

SUBTASK 05-42-02-910-007

(3) Refer to the TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

1962011 S0000373005_V3

Inspect (General Visual) - Exposed EWIS In Flight Compartment Excluding Exposed EWIS in the P5, P6, and P18 Panels
Figure 207/05-42-02-990-807

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-02-211-801

8. Detailed Inspection: Exposed EWIS in the P5, P6 and P18 panels. (EZAP)

Figure 208

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right

C. Inspection

NOTE: Opening P5 (fwd/aft), P6 and P18 panels required.

SUBTASK 05-42-02-211-001

(1) Do the inspection, Detailed Inspection of EWIS, Task 20-60-03-100-801.

(2) Inspect (Detailed) all exposed EWIS in the P5 (fwd/aft), P6 and P18 panels. (EZAP)

SUBTASK 05-42-02-910-008

(3) Refer to 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FLIGHT COMPARTMENT

A

1961990 S0000373357_V4

Exposed EWIS in P5, P6, and P18 Panels
Figure 208/05-42-02-990-808 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FLIGHT COMPARTMENT
(LOOKING AFT)

B

1962004 S0000373359_V3

Exposed EWIS in P5, P6, and P18 Panels
Figure 208/05-42-02-990-808 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

1. **General**
   A. This pageblock contains MSG-3 task card data.

EWIS

TASK 05-42-03-210-801

2. **General Visual Inspection: Exposed EWIS in the Tail Cone. (EZAP)**
   Figure 201

   NOTE: This procedure is a scheduled maintenance task.

   A. General
   (1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

   B. Location Zones

Zone	Area
317	Tail Cone Compartment - Left
318	Tail Cone Compartment - Right

   C. Access Panels

Number	Name/Location
318BR	Tailcone Access Door

   D. Inspection

SUBTASK 05-42-03-010-001

(1) Open this access panel:

Number	Name/Location
318BR	Tailcone Access Door

SUBTASK 05-42-03-210-001

(2) Do the inspection, General Visual Inspection of EWIS, Task 20-60-04-100-801.

(3) Inspect (General Visual) all exposed EWIS in the Tail Cone. (EZAP)

SUBTASK 05-42-03-910-001

(4) Refer to 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

SUBTASK 05-42-03-410-001

(5) Close this access panel:

Number	Name/Location
318BR	Tailcone Access Door

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Inspect (General Visual) - Exposed EWIS In Tail Cone
Figure 201/05-42-03-990-801

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-03-211-801

3. **Detailed Inspection: APU Starter/Generator Power Feeder Wiring/Ignition Leads/ and connected EWIS in the APU compartment. (EZAP)**

Figure 202

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
20-60-03-100-801	Detailed Inspection of EWIS (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
315	APU Compartment - Left
316	APU Compartment - Right

D. Access Panels

Number	Name/Location
315A	APU Cowl Door

E. Inspection

SUBTASK 05-42-03-010-002

(1) Open this access panel:

Number	Name/Location
315A	APU Cowl Door

SUBTASK 05-42-03-211-001

(2) Do this task: Detailed Inspection of EWIS, TASK 20-60-03-100-801.

(a) Inspect (Detailed) the APU starter/generator power feeder wiring, ignition leads and connected EWIS in the APU compartment. (EZAP)

SUBTASK 05-42-03-910-002

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801, for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

SUBTASK 05-42-03-410-002

(4) Close this access panel:

Number	Name/Location
315A	APU Cowl Door

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

APU Starter/Generator Power Feeder Wiring, Ignition Leads, and Connected EWIS
Figure 202/05-42-03-990-802 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

APU Starter/Generator Power Feeder Wiring, Ignition Leads, and Connected EWIS
Figure 202/05-42-03-990-802 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-03-211-802

4. Detailed Inspection: APU Starter/Generator Power Feeder Wiring/EWIS in the area aft of Pressure Bulkhead. (EZAP)

Figure 203

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. Location Zones

Zone	Area
311	Area Aft of Pressure Bulkhead - Left
312	Area Aft of Pressure Bulkhead - Right

C. Access Panels

Number	Name/Location
311BL	Stabilizer Trim Access Door

D. Inspection

SUBTASK 05-42-03-010-003

(1) Open this access panel:

Number	Name/Location
311BL	Stabilizer Trim Access Door

SUBTASK 05-42-03-211-002

(2) Do the inspection, Detailed Inspection of EWIS, Task 20-60-03-100-801.

(3) Inspect (Detailed) the APU starter/generator power feeder wiring and connected EWIS in the area aft of pressure bulkhead. (EZAP)

SUBTASK 05-42-03-910-003

(4) Refer to 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

SUBTASK 05-42-03-410-003

(5) Close this access panel:

Number	Name/Location
311BL	Stabilizer Trim Access Door

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

1962822 S0000373348_V3

Aft Pressure Bulkhead APU EWIS
Figure 203/05-42-03-990-803

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-04-211-801

1. **Detailed Inspection: IDG Power Feeder Wiring/EWIS - Engine No. 1. (EZAP)**
Figure 201

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. Location Zones

Zone	Area
411	Engine 1 - Engine

C. Access Panels

Number	Name/Location
413	Left Fan Cowl, Engine 1
414	Right Fan Cowl, Engine 1
415	Left Thrust Reverser, Engine 1
416	Right Thrust Reverser, Engine 1

D. Inspection

SUBTASK 05-42-04-010-001

(1) Open these access panels:

Number	Name/Location
413	Left Fan Cowl, Engine 1
414	Right Fan Cowl, Engine 1
415	Left Thrust Reverser, Engine 1
416	Right Thrust Reverser, Engine 1

SUBTASK 05-42-04-211-001

(2) Do the inspection, Detailed Inspection of EWIS, Task 20-60-03-100-801.

(3) Inspect (Detailed) the IDG power feeder wiring and connected EWIS - Engine No. 1. (EZAP)

SUBTASK 05-42-04-910-001

(4) Refer to 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

SUBTASK 05-42-04-410-001

(5) Close these access panels:

Number	Name/Location
413	Left Fan Cowl, Engine 1
414	Right Fan Cowl, Engine 1
415	Left Thrust Reverser, Engine 1
416	Right Thrust Reverser, Engine 1

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

1962878 S0000373196_V3

IDG Power Feeder and Connected EWIS
Figure 201/05-42-04-990-801

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-04-211-802

2. **Detailed Inspection: IDG Power Feeder Wiring/EWIS - Engine No. 2. (EZAP)**

Figure 202

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. Location Zones

Zone	Area
421	Engine 2 - Engine

C. Access Panels

Number	Name/Location
423	Left Fan Cowl, Engine 2
424	Right Fan Cowl, Engine 2
425	Left Thrust Reverser, Engine 2
426	Right Thrust Reverser, Engine 2

D. Inspection

SUBTASK 05-42-04-010-002

(1) Open these access panels:

Number	Name/Location
423	Left Fan Cowl, Engine 2
424	Right Fan Cowl, Engine 2
425	Left Thrust Reverser, Engine 2
426	Right Thrust Reverser, Engine 2

SUBTASK 05-42-04-211-002

(2) Do the inspection, Detailed Inspection of EWIS, Task 20-60-03-100-801.

(3) Inspect (Detailed) the IDG power feeder wiring and connected EWIS - Engine No. 2. (EZAP)

SUBTASK 05-42-04-910-002

(4) Refer to 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

SUBTASK 05-42-04-410-002

(5) Close these access panels:

Number	Name/Location
423	Left Fan Cowl, Engine 2
424	Right Fan Cowl, Engine 2
425	Left Thrust Reverser, Engine 2
426	Right Thrust Reverser, Engine 2

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

1962878 S0000373196_V3

IDG Power Feeder and Connected EWIS
Figure 202/05-42-04-990-802

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-04-211-803

3. **Detailed Inspection: Exposed EWIS in the Forward Strut Fairing - Engine No. 1. (EZAP)** (Figure 203)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
20-60-03-100-801	Detailed Inspection of EWIS (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)

C. Consumable Materials

Reference	Description	Specification
D00633	Grease - Aircraft General Purpose	BMS3-33

D. Location Zones

Zone	Area
431	Engine 1 - Forward Strut Fairing

E. Access Panels

Number	Name/Location
431AL	Forward Strut Fairing, Left Thrust Reverser Disconnect, Strut 1
431AR	Forward Strut Fairing, Right Thrust Reverser Disconnect, Strut 1
431AT	Forward Strut Fairing, Thumbnail Fairing, Strut 1
431BL	Forward Strut Fairing, Left Mid Strut Fairing, Strut 1
431BR	Forward Strut Fairing, Right Mid Strut Fairing, Strut 1
431CL	Forward Strut Fairing, Left Overwing Fairing, Strut 1
431CR	Forward Strut Fairing, Right Overwing Fairing, Strut 1
431DL	Forward Strut Fairing, Left Underwing Fairing, Strut 1
431DR	Forward Strut Fairing, Right Underwing Fairing, Strut 1
431EL	Forward Strut Fairing, Left T.R. Strut Fairing, Strut 1
431ER	Forward Strut Fairing, Right T.R. Strut Fairing, Strut 1

F. Detailed Inspection Exposed EWIS in the Forward Strut Fairing Engine No. 1. (EZAP)

SUBTASK 05-42-04-010-003

(1) Open these access panels:

Number	Name/Location
431AL	Forward Strut Fairing, Left Thrust Reverser Disconnect, Strut 1
431AR	Forward Strut Fairing, Right Thrust Reverser Disconnect, Strut 1
431AT	Forward Strut Fairing, Thumbnail Fairing, Strut 1
431BL	Forward Strut Fairing, Left Mid Strut Fairing, Strut 1
431BR	Forward Strut Fairing, Right Mid Strut Fairing, Strut 1
431CL	Forward Strut Fairing, Left Overwing Fairing, Strut 1
431CR	Forward Strut Fairing, Right Overwing Fairing, Strut 1
431DL	Forward Strut Fairing, Left Underwing Fairing, Strut 1
431DR	Forward Strut Fairing, Right Underwing Fairing, Strut 1

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

Number	Name/Location
431EL	Forward Strut Fairing, Left T.R. Strut Fairing, Strut 1
431ER	Forward Strut Fairing, Right T.R. Strut Fairing, Strut 1

SUBTASK 05-42-04-211-003

(2) Do the inspection, Detailed Inspection of EWIS, TASK 20-60-03-100-801.

(a) Inspect (Detailed) all exposed EWIS in the Forward Strut Fairing - Engine No. 1. (EZAP).

SUBTASK 05-42-04-910-003

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801, for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

SUBTASK 05-42-04-410-003

(4) Close these access panels:

Number	Name/Location
431AT	Forward Strut Fairing, Thumbnail Fairing, Strut 1
431BL	Forward Strut Fairing, Left Mid Strut Fairing, Strut 1
431BR	Forward Strut Fairing, Right Mid Strut Fairing, Strut 1
431CL	Forward Strut Fairing, Left Overwing Fairing, Strut 1
431CR	Forward Strut Fairing, Right Overwing Fairing, Strut 1
431DL	Forward Strut Fairing, Left Underwing Fairing, Strut 1
431DR	Forward Strut Fairing, Right Underwing Fairing, Strut 1
431EL	Forward Strut Fairing, Left T.R. Strut Fairing, Strut 1
431ER	Forward Strut Fairing, Right T.R. Strut Fairing, Strut 1

SUBTASK 05-42-04-410-009

(5) Do these steps to close the applicable access panels:

(a) Close these access panels:

Number	Name/Location
431AL	Forward Strut Fairing, Left Thrust Reverser Disconnect, Strut 1
431AR	Forward Strut Fairing, Right Thrust Reverser Disconnect, Strut 1

(b) Install the bolts with grease, D00633, on the access panels.

1) Install the two lower bolts and tighten sufficiently to compress the seal before torque.

NOTE: The access panel and seal under panel are installed as one assembly.

a) Make sure that the seal does not have interference with the seal on the thumbnail fairing.

2) Install the four upper bolts.

3) Tighten the bolts to 65 ±15 in-lb (7 ±2 N·m).

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Forward Strut Fairing - Engine 1
Figure 203/05-42-04-990-803

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-04-211-804

4. Detailed Inspection: Exposed EWIS in Fan Cowl Support Beam - Engine No. 1. (EZAP)

Figure 204

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. Location Zones

Zone	Area
432	Engine 1 - Fan Cowl Support Beam

C. Access Panels

Number	Name/Location
431AT	Forward Strut Fairing, Thumbnail Fairing, Strut 1

D. Inspection

SUBTASK 05-42-04-010-004

(1) Open this access panel:

Number	Name/Location
431AT	Forward Strut Fairing, Thumbnail Fairing, Strut 1

SUBTASK 05-42-04-211-004

(2) Do the inspection, Detailed Inspection of EWIS, Task 20-60-03-100-801.

(3) Inspect (Detailed) all exposed EWIS in Fan Cowl Support Beam - Engine No. 1. (EZAP)

SUBTASK 05-42-04-910-004

(4) Refer to 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

SUBTASK 05-42-04-410-004

(5) Close this access panel:

Number	Name/Location
431AT	Forward Strut Fairing, Thumbnail Fairing, Strut 1

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Fan Cowl Support Beam
Figure 204/05-42-04-990-804

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-04-211-805

5. **Detailed Inspection: Exposed EWIS in Strut Torque Box - Engine No. 1. (EZAP)**
(Figure 205)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
20-60-03-100-801	Detailed Inspection of EWIS (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)
54-53-01-000-801	Strut Access Panel Removal (P/B 401)
54-53-01-400-801	Strut Access Panel Installation (P/B 401)
54-55-01-720-802	Strut Seal Plane Access Panels- Functional Test (P/B 201)

C. Location Zones

Zone	Area
433	Engine 1 - Strut Torque Box

D. Access Panels

Number	Name/Location
433AL	Strut, Left Aft Dry Bay, Strut 1
433AR	Strut, Right Aft Dry Bay, Strut 1
433AT	Strut, Forward Spar Web, Strut 1
433BT	Strut, Forward Spar Web, Strut 1
433CT	Strut, Upper Spar Web, Strut 1
433DT	Strut, Upper Spar Web, Strut 1

E. Inspection

SUBTASK 05-42-04-010-005

(1) Open these access panels:
(TASK 54-53-01-000-801)

Number	Name/Location
433AL	Strut, Left Aft Dry Bay, Strut 1
433AR	Strut, Right Aft Dry Bay, Strut 1
433AT	Strut, Forward Spar Web, Strut 1
433BT	Strut, Forward Spar Web, Strut 1
433CT	Strut, Upper Spar Web, Strut 1
433DT	Strut, Upper Spar Web, Strut 1

SUBTASK 05-42-04-211-005

(2) Do the inspection, Detailed Inspection of EWIS, TASK 20-60-03-100-801.

SUBTASK 05-42-04-211-011

(3) Inspect (Detailed) all exposed EWIS in Strut Torque Box - Engine No. 1 (EZAP).

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-42-04-910-005

(4) Refer to TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

SUBTASK 05-42-04-410-005

(5) Close these access panels:

(TASK 54-53-01-400-801)

Number	Name/Location
433AL	Strut, Left Aft Dry Bay, Strut 1
433AR	Strut, Right Aft Dry Bay, Strut 1
433AT	Strut, Forward Spar Web, Strut 1
433BT	Strut, Forward Spar Web, Strut 1
433CT	Strut, Upper Spar Web, Strut 1
433DT	Strut, Upper Spar Web, Strut 1

SUBTASK 05-42-04-720-001

(6) Do this task to make sure that the access panels do not leak: Strut Seal Plane Access Panels-Functional Test, TASK 54-55-01-720-802.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Exposed EWIS in Strut Torque Box - Engine 1
Figure 205/05-42-04-990-805 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(RIGHT SIDE IS SHOWN, LEFT SIDE IS EQUIVALENT)

D

1 TORQUE BOX SKIN INSTALLATION NOT SHOWN.

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Exposed EWIS in Strut Torque Box - Engine 1
Figure 205/05-42-04-990-805 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-04-211-806

6. **Detailed Inspection: Exposed EWIS in the Forward Strut Fairing - Engine No. 2. (EZAP)** (Figure 206)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
20-60-03-100-801	Detailed Inspection of EWIS (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)

C. Consumable Materials

Reference	Description	Specification
D00633	Grease - Aircraft General Purpose	BMS3-33

D. Location Zones

Zone	Area
441	Engine 2 - Forward Strut Fairing

E. Access Panels

Number	Name/Location
441AL	Forward Strut Fairing, Left Thrust Reverser Disconnect, Strut 2
441AR	Forward Strut Fairing, Right Thrust Reverser Disconnect, Strut 2
441AT	Forward Strut Fairing, Thumbnail Fairing, Strut 2
441BL	Forward Strut Fairing, Left Mid Strut Fairing, Strut 2
441BR	Forward Strut Fairing, Right Mid Strut Fairing, Strut 2
441CL	Forward Strut Fairing, Left Overwing Fairing, Strut 2
441CR	Forward Strut Fairing, Right Overwing Fairing, Strut 2
441DL	Forward Strut Fairing, Left Underwing Fairing, Strut 2
441DR	Forward Strut Fairing, Right Underwing Fairing, Strut 2
441EL	Forward Strut Fairing, Left T.R. Strut Fairing, Strut 2
441ER	Forward Strut Fairing, Right T.R. Strut Fairing, Strut 2

F. Detailed Inspection Exposed EWIS in the Forward Strut Fairing Engine No. 2. (EZAP)

SUBTASK 05-42-04-010-006

(1) Open these access panels:

Number	Name/Location
441AL	Forward Strut Fairing, Left Thrust Reverser Disconnect, Strut 2
441AR	Forward Strut Fairing, Right Thrust Reverser Disconnect, Strut 2
441AT	Forward Strut Fairing, Thumbnail Fairing, Strut 2
441BL	Forward Strut Fairing, Left Mid Strut Fairing, Strut 2
441BR	Forward Strut Fairing, Right Mid Strut Fairing, Strut 2
441CL	Forward Strut Fairing, Left Overwing Fairing, Strut 2
441CR	Forward Strut Fairing, Right Overwing Fairing, Strut 2
441DL	Forward Strut Fairing, Left Underwing Fairing, Strut 2
441DR	Forward Strut Fairing, Right Underwing Fairing, Strut 2

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

Number	Name/Location
441EL	Forward Strut Fairing, Left T.R. Strut Fairing, Strut 2
441ER	Forward Strut Fairing, Right T.R. Strut Fairing, Strut 2

SUBTASK 05-42-04-211-006

(2) Do the inspection, Detailed Inspection of EWIS, TASK 20-60-03-100-801.

(a) Inspect (Detailed) all exposed EWIS in the Forward Strut Fairing - Engine No. 2. (EZAP).

SUBTASK 05-42-04-910-006

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801, for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

SUBTASK 05-42-04-410-006

(4) Close these access panels:

Number	Name/Location
441AT	Forward Strut Fairing, Thumbnail Fairing, Strut 2
441BL	Forward Strut Fairing, Left Mid Strut Fairing, Strut 2
441BR	Forward Strut Fairing, Right Mid Strut Fairing, Strut 2
441CL	Forward Strut Fairing, Left Overwing Fairing, Strut 2
441CR	Forward Strut Fairing, Right Overwing Fairing, Strut 2
441DL	Forward Strut Fairing, Left Underwing Fairing, Strut 2
441DR	Forward Strut Fairing, Right Underwing Fairing, Strut 2
441EL	Forward Strut Fairing, Left T.R. Strut Fairing, Strut 2
441ER	Forward Strut Fairing, Right T.R. Strut Fairing, Strut 2

SUBTASK 05-42-04-410-010

(5) Do these steps to close the applicable access panels:

(a) Close these access panels:

Number	Name/Location
441AL	Forward Strut Fairing, Left Thrust Reverser Disconnect, Strut 2
441AR	Forward Strut Fairing, Right Thrust Reverser Disconnect, Strut 2

(b) Install the bolts with grease, D00633, on the access panels.

1) Install the two lower bolts and tighten sufficiently to compress the seal before torque.

NOTE: The access panel and seal under panel are installed as one assembly.

a) Make sure that the seal does not have interference with the seal on the thumbnail fairing.

2) Install the four upper bolts.

3) Tighten the bolts to 65 ±15 in-lb (7 ±2 N·m).

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

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Forward Strut Fairing - Engine 2
Figure 206/05-42-04-990-806

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-04-211-807

7. Detailed Inspection: Exposed EWIS in Fan Cowl Support Beam - Engine No. 2. (EZAP)

Figure 207

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. Location Zones

Zone	Area
442	Engine 2 - Fan Cowl Support Beam

C. Access Panels

Number	Name/Location
441AT	Forward Strut Fairing, Thumbnail Fairing, Strut 2

D. Inspection

SUBTASK 05-42-04-010-007

(1) Open this access panel:

Number	Name/Location
441AT	Forward Strut Fairing, Thumbnail Fairing, Strut 2

SUBTASK 05-42-04-211-007

(2) Do the inspection, Detailed Inspection of EWIS, Task 20-60-03-100-801.

(3) Inspect (Detailed) all exposed EWIS in Fan Cowl Support Beam - Engine No. 2. (EZAP)

SUBTASK 05-42-04-910-007

(4) Refer to 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

SUBTASK 05-42-04-410-007

(5) Close this access panel:

Number	Name/Location
441AT	Forward Strut Fairing, Thumbnail Fairing, Strut 2

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Fan Cowl Support Beam - Engine 2
Figure 207/05-42-04-990-807

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-04-211-808

8. **Detailed Inspection: Exposed EWIS in Strut Torque Box - Engine No. 2. (EZAP)**
(Figure 208)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
20-60-03-100-801	Detailed Inspection of EWIS (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)
54-53-01-000-801	Strut Access Panel Removal (P/B 401)
54-53-01-400-801	Strut Access Panel Installation (P/B 401)
54-55-01-720-802	Strut Seal Plane Access Panels- Functional Test (P/B 201)

C. Location Zones

Zone	Area
443	Engine 2 - Strut Torque Box

D. Access Panels

Number	Name/Location
443AL	Strut, Left Aft Dry Bay, Strut 2
443AR	Strut, Right Aft Dry Bay, Strut 2
443AT	Strut, Forward Spar Web, Strut 2
443BT	Strut, Forward Spar Web, Strut 2
443CT	Strut, Upper Spar Web, Strut 2
443DT	Strut, Upper Spar Web, Strut 2

E. Inspection

SUBTASK 05-42-04-010-008

(1) Open these access panels:
(TASK 54-53-01-000-801)

Number	Name/Location
443AL	Strut, Left Aft Dry Bay, Strut 2
443AR	Strut, Right Aft Dry Bay, Strut 2
443AT	Strut, Forward Spar Web, Strut 2
443BT	Strut, Forward Spar Web, Strut 2
443CT	Strut, Upper Spar Web, Strut 2
443DT	Strut, Upper Spar Web, Strut 2

SUBTASK 05-42-04-211-008

(2) Do the inspection, Detailed Inspection of EWIS, TASK 20-60-03-100-801.

SUBTASK 05-42-04-211-012

(3) Inspect (Detailed) all exposed EWIS in Strut Torque Box - Engine No. 2 (EZAP).

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-42-04-910-008

(4) Refer to TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

SUBTASK 05-42-04-410-008

(5) Close these access panels:

(TASK 54-53-01-400-801)

Number	Name/Location
443AL	Strut, Left Aft Dry Bay, Strut 2
443AR	Strut, Right Aft Dry Bay, Strut 2
443AT	Strut, Forward Spar Web, Strut 2
443BT	Strut, Forward Spar Web, Strut 2
443CT	Strut, Upper Spar Web, Strut 2
443DT	Strut, Upper Spar Web, Strut 2

SUBTASK 05-42-04-720-002

(6) Do this task to make sure that the access panels do not leak: Strut Seal Plane Access Panels-Functional Test, TASK 54-55-01-720-802.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Exposed EWIS in Strut Torque Box - Engine 2
Figure 208/05-42-04-990-808 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(LEFT SIDE IS SHOWN, RIGHT SIDE IS EQUIVALENT)

D

1 TORQUE BOX SKIN INSTALLATION NOT SHOWN.

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Exposed EWIS in Strut Torque Box - Engine 2
Figure 208/05-42-04-990-808 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-05-211-801

1. **Detailed Inspection: Exposed EWIS in the area from Leading Edge to Front Spar - Left Wing. (EZAP)**

Figure 201

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. Location Zones

Zone	Area
511	Left Wing - Leading Edge To Front Spar

C. Access Panels

Number	Name/Location
511AB	Inboard Leading Edge, Lower Removable Panel
511AT	Inboard Leading Edge, Strakelet Upper Panel
511BT	Fairing

D. Inspection

SUBTASK 05-42-05-010-001

(1) Open these access panels:

Number	Name/Location
511AB	Inboard Leading Edge, Lower Removable Panel
511AT	Inboard Leading Edge, Strakelet Upper Panel
511BT	Fairing

NOTE: Leading edge flaps extended.

SUBTASK 05-42-05-211-001

(2) Do the inspection, Detailed Inspection of EWIS, Task 20-60-03-100-801.

(3) Inspect (Detailed) all exposed EWIS in the area from Leading Edge to Front Spar - Left Wing. (EZAP)

SUBTASK 05-42-05-910-001

(4) Refer to 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

SUBTASK 05-42-05-410-001

(5) Close these access panels:

Number	Name/Location
511AB	Inboard Leading Edge, Lower Removable Panel
511AT	Inboard Leading Edge, Strakelet Upper Panel
511BT	Fairing

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Leading Edge to Front Spar - Left Wing - Inboard
Figure 201/05-42-05-990-801 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

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Leading Edge to Front Spar - Left Wing - Inboard
Figure 201/05-42-05-990-801 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

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Leading Edge to Front Spar - Left Wing - Inboard
Figure 201/05-42-05-990-801 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-05-211-802

2. Detailed Inspection: Exposed EWIS in the area from Leading Edge to Front Spar - Left Wing. (EZAP)

Figure 202

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
20-60-03-100-801	Detailed Inspection of EWIS (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
521	Left Wing - Leading Edge to Front Spar

D. Access Panels

Number	Name/Location
521AAB	Lower Leading Edge Access Panel - Slat Station 508.31
521AB	Outboard Leading Edge Blowout Door - Slat Station 20.04
521ABB	Lower Leading Edge Access Panel-Slat Station 524.31
521AT	Outbd Leading Edge - Gap Cover Access
521BB	Outboard Lower Fixed Leading Edge Access Panel - Slat Station 36.02
521CB	Lower Leading Edge Access Panel - Slat Station 53.95
521DB	Lower Leading Edge Access Panel - Slat Station 71.38
521EB	Lower Leading Edge Access Panel - Slat Station 98.95
521FB	Lower Leading Edge Access Panel - Slat Station 116.32
521GB	Lower Leading Edge Access Panel - Slat Station 125.27
521HB	Lower Leading Edge Access Panel - Slat Station 152.81
521JB	Lower Leading Edge Access Panel - Slat Station 170.20
521KB	Lower Leading Edge Access Panel - Slat Station 188.12
521LB	Lower Leading Edge Access Panel - Slat Station 216.76
521MB	Lower Leading Edge Access Panel - Slat Station 234.65
521NB	Lower Leading Edge Access Panel - Slat Station 252.04
521PB	Lower Leading Edge Access Panel - Slat Station 270.42
521QB	Lower Leading Edge Access Panel - Slat Station 289.17
521RB	Lower Leading Edge Access Panel - Slat Station 307.75
521SB	Lower Leading Edge Access Panel - Slat Station 337.62
521TB	Lower Leading Edge Access Panel - Slat Station 356.14
521UB	Lower Leading Edge Access Panel - Slat Station 374.95
521VB	Lower Leading Edge Access Panel - Slat Station 395.64
521WB	Lower Leading Edge Access Panel - Slat Station 415.79
521XB	Lower Leading Edge Access Panel - Slat Station 435.91
521YB	Lower Leading Edge Access Panel - Slat Station 467.98

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

Number	Name/Location
521ZB	Lower Leading Edge Access Panel - Slat Station 488.05

E. Inspection

SUBTASK 05-42-05-010-002

(1) Open these access panels (TASK 57-41-02-000-801):

Number	Name/Location
521AAB	Lower Leading Edge Access Panel - Slat Station 508.31
521AB	Outboard Leading Edge Blowout Door - Slat Station 20.04
521ABB	Lower Leading Edge Access Panel-Slat Station 524.31
521AT	Outbd Leading Edge - Gap Cover Access
521BB	Outboard Lower Fixed Leading Edge Access Panel - Slat Station 36.02
521CB	Lower Leading Edge Access Panel - Slat Station 53.95
521DB	Lower Leading Edge Access Panel - Slat Station 71.38
521EB	Lower Leading Edge Access Panel - Slat Station 98.95
521FB	Lower Leading Edge Access Panel - Slat Station 116.32
521GB	Lower Leading Edge Access Panel - Slat Station 125.27
521HB	Lower Leading Edge Access Panel - Slat Station 152.81
521JB	Lower Leading Edge Access Panel - Slat Station 170.20
521KB	Lower Leading Edge Access Panel - Slat Station 188.12
521LB	Lower Leading Edge Access Panel - Slat Station 216.76
521MB	Lower Leading Edge Access Panel - Slat Station 234.65
521NB	Lower Leading Edge Access Panel - Slat Station 252.04
521PB	Lower Leading Edge Access Panel - Slat Station 270.42
521QB	Lower Leading Edge Access Panel - Slat Station 289.17
521RB	Lower Leading Edge Access Panel - Slat Station 307.75
521SB	Lower Leading Edge Access Panel - Slat Station 337.62
521TB	Lower Leading Edge Access Panel - Slat Station 356.14
521UB	Lower Leading Edge Access Panel - Slat Station 374.95
521VB	Lower Leading Edge Access Panel - Slat Station 395.64
521WB	Lower Leading Edge Access Panel - Slat Station 415.79
521XB	Lower Leading Edge Access Panel - Slat Station 435.91
521YB	Lower Leading Edge Access Panel - Slat Station 467.98
521ZB	Lower Leading Edge Access Panel - Slat Station 488.05

NOTE: Access is gained by extending slats, and through lower wing surface access panels.

SUBTASK 05-42-05-211-002

(2) Do the inspection, do this task: Detailed Inspection of EWIS, TASK 20-60-03-100-801.

(a) Inspect (Detailed) all exposed Electrical Wiring Interconnect Systems (EWIS) in the area from Leading Edge to Front Spar - Left Wing (EZAP).

SUBTASK 05-42-05-910-002

(3) For the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance, refer to: Protection of the EWIS During Maintenance, TASK 20-60-07-913-801.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-42-05-410-002

(4) Close these access panels (TASK 57-41-02-400-801):

Number	Name/Location
521AAB	Lower Leading Edge Access Panel - Slat Station 508.31
521AB	Outboard Leading Edge Blowout Door - Slat Station 20.04
521ABB	Lower Leading Edge Access Panel-Slat Station 524.31
521AT	Outbd Leading Edge - Gap Cover Access
521BB	Outboard Lower Fixed Leading Edge Access Panel - Slat Station 36.02
521CB	Lower Leading Edge Access Panel - Slat Station 53.95
521DB	Lower Leading Edge Access Panel - Slat Station 71.38
521EB	Lower Leading Edge Access Panel - Slat Station 98.95
521FB	Lower Leading Edge Access Panel - Slat Station 116.32
521GB	Lower Leading Edge Access Panel - Slat Station 125.27
521HB	Lower Leading Edge Access Panel - Slat Station 152.81
521JB	Lower Leading Edge Access Panel - Slat Station 170.20
521KB	Lower Leading Edge Access Panel - Slat Station 188.12
521LB	Lower Leading Edge Access Panel - Slat Station 216.76
521MB	Lower Leading Edge Access Panel - Slat Station 234.65
521NB	Lower Leading Edge Access Panel - Slat Station 252.04
521PB	Lower Leading Edge Access Panel - Slat Station 270.42
521QB	Lower Leading Edge Access Panel - Slat Station 289.17
521RB	Lower Leading Edge Access Panel - Slat Station 307.75
521SB	Lower Leading Edge Access Panel - Slat Station 337.62
521TB	Lower Leading Edge Access Panel - Slat Station 356.14
521UB	Lower Leading Edge Access Panel - Slat Station 374.95
521VB	Lower Leading Edge Access Panel - Slat Station 395.64
521WB	Lower Leading Edge Access Panel - Slat Station 415.79
521XB	Lower Leading Edge Access Panel - Slat Station 435.91
521YB	Lower Leading Edge Access Panel - Slat Station 467.98
521ZB	Lower Leading Edge Access Panel - Slat Station 488.05

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

LEFT WING
(TOP VIEW)

A

1963037 S0000373015_V2

Leading Edge to Front Spar - Left Wing - Outboard
Figure 202/05-42-05-990-802 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Leading Edge to Front Spar - Left Wing - Outboard
Figure 202/05-42-05-990-802 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(BOTTOM VIEW)

C

1963052 S0000373017_V3

Leading Edge to Front Spar - Left Wing - Outboard
Figure 202/05-42-05-990-802 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-05-211-803

3. **Detailed Inspection: Exposed EWIS in the area from Rear Spar to Main Landing Gear Support Beam - Left Wing. (EZAP)**

Figure 203

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. Location Zones

Zone	Area
551	Left Wing - Rear Spar To Landing Gear Support Beam

C. Access Panels

Number	Name/Location
551DB	Lower Inboard Fixed Trailing Edge, Lube Actuator & MLG Beam Outboard Attach Pin Access Panel

D. Inspection

SUBTASK 05-42-05-010-003

(1) Open this access panel:

Number	Name/Location
551DB	Lower Inboard Fixed Trailing Edge, Lube Actuator & MLG Beam Outboard Attach Pin Access Panel

SUBTASK 05-42-05-211-003

(2) Do the inspection, Detailed Inspection of EWIS, Task 20-60-03-100-801.

(3) Inspect (Detailed) all exposed EWIS in the area from Rear Spar to Main Landing Gear Support Beam - Left Wing. (EZAP)

SUBTASK 05-42-05-910-004

(4) Refer to 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

SUBTASK 05-42-05-410-003

(5) Close this access panel:

Number	Name/Location
551DB	Lower Inboard Fixed Trailing Edge, Lube Actuator & MLG Beam Outboard Attach Pin Access Panel

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Rear Spar to Main Landing Gear Support Beam - Left Wing
Figure 203/05-42-05-990-803

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-05-211-804

4. Detailed Inspection: Exposed EWIS in the area from Rear Spar to Trailing Edge - Left Wing. (EZAP)

Figure 204

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. Location Zones

Zone	Area
561	Left Wing - Rear Spar to Trailing Edge, Outboard Of Inboard Flap, Inboard of Fixed Trailing Edge

C. Inspection

SUBTASK 05-42-05-211-004

NOTE: Flaps extended, spoilers raised.

(1) Do the inspection, Detailed Inspection of EWIS, Task 20-60-03-100-801.

(2) Inspect (Detailed) all exposed EWIS in the area from Rear Spar to Trailing Edge - Left Wing. (EZAP)

SUBTASK 05-42-05-910-003

(3) Refer to 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

1963072 S0000373021_V3

Rear Spar to Trailing Edge - Left Wing
Figure 204/05-42-05-990-804

ECCN 9E991 BOEING PROPRIETARY - See title page for details

ZONE 600 - RIGHT WING - (EZAP)

1. **General**
   A. This pageblock contains MSG-3 task card data.

EWIS

TASK 05-42-06-211-801

2. **Detailed Inspection: Exposed EWIS in the area from Leading Edge to Front Spar - Inboard of Nacelle Strut - Right Wing. (EZAP)**
   (Figure 201)

   NOTE: This procedure is a scheduled maintenance task.

   A. General
   (1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

   B. References

Reference	Title
20-60-03-100-801	Detailed Inspection of EWIS (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)

   C. Location Zones

Zone	Area
611	Right Wing - Leading Edge to Front Spar

   D. Access Panels

Number	Name/Location
611AB	Inboard Leading Edge, Lower Removable Access Panel
611AT	Inboard Leading Edge, Strakelet Upper Access Panel
611BT	Fairing

   E. Inspection

SUBTASK 05-42-06-010-001

(1) Open these access panels:

Number	Name/Location
611AB	Inboard Leading Edge, Lower Removable Access Panel
611AT	Inboard Leading Edge, Strakelet Upper Access Panel
611BT	Fairing

NOTE: Leading edge flaps extended.

SUBTASK 05-42-06-211-001

(2) Do this task: Detailed Inspection of EWIS, TASK 20-60-03-100-801.

SUBTASK 05-42-06-211-005

(3) Inspect (Detailed) all exposed EWIS in the area from Leading Edge to Front Spar - Right Wing. (EZAP)

SUBTASK 05-42-06-910-005

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-42-06-410-001

(5) Close these access panels:

Number	Name/Location
611AB	Inboard Leading Edge, Lower Removable Access Panel
611AT	Inboard Leading Edge, Strakelet Upper Access Panel
611BT	Fairing

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Leading Edge to Front Spar - Right Wing - Inboard
Figure 201/05-42-06-990-801 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

1964088 S0000373002_V3

Leading Edge to Front Spar - Right Wing - Inboard
Figure 201/05-42-06-990-801 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

1964093 S0000373003_V4

Leading Edge to Front Spar - Right Wing - Inboard
Figure 201/05-42-06-990-801 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-06-211-802

3. **Detailed Inspection: Exposed EWIS in the area from Leading Edge to Front Spar - Right Wing. (EZAP)**

Figure 202

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
20-60-03-100-801	Detailed Inspection of EWIS (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
621	Right Wing - Leading Edge to Front Spar

D. Access Panels

Number	Name/Location
621AAB	Lower Leading Edge Access Panel - Slat Station 524.31
621AB	Outboard Leading Edge Blowout Door - Slat Station 20.04
621AT	Outbd Leading Edge - Gap Cover Access
621BB	Outboard Lower Fixed Leading Edge Access Panel - Slat Station 36.02
621CB	Lower Leading Edge Access Panel - Slat Station 53.95
621DB	Lower Leading Edge Access Panel - Slat Station 71.38
621EB	Defuel Access Panel - Slat Station 95.15
621FB	Lower Leading Edge Access Panel - Slat Station 112.52
621GB	Refuel Access Panel - Slat Station 143.27
621HB	Lower Leading Edge Access Panel - Slat Station 170.21
621JB	Lower Leading Edge Access Panel - Slat Station 188.14
621KB	Lower Leading Edge Access Panel - Slat Station 216.71
621LB	Lower Leading Edge Access Panel - Slat Station 234.59
621MB	Lower Leading Edge Access Panel - Slat Station 252.04
621NB	Lower Leading Edge Access Panel - Slat Station 270.63
621PB	Lower Leading Edge Access Panel - Slat Station 289.18
621QB	Lower Leading Edge Access Panel - Slat Station 307.75
621RB	Lower Leading Edge Access Panel - Slat Station 337.62
621SB	Lower Leading Edge Access Panel - Slat Station 356.15
621TB	Lower Leading Edge Access Panel - Slat Station 374.95
621UB	Lower Leading Edge Access Panel - Slat Station 395.64
621VB	Lower Leading Edge Access Panel - Slat Station 415.79
621WB	Lower Leading Edge Access Panel - Slat Station 435.91
621XB	Lower Leading Edge Access Panel - Slat Station 467.98
621YB	Lower Leading Edge Access Panel - Slat Station 488.04
621ZB	Lower Leading Edge Access Panel - Slat Station 508.31

ECCN 9E991 BOEING PROPRIETARY - See title page for details

E. Inspection

SUBTASK 05-42-06-010-002

(1) Open these access panels (TASK 57-41-02-000-801):

Number	Name/Location
621AAB	Lower Leading Edge Access Panel - Slat Station 524.31
621AB	Outboard Leading Edge Blowout Door - Slat Station 20.04
621AT	Outbd Leading Edge - Gap Cover Access
621BB	Outboard Lower Fixed Leading Edge Access Panel - Slat Station 36.02
621CB	Lower Leading Edge Access Panel - Slat Station 53.95
621DB	Lower Leading Edge Access Panel - Slat Station 71.38
621EB	Defuel Access Panel - Slat Station 95.15
621FB	Lower Leading Edge Access Panel - Slat Station 112.52
621GB	Refuel Access Panel - Slat Station 143.27
621HB	Lower Leading Edge Access Panel - Slat Station 170.21
621JB	Lower Leading Edge Access Panel - Slat Station 188.14
621KB	Lower Leading Edge Access Panel - Slat Station 216.71
621LB	Lower Leading Edge Access Panel - Slat Station 234.59
621MB	Lower Leading Edge Access Panel - Slat Station 252.04
621NB	Lower Leading Edge Access Panel - Slat Station 270.63
621PB	Lower Leading Edge Access Panel - Slat Station 289.18
621QB	Lower Leading Edge Access Panel - Slat Station 307.75
621RB	Lower Leading Edge Access Panel - Slat Station 337.62
621SB	Lower Leading Edge Access Panel - Slat Station 356.15
621TB	Lower Leading Edge Access Panel - Slat Station 374.95
621UB	Lower Leading Edge Access Panel - Slat Station 395.64
621VB	Lower Leading Edge Access Panel - Slat Station 415.79
621WB	Lower Leading Edge Access Panel - Slat Station 435.91
621XB	Lower Leading Edge Access Panel - Slat Station 467.98
621YB	Lower Leading Edge Access Panel - Slat Station 488.04
621ZB	Lower Leading Edge Access Panel - Slat Station 508.31

SUBTASK 05-42-06-211-002

NOTE: Slats extended.

(2) Do the inspection, do this task: Detailed Inspection of EWIS, TASK 20-60-03-100-801.

(a) Inspect (Detailed) all exposed Electrical Wiring Interconnect Systems (EWIS) in the area from Leading Edge to Front Spar - Right Wing (EZAP).

SUBTASK 05-42-06-910-004

(3) For the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance, refer to: Protection of the EWIS During Maintenance, TASK 20-60-07-913-801.

SUBTASK 05-42-06-410-002

(4) Close these access panels (TASK 57-41-02-400-801):

Number	Name/Location
621AAB	Lower Leading Edge Access Panel - Slat Station 524.31
621AB	Outboard Leading Edge Blowout Door - Slat Station 20.04
621AT	Outbd Leading Edge - Gap Cover Access

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(Continued)

Number	Name/Location
621BB	Outboard Lower Fixed Leading Edge Access Panel - Slat Station 36.02
621CB	Lower Leading Edge Access Panel - Slat Station 53.95
621DB	Lower Leading Edge Access Panel - Slat Station 71.38
621EB	Defuel Access Panel - Slat Station 95.15
621FB	Lower Leading Edge Access Panel - Slat Station 112.52
621GB	Refuel Access Panel - Slat Station 143.27
621HB	Lower Leading Edge Access Panel - Slat Station 170.21
621JB	Lower Leading Edge Access Panel - Slat Station 188.14
621KB	Lower Leading Edge Access Panel - Slat Station 216.71
621LB	Lower Leading Edge Access Panel - Slat Station 234.59
621MB	Lower Leading Edge Access Panel - Slat Station 252.04
621NB	Lower Leading Edge Access Panel - Slat Station 270.63
621PB	Lower Leading Edge Access Panel - Slat Station 289.18
621QB	Lower Leading Edge Access Panel - Slat Station 307.75
621RB	Lower Leading Edge Access Panel - Slat Station 337.62
621SB	Lower Leading Edge Access Panel - Slat Station 356.15
621TB	Lower Leading Edge Access Panel - Slat Station 374.95
621UB	Lower Leading Edge Access Panel - Slat Station 395.64
621VB	Lower Leading Edge Access Panel - Slat Station 415.79
621WB	Lower Leading Edge Access Panel - Slat Station 435.91
621XB	Lower Leading Edge Access Panel - Slat Station 467.98
621YB	Lower Leading Edge Access Panel - Slat Station 488.04
621ZB	Lower Leading Edge Access Panel - Slat Station 508.31

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

RIGHT WING
(TOP VIEW)

A

1964171 S0000373006_V2

Leading Edge to Front Spar - Right Wing - Outboard
Figure 202/05-42-06-990-802 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

RIGHT WING
(BOTTOM VIEW)

B

1964182 S0000373007_V4

Leading Edge to Front Spar - Right Wing - Outboard
Figure 202/05-42-06-990-802 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(BOTTOM VIEW)

C

1964195 S0000373008_V3

Leading Edge to Front Spar - Right Wing - Outboard
Figure 202/05-42-06-990-802 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-06-211-803

4. **Detailed Inspection: Exposed EWIS in the area from Rear Spar to Main Landing Gear Support Beam - Right Wing. (EZAP)**

Figure 203

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. Location Zones

Zone	Area
651	Right Wing - Rear Spar to Landing Gear Support Beam

C. Access Panels

Number	Name/Location
651DB	Lower Inboard Fixed Trailing Edge, Lube Actuator & MLG Beam Outboard Attach Pin Access Panel

D. Inspection

SUBTASK 05-42-06-010-003

(1) Open this access panel:

Number	Name/Location
651DB	Lower Inboard Fixed Trailing Edge, Lube Actuator & MLG Beam Outboard Attach Pin Access Panel

SUBTASK 05-42-06-211-003

(2) Do the inspection, Detailed Inspection of EWIS, Task 20-60-03-100-801.

(3) Inspect (Detailed) all exposed EWIS in the area from Rear Spar to Main Landing Gear Support Beam - Right Wing. (EZAP)

SUBTASK 05-42-06-910-002

(4) Refer to 20-60-07-913-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

SUBTASK 05-42-06-410-003

(5) Close this access panel:

Number	Name/Location
651DB	Lower Inboard Fixed Trailing Edge, Lube Actuator & MLG Beam Outboard Attach Pin Access Panel

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Rear Spar to Main Landing Gear Support Beam - Right Wing
Figure 203/05-42-06-990-803

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-06-211-804

5. Detailed Inspection: Exposed EWIS in the area from Rear Spar to Trailing Edge - Right Wing. (EZAP)

Figure 204

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
20-60-03-100-801	Detailed Inspection of EWIS (P/B 201)
20-60-07-913-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
661	Right Wing - Rear Spar to Trailing Edge, Outboard of Inboard Flap, Inboard of Fixed Trailing Edge

D. Inspection

SUBTASK 05-42-06-211-004

NOTE: Flaps extended, spoilers raised.

(1) Do the inspection, do this task: Detailed Inspection of EWIS, TASK 20-60-03-100-801.

(a) Inspect (Detailed) all exposed Electrical Wiring Interconnect Systems (EWIS) in the area from Rear Spar to Trailing Edge - Right Wing (EZAP).

SUBTASK 05-42-06-910-003

(2) For the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance, refer to: Protection of the EWIS During Maintenance, TASK 20-60-07-913-801.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

BOTTOM VIEW

A

1964230 S0000372995_V2

Rear Spar to Trailing Edge - Right Wing
Figure 204/05-42-06-990-804

ECCN 9E991 BOEING PROPRIETARY - See title page for details

HARD LANDING OR OVERWEIGHT/HARD LANDING OR HIGH DRAG/SIDE LOAD CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. General

A. This inspection is for hard landings, or overweight/hard landings, or high drag or high side load conditions. It defines the inspections for areas other than the nose landing gear and forward fuselage for those conditions. The Phase I inspections of the nose landing gear and forward fuselage structure for these conditions are covered in procedure SUBJECT 05-51-37.

B. The Inspection

(1) The inspection is divided into two phases (Phase I and Phase II).

(a) The Phase I inspections in this procedure are for areas other than the nose gear. The nose gear inspections are contained in a separate procedure NOSE LANDING GEAR AND FORWARD FUSELAGE - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION), PAGEBLOCK 05-51-37/201.

(b) The Phase I inspection is divided into two phases (Phase IA and Phase IB).

1) Phase IA is a visual inspection.

2) Phase IB contains inspections that require special tools or access to the structure. It is completed after Phase IA under the conditions described in this procedure.

(c) The Phase II inspection is a detailed structural inspection required if damage is found during the Phase I inspection.

NOTE: All inspections, especially visual inspections, are made with sufficient lighting conditions such as daylight, hangar lighting, flashlight or drop-light.

C. High Drag or High Side Load Condition

(1) A High Drag or High Side Load condition occurs if one or more of the following conditions are met:

(a) The flight crew reported a “high drag load” or “high side load” event.

(b) The airplane ran off the prepared surface.

(c) The airplane landed short of the prepared surface.

(d) The airplane made a landing and one or more tires were blown.

(e) One or more of the landing gear hit an obstacle.

D. Hard Main Gear Landing

(1) A Hard Main Gear Landing occurs if one of the following conditions is met:

(a) The landing is reported by the flight crew as:

1) “hard landing” without specifying if it was hard on the main or nose gear, or

2) “hard main gear landing”, or

3) “hard bounced landing”.

E. Hard Nose Gear Landing

(1) A Hard Nose Gear Landing occurs if one of the following conditions is met:

(a) The landing is reported by the flight crew as:

1) “hard landing” without specifying if it was hard on the main or nose gear, or

2) “hard nose gear landing”, or

3) “hard bounced landing”, or

ECCN 9E991 BOEING PROPRIETARY - See title page for details

4) a landing where the nose gear contacted the prepared surface before the main gears.

F. Overweight Landing

(1) For the purpose of this inspection, an Overweight Landing occurs when:

(a) The landing weight is greater than the Maximum Landing Weight plus 1000 lb (454 kg).

G. The Inspection Logic

NOTE: The inspection logic is also shown on the flowchart in Figure 201.

(1) If it was a “Hard Nose Gear Landing”, or a “High Drag or High Side Load Condition”, do the NOSE LANDING GEAR AND FORWARD FUSELAGE - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION), PAGEBLOCK 05-51-37/201.

(2) Was it a High Drag or High Side Load condition or a Bounced Landing?

(a) Yes: Do both the Phase IA and Phase IB inspections before the next flight.

(b) No: Is data available from the Flight Data Recorder (FDR) or other equivalent recording device?

NOTE: Answer "No” to this question if the data recording sample rate for the CG vertical load factor (VERTICAL ACCELERATION) is less than 8 samples/sec.

1) No: Do both the Phase IA and Phase IB inspections before the next flight.

2) Yes: Was the CG vertical load factor higher than the threshold for the corresponding roll angle in Figure 202 or was the roll angle greater than 6 degrees?

a) Yes: Do both the Phase IA and Phase IB inspections before the next flight.

b) No: Do the Phase IA inspection before the next flight. If damage is found, also do the Phase IB inspections.

NOTE: The CG vertical load factor (VERTICAL ACCELERATION) and roll angle (ROLL ATTITUDE) are determined from the Flight Data Recorder (FDR) or equivalent recording device. The load factor is the maximum value of VERTICAL ACCELERATION that occurs in the first one-second period after touchdown and prior to speedbrake deployment. The roll angle is the maximum absolute value of ROLL ATTITUDE in the one-second period prior to the maximum load factor.

NOTE: The threshold is shown graphically in Figure 202. The threshold curve to use depends on the landing weight and the VERTICAL ACCELERATION sample rate.

NOTE: The CG vertical load factor threshold may only be used if the recording sample rate for VERTICAL ACCELERATION is at least 8 samples/sec, if the landing was not bounced and if the roll angle is less than or equal to 6 degrees.

(3) If damage is found during any inspection phase, then the remaining inspection phases must be performed and all repairs be completed before the airplane is returned to service.

(4) When damage is found, Boeing recommends downloading the flight recorded data and retaining it for future consultation with Boeing regarding the incident.

H. When the conditional inspection tells you to "examine" or inspect a component, look for these conditions (replace or repair components, if necessary).

(1) Cracks

(2) Pulled apart structure or unusual gaps

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(3) Loose paint (paint flakes)
(4) Discoloration or scuffing
(5) Twisted parts (distortion)
(6) Wrinkles or buckles in the structure
(7) Bent components
(8) Fastener holes that become larger or deformed
(9) Loose fasteners
(10) Fasteners that have pulled out or are gone
(11) Delamination
(12) Fiber breakage
(13) Misalignment
(14) Interference
(15) Nicks or gouges
(16) Cracked fillet seals on sealed assemblies
(17) Other signs of damage

I. Fuse Pin Inspection Guidelines

NOTE: The fuse pin locations are shown in Figure 204.

(1) When the conditional inspection tells you to “examine” a fuse pin use this inspection method:

NOTE: The bolts must be inspected one at a time.

(a) Fuse pin removal and inspection.

1) Remove the load from the joint that has the fuse pin to be inspected.
2) Remove the bolt that goes through the fuse pin and the end caps of the fuse pin that will be inspected.
3) Remove the fuse pin.

(b) If distortion or other damage was not found during the fuse pin inspection, put the fuse pin installation back to the initial condition.

TASK 05-51-01-210-801

2. Phase IA Inspection

(Figure 203, Figure 204)

A. References

Reference	Title
05-51-37 P/B 201	NOSE LANDING GEAR AND FORWARD FUSELAGE - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)
05-51-37-200-806	Phase I Inspection (P/B 201)
32-45-00-700-801	Wheels Fast Check (Wheel Installed on the Airplane) (P/B 601)
32-45-00-700-803	Tires - Inspection (P/B 601)
SRM 51-10-03	Structural Repair Manual

B. Location Zones

Zone	Area
100	Lower Half of Fuselage

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(Continued)

Zone	Area
220	Subzone - Passenger Compartment - Body Station 259.50 to 360.00
230	Subzone - Passenger Compartment - Body Station 360.00 to 663.75
240	Subzone - Passenger Compartment - Body Station 663.75 to Body Station 1016.00
300	Empennage
400	Powerplant and Nacelle Struts
500	Left Wing
600	Right Wing
710	Subzone - Landing Gear: Nose Landing Gear and Landing Gear Doors
730	Subzone - Left Main Landing Gear and Landing Gear Doors
740	Subzone - Right Main Landing Gear and Landing Gear Doors

C. Nose Landing Gear and Forward Fuselage Inspection

SUBTASK 05-51-01-210-040

(1) Perform the Nose Landing Gear (NLG) and forward fuselage inspection procedure as stated in PAGEBLOCK 05-51-37/201, if it was a “Hard Nose Gear Landing”, or a “High Drag or High Side Load Condition”.

D. Main Landing Gear Inspection

SUBTASK 05-51-01-210-041

(1) Examine the Main Landing Gear (MLG) areas as follows (Figure 203, Figure 204):

(a) The tires for damage (TASK 32-45-00-700-803).

(b) The wheels for damage; cracks, missing tie-bolts, heat shield (TASK 32-45-00-700-801).

(c) The shock struts at the top and bottom end for signs of fluid leakage.

NOTE: A small quantity of hydraulic fluid on the inner cylinder is satisfactory.

(d) The top end of the shock strut for cracks and bolt distortion.

(e) The outer door and linkage.

(f) The center door and linkage.

(g) The inner door and linkage.

(h) The trunnions and shock strut top end, including bushing edges/flanges and visible pin's external surface plating.

(i) The side strut and trunnion attach fittings of the main landing gear.

(j) The landing gear walking beam to wing structure attachment fittings.

(k) The landing gear trunnion to landing gear walking beam attachment and landing gear trunnion to wing structure.

(l) The landing gear beam.

(m) The main landing beam outboard support fitting.

(n) The forward trunnion support fitting.

(o) The main landing gear beam inboard support (hanger link fitting).

(p) If the airplane departs the prepared surface, do the inspections outlined in Phase IB.

E. Fuselage, Wing, Empennage and Engine Strut/Nacelle Inspection

SUBTASK 05-51-01-210-042

(1) Examine the fuselage areas that follow:

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(a) Examine the upper and lower fuselage skin panels forward and aft of the wing.

NOTE: Permanent wrinkles frequently occur on the lower side of the fuselage skins aft of STA 727.

(b) If you found wrinkles on the skin panels and you did not know they were there before, make and internal inspection.

NOTE: If the wrinkles were there before, make a careful inspection of the wrinkles for cracks.

(c) Examine the keel beam chords, stiffeners, webs and splices at station 663 thru 727A.

SUBTASK 05-51-01-210-056

(2) Perform a general visual examination of the areas around the probes and static ports.

(a) If obvious visual damage is found, do an RVSM check: SRM 51-10-03.

(3) Examine the wing lower surface leading edge, inspar, and trailing edge for signs of damage.

F. Cabin Inspections

NOTE: If inspections of the forward cabin were already performed during Phase I Inspection, TASK 05-51-37-200-806, then they do not need to be repeated.

SUBTASK 05-51-01-210-043

(1) Do the following cabin inspections that follow to find possible damage:

(a) Do a visual inspection of all ceiling panels (and video monitors, if applicable) for dislodging and evidence due to impact damage.

(b) Do a visual inspection of all overhead bins for evidence of looseness and impact damage.

(2) If any cabin damage was found in the Phase IA Cabin Inspections including the ceiling panels, overhead bins, or the video monitors then continue the Cabin Inspection in Phase IB and Phase II. If no damage was found, no further cabin inspections are required, and it is not necessary to continue the cabin inspections in Phase IB and Phase II.

END OF TASK

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NOTE:

1 THE CG VERTICAL LOAD FACTOR THRESHOLD MAY ONLY BE USED IF THE RECORDING SAMPLE RATE FOR VERTICAL ACCELERATION IS AT LEAST 8 SAMPLES/SEC, IF THE LANDING WAS NOT BOUNCED AND IF THE ROLL ANGLE IS LESS THAN OR EQUAL TO 6 DEGREES.

Hard or Overweight/Hard Landing or High Drag or High Side Load Condition Logic Flowchart
Figure 201/05-51-01-990-805

ECCN 9E991 BOEING PROPRIETARY - See title page for details

LEGEND:

- LANDING WEIGHT ≤ MLW+1000 Lbs (454 kg), 16+ SAMPLES/SEC
- LANDING WEIGHT ≤ MLW+1000 Lbs (454 kg), 8+ SAMPLES/SEC
- LANDING WEIGHT >MLW+1000 Lbs (454 kg), 16+ SAMPLES/SEC
- LANDING WEIGHT > MLW+1000 Lbs (454 kg), 8+ SAMPLES/SEC

2588103 S0000604346_V1

CG Vertical Load Factor Chart
Figure 202/05-51-01-990-807

ECCN 9E991 BOEING PROPRIETARY - See title page for details

2588042 S0000604347_V1

Main Landing Gear
Figure 203/05-51-01-990-808

ECCN 9E991 BOEING PROPRIETARY - See title page for details

MAIN LANDING GEAR SUPPORT BEAM

A

2588041 S0000604348_V1

Main Landing Gear Fuse Pins
Figure 204/05-51-01-990-809 (Sheet 1 of 6)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

2795420 S0000604353_V1

Main Landing Gear Fuse Pins
Figure 204/05-51-01-990-809 (Sheet 2 of 6)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

MAIN LANDING GEAR BEAM OUTBOARD SUPPORT

C

2588039 S0000604349_V1

Main Landing Gear Fuse Pins
Figure 204/05-51-01-990-809 (Sheet 3 of 6)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Main Landing Gear Fuse Pins
Figure 204/05-51-01-990-809 (Sheet 4 of 6)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

MAIN LANDING GEAR BEAM INBOARD SUPPORT

E

2795610 S0000604352_V1

Main Landing Gear Fuse Pins
Figure 204/05-51-01-990-809 (Sheet 5 of 6)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

MAIN GEAR TRUNNION

F

2795613 S0000637788_V2

Main Landing Gear Fuse Pins
Figure 204/05-51-01-990-809 (Sheet 6 of 6)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-51-01-210-805

3. Phase IB Inspection

A. References

Reference	Title
05-51-10-210-801	Dragged Engine Nacelle/Fan Blade Out/Engine Seizure/Engine and Strut Damage Conditional Inspection (P/B 201)
05-51-37 P/B 201	NOSE LANDING GEAR AND FORWARD FUSELAGE - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)
24-22-00-860-811	Supply Electrical Power (P/B 201)
24-22-00-860-812	Remove Electrical Power (P/B 201)
27-51-00-040-801	Trailing Edge Flap System Deactivation (P/B 201)
27-51-00-440-801	Trailing Edge Flap System Reactivation (P/B 201)
27-51-00-860-803	Extend the Trailing Edge Flaps (P/B 201)
27-81-00-040-801	Leading Edge Flaps and Slats Deactivation (P/B 201)
27-81-00-080-801	Leading Edge Flap and Slat Locks Removal (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
27-81-00-480-801	Leading Edge Flap and Slat Locks Installation (P/B 201)
27-81-00-860-803	Leading Edge Flaps and Slats Extension (P/B 201)
29-11-00-860-801	Hydraulic System A or B Pressurization (P/B 201)
29-11-00-860-805	Hydraulic System A or B Power Removal (P/B 201)
32-09-00-860-802	Return the Airplane to the Ground Mode (P/B 201)
32-41-41 P/B 401	MAIN LANDING GEAR BRAKE - REMOVAL/INSTALLATION
32-41-41-000-801	Main Landing Gear Brake Removal (P/B 401)
32-41-41-700-802	Main Landing Gear Brake Fast Check (Wheel Installed on the Airplane) (P/B 601)
32-45-00-700-801	Wheels Fast Check (Wheel Installed on the Airplane) (P/B 601)
32-45-00-700-803	Tires - Inspection (P/B 601)
32-45-11 P/B 401	MAIN LANDING GEAR WHEEL AND TIRE ASSEMBLY - REMOVAL/INSTALLATION
32-45-11-000-801	Main Landing Gear Wheel and Tire Assembly Removal (P/B 401)
32-45-11-400-801	Main Landing Gear Wheel and Tire Assembly Installation (P/B 401)
SWPM 20-60-03	Special Protection of Electrical Connectors

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1746	Pin - Lockout, L.E. Cruise Depressurization Valve Part #: C27038-6 Supplier: 81205
STD-858	Tag - DO NOT OPERATE

C. Location Zones

Zone	Area
100	Lower Half of Fuselage

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(Continued)

Zone	Area
117	Electrical and Electronics Compartment - Left
133	Main Landing Gear Wheel Well, Body Station 663.75 to Body Station 727.00 - Left
134	Main Landing Gear Wheel Well, Body Station 663.75 to Body Station 727.00 - Right
211	Flight Compartment - Left
212	Flight Compartment - Right
220	Subzone - Passenger Compartment - Body Station 259.50 to 360.00
230	Subzone - Passenger Compartment - Body Station 360.00 to 663.75
240	Subzone - Passenger Compartment - Body Station 663.75 to Body Station 1016.00
315	APU Compartment - Left
316	APU Compartment - Right
430	Subzone - Engine 1, Nacelle Strut
440	Subzone - Engine 2, Nacelle Strut
500	Left Wing
600	Right Wing
710	Subzone - Landing Gear: Nose Landing Gear and Landing Gear Doors
730	Subzone - Left Main Landing Gear and Landing Gear Doors
740	Subzone - Right Main Landing Gear and Landing Gear Doors

D. Access Panels

Number	Name/Location
117A	Electronic Equipment Access Door
192BR	ECS Ram Air Inlet Mixing Duct Panel - Forward

E. Main Landing Gear Inspection

SUBTASK 05-51-01-210-044

(1) Examine the main landing gear areas as follows:

(a) Examine the tires for damage (Tires - Inspection, TASK 32-45-00-700-803)

(b) Examine the wheels for damage; cracks, missing tie-bolts, heat shield (Wheels Fast Check (Wheel Installed on the Airplane), TASK 32-45-00-700-801)

(c) Examine the brake assemblies for damage (Main Landing Gear Brake Fast Check (Wheel Installed on the Airplane), TASK 32-41-41-700-802)

(d) The shock strut of the main gear for fluid leakage (top & bottom)

(e) The doors and linkages of the main gear strut

(f) The landing gear beam and attachment fittings

(g) Remove the forward trunnion fuse pin [5] and perform a detailed visual inspection if any of the following events occurred such that a significant drag loading on the main gear is expected:

1) The main landing gear hit an obstacle of large mass, or

2) The aircraft landed short of the prepared surface, or

3) The airplane ran off the prepared surface which produced a peak deceleration that was more severe than maximum effort braking.

NOTE: Inspection of the forward trunnion fuse pins may be deferred for non-revenue ferry flights only.

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SUBTASK 05-51-01-210-074

(2) If the airplane departs off the prepared surface, do the following:

(a) Examine the tires for damage (Tires - Inspection, TASK 32-45-00-700-803)

(b) Examine the wheels for damage; cracks, missing tiebolts, heat shield (Wheels Fast Check (Wheel Installed on the Airplane), TASK 32-45-00-700-801)

1) After the examination, if the tires and wheels have not been damaged, do these steps:

a) Do the recovery and/or movement of the airplane to the prepared surface.

2) If the wheel heat shield(s) is/are bent and prevents the free rotation of the wheel and the tire assembly that contacts the brake:

a) Bend the heat shield(s) to allow free rotation of the wheel and tire assembly.

NOTE: The airplane can be towed to a location where further inspections and examinations will be performed.

3) After the examination, if the tires and wheels are determined to be damaged and prevents the recovery and/or movement of the airplane to the prepared surface, do these steps:

a) Replace the wheel and tire assemblies to allow recovery and movement of the airplane (MAIN LANDING GEAR WHEEL AND TIRE ASSEMBLY - REMOVAL/INSTALLATION, PAGEBLOCK 32-45-11/401).

4) Examine the brake assemblies for damage (Main Landing Gear Brake Fast Check (Wheel Installed on the Airplane), TASK 32-41-41-700-802)

a) If a brake assembly is damaged and does not allow the rotation of the wheel and tire assembly, do these steps:

NOTE: If the wheel and tire assembly cannot rotate because the brake assembly is damaged, the brake assembly must be removed. After the brake assembly is removed and the wheel and tire assembly is installed, then the airplane can be towed safely.

<1> Remove the Wheel and Tire assembly (Main Landing Gear Wheel and Tire Assembly Removal, TASK 32-45-11-000-801).

<2> Remove the brake assembly (Main Landing Gear Brake Removal, TASK 32-41-41-000-801).

<3> Install the Wheel and Tire assembly (Main Landing Gear Wheel and Tire Assembly Installation, TASK 32-45-11-400-801).

NOTE: The wheel and tire assembly is installed to allow the airplane to be recovered.

5) After the airplane has been moved to a location for further examination, and before next flight, do these steps:

a) Replace the damaged wheel and tire assemblies (MAIN LANDING GEAR WHEEL AND TIRE ASSEMBLY - REMOVAL/INSTALLATION, PAGEBLOCK 32-45-11/401)

<1> If the wheel and tire assemblies were replaced before the airplane recovery. Clean the wheel and tire assemblies of unwanted material.

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<2> After the wheel and tire assemblies have been cleaned, examine the wheels and tires for damage (Tires - Inspection, TASK 32-45-00-700-803, Wheels Fast Check (Wheel Installed on the Airplane), TASK 32-45-00-700-801).

<3> If no damage is found, the wheels and tires are serviceable.

b) Prior to flight, replace the brake assemblies (MAIN LANDING GEAR BRAKE - REMOVAL/INSTALLATION, PAGEBLOCK 32-41-41/401).

c) Remove the brake sleeves and examine the axles.

NOTE: There are occasions where the airplane lands and one Main Landing Gear (MLG) departs the prepared surface but then returns to the prepared surface and taxis to the gate. In this case, the wheel/tire- and brake-assemblies need to be cleaned of any debris and examined.

SUBTASK 05-51-01-210-075

(3) During a landing, if one main landing gear departs from the prepared surface and returns to the prepared surface and taxis to the gate, do these steps:

(a) Examine the tires for damage (Tires - Inspection, TASK 32-45-00-700-803)

(b) Examine the wheels for damage; cracks, missing tiebolts, heat shield (Wheels Fast Check (Wheel Installed on the Airplane), TASK 32-45-00-700-801)

(c) Examine the brake assemblies for damage (Main Landing Gear Brake Fast Check (Wheel Installed on the Airplane), TASK 32-41-41-700-802)

F. Nose Landing Gear Inspection

SUBTASK 05-51-01-210-045

(1) Perform the NOSE LANDING GEAR AND FORWARD FUSELAGE - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION), PAGEBLOCK 05-51-37/201, if it was a "Hard Nose Gear Landing", or a "High Drag or High Side Load Condition".

G. Wing Area Inspection

SUBTASK 05-51-01-860-001

(1) Extend the Trailing Edge (TE) flaps, do this task: Extend the Trailing Edge Flaps, TASK 27-51-00-860-803.

SUBTASK 05-51-01-860-002

(2) Extend the Leading Edge (LE) flaps and slats, do this task: Leading Edge Flaps and Slats Extension, TASK 27-81-00-860-803.

SUBTASK 05-51-01-040-007

WARNING DO THE DEACTIVATION PROCEDURE FOR THE TRAILING EDGE FLAP BEFORE YOU DO WORK ON THE FLAP SYSTEM. THE FLAPS MOVE QUICKLY. THEY CAN CAUSE INJURIES TO PERSONNEL, AND DAMAGE TO EQUIPMENT.

(3) Do this task: Trailing Edge Flap System Deactivation, TASK 27-51-00-040-801.

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SUBTASK 05-51-01-040-012

> **WARNING** DO THE DEACTIVATION PROCEDURE FOR THE LEADING EDGE FLAPS AND SLATS. THE FLAPS AND SLATS MOVE QUICKLY. INJURIES TO PERSONNEL, AND DAMAGE TO EQUIPMENT CAN OCCUR.

(4) (Preferred Configuration) If the LE flaps and slat locks are available, do these steps to secure the area under the wing for inspection:

(a) Do this task: Leading Edge Flaps and Slats Deactivation, TASK 27-81-00-040-801.

(b) Do this task: Leading Edge Flap and Slat Locks Installation, TASK 27-81-00-480-801.

SUBTASK 05-51-01-040-013

> **WARNING** DO THE ALTERNATIVE DEACTIVATION PROCEDURE FOR THE LEADING EDGE FLAPS AND SLATS. THE FLAPS AND SLATS MOVE QUICKLY. IF YOU DO NOT OBEY, INJURIES TO PERSONNEL, AND DAMAGE TO EQUIPMENT CAN OCCUR.

(5) (Alternate Configuration) If the LE flaps and slat locks are not available, do these steps to secure the area under the wing for inspection:

NOTE: This alternate method is used to secure the areas under the wing leading edge and trailing edge when no other maintenance action or structural inspection is required, scheduled or unscheduled.

(a) Do these steps to secure the hydraulic system:

1) Make sure that the hydraulic power is removed (TASK 29-11-00-860-805).

2) Make sure that the HYD PUMPS A ELEC 2 and the HYD PUMPS B ELEC 1 switches are in the OFF position.

3) Make sure that the HYD PUMPS ENG switch is in the ON position.

NOTE: The HYD PUMPS ENG switch should be left in the ON position. This will increase the life of the depressurization solenoid which becomes energized when the HYD PUMPS ENG switch is put in the OFF position.

4) Attach a DO NOT OPERATE tag, STD-858, on the HYD PUMPS switches.

(b) Make sure that the Proximity Sensor Electronics Unit (PSEU) is in GROUND MODE (TASK 32-09-00-860-802).

(c) Open this circuit breaker and install safety tag:

F/O Electrical System Panel, P6-2

Row	Col	Number	Name
A	7	C00210	FLIGHT CONTROL FLAP SHUTOFF VALVES

(d) Make sure that the ALTERNATE FLAP ARM switch is in the OFF position.

(e) Attach a DO NOT OPERATE tag, STD-858, on the flap control lever and the ALTERNATE FLAPS ARM switch.

(f) Do these steps to secure the LE Uncommanded Motion (UCM) shutoff valve:

1) Open this access panel:

Number	Name/Location
192BR	ECS Ram Air Inlet Mixing Duct Panel - Forward

2) Remove the lockwire from the manual override lever (handle).

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3) Move the manual override lever on the LE UCM shutoff valve to the OFF position.

NOTE: The lever should move with very little force. If the lever is tight, you may need hydraulic pressure and the Flap/Slat Electronics Unit (FSEU) to release the pressure on the LE UCM shutoff valve.

4) Install the lockout pin, SPL-1746, in the manual override lever to keep the lever in the OFF position.

a) If the tool cannot be easily installed then it is necessary to supply system B hydraulic power and then use the FSEU to relieve the pressure on the LE UCM shutoff valve.

<1> Use the FSEU procedure below but replace the selection of the LE DEPR valve for the LE UCM shutoff valve.

NOTE: Two persons will be necessary when the FSEU is used to operate the LE UCM shutoff valve.

5) Attach a DO-NOT-REMOVE tag on the rig pin or lockout pin, SPL-1746.

(g) Do these steps to secure the LE cruise depressurization valve (located in the main landing gear wheel well):

1) If the valve has a tab, cut the tab from the valve (SB 27-1242).

2) Remove the lockwire from the manual override lever (handle).

3) Move the manual override lever up to the OFF position.

NOTE: Do not force movement of the lever with tools. The lever should move with very little force. If the lever is tight, you may need hydraulic pressure and the FSEU to relieve the pressure on the LE cruise depressurization valve.

a) If you cannot move the manual override lever, use the FSEU and hydraulic pressure to operate the LE cruise depressurization valve.

NOTE: Two persons will be necessary when the FSEU is used to operate the LE cruise depressurization valve.

WARNING

KEEP PERSONS AND EQUIPMENT CLEAR OF THE FLIGHT CONTROL SURFACES, THE THRUST REVERSERS, AND THE LANDING GEAR. THESE COMPONENTS CAN MOVE SUDDENLY WHEN YOU SUPPLY HYDRAULIC POWER. THIS CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

<1> Supply system B hydraulic power (TASK 29-11-00-860-801).

<2> Use the FSEU to release the pressure on the LE cruise depressurization valve, as follows:

<a> Get access to the main equipment center, open this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

ECCN 9E991 BOEING PROPRIETARY - See title page for details

<b> Remove the safety tag and close this circuit breaker:

F/O Electrical System Panel, P6-2

Row	Col	Number	Name
A	7	C00210	FLIGHT CONTROL FLAP SHUTOFF VALVES

<c> Push the ON/OFF button.

<d> EXISTING FAULTS..... press NO.

<e> Press NO until OTHER FUNCTIONS.

<f> OTHER FUNCTIONS..... press YES.

<g> SET OUTPUTS..... press YES.

<h> Press NO until LE DEPR VALVE.

<i> LE DEPR VALVE..... press YES.

WARNING MAKE SURE THAT YOU MOVE THE MANUAL OVERRIDE HANDLE TO THE OFF POSITION AND INSTALL THE RIG PIN IN LESS THAN 75 SECONDS. THE FSEU WILL AUTOMATICALLY CHANGE THE POSITION OF THE VALVE AND THE OVERRIDE HANDLE AFTER 75 SECONDS. THE MANUAL OVERRIDE HANDLE CAN MOVE SUDDENLY AND CAUSE INJURY TO PERSONS.

<j> SET ON..... press YES.

<3> Move the manual override lever up to the OFF position.

4) Install the lockout pin, SPL-1746, in the manual override lever to keep the lever in the OFF position.

NOTE: If the newer -1003 cruise depressurization valve is installed on the airplane then the lockout pin, SPL-1746, will stop the movement of the leading edge flaps and slats when hydraulic power is applied.

WARNING IF A -1001 CRUISE DEPRESSURIZATION VALVE IS INSTALLED, DO NOT APPLY HYDRAULIC POWER TO EXTEND OR RETRACT THE TRAILING EDGE WHEN THE LEADING EDGE FLAPS ARE DEACTIVATED. A -1001 VALVE CAN HAVE HYDRAULIC PRESSURE LEAKAGE AND WILL NOT STOP THE MOVEMENT OF THE LEADING EDGE FLAPS AND SLATS. MOVEMENT OF THE LEADING EDGE FLAPS AND SLATS CAN CAUSE DAMAGE TO AN OPEN THRUST REVERSER AND INJURY TO PERSONNEL.

a) If the older -1001 cruise depressurization valve is installed on the airplane, do these steps:

NOTE: A leading edge device creep condition has been associated with a “lap assembly” tolerances or a combination of “lap assembly” tolerances and the use of the smaller 0.3125 in. (7.9375 mm) diameter lockout pin, SPL-1746, that could be the cause of hydraulic pressure leakage through the older -1001 valve.

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<1> Make sure that the hydraulic power is turned OFF after the leading edge devices have been moved to their desired position.

<2> Make sure to attach the DO NOT OPERATE tag, STD-858, to both ELEC 1 and the ELEC 2 HYD PUMP switches on the P5 panel.

NOTE: Due to -1001 cruise depressurization valve installed, hydraulics cannot be operated until LE flaps and slats are re-activated.

5) Attach a DO-NOT-REMOVE tag on the rig pin or lockout pin, SPL-1746.

6) If the FSEU was used, then do the following:

a) Remove system B hydraulic power (TASK 29-11-00-860-805).

b) Open this circuit breaker and install safety tag:

F/O Electrical System Panel, P6-2

Row	Col	Number	Name
A	7	C00210	FLIGHT CONTROL FLAP SHUTOFF VALVES

(h) Do these steps to prevent leading edge devices extension by the standby hydraulic system:

1) Disconnect the electrical connector from the LE standby drive shutoff valve.

a) After you disconnect the electrical connector, examine the connector for corrosion.

NOTE: The inspection of the electrical connector(s) can be done after the removal step or before the installation step of the electrical connector. This is an operator option.

b) If there was corrosion, correct the problem (SWPM 20-60-03).

WARNING MAKE SURE THAT THE MANUAL OVERRIDE LEVER IS IN POSITION 1 TO PREVENT THE MOVEMENT OF THE LEADING EDGE SLATS. IF THE LEADING EDGE SLATS MOVE, DAMAGE TO AN OPEN THRUST REVERSER AND INJURIES TO PERSONNEL CAN OCCUR.

2) Make sure that the override lever is in the Position 1 (standby hydraulic power OFF).

NOTE: If the manual override lever at the LE standby drive shutoff valve is in Position 2 and the standby hydraulic system is then pressurized, the leading edge slats will move to the full extend position.

3) Install the lockout pin, SPL-1746.

4) Attach a DO NOT OPERATE tag, STD-858, on the LE standby drive shutoff valve.

(i) Do the LE flaps and slats tryout (TASK 27-81-00-040-801).

(j) Remove power from the airplane, do this task: Remove Electrical Power, TASK 24-22-00-860-812.

(k) Make sure the BAT switch is in the OFF position.

(l) Attach a DO NOT OPERATE tag, STD-858, on the BAT switch.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-51-01-210-076

WARNING	DO NOT GO INTO THE WING LEADING EDGE AND TRAILING EDGE AREAS. THESE FLIGHT CONTROL SURFACES CAN MOVE SUDDENLY WHEN YOU SUPPLY HYDRAULIC POWER. IF YOU DO NOT OBEY, INJURY TO PERSONNEL AND DAMAGE TO EQUIPMENT CAN OCCUR.

(6) Examine the wing area as follow:

NOTE: The wing areas must be examined from the ground. Unsatisfactory conditions or descrepancies can be visually identified from a safe distance. If damage is found in the extended wing areas, then it is necessary to install the leading edge flaps and slat locks before further maintenance action.

(a) Examine the extended wing trailing edges for signs of damage.

(b) Examine the extended wing leading edges for signs of damage.

(c) The strut-to-wing fairing panels on the upper and lower nacelle.

(d) If there was a dragged engine nacelle condition that occurred, do the following:

1) Dragged Engine Nacelle/Fan Blade Out/Engine Seizure/Engine and Strut Damage Conditional Inspection, TASK 05-51-10-210-801.

H. Cabin Inspections

NOTE: If no damage was found in the Phase IA cabin inspections, then no further cabin inspections are required.

SUBTASK 05-51-01-210-047

(1) Do a detailed visual inspection of the latches, stops, potting inserts, and all fasteners on all ceiling panels equipped with video monitors.

(2) Continue the Cabin Inspection in the Phase II Inspection, TASK 05-51-01-210-802.

I. Put the Airplane Back to Its Usual Condition

SUBTASK 05-51-01-410-005

(1) Install the components you removed if they are serviceable, or install replacement parts

SUBTASK 05-51-01-080-004

(2) If installed, remove the leading edge flaps and slat locks.

(a) Do this task: Leading Edge Flap and Slat Locks Removal, TASK 27-81-00-080-801.

SUBTASK 05-51-01-860-005

(3) If necessary, do these steps to restore electrical power to the airplane:

(a) Remove the DO NOT OPERATE tag, STD-858, from the BAT switch.

(b) Do this task: Supply Electrical Power, TASK 24-22-00-860-811.

SUBTASK 05-51-01-860-006

(4) If installed, remove the DO NOT OPERATE tag, STD-858, from the HYD PUMPS switches.

SUBTASK 05-51-01-440-007

(5) Do the activation procedure for the trailing edge flap system.

(a) Do this task: Trailing Edge Flap System Reactivation, TASK 27-51-00-440-801.

SUBTASK 05-51-01-440-008

(6) Do the activation procedure for the leading edge flap and slat system.

(a) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

END OF TASK

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TASK 05-51-01-210-802

4. Phase II Inspection

(Figure 203, Figure 204)

A. References

Reference	Title
05-51-10-210-801	Dragged Engine Nacelle/Fan Blade Out/Engine Seizure/Engine and Strut Damage Conditional Inspection (P/B 201)
05-51-37 P/B 201	NOSE LANDING GEAR AND FORWARD FUSELAGE - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)
05-51-37-200-806	Phase I Inspection (P/B 201)
07-11-01-580-815	Lift the Airplane with the Jacks (P/B 201)
07-11-03-580-802	Lift the Airplane Nose Landing Gear with the Axle Jack at Jack Point E (P/B 201)
07-11-21-580-801	Lift the Airplane Nose with the Nose Jack at Jack Point D (P/B 201)
12-15-31-610-801	Main Landing Gear Shock Strut Fluid Check (P/B 301)
12-15-41-610-802	Nose Landing Gear Shock Strut Servicing, Airplane on the Ground (P/B 301)
27-51-00-040-801	Trailing Edge Flap System Deactivation (P/B 201)
27-51-00-440-801	Trailing Edge Flap System Reactivation (P/B 201)
27-81-00-080-801	Leading Edge Flap and Slat Locks Removal (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
27-81-00-480-801	Leading Edge Flap and Slat Locks Installation (P/B 201)
32-00-10-211-801	Landing Gear Inner Cylinder Chrome Inspection (P/B 601)
32-11-00-000-801	Main Landing Gear Removal (P/B 401)
32-11-21-960-801	Replace the Active Seals with the Spare Seals (P/B 801)
32-21-00-200-801	Nose Landing Gear Inspection (P/B 601)
32-21-00-700-801	Nose Landing Gear Torsional Freeplay Inspection (P/B 601)
32-21-24-000-801	NLG Inner Cylinder Removal (P/B 401)
32-32-00-710-801	Main Landing Gear Operational Test (P/B 501)
32-33-00-710-801	Operational Test for the Nose Landing Gear (P/B 501)
32-34-00-730-801	Main Gear Manual Extension System Test - Airplane on Jacks (P/B 501)
32-35-00-730-801	Nose Gear Manual Extension System Test - Airplane on Jacks (P/B 501)
32-41-41-700-803	Main Landing Gear Brake Check (Wheel Removed from the Airplane) (P/B 601)
32-51-00-700-801	Nose Wheel Steering System Test (P/B 501)
57-15-00-000-801	Landing Gear Support Beam Removal (P/B 401)
71-00-00-200-803-F00	Inspection Of The Engine After A Hard Landing (P/B 601)

B. Location Zones

Zone	Area
100	Lower Half of Fuselage
120	Subzone - Body Station 396 to Body Station 540
140	Subzone - Body Station 727.00 to Body Station 1016.00

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(Continued)

Zone	Area
200	Upper Half of Fuselage
300	Empennage
400	Powerplant and Nacelle Struts
500	Left Wing
600	Right Wing
710	Subzone - Landing Gear: Nose Landing Gear and Landing Gear Doors
730	Subzone - Left Main Landing Gear and Landing Gear Doors
740	Subzone - Right Main Landing Gear and Landing Gear Doors

C. Access Panels

Number	Name/Location
321A	Vertical Fin, Dorsal Fin

D. Main Landing Gear Inspection

SUBTASK 05-51-01-210-005

(1) Examine the Main Landing Gear (MLG) areas as follows (Figure 203, Figure 204).

(a) Examine the outer and inner cylinder lugs.

(b) Examine the trunnion fitting area of the outer cylinder including the bushing edges/flanges.

(c) Examine the torsion links.

(d) Examine the actuator walking beam and linkage fittings.

(e) Examine the MLG beam fitting and AFT trunnion support fitting on the shock strut for cracks.

(f) Examine these MLG pins and fuse pins: side strut hanger link assembly pin [1], side strut hanger link pin [2], side strut pin [3], fuse pin [4], fuse pin [5], upper hanger link pin [6], pin [7], lower hanger link pin [8], aft trunnion pin [9], and fwd trunnion pin [10].

1) For vertical overload remove the MLG Beam outboard attachment fuse pin [4] and perform a detailed visual inspection.

a) Remove the MLG (TASK 32-11-00-000-801).

b) Remove the MLG support beam as required (TASK 57-15-00-000-801).

c) If damage is found remove the forward trunnion fuse pins and perform a detailed visual inspection.

2) For a high drag or high side load overload, remove the forward trunnion fuse pins and perform a detailed visual inspection.

a) Remove the MLG (TASK 32-11-00-000-801).

b) Remove the MLG support beam as required (TASK 57-15-00-000-801).

c) If damage is found remove MLG Beam outboard attachment fuse pin and perform a detailed visual inspection.

(g) Make sure that the pressure and hydraulic fluid levels in the main landing gear shock struts are correct, do this task: Main Landing Gear Shock Strut Fluid Check, TASK 12-15-31-610-801.

1) If the fluid level is low; do these steps:

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a) Do this task: Replace the Active Seals with the Spare Seals, TASK 32-11-21-960-801.

b) Remove the inner cylinder and examine it for distortions or cracks, do this task: Landing Gear Inner Cylinder Chrome Inspection, TASK 32-00-10-211-801.

c) Examine the orifice support tube, while it is on the airplane, for cracks.

(h) Examine the wheel well of the main landing gear for fuel or other fluid leaks.

(i) If a high drag or side load condition, and a hard landing occur at the same time, remove the main gear inner cylinders, do this task: Landing Gear Inner Cylinder Chrome Inspection, TASK 32-00-10-211-801.

1) Look for distortions or cracks in the inner cylinder.

(j) Examine the side strut and side strut attachments.

(k) If any main landing gear wheels are removed because of a blown tire, do the steps that follow:

1) Examine the wheel structure for damage.

2) Examine the brake assembly for damage (TASK 32-41-41-700-803).

E. Nose Landing Gear Inspection

NOTE: If no damage was found in the nose landing gear inspections of NOSE LANDING GEAR AND FORWARD FUSELAGE - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION), PAGEBLOCK 05-51-37/201, then no further nose landing gear inspections are required.

SUBTASK 05-51-01-210-025

(1) If not previously done during the inspection of Phase I Inspection, TASK 05-51-37-200-806, do the following:

(a) Jack the nose landing gear Lift the Airplane Nose Landing Gear with the Axle Jack at Jack Point E, TASK 07-11-03-580-802 or Lift the Airplane Nose with the Nose Jack at Jack Point D, TASK 07-11-21-580-801.

SUBTASK 05-51-01-210-006

(2) Examine the nose landing gear areas that follows.

(a) Examine carefully the areas near the trunnion and the drag-strut support fittings.

(b) Do this task: Nose Landing Gear Inspection, TASK 32-21-00-200-801.

(c) Do this task: Nose Landing Gear Torsional Freeplay Inspection, TASK 32-21-00-700-801.

(d) Examine the nose landing gear wheel well.

(e) Examine the drag strut support fittings.

(f) Examine the outer-cylinder-trunnion-fitting area and the drag brace linkage.

(g) Make sure that the pressure and hydraulic fluid level in the nose landing gear shock strut is correct, do this task: Nose Landing Gear Shock Strut Servicing, Airplane on the Ground, TASK 12-15-41-610-802.

1) If the pressure and hydraulic fluid level is not correct, remove the nose landing gear inner cylinder, do this task: NLG Inner Cylinder Removal, TASK 32-21-24-000-801.

a) Examine the inner cylinder for cracks and other types of damage.

b) Examine the orifice support tube for distortion and cracks.

(h) Examine the wheel well of the nose landing gear for buckling and other damage.

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1) Make sure that there are no loose fasteners in the web of the nose wheel well near the trunnion support fittings.
2) Look for fluid leaks.

(i) Do a check of the rigging of the steering mechanism.
1) Do this task: Nose Wheel Steering System Test, TASK 32-51-00-700-801.

(j) Examine the axle for bends.
1) Spin the wheels.
a) Make sure that there is no binding that may be caused by a bent axle.
2) Place a level on the outboard wheel rims.
a) Make sure that both wheels are vertical.

(k) If it was a hard nose gear landing or a high drag or side load condition, do these steps:
1) Remove the nose landing gear inner cylinder, do this task: NLG Inner Cylinder Removal, TASK 32-21-24-000-801.
a) Examine the inner cylinder for damage.

F. Fuselage and Empennage Inspection

SUBTASK 05-51-01-040-004

(1) Examine the fuselage as follows:
(a) Examine the lower fuselage structure.
1) Look carefully at the area below the body floor beams immediately aft of the wing center section.
(b) Examine the wing-to-fuselage joints and the wheel well bulkheads.
(c) Examine the upper fuselage structure above the primary wing spars.
(d) Examine the area around leading edge dorsal fin:

Number	Name/Location
321A	Vertical Fin, Dorsal Fin

(e) Examine the wheel well bulkheads of the main landing gear.
(f) Examine the side-of-body ribs for cracks in the area of the rear spar.
(g) Examine the rear spar for permanent buckles between the tank end and side of the body.
(h) Examine the nose landing gear wheel well aft bulkhead.
(i) Examine the fuselage structure immediately outboard of the nose wheel well.
(j) Examine the fuselage skin attachments above the landing gear beam.
(k) Look for signs of fuel leaks or other fluids leaking in the areas that follow:
1) the wing
2) the nacelles
3) the engine struts
4) the external surfaces of the fuselage
5) the nose landing gear wheel well
6) the main landing gear wheel well.
(l) Examine the lower fuselage (body sections 46 and 48) for signs that it touched the runway.

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(m) If there are signs of damage, examine the areas that follow.

NOTE: Look for broken parts, bent parts, or other types of damage.

1) the Auxiliary Power Unit (APU) firewall
2) the APU drain
3) the APU doors
4) the drain mast
5) the lower fuselage skin, stringers, frames, and shears ties.

SUBTASK 05-51-01-200-005

(2) Examine the external fuselage skin at BS 1016 and the aft side of the pressure bulkhead for signs of buckling, deformation or damage.

(a) Do a detailed visual inspection of the exterior fuselage skin 10 in. (25.4 cm) forward and aft of the BS 1016 skin butt joint between stringers S-10L and S-10R.

NOTE: Gain access to the exterior of the fuselage skin BS 1016 under the vertical stabilizer fairing, 323AL and 323AR.

(b) Do a detailed visual inspection of the entire aft side of the BS 1016 aft pressure bulkhead.

NOTE: Access to the interior unpressurized aft pressure bulkhead area is through the aft access hatch, 311BL.

1) Give particular attention to the upper bulkhead structure between skin stringers S-10L and S-10R.

SUBTASK 05-51-01-210-007

(3) Make sure that the flight controls move freely.

G. Wing Area Inspection

SUBTASK 05-51-01-210-008

(1) Do an inspection of the wing areas that follow:

WARNING DO NOT GO INTO THE WING LEADING EDGE AND TRAILING EDGE AREAS BEFORE YOU INSTALL SAFETY LOCKS. IF YOU DO NOT OBEY, INJURY TO PERSONNEL FROM ACCIDENTAL FLAP/SLAT OPERATION CAN OCCUR.

(a) Install the leading edge flaps and slat locks.

1) Do this task: Leading Edge Flap and Slat Locks Installation, TASK 27-81-00-480-801.
2) Do this task: Trailing Edge Flap System Deactivation, TASK 27-51-00-040-801.

(b) Examine the wings and nacelles for fuel or other fluid leaks.

(c) Examine the wing ribs along the aft side of the rear spar, WSTA 228.25 and 253.00 for cracks.

(d) Examine the upper and lower trailing edge panels and the airplane structure for damage.

1) Make sure that you examine the area near the main landing gear beam carefully.

(e) Examine the flap areas that follow for sheared rivets and structure damage:

1) The inboard and outboard trailing edge flaps
2) The flap tracks
3) The drive screws

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4) The linkages and fairings.

(f) Examine the inboard and outboard spoilers for sheared rivets and structure damage.

(g) Examine the flap track bolts on the outboard trailing edge flap for damage that can occur if the flaps touched the ground.

(h) Examine the flap track bolts on the inboard trailing edge flap for damage that can occur if the flaps touched the ground.

(i) Make sure that the flight controls move freely and cable tension is satisfactory.

(j) For airplanes with winglets:

1) Examine the winglet and attachment at rib 27 (WBL 658.17).

H. Do a Test of the Landing Gears

SUBTASK 05-51-01-580-002

(1) Do a check of the nose and main landing gear.

NOTE: Look for signs of interference, misalignment, or distortion.

(a) Lift the airplane on jacks, do these tasks: Lift the Airplane with the Jacks, TASK 07-11-01-580-815.

(b) Retract and extend the nose landing gear, do this task: Operational Test for the Nose Landing Gear, TASK 32-33-00-710-801.

(c) Retract and extend the main landing gear, do this task: Main Landing Gear Operational Test, TASK 32-32-00-710-801.

(d) Retract and then extend the main landing gear with the manual system to make sure they operate correctly, do this task: Main Gear Manual Extension System Test - Airplane on Jacks, TASK 32-34-00-730-801.

(e) Retract and then extend the nose landing gear with the manual system to make sure it operates correctly, do this task: Nose Gear Manual Extension System Test - Airplane on Jacks, TASK 32-35-00-730-801

I. Cabin Inspections

SUBTASK 05-51-01-210-011

(1) Continue the following inspection if any cabin damage was found in the above Cabin Inspection including the ceiling panels, central overhead bins, or the video monitors. If no damage was found, no further cabin inspection is required and it is not necessary to continue this Cabin Inspection.

(a) If ceiling panels without video monitors are found dislodged or damaged: Check for proper latching and installation. Repair as necessary.

(b) If central overhead stowage bins are found with impact damage or are loose, or if ceiling panels equipped with video monitors are found with broken latches: repair as necessary.

(c) Inspect all tie rods of affected zones for evidence of buckling or rupture.

1) If any defect is found, replace as necessary.

(d) Examine lavatory tie rod attachments for damage consisting of breakage, cracks, and deformation. Inspect the tie rods for evidence of buckling or rupture.

1) If any defect is found, replace as necessary.

(e) Examine the lavatory floor fittings for damage consisting of breakage, cracks, and deformation.

1) If any defect is found, replace as necessary.

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(f) Examine galley tie rod attachments for damage consisting of breakage, cracks, and deformation. Inspect the tie rods for evidence of buckling or rupture.

1) If any defect is found, replace as necessary.

(g) Examine the galley floor fittings for damage consisting of breakage, cracks, and deformation.

1) If any defect is found, replace as necessary.

(h) Examine, closet tie rod attachments for damage consisting of breakage, cracks, and deformation.

1) If any defect is found, replace as necessary.

(i) Examine the closet floor fittings for damage consisting of breakage, cracks, and deformation.

1) If any defect is found, replace as necessary.

J. Engine Inspections

SUBTASK 05-51-01-210-009

(1) Do the steps that follow to examine the engine areas:

(a) Do an engine inspection after a hard landing.

1) Do this task: Inspection Of The Engine After A Hard Landing, TASK 71-00-00-200-803-F00.

2) Examine the engine nacelle if it touched the ground.

(b) If damage was found on the strut to wing fairing, then do this task: Dragged Engine Nacelle/Fan Blade Out/Engine Seizure/Engine and Strut Damage Conditional Inspection, TASK 05-51-10-210-801.

K. Cargo Loading Inspection

SUBTASK 05-51-01-211-005

(1) Do a check of the cargo loading system to make sure it operates correctly with the containers and pallets.

(a) Look at the components that follow:

1) Make a check of the cargo restraint system in all cargo compartments.

2) Visually check the following:

a) The rollers,

b) The side guides,

c) The seat tracks,

d) The pallet locks.

3) Examine all components for breaks, cracks, and missing retaining lips.

a) Make sure that the cargo loading rollers (where installed) move freely.

L. Put the Airplane Back to Its Usual Condition

SUBTASK 05-51-01-410-002

(1) Install the components you removed if they are serviceable, or install replacement parts.

SUBTASK 05-51-01-410-003

(2) Close all of the cowling, panels, fairings, and doors.

SUBTASK 05-51-01-080-002

(3) Remove the leading edge flaps and slat locks.

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(a) Do this task: Leading Edge Flap and Slat Locks Removal, TASK 27-81-00-080-801.

SUBTASK 05-51-01-440-003

(4) Do the activation procedure for the trailing edge flap system.

(a) Do this task: Trailing Edge Flap System Reactivation, TASK 27-51-00-440-801.

SUBTASK 05-51-01-440-004

(5) Do the activation procedure for the leading edge flap and slat system.

(a) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

END OF TASK

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SEVERE OR UNUSUAL TURBULENCE, EXCESSIVE MANEUVER, BUFFET OR SPEEDS MORE THAN DESIGN LIMITS - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. General

A. This procedure contains a task that is an inspection of the airplane after one of the following occurs:

(1) Severe turbulence or unusual turbulence

(2) Excessive maneuver

(3) Buffets

(4) Airspeed more than its design limits.

TASK 05-51-04-210-801

2. Severe or Unusual Turbulence, Excessive Maneuver, Buffet, or Speeds More than the Design Limits Conditional Inspection

A. General

(1) When the conditional inspection tells you to "examine" a component, look for these conditions (repair or replace components, if it is necessary):

(a) Cracks

(b) Pulled apart structure

(c) Loose paint (paint flakes)

(d) Discoloration

(e) Twisted parts (distortion)

(f) Wrinkles or buckles in the structure

(g) Bent components

(h) Loose fasteners

(i) Fasteners that have pulled out or are gone

(j) Delaminations

(k) Fiber breakouts

(l) Misalignment

(m) Interference

(n) Nicks or gouges

(o) Other signs of damage.

B. References

Reference	Title
05-51-10-210-801	Dragged Engine Nacelle/Fan Blade Out/Engine Seizure/Engine and Strut Damage Conditional Inspection (P/B 201)
27-11-00 P/B 501	AILERON - ADJUSTMENT/TEST
27-21-00 P/B 501 Config 2	RUDDER AND RUDDER TRIM CONTROL SYSTEM - ADJUSTMENT/TEST
27-31-00 P/B 501	ELEVATOR AND ELEVATOR TRIM CONTROL SYSTEM - ADJUSTMENT/TEST
27-41-00 P/B 501	HORIZONTAL STABILIZER TRIM CONTROL SYSTEM - ADJUSTMENT/TEST

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(Continued)

Reference	Title
27-51-00 P/B 501	TRAILING EDGE FLAP SYSTEM - ADJUSTMENT/TEST
27-51-00-040-801	Trailing Edge Flap System Deactivation (P/B 201)
27-51-00-440-801	Trailing Edge Flap System Reactivation (P/B 201)
27-51-00-860-803	Extend the Trailing Edge Flaps (P/B 201)
27-61-00 P/B 501	SPOILER CONTROL SYSTEM - ADJUSTMENT/TEST
27-62-00 P/B 501	SPEED BRAKE CONTROL SYSTEM - ADJUSTMENT/TEST
27-81-00 P/B 501	LEADING EDGE FLAP AND SLAT - ADJUSTMENT/TEST
27-81-00-040-801	Leading Edge Flaps and Slats Deactivation (P/B 201)
27-81-00-080-801	Leading Edge Flap and Slat Locks Removal (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
27-81-00-480-801	Leading Edge Flap and Slat Locks Installation (P/B 201)

C. Location Zones

Zone	Area
100	Lower Half of Fuselage
200	Upper Half of Fuselage
300	Empennage
400	Powerplant and Nacelle Struts
500	Left Wing
600	Right Wing
700	Landing Gear and Landing Gear Doors
800	Doors

D. Severe or Unusual Turbulence Condition

SUBTASK 05-51-04-210-016

(1) Severe turbulence is identified as turbulence which causes large, abrupt changes in the altitude and/or attitude. The airplane could be out of control for short periods. It usually causes large variations in airspeed. Passengers and crew are moved violently against their seat belts and loose objects are moved around the airplane.

SUBTASK 05-51-04-210-024

(2) An inspection is required when the aircraft has encountered severe turbulence. The pilot must report the suspected encounter of this event. If the pilot reports that the aircraft has encountered severe turbulence, refer to “Examine Airplane Structure and Wing Areas” and “Cabin Inspections” in this section.

E. Excessive Maneuver Condition

SUBTASK 05-51-04-210-018

(1) Excessive maneuvers are maneuvers that result in severe and abnormal aircraft response and/or attitude, and/or exceeding of the flight maneuvering vertical load factors, specified below. Excessive maneuvers could be due to rapid or large alternating control inputs i.e., control column, rudder pedals, and control wheel.

(a) The vertical acceleration load limits shown below are directly applicable to excessive maneuvers.

1) Flaps up . . . . . 2.5g to -1.0g

2) Flaps down . . . . . 2.0g to 0.0g

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SUBTASK 05-51-04-210-025

(2) An inspection is required when the aircraft has been involved in an excessive maneuver. The pilot must report the suspected encounter of this event. If the pilot reports that the airplane has been involved in an excessive maneuver, refer to "Examine Airplane Structure and Wing Areas" and "Cabin Inspections" in this section.

F. Severe or Unusual Buffet Condition

SUBTASK 05-51-04-210-002

(1) If an unusual vibration, an unusual maneuver or a severe or unusual buffet condition occurs in-flight, do the "Examine the Airplane Structure and Wing Areas" steps in the following task: Severe or Unusual Turbulence, Excessive Maneuver, Buffet, or Speeds More than the Design Limits Conditional Inspection, TASK 05-51-04-210-801.

SUBTASK 05-51-04-210-003

(2) If a stall occurs after the initial buffet or stick shaker condition, an inspection is necessary.

(a) Do the Stall (After Initial Buffet or Stick Shaker) Structural Inspection Procedure.

G. Airplane Speeds More than the Design Limits

SUBTASK 05-51-04-210-004

(1) The maximum design speed of the airplane for flight operations are as follows:

NOTE: The Maximum Operating Limit Speed is in Section 1, LIMITATIONS of the Airplane Flight Manual (AFM).

(a) The airplane Maximum Operating Speed (VMO) is 340 knots (630 km/h) when the airplane is at or below 25,968 ft (7915 m).

(b) Above 25,968 ft (7915 m), the airplane is limited to a Maximum Operating Mach (MMO) of 0.82.

(c) The overspeed clacker will activate when the airplane exceeds the VMO or MMO.

SUBTASK 05-51-04-210-005

(2) Do the “Examine the Airplane Structure and Wing Areas” procedure in the task if one or both conditions that follow occurs:

NOTE: When the overspeed event occurs at 25,968 ft (7915 m) or below, it should be viewed in knots. Overspeed events above 25,968 ft (7915 m) should be viewed in mach.

(a) The airplane speed exceeds the VMO by 20 knots (37 km/h) or more.

(b) The airplane speed exceeds the MMO by 0.02 Mach or more.

H. Examine the Airplane Structure and Wing Areas

SUBTASK 05-51-04-560-001

(1) Extend the trailing edge flaps and the leading edge flaps and slats.

(a) Extend the trailing edge flaps to the 40-unit position (Extend the Trailing Edge Flaps, TASK 27-51-00-860-803).

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SUBTASK 05-51-04-040-001

WARNING	DO THE DEACTIVATION PROCEDURE FOR THE TRAILING-EDGE FLAP-ACTUATION SYSTEMS. DO NOT OPERATE THE FLAP ACTUATION SYSTEMS DURING THIS INSPECTION. IF YOU DO NOT OBEY THIS WARNING, IT CAN CAUSE INJURY TO PERSONS AND DAMAGE TO EQUIPMENT.

(2) Do the deactivation procedure for the trailing edge flap system, do this task: Trailing Edge Flap System Deactivation, TASK 27-51-00-040-801.

SUBTASK 05-51-04-040-002

WARNING	DO THE DEACTIVATION PROCEDURE FOR THE LEADING EDGE FLAPS AND SLAT ACTUATION SYSTEMS. DO NOT OPERATE FLAPS AND SLATS ACTUATION SYSTEMS DURING THIS INSPECTION. FAILURE TO OBEY THIS WARNING CAN CAUSE INJURY TO PERSONS AND DAMAGE TO EQUIPMENT.

(3) Do the deactivation procedure for the leading edge flap and slat system with the flaps/slats in the fully extended position, do this task: Leading Edge Flaps and Slats Deactivation, TASK 27-81-00-040-801.

(a) Install the lockset to prevent movement of the leading edge flaps/slats, do this task: Leading Edge Flap and Slat Locks Installation, TASK 27-81-00-480-801.

SUBTASK 05-51-04-210-006

(4) Do the inspections that follow:

(a) Examine the external surface of the fuselage.

1) Examine these areas carefully:

- The keel beam between stations 540 and 727
- The area above the wing aft of station 639
- The bottom fuselage between stations 727 and 927
- The fuselage between station 927 and 1088.

2) If external damage is found, examine all of the internal structure in the damaged area.

(b) Examine all of the external and internal structure of the fuselage, section 48 that you can get access to and/or is called out in this procedure for signs of buckling, deformation or damage.

NOTE: Look at the structure from the rear pressure bulkhead to the aft end of the airplane.

1) Examine these areas carefully:

a) Do a detailed visual inspection of the exterior fuselage skin 10 in. (25.4 cm) forward and aft of the BS 1016 skin butt joint between stringers S-10L and S-10R.

b) Do a detailed visual inspection of the entire aft side of the BS 1016 aft pressure bulkhead. Give particular attention to the upper bulkhead structure between skin stringers S-10L and S-10R.

NOTE: Access to the interior unpressurized aft pressure bulkhead area is through the aft access hatch, 311BL.

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c) If any damage is found in the previous inspection steps of the fuselage - section 48 - of the aft pressure bulkhead around BS 1016, remove the galley and lavatories as necessary to gain access to the upper center web installation of the BS 1016 bulkhead on the forward side of the pressure bulkhead and do a detailed visual inspection of the upper center web installation of the BS 1016 bulkhead for any damage.

d) Examine the exterior fuselage skin at BS 1016.

NOTE: Gain access to the exterior fuselage skin at BS 1016 behind the vertical stabilizer fairing (panels 323AL and 323AR).

2) Look at the jackscrew and hinges for signs of binding.

a) Examine the stabilizer jackscrew-mechanism mount fittings and support structure.

(c) Examine the horizontal stabilizer external surfaces for signs of buckling.

1) Make sure that you look at the skin splices.

2) If external damage to the horizontal stabilizer is found, do these steps:

a) Examine the horizontal stabilizer rear spar.

b) Examine the horizontal stabilizer rear spar webs.

c) Examine the terminal fittings for the front and rear spar of the horizontal stabilizer.

d) Examine all the internal primary structure in the damaged area that has access.

(d) Examine the elevator external surfaces.

1) If you find any external damage to the elevator, do these steps:

a) Examine the front spar web.

b) Examine the elevator actuator bearings for signs of binding.

c) Examine the horizontal stabilizer rear spar webs.

d) Move the elevator slowly by hand:

<1> Make sure that the elevator moves smoothly without binding.

<2> Make sure that the elevator hinge bearings are not damaged.

NOTE: You can feel a slight vibration or ratcheting noise from the hinge bearings if they are damaged.

(e) Examine the fin external surfaces for signs of buckling.

1) If you find external damage to the fin, do these steps:

a) Examine the fin attach fittings.

b) Examine the fin rear spar web.

c) Examine all of the internal primary structure in the damaged area that has access.

(f) Examine the rudder for signs of buckling.

1) If you find external damage to the rudder, examine all of the internal primary structure in the damaged area that has access.

(g) Examine the external surfaces around the top and bottom wing-to-body attachment; this includes the wing-to-body fairing.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

1) If you see external damage, do these steps:
   a) Examine the body-to-wing joints.
   b) Examine landing gear beam-to-body joints.
   c) Examine the upper-wing skin splice.

(h) Examine the external surfaces of the wing at the skin splices.
   1) Examine the external surface of the top of the wing trailing edge.
   2) If external damage is found, do these steps:
      a) Examine all of the internal primary structure in the damaged area that has access.

(i) Examine the wingtip fairings.

(j) Examine the wing control surfaces.
   1) If you find external damage, do these steps:
      a) Examine the spars.
      b) Examine all of the internal primary structure in the damaged area that has access.
      c) Examine the control surface attachments at the front and rear spars.

SUBTASK 05-51-04-720-001

(5) Make sure that the flight controls move freely, do these steps:
   (a) Move the following items through their usual range of movement:
      - Flaps
      - Slats
      - Spoilers
      - Ailerons
      - Elevators
      - Stabilizer
      - Rudder.
   (b) Make sure that there is full travel and the flight controls move freely.

      NOTE: If the flight controls operate correctly, no more inspections are necessary.
   (c) If unusual conditions are found for the following system, do these steps:
      1) Check all of the flight control force specifications for that system.
      2) Check the cable tensions.
      3) Do these tasks for the following system:
         a) If it is necessary, do following tasks for the aileron: AILERON - ADJUSTMENT/TEST, PAGEBLOCK 27-11-00/501.
         b) If it is necessary, do following tasks for the rudder: RUDDER AND RUDDER TRIM CONTROL SYSTEM - ADJUSTMENT/TEST, PAGEBLOCK 27-21-00/501 Config 2.
         c) If it is necessary, do following tasks for the elevators: ELEVATOR AND ELEVATOR TRIM CONTROL SYSTEM - ADJUSTMENT/TEST, PAGEBLOCK 27-31-00/501.

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d) If it is necessary, do following tasks for the horizontal stabilizer: HORIZONTAL STABILIZER TRIM CONTROL SYSTEM - ADJUSTMENT/TEST, PAGEBLOCK 27-41-00/501.

e) If it is necessary, do following tasks for the trailing edge flaps: TRAILING EDGE FLAP SYSTEM - ADJUSTMENT/TEST, PAGEBLOCK 27-51-00/501.

f) If it is necessary, do following tasks for the spoilers: SPOILER CONTROL SYSTEM - ADJUSTMENT/TEST, PAGEBLOCK 27-61-00/501.

g) If it is necessary, do following tasks for the speedbrakes: SPEED BRAKE CONTROL SYSTEM - ADJUSTMENT/TEST, PAGEBLOCK 27-62-00/501.

h) If it is necessary, do following tasks for the leading edge devices: LEADING EDGE FLAP AND SLAT - ADJUSTMENT/TEST, PAGEBLOCK 27-81-00/501.

SUBTASK 05-51-04-210-007

(6) Examine the engine strut panels, doors, and lower surface of the nacelle cowling.

(a) If you find unusual conditions, do this step:

1) Do this task: Dragged Engine Nacelle/Fan Blade Out/Engine Seizure/Engine and Strut Damage Conditional Inspection, TASK 05-51-10-210-801.

SUBTASK 05-51-04-210-008

(7) Examine the areas that follow for signs of fuel leaks or other types of fluid leaks:

- The wing
- The engine nacelles
- The fuselage external surfaces
- All landing gear wheel wells.

SUBTASK 05-51-04-210-009

(8) If flight load accelerations are more than flight manual limits, and the airplane showed signs of much damage following the most recent severe turbulence event, check the airplane alignment.

NOTE: The alignment check procedure is in the Structural Repair Manual (SRM).

SUBTASK 05-51-04-210-010

(9) Examine the landing gear doors for damage and looseness.

(a) If the landing gear position lights were on during the turbulent part of the flight, do a check of the landing gear doors and uplocks.

SUBTASK 05-51-04-210-011

(10) Examine the inspection and blowout doors on the bottom surface of the wing and engine nacelles.

(a) Also examine the inspection and access doors on the bottom of the fuselage.

I. Stall (After Initial Buffet or Stick Shaker) Structural Inspection

SUBTASK 05-51-04-210-012

(1) Do the inspections that follow to find possible damage.

(a) Examine all of the internal structure of the fuselage, section 48 that has access.

1) Look at the structure from the rear pressure bulkhead to the aft end of the airplane.

2) Look carefully at the areas that follow:

- The aft fuselage bulkheads
- The horizontal stabilizer center sections

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- The attach fittings for the horizontal stabilizer (Station 1088 and 1156)
- The terminal fittings for the front and rear spar of the horizontal stabilizer
- The stabilizer hinge fittings
- The stabilizer jackscrew-mechanism mount fittings and support structure.

3) Make sure that the stabilizer jackscrew and hinges do not bind.

SUBTASK 05-51-04-210-013

(2) Examine the horizontal stabilizer external surfaces for signs of buckling.

(a) Look at the skin splices for cracks.

1) If external damage to the horizontal stabilizer is found, do these steps:

a) Examine the spars.

b) Examine all of the internal primary structure in the damaged area that has access.

SUBTASK 05-51-04-210-014

(3) Examine the elevator external surfaces.

(a) If any external damage to the elevator is found, do these steps:

1) Examine the front spar web.

2) Examine the elevator actuator bearings for signs of binding.

3) Examine the elevator hinge bearing for signs of binding.

SUBTASK 05-51-04-720-002

(4) Make sure that the flight controls move freely, do these steps:

(a) Move the following items through their usual range of movement:

- Flaps
- Slats
- Spoilers
- Ailerons
- Elevators
- Stabilizer
- Rudder.

(b) Make sure that there is full travel and the flight controls move freely.

NOTE: If the flight controls operate correctly, no more inspections are necessary.

(c) If unusual conditions are found for the following system, do these steps:

1) Check all of the flight control force specifications for that system.

2) Check the cable tensions.

3) Do these tasks for the following system:

a) If it is necessary, do following tasks for the aileron: AILERON - ADJUSTMENT/TEST, PAGEBLOCK 27-11-00/501.

b) If it is necessary, do following tasks for the rudder: RUDDER AND RUDDER TRIM CONTROL SYSTEM - ADJUSTMENT/TEST, PAGEBLOCK 27-21-00/501 Config 2.

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c) If it is necessary, do following tasks for the elevators: ELEVATOR AND ELEVATOR TRIM CONTROL SYSTEM - ADJUSTMENT/TEST, PAGEBLOCK 27-31-00/501.

d) If it is necessary, do following tasks for the horizontal stabilizer: HORIZONTAL STABILIZER TRIM CONTROL SYSTEM - ADJUSTMENT/TEST, PAGEBLOCK 27-41-00/501.

e) If it is necessary, do following tasks for the trailing edge flaps: TRAILING EDGE FLAP SYSTEM - ADJUSTMENT/TEST, PAGEBLOCK 27-51-00/501.

f) If it is necessary, do following tasks for the spoilers: SPOILER CONTROL SYSTEM - ADJUSTMENT/TEST, PAGEBLOCK 27-61-00/501.

g) If it is necessary, do following tasks for the speedbrakes: SPEED BRAKE CONTROL SYSTEM - ADJUSTMENT/TEST, PAGEBLOCK 27-62-00/501.

h) If it is necessary, do following tasks for the leading edge devices: LEADING EDGE FLAP AND SLAT - ADJUSTMENT/TEST, PAGEBLOCK 27-81-00/501.

J. Cabin Inspections (After Severe, Unusual Turbulence, or Excessive Maneuver)

SUBTASK 05-51-04-210-015

(1) Do the inspections that follow to find possible damage:

(a) Do a visual inspection of all ceiling panels for dislodging and evidence do to impact damage.

(b) Do a visual inspection of all ceiling overhead bins for evidence of looseness and impact damage.

(c) Do a detailed visual inspection of all ceiling panels equipped with video monitors.

1) Inspect latches, stops, potting inserts and all fasteners.

(d) Continue the following inspection if any cabin damage was found in the above Cabin Inspection including the ceiling panels, central overhead bins, or the video monitors. If no damage was found, no further cabin inspection is required and it is not necessary to continue this Cabin Inspection.

1) If ceiling panels without video monitors are found dislodged or damaged: Check for proper latching and installation. Repair as necessary.

2) If central overhead stowage bins are found with impact damage or are loose, or if ceiling panels equipped with video monitors are found with broken latches: repair as necessary.

3) Inspect all tie rods of affected zones for evidence of buckling or rupture. If any defect is found, replace as necessary.

4) Examine lavatory tie rod attachments for damage consisting of breakage, cracks, and deformation. Inspect the tie rods for evidence of buckling or rupture.

5) Examine the lavatory floor fittings for damage consisting of breakage, cracks, and deformation.

6) Examine galley tie rod attachments for damage consisting of breakage, cracks, and deformation. Inspect the tie rods for evidence of buckling or rupture.

7) Examine the galley floor fittings for damage consisting of breakage, cracks, and deformation.

8) Examine, closet tie rod attachments for damage consisting of breakage, cracks, and deformation.

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K. Put the Airplane Back to Its Usual Condition

SUBTASK 05-51-04-410-001

(1) Install the components you removed if they are serviceable, or install replacement parts.

SUBTASK 05-51-04-080-001

(2) Do this task: Leading Edge Flap and Slat Locks Removal, TASK 27-81-00-080-801.

SUBTASK 05-51-04-440-001

(3) Do this task: Trailing Edge Flap System Reactivation, TASK 27-51-00-440-801.

SUBTASK 05-51-04-440-002

(4) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

END OF TASK

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HIGH ENERGY STOP/HEAT DAMAGE CONDITION - MAINTENANCE PRACTICES

1. **General**

A. This procedure contains three tasks:

(1) Inspect the landing gear wheels, brakes and axles after a high energy stop condition.

(2) Heat Damage Inspection.

(3) Tire Removal After Overspeed Landing.

TASK 05-51-07-210-801

2. **High Energy Stop**

A. General

(1) The level of the inspection depends on the level of absorbed kinetic energy.

(2) High energy stop is an event where the brake energy falls within the "Caution" or "Fuse Plug Melt" zones.

(3) The heat absorbed by the airplane brake is slowly, but not fully transmitted to the wheel, tire, axle, and in-axle components.

(4) The wheels have fuse plugs which are designed to melt and release the tire pressure.

NOTE: The fuse plugs melt at a specific design temperature.

(a) This is to stop ruptures of the tires and wheels when the wheel temperature gets too high.

(5) If brake fire occurs, do the steps in the "High Energy Stop Condition Inspection - IN FUSE PLUG MELT range or Brake Fire" section.

(6) Use the brake energy chart to approximate energy absorbed by a brake unit (Figure 202 or Figure 203).

(a) This chart will give only the approximate energy absorbed during the stop.

1) The factors that follow will also affect the energy absorbed:

a) The residual energy from the previous stop

b) The runway slope

c) The wind conditions

d) The thrust reverser use.

(b) Listed below are example values to show you how to use the Brake Energy Chart to obtain result values (Figure 201):

NOTE: The brake temperature monitoring system (BTMS) indications are also shown in the bottom of the figure. If brake cooling is determined from the BTMS, use the hottest brake indication 10 to 15 minutes after the airplane has come to a complete stop, or in-flight with gear retracted to determine recommended cooling schedule.

NOTE: The data values given below are for example only and must not be used to determine a specific airplane absorbed energy by a brake unit. The airplane operators must use actual values generated by the specific airplane high energy stop/heat event.

1) Example input values:

a) Gross Weight - 135,000 lb (61,235 kg)

b) Brakes on Speed - 120 knots (222 km/h) (no wind)

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c) Pressure Altitude - 5000 ft (2 km)

d) Outside Air Temperature - 80°F (27°C)

e) Landing stop using maximum manual braking

f) No Thrust Reversers.

2) Example result values:

a) Resultant Brake Energy - 26,000,000 ft-lb (35,251,268 N·m)

b) Resultant is in the COOLING RECOMMENDED range.

(7) A high energy condition can be a refused takeoff.

(a) It can also be any stop or sequence of stops that collect energy in the CAUTION or FUSE PLUG MELT range (Figure 202 or Figure 203).

(8) An indication that a high energy stop, or equivalent, has occurred is the release of a wheel fuse plug.

NOTE: If fuse plug releases do occur, the condition is a high energy stop within the fuse plug melt range.

(a) Energy levels are different between brakes after stops in the COOLING RECOMMENDED range.

(b) One or more brakes could have absorbed energy in the CAUTION range, and one or more wheel fuse plugs released.

(9) All tires that have been subjected to unusual service events, such as high energy rejected takeoffs, high energy stops, or high energy overspeed landings where thermal fuse plugs have melted, should be removed and discarded. All tires on the airplane that remain inflated should be removed and sent to a wheel repair facility for an inspection.

B. References

Reference	Title
05-51-95-100-801	Cleaning After Dry Chemical Fire Extinguisher Used (P/B 201)
10-11-05 P/B 201	CHOCK INSTALLATION
32-41-41-000-801	Main Landing Gear Brake Removal (P/B 401)
32-41-41-700-802	Main Landing Gear Brake Fast Check (Wheel Installed on the Airplane) (P/B 601)
32-41-41-700-803	Main Landing Gear Brake Check (Wheel Removed from the Airplane) (P/B 601)
32-42-11-000-801	Transducer Removal (P/B 401)
32-45-00-700-801	Wheels Fast Check (Wheel Installed on the Airplane) (P/B 601)
32-45-00-700-803	Tires - Inspection (P/B 601)
32-45-11-000-801	Main Landing Gear Wheel and Tire Assembly Removal (P/B 401)

C. Location Zones

Zone	Area
713	Nose Landing Gear
734	Left Main Landing Gear
744	Right Main Landing Gear

D. High Energy Stop Conditional Inspection - In CAUTION range

SUBTASK 05-51-07-210-001

(1) Do the steps that follow for the In Caution range inspection (Figure 204):

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(a) Move the airplane away from the runway.

1) Do not use the brakes very much when you move the airplane.

2) Do not set the parking brake.

> **WARNING** DO NOT GO NEAR THE MAIN LANDING GEAR FOR 1 HOUR AFTER THE AIRPLANE MAKES A HIGH-ENERGY STOP. INJURIES TO PERSONNEL CAN OCCUR.

(b) Let the brakes, tires, and wheels cool so you can touch them.

(c) Examine the tires, do this task: Tires - Inspection, TASK 32-45-00-700-803.

NOTE: Low tire pressure compared to the other tires can show a melted fuse plug.

1) If a fuse plug has melted, do the FUSE PLUG MELT Range inspection.

(d) Examine the wheels, do this task: Wheels Fast Check (Wheel Installed on the Airplane), TASK 32-45-00-700-801.

(e) Examine the brakes, do this task: Main Landing Gear Brake Fast Check (Wheel Installed on the Airplane), TASK 32-41-41-700-802.

(f) If the high energy condition was a refused takeoff do the step that follows:

1) Examine the thrust reverser blocker door cover assembly for cracking.

E. High Energy Stop Conditional Inspection - In FUSE PLUG MELT range or Brake Fire

SUBTASK 05-51-07-210-002

(1) Do the steps that follow for the In FUSE PLUG MELT range inspection (Figure 204):

(a) Move the airplane away from the runway immediately because the tires will possibly deflate.

(b) Do not set the parking brake.

(c) Do not let the airplane move, do one of these steps:

1) Keep the tow tug connected to the airplane.

2) Put the chocks on the nose landing gear tires (CHOCK INSTALLATION, PAGEBLOCK 10-11-05/201).

> **WARNING** DO NOT GO NEAR THE MAIN LANDING GEAR FOR 1 HOUR AFTER THE AIRPLANE MAKES A HIGH-ENERGY STOP. INJURIES TO PERSONNEL CAN OCCUR.

> **WARNING** DO NOT SPRAY EXTINGUISHER OR COOLANT DIRECTLY ON THE INFLATED TIRE OR WHEEL. AN EXPLOSION CAN OCCUR. IT CAN CAUSE INJURY TO PERSONS AND DAMAGE TO EQUIPMENT.

(d) Decrease the temperature of the wheel or tire, do one of these steps:

NOTE: A different source of cooling can be an air conditioning cart or truck.

1) After 1 hour, use water mist or fog on the wheel or tire to decrease the temperature.

2) Wait 2 to 3 hours for the brakes, wheels and tires to cool until they can be touched.

3) If a chemical agent is used to extinguish a brake-area fire, do these steps:

a) Wait until brakes and adjacent components are cool.

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b) Fully clean the extinguishing agent from the brakes and adjacent components.

c) Use a large quantity of low pressure and clean water to clean the brakes (TASK 05-51-95-100-801).

(e) Examine the tires on the axles where all tires are inflated, do this task: Tires - Inspection, TASK 32-45-00-700-803.

(f) Examine the wheels on the axles where all tires are inflated, do this task: Wheels Fast Check (Wheel Installed on the Airplane), TASK 32-45-00-700-801.

(g) Examine the brakes on the axles where all tires are inflated, do this task: Main Landing Gear Brake Fast Check (Wheel Installed on the Airplane), TASK 32-41-41-700-802.

(h) Remove all main gear tires and wheels on the axles where at least one tire was deflated, do this task: Main Landing Gear Wheel and Tire Assembly Removal, TASK 32-45-11-000-801.

NOTE: Do this step after the landing gear is cool and safe to go near.

1) Tires from the wheels with melted fuse plugs must be discarded.

2) Tires from the wheels with good fuse plugs must be discarded or sent to a wheel repair facility for an inspection.

(i) On the axles where at least one tire was deflated, look for seized or damaged brakes, do this task: Main Landing Gear Brake Check (Wheel Removed from the Airplane), TASK 32-41-41-700-803.

(j) Remove the antiskid wheel speed transducer on the axles where at least one tire was deflated, do this task: Transducer Removal, TASK 32-42-11-000-801.

(k) Remove the brakes on the axles where the tires are deflated and you found damaged brakes, do this task: Main Landing Gear Brake Removal, TASK 32-41-41-000-801.

1) If a dry chemical fire extinguisher was used to extinguish a landing gear brake fire, visually check for chemical residue.

LOM 411, 416, 422, 425, 426, 429-431, 433, 434, 440, 442-447, 450-457, 461-463, 465-999; LOM 402, 404, 406, 407, 420, 437, 438, 458-460 POST SB 737-32-1441 OR POST SB 737-32-1429; LOM 427, 428 PRE SB 737-32-1494

a) All carbon brake assemblies that have visible dry chemical fire extinguisher residue need to be removed from the airplane, and dispositioned per the applicable instructions in the carbon brake supplier's Component Maintenance Manual (CMM).

LOM ALL

(l) Examine the main landing gear axle.

NOTE: If you find heat damage in the steps that follow, (Heat Damage Inspection (Ammonium Persulfate Solution), TASK 05-51-07-280-801).

1) Examine the Ti-Cad (titanium-cadmium) plating for heat damage.

NOTE: Heat damage can cause cadmium embrittlement of the steel substrate and is not always found by non-destructive inspection procedures.

NOTE: If you find an inorganic protective coating, the Ti-Cad plating could have been removed and the coating could have been applied during a previous inspection/repair.

a) Look for a white oxide material and blistered or melted plating.

b) If the plating shows signs of heat damage, remove the components.

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2) Examine the hydraulic fluid-resistant paint on the axles and the lower end of the shock strut inner cylinder.

a) Look for a brown shade color that was caused by an overheat condition.

3) If the above two steps show that the coating has blistered and the parts have been overheated, remove the parts for a hardness test.

NOTE: Send the parts to the shop for approved repairs.

4) If the inspection in the first step 1) above shows that the coating has melted, inspect for evidence of embrittlement or cracking.

a) Use the fluorescent magnetic particle inspection techniques.

NOTE: Additional hand polishing and visual inspection techniques can be used if it is necessary.

WARNING	MAKE SURE THAT THE POWER CABLE OF THE BORESCOPE IS IN GOOD CONDITION. IF THERE ARE CIRCUMFERENTIAL CUTS, FRAYED AREAS, OR RUPTURES TO THE EXTERNAL RUBBER COVER OF THE CABLE, INJURY TO PERSONS AND DAMAGE TO EQUIPMENT CAN OCCUR.

(m) Examine the paint (green primer or light gray enamel) on the inner surfaces (bore) of the axle with a borescope.

NOTE: Use the borescope manufacturer instructions and look to a minimum depth of 16 in. (41 cm).

1) Look for discoloration or blistering.

a) Green paint will change to a light brown or black color.

b) Light gray paint will change to a yellow color.

2) If the plating shows signs of heat damage, do this task: Heat Damage Inspection (Ammonium Persulfate Solution), TASK 05-51-07-280-801.

3) If the paint shows only a minimum discoloration, you can wait for the Heat Damage Inspection (Ammonium Persulfate Solution).

a) When the airplane gets back to the primary base, do this task: Heat Damage Inspection (Ammonium Persulfate Solution), TASK 05-51-07-280-801.

NOTE: Do not land the airplane more than three times before you do this inspection.

(n) If the high energy condition was a refused takeoff do the step that follows:

1) Examine the thrust reverser blocker door cover assembly for cracking.

F. Put the Airplane Back to its Usual Condition.

SUBTASK 05-51-07-420-001

(1) Install the components you removed if they are serviceable, or install replacement parts.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Brake Cooling Schedule Example
Figure 201/05-51-07-990-806

ECCN 9E991 BOEING PROPRIETARY - See title page for details

GUIDANCE INFORMATION ONLY

OBSERVE MAXIMUM QUICK TURNAROUND LIMITATION.

TO CORRECT FOR WIND, ENTER CHART WITH BRAKES ON SPEED MINUS ONE HALF THE HEADWIND OR PLUS 1.5 TIMES THE TAILWIND.

CHART SHOWS ENERGY PER BRAKE ADDED BY A SINGLE STOP WITH ALL BRAKES OPERATING. ENERGY IS ASSUMED TO BE EQUALLY DISTRIBUTED AMONG THE OPERATING BRAKES. TOTAL ENERGY IS THE SUM OF THE RESIDUAL ENERGY PLUS THE ENERGY ADDED.

ADD 1.0 MILLION FOOT POUNDS PER BRAKE FOR EACH TAXI MILE.

IF GROUND SPEED IS USED FOR BRAKES ON SPEED. IGNORE WIND, ALTITUDE, AND TEMPERATURE EFFECTS.

RTO AND LANDING BRAKE ENERGY BASED ON MAXIMUM MANUAL BRAKING.

SOLID LINES ARE BASED ON NO REVERSE.

DASHED LINES ARE BASED ON 2 ENGINE DETENT REVERSE.

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Brake Energy
Figure 202/05-51-07-990-807

ECCN 9E991 BOEING PROPRIETARY - See title page for details

OBSERVE MAXIMUM QUICK TURNAROUND LIMITATION

① WHEEL FUSE PLUGS MAY MELT. DELAY TAKE OFF AND INSPECT AFTER ONE HOUR. IF OVERHEAT OCCURS AFTER TAKEOFF, EXTEND GEARS SOON FOR AT LEAST 7 MINUTES.

② CLEAR RUNWAY IMMEDIATELY, UNLESS REQUIRED, DO NOT SET PARKING BRAKE. DO NOT APPROACH GEAR OR ATTEMPT TAXI FOR ONE HOUR. TIRE WHEEL AND BRAKE REPLACEMENT MAY BE REQUIRED. IF OVERHEAT OCCURS AFTER TAKEOFF, EXTEND GEAR SOON FOR AT LEAST 12 MINUTES.

BRAKE TEMPERATURE MONITORING SYSTEM INDICATION MAY BE USED 10 TO 15 MINUTES AFTER AIRPLANE HAS COME TO A COMPLETE STOP OF INFLIGHT WITH GEAR RETRACTED TO DETERMINE RECOMMENDED COOLING SCHEDULE.

M26086 S0006557861_V4

Brake Cooling Schedule
Figure 203/05-51-07-990-808 (Sheet 1 of 2)

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BRAKE TEMPERATURE MONITOR INDICATION ON CDS SYSTEMS PAGE

OBSERVE MAXIMUM QUICK TURNAROUND LIMITATION

① WHEEL FUSE PLUGS MAY MELT. DELAY TAKEOFF AND INSPECT AFTER ONE HOUR. IF OVERHEAT OCCURS AFTER TAKEOFF, EXTEND GEAR SOON FOR AT LEAST 7 MINUTES.

② CLEAR RUNWAY IMMEDIATELY, UNLESS REQUIRED, DO NOT SET PARKING BRAKE. DO NOT APPROACH GEAR OR ATTEMPT TAXI FOR ONE HOUR. TIRE WHEEL AND BRAKE REPLACEMENT MAY BE REQUIRED. IF OVERHEAT OCCURS AFTER TAKEOFF, EXTEND GEAR SOON FOR AT LEAST 12 MINUTES.

BRAKE TEMPERATURE MONITORING SYSTEM INDICATION MAY BE USED 10 TO 15 MINUTES AFTER AIRPLANE HAS COME TO A COMPLETE STOP OR IN FLIGHT WITH GEAR RETRACTED TO DETERMINE RECOMMENDED COOLING SCHEDULE.

M25887 S0006557862_V4

Brake Cooling Schedule
Figure 203/05-51-07-990-808 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TIRE HAZARD AREA

RIM HAZARD AREA

NOTE:

DO NOT APPROACH MLG FOR INSPECTION OR INSTALLATION OF GEAR PINS UNTIL CLEARED

1557963 S0000286255_V2

Hot Brake and Tire Danger Areas
Figure 204/05-51-07-990-809

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-51-07-280-801

3. Heat Damage Inspection (Ammonium Persulfate Solution)

A. General

(1) This inspection is used to find if the high strength steel that showed visible signs of heat damage, had changed.

(a) It will look for a change in the temper or heat treat properties.

NOTE: Refer to product Material Safety Data Sheets (MSDS) and local requirements for proper handling procedures.

(2) This inspection will usually occur on the components of the landing gear axles.

(a) The signs of discolored or blistered paint or plating shows that a general intense heat has changed the temper of the axle.

1) When this happens, the ammonium persulfate procedure should be applied to the damaged part of the axle.

B. References

Reference	Title
32-11-85-000-801	Main Landing Gear Axle Removal (P/B 401)
32-11-85-420-801	Main Landing Gear Axle Installation (P/B 401)
32-41-41-400-801	Main Landing Gear Brake Installation (P/B 401)
32-42-21-400-801	Antiskid/Autobrake Control Unit Installation (P/B 401)
32-45-11-400-801	Main Landing Gear Wheel and Tire Assembly Installation (P/B 401)
51-21-21-370-801	Prepare the Surface to be Painted (P/B 701)
SOPM 20-42-10	Standard Overhaul Practices Manual

C. Consumable Materials

Reference	Description	Specification
B00081	Solvent - Trichloroethylene	ASTM D4080
B00102	Abrasive - Aluminum Oxide Coated Cloth	
G00034	Cotton Wiper - Process Cleaning Absorbent Wiper (Cheesecloth, Gauze)	AMS3819 Class 1 Grade A or B Form 1 (Supersede BMS15-5 CL A)
G02412	Compound - Ammonium Persulfate	

D. Location Zones

Zone	Area
713	Nose Landing Gear
734	Left Main Landing Gear
744	Right Main Landing Gear

E. Ammonium Persulfate Solution Procedure

SUBTASK 05-51-07-120-001

(1) Do the steps that follow to apply the solution, ammonium persulfate compound, G02412.

NOTE: 100 grams of ammonium persulfate per 0.27 gal (1.02 l) of tap water will make the necessary solution.

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WARNING DO NOT BREATHE THE VAPORS OF THE CAUSTIC STRIPPER. DO NOT GET IT IN YOUR EYES, ON YOUR SKIN, OR ON YOUR CLOTHES. INJURY TO PERSONS CAN OCCUR.

(a) Remove the paint from the heat damage areas.

(b) Strip the cadmium surface with sandpaper, abrasive cloth, B00102 applied by hand.

1) Strip a minimum area of 0.5 in. (12.7 mm) larger than the area that is to be tested.

WARNING DO NOT BREATHE THE FUMES OF THE SOLVENTS OR ETCH SOLUTIONS. DO NOT GET THEM IN YOUR EYES, ON YOUR SKIN OR ON YOUR CLOTHES. IF YOU DO NOT OBEY, INJURY TO PERSONS CAN OCCUR.

(c) Clean the area to be etched, with an applicable solvent like solvent, B00081.

(d) Remove the cadmium plating.

(e) Apply the ammonium persulfate solution, with a cheesecloth, cotton wiper, G00034, on the surface to be tested for 30 to 60 seconds.

WARNING MAKE SURE THAT THE ETCHANT SOLUTION DOES NOT TOUCH THE CADMIUM PLATED SURFACES. POISONOUS FUMES CAN OCCUR. IT CAN CAUSE INJURY TO PERSONNEL.

(f) Rinse the surface with hot or cold water immediately.

NOTE: Alcohol can also be used.

(g) Dry the surface with clean, dry compressed air, immediately.

F. Examine the Etched Area.

SUBTASK 05-51-07-210-003

(1) Do the steps that follow to examine the etched areas:

(a) Examine the parts with a bright light and without magnification.

1) Look for signs of heat damage.

(b) If all of the etched area is the same shade of gray, there was no change to the temper of the steel.

(c) If the area has been too hot it will be a lighter or darker color than the normal color.

NOTE: Darker color shows over-tempered martensite.

NOTE: Darker color in a lighter circle shows untempered martensite surrounded by overtempered material.

(d) If the etched area is mottled (has spots or streaks of a different color), the condition of the heat treat will be unknown.

NOTE: If this condition occurs, replace the axle.

1) Replace the axle if it is necessary, do this task: Main Landing Gear Axle Removal, TASK 32-11-85-000-801.

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G. Put the airplane back to its usual condition.

SUBTASK 05-51-07-120-002

(1) Remove the etch with applicable abrasive paper, abrasive cloth, B00102.

NOTE: Do this step if the part is serviceable.

NOTE: If it is not serviceable, install replacement parts.

(2) Stylus the cadmium plate areas where the plating was removed (SOPM 20-42-10).

SUBTASK 05-51-07-370-001

(3) Refinish the surface with the correct primer and paint, do this task: Prepare the Surface to be Painted, TASK 51-21-21-370-801.

SUBTASK 05-51-07-400-001

(4) Install the axle if it is applicable, do this task: Main Landing Gear Axle Installation, TASK 32-11-85-420-801.

SUBTASK 05-51-07-400-002

(5) Do this task: Main Landing Gear Brake Installation, TASK 32-41-41-400-801.

SUBTASK 05-51-07-400-003

(6) Do this task: Antiskid/Autobrake Control Unit Installation, TASK 32-42-21-400-801.

SUBTASK 05-51-07-400-004

(7) Do this task: Main Landing Gear Wheel and Tire Assembly Installation, TASK 32-45-11-400-801.

END OF TASK

TASK 05-51-07-000-801

4. Tire Removal After Overspeed Landing

A. General

(1) If the tires have been subjected to an overspeed landing above the rated tire speed, all tires on the airplane should be removed and discarded.

B. References

Reference	Title
32-45-11-000-801	Main Landing Gear Wheel and Tire Assembly Removal (P/B 401)
32-45-21-000-801	Nose Landing Gear Wheel and Tire Assembly - Removal (P/B 401)

C. Remove The Tires

SUBTASK 05-51-07-020-001

(1) If the tires have been subjected to an overspeed landing above the rated tire speed, do these steps:

(a) Do this task: Main Landing Gear Wheel and Tire Assembly Removal, TASK 32-45-11-000-801.

(b) Do this task: Nose Landing Gear Wheel and Tire Assembly - Removal, TASK 32-45-21-000-801.

(c) Discard all tires after removing them from the airplane.

END OF TASK

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FLAP/SLAT DOWN OVERSPEED OR ABOVE 20,000 FEET CONDITION - MAINTENANCE PRACTICES

1. General

A. General (Figure 201)

(1) If the trailing edge flaps, leading edge Krueger flaps, or leading edge slats (high lift devices) are extended at speeds more than permitted, or extended at altitudes above 20,000 ft (6.10 km), then inspect the affected components and structure with the criteria in this procedure.

(2) The conditional inspections are divided into two phases.

(a) Phase I Inspection (TASK 05-51-08-210-801).

(b) Phase II Inspection (TASK 05-51-08-210-802).

(3) If Flight Data Recorder (FDR) data (or equivalent) is used to assess overspeed events, use the following guidelines. If data is not available, then use flight crew notes to complete the assessment.

(a) If the flaps are stable in a flap setting at the time of the suspected overspeed (not in transition), then it is acceptable to assess the overspeed using the detent position.

NOTE: Due to flap position indication system tolerances, the actual flap position as reported by the airplane data systems may be slightly higher or lower than the detent position.

(b) If flaps are in transition (moving between two flap settings) when the overspeed is suspected, use the following guidelines:

1) Use the actual flap position as reported by the airplane data systems to assess the overspeed.

2) Use the more restrictive (lower) speed from the next higher flap setting to determine inspection requirements.

(c) Load relief from the flap load relief system does not eliminate the need to do the inspections.

(4) If the trailing edge flaps, leading edge Krueger flaps, or leading edge slats are extended at altitudes above 20,000 ft (6.10 km), use the following criteria:

(a) If speeds are within the permitted speeds, then do the Phase I Inspection on all high lift devices within 100 flight hours of the overspeed event or within 5 flight cycles of the discovery of the overspeed event, whichever occurs later.

(b) If speeds are more than permitted, then contact Boeing for inspection requirements.

(c) Continue to the inspection requirements in Section D. Inspections.

(5) If the trailing edge flaps, leading edge Krueger flaps, or leading edge slats are extended at altitudes below 20,000 ft (6.10 km) at speeds more than permitted, refer to Section B. Trailing Edge and Section C. Leading Edge to determine inspection requirements.

NOTE: The inspection thresholds for the trailing edge flaps and leading edge devices are not the same and should be assessed independently.

B. Trailing Edge (Figure 202)

(1) This procedure determines the trailing edge inspection requirements when the trailing edge flaps are extended at speeds more than permitted at altitudes less than 20,000 ft (6.10 km). This procedure is summarized in Table 203.

(2) If the trailing edge flaps are extended at speeds above the Phase II limits in Table 201, do the Phase I and Phase II Inspections on the trailing edge before the next flight.

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(a) Continue to the inspection requirements in Section D. Inspections.

(3) When vertical acceleration (Nz) is within 0.7 to 1.3 G, the following applies:

(a) If speed during the overspeed event is less than or equal to 5 knots above the Phase I limits in Table 201, do the Phase I Inspection on the trailing edge within 100 flight hours of the overspeed event or within 25 flight cycles of the discovery of the overspeed event, whichever occurs later.

(b) If speed during the overspeed event is greater than 5 knots above the Phase I limits and below the Phase II limits in Table 201, do the Phase I Inspection on the trailing edge within 100 flight hours of the overspeed event or within 5 flight cycles of the discovery of the overspeed event, whichever occurs later.

(c) Continue to the inspection requirements in Section D. Inspections.

(4) When vertical acceleration (Nz) is unknown, or outside 0.7 to 1.3 G but within 0.5 to 1.6 G, the following applies:

(a) If speed during the overspeed is above the Data Review Deferral limits in Table 202, contact Boeing for inspection requirements or do the Phase I and Phase II Inspections on the trailing edge before the next flight.

NOTE: When contacting Boeing for inspection requirements, having FDR data or equivalent can decrease response time. If the vertical acceleration during the overspeed is found to be within 0.7 to 1.3 G, refer to applicable inspection requirements.

(b) If speed during the overspeed event is above the Phase I limits and below the Data Review Deferral limits in Table 202, do the Phase I Inspection on the trailing edge within 100 flight hours of the overspeed event or within 5 flight cycles of the discovery of the overspeed event, whichever occurs later.

(c) If vertical acceleration is unknown, then review the FDR data or equivalent within 5 flight cycles of the overspeed event to determine vertical acceleration during the overspeed.

1) If the vertical acceleration during the overspeed was outside 0.5 to 1.6 G, contact Boeing for inspection requirements.

2) If the vertical acceleration during the overspeed was within 0.5 to 1.6 G, no further action is necessary.

3) If the vertical acceleration data cannot be obtained, it is acceptable to also do the Phase II inspection.

(d) Continue to the inspection requirements in Section D. Inspections.

(5) If vertical acceleration is known and outside 0.5 to 1.6 G, contact Boeing for inspection requirements on the trailing edge before the next flight.

NOTE: Phase I and Phase II Inspections can be done in lieu of contacting Boeing. Continue to the inspection requirements in Section D. Inspections.

Table 201

Trailing Edge Flap Inspection Speed Limits for Vertical Acceleration within 0.7 to 1.3 G						
Trailing Edge Flap Position	737–600/-700		737–700IGW/-800*[1]/900		737–900ER	
	Phase I Inspection Limit (KIAS)	Phase II Inspection Limit (KIAS)	Phase I Inspection Limit (KIAS)	Phase II Inspection Limit (KIAS)	Phase I Inspection Limit (KIAS)	Phase II Inspection Limit (KIAS)
1	250 *[2]	265 *[3]	250 *[2]	265 *[3]	250 *[2]	265 *[3]

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Table 201 (Continued)

Trailing Edge Flap Inspection Speed Limits for Vertical Acceleration within 0.7 to 1.3 G						
2	250 *[2]	265 *[3]	250 *[2]	265 *[3]	250 *[2]	265 *[3]
5	250 *[2]	265 *[3]	250 *[2]	265 *[3]	250 *[2]	265 *[3]
10	210	225	210	231	205	229
15	195	217	200	229	200	227
25	180	214	190	227	195	211
30	165	190	175	190	180	196
40	156	177	162	177	170	186

*[1] These speeds are also applicable for 737-800 airplanes with the Short Field Performance (SFP) option.
*[2] 230 KIAS when Trailing Edge flaps are extended using the alternate (standby) system.
*[3] 245 KIAS when Trailing Edge flaps are extended using the alternate (standby) system.

Table 202

Trailing Edge Flap Inspection Speed Limits for Vertical Acceleration unknown or within 0.5 to 1.6 G						
Trailing Edge Flap Position	737–600/-700		737–700IGW/-800*[1]/900		737–900ER	
	Phase I Inspection Limit (KIAS)	Data Review Deferral Limit (KIAS)	Phase I Inspection Limit (KIAS)	Data Review Deferral Limit (KIAS)	Phase I Inspection Limit (KIAS)	Data Review Deferral Limit (KIAS)
1	250 *[2]	255 *[3]	250 *[2]	255*[3]	250 *[2]	255*[3]
2	250 *[2]	255 *[3]	250 *[2]	255*[3]	250*[2]	255*[3]
5	250 *[2]	255*[3]	250 *[2]	255*[3]	250 *[2]	255*[3]
10	210	215	210	221	205	219
15	195	207	200	219	200	217
25	180	204	190	217	195	201
30	165	180	175	180	180	186
40	156	167	162	167	170	176

*[1] These speeds are also applicable for 737-800 airplanes with the Short Field Performance (SFP) option.
*[2] 230 KIAS when Trailing Edge flaps are extended using the alternate (standby) system.
*[3] 235 KIAS when Trailing Edge flaps are extended using the alternate (standby) system.

Table 203

Trailing Edge Flight Hour/Cycle Limits for Inspections	
Condition	Task
The overspeed is greater than the Phase II speed limit in Table 201.	Do the Phase I and Phase II Inspections on the trailing edge before the next flight.
Vertical acceleration is within 0.7 to 1.3 G and the overspeed is less than or equal to 5 knots above the Phase I limits in Table 201.	Do the Phase I Inspection on the trailing edge within 100 flight hours of the overspeed event or within 25 flight cycles of the discovery of the overspeed event, whichever occurs later.

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Table 203 (Continued)

Vertical acceleration is within 0.7 to 1.3 G and the overspeed is greater than 5 knots above the Phase I limits and below the Phase II limits in Table 201.	Do the Phase I Inspection on the trailing edge within 100 flight hours of the overspeed event or within 5 flight cycles of the discovery of the overspeed event, whichever occurs later.
Vertical acceleration is unknown, or outside 0.7 to 1.3 G but within 0.5 to 1.6 G, and the overspeed is above the Phase I limits and below the Data Review Deferral limits in Table 202.	Do the Phase I Inspection on the trailing edge within 100 flight hours of the overspeed event or within 5 flight cycles of the discovery of the overspeed event, whichever occurs later. If vertical acceleration is unknown, then review FDR data or equivalent within 5 flight cycles of the overspeed event to determine vertical acceleration during the overspeed. • If the vertical acceleration during the overspeed was outside 0.5 to 1.6 G, contact Boeing for inspection requirements. • If the vertical acceleration data cannot be obtained, it is acceptable to do the Phase I and Phase II Inspections on the trailing edge.
Vertical acceleration is unknown, or outside 0.7 to 1.3 G but within 0.5 to 1.6 G, and the overspeed is above the Data Review Deferral limits in Table 202.	Contact Boeing for inspection requirements or do the Phase I and Phase II Inspections on the trailing edge before the next flight.
Vertical acceleration is known and outside 0.5 to 1.6 G.	Contact Boeing for inspection requirements or do the Phase I and Phase II Inspections on the trailing edge before the next flight.

C. Leading Edge (Figure 203)

(1) This procedure determines the leading edge inspection requirements when the leading edge Krueger flaps or leading edge slats are extended at speeds more than permitted at altitudes less than 20,000 ft (6.10 km). This procedure is summarized in Table 206.

(2) If the leading edge Krueger flaps or leading edge slats are extended at speeds above the Phase II limits in Table 204, do the Phase I and Phase II Inspections on the leading edge before the next flight

(a) Continue to the inspection requirements in Section D. Inspections.

(3) When vertical acceleration (Nz) is within 0.7 to 1.3 G, the following applies:

(a) If speed during the overspeed event is less than or equal to 5 knots above the Phase I limits in Table 204, do the Phase I Inspection on the leading edge within 100 flight hours of the overspeed event or within 25 flight cycles of the discovery of the overspeed event, whichever occurs later.

(b) If speed during the overspeed event is greater than 5 knots above the Phase I limits and below the Phase II limits in Table 204, do the Phase I Inspection on the leading edge within 100 flight hours of the overspeed event or within 5 flight cycles of the discovery of the overspeed event, whichever occurs later.

(c) Continue to the inspection requirements in Section D. Inspections.

(4) When vertical acceleration (Nz) is unknown, or outside 0.7 to 1.3 G but within 0.5 to 1.6 G, the following applies:

(a) If speed during the overspeed event is greater than the Data Review Deferral limits in Table 205, contact Boeing for inspection requirements or do the Phase I and Phase II Inspections on the leading edge before the next flight.

NOTE: When contacting Boeing for inspection requirements, having FDR data or equivalent can decrease response time. If the vertical acceleration during the overspeed is found to be within 0.7 to 1.3 G, refer to applicable inspection requirements.

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(b) If speed during the overspeed event is above the Phase I limits and below the Data Review Deferral limits in Table 205, do the Phase I Inspection on the leading edge within 100 flight hours of the overspeed event or within 5 flight cycles of the discovery of the overspeed event, whichever occurs later.

(c) If vertical acceleration is unknown, then review FDR data or equivalent within 5 flight cycles of the overspeed event to determine vertical acceleration during the overspeed.

1) If the vertical acceleration during the overspeed was outside 0.5 to 1.6 G, contact Boeing for inspection requirements.

2) If the vertical acceleration during the overspeed was within 0.5 to 1.6 G, no further action is necessary.

3) If the vertical acceleration data cannot be obtained, it is acceptable to also do the Phase II inspection.

(d) Continue to the inspection requirements in Section D. Inspections.

(5) If vertical acceleration is known and outside 0.5 to 1.6 G, contact Boeing for inspection requirements on the leading edge before the next flight.

NOTE: Phase I and Phase II Inspections can be done in lieu of contacting Boeing. Continue to the inspection requirements in Section D. Inspections.

Table 204

Leading Edge Krueger Flap and Slat Inspection Speed Limits for Vertical Acceleration within 0.7 to 1.3 G		
Trailing Edge Flap Position	Phase I Inspection Limit (KIAS)	Phase II Inspection Limit (KIAS)
1	250 *[1]	265 *[2]
2	250 *[1]	265 *[2]
5	250 *[1]	265 *[2]
10	230	245
15	230	245
25	230	245
30	230	245
40	230	245

*[1] 230 KIAS when Trailing Edge flaps are extended using the alternate (standby) system.

*[2] 245 KIAS when Trailing Edge flaps are extended using the alternate (standby) system.

Table 205

Leading Edge Krueger Flap and Slat Inspection Speed Limits for Vertical Acceleration unknown or within 0.5 to 1.6 G		
Trailing Edge Flap Position	Phase I Inspection Limit (KIAS)	Data Review Deferral Limit (KIAS)
1	250 *[1]	253 *[2]
2	250 *[1]	253 *[2]
5	250 *[1]	253 *[2]
10	230	235
15	230	235
25	230	235

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Table 205 (Continued)

Leading Edge Krueger Flap and Slat Inspection Speed Limits for Vertical Acceleration unknown or within 0.5 to 1.6 G		
30	230	235
40	230	235

*[1] 230 KIAS when Trailing Edge flaps are extended using the alternate (standby) system.

*[2] 233 KIAS when Trailing Edge flaps are extended using the alternate (standby) system.

Table 206

Leading Edge Flight Hour/Cycle Limits for Inspections	
Condition	Task
The overspeed is greater than the Phase II speed limit in Table 204.	Do the Phase I and Phase II Inspections on the leading edge before the next flight.
Vertical acceleration is within 0.7 to 1.3 G and the overspeed is less than or equal to 5 knots above the Phase I limits in Table 204.	Do the Phase I Inspection on the leading edge within 100 flight hours of the overspeed event or within 25 flight cycles of the discovery of the overspeed event, whichever occurs later.
Vertical acceleration is within 0.7 to 1.3 G and the overspeed is greater than 5 knots above the Phase I limits and below the Phase II limits in Table 204.	Do the Phase I Inspection on the leading edge within 100 flight hours of the overspeed event or within 5 flight cycles of the discovery of the overspeed event, whichever occurs later.
Vertical acceleration is unknown, or outside 0.7 to 1.3 G but within 0.5 to 1.6 G, and the overspeed is above the Phase I limits and below the Data Review Deferral limits in Table 205.	Do the Phase I Inspection on the leading edge within 100 flight hours of the overspeed event or within 5 flight cycles of the discovery of the overspeed event, whichever occurs later. If vertical acceleration is unknown, then review FDR data or equivalent within 5 flight cycles of the overspeed event to determine vertical acceleration during the overspeed. • If the vertical acceleration during the overspeed was outside 0.5 to 1.6 G, contact Boeing for inspection requirements. • If the vertical acceleration data cannot be obtained, it is acceptable to do the Phase I and Phase II Inspections on the leading edge.
Vertical acceleration is unknown, or outside 0.7 to 1.3 G but within 0.5 to 1.6 G, and the overspeed is above the Data Review Deferral limits in Table 205.	Contact Boeing for inspection requirements or do the Phase I and Phase II Inspections on the leading edge before the next flight.
Vertical acceleration is known and outside 0.5 to 1.6 G.	Contact Boeing for inspection requirements or do the Phase I and Phase II Inspections on the leading edge before the next flight.

D. Inspections

(1) If a Phase II inspection is necessary and there are zero findings in the Phase I Inspection, this does not remove the requirement to do the Phase II Inspection.

(2) If overload damage is found during a Phase I Inspection, then do the Phase II Inspection before the next flight.

NOTE: It is only necessary to do the Phase II Inspection if you find the types of damage associated with an overload event as specified in the subsequent step.

(a) If the overload damage found during the Phase I Inspection is only common to the trailing edge flaps, then do the Phase II Inspection for the trailing edge structure only.

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(b) If the overload damage found during the Phase I Inspection is only common to the leading edge Krueger flaps or leading edge slats, then do the Phase II Inspection for the leading edge structure only.

(c) If overload damage is found during the Phase I Inspection on one wing, then do the Phase II Inspections on both wings.

(3) When the conditional inspection tells you to examine a component, use the following guidance.

NOTE: All damage must be evaluated to determine what repairs or component replacements are necessary.

NOTE: If any damage found during a Phase I Inspection is related to an overload event, then a Phase II Inspection is necessary. Otherwise a Phase II Inspection is not necessary.

(a) Types of damage related to an overload event may include, but are not limited to, the following items:

1) Cracks.

2) Pulled apart structure.

3) Loose paint or paint flakes.

NOTE: If loose paint or paint flakes are found, the fastener holes should be inspected closely for damage related to an overload event. Loose paint or paint flakes with no other indication of an overload event do not require a Phase II Inspection to be performed.

4) Twisted or Bent parts.

5) Wrinkles or buckles in the structure.

6) Fastener holes that became larger or longer.

7) Fasteners that have pulled through the skin.

8) Fasteners that are loose or missing near critical joints.

NOTE: Critical trailing edge flap joints include the skin connections to carriages, carriage support ribs, and torque tube support ribs.

NOTE: Critical leading edge Krueger flap joints include the connections at the bullnoses and hinges.

NOTE: Critical leading edge slat joints include the skin connections to the actuator ribs, main track ribs, and auxiliary arm ribs.

NOTE: Corrosion around the fastener hole indicates the fastener has been loose or missing for an extended time and does not require a Phase II Inspection to be performed.

NOTE: Fasteners that are loose or missing away from critical joints do not require a Phase II Inspection to be performed.

9) Delaminations to solid laminate and sandwich structure that is not obviously caused by Foreign Object Debris (FOD), environmental conditions, etc.

10) Fiber breakouts.

11) Misalignment that is not due to rigging.

12) Interference or evidence of interference that has not been previously discovered.

13) Other signs of damage caused by overloading the structure.

(b) Types of damage not related to an overload event may include, but are not limited to, the following.

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1) Corrosion.
2) Wear (tracks, wedges, seals, paint, etc.).
3) Loose paint or paint flakes with no other signs of an overload event.
4) Fasteners that are loose and have corrosion around the fastener hole.
5) Disbonds to metal-bond structure.
6) Other signs of damage caused by normal operating procedures.

TASK 05-51-08-210-801

2. Phase I Inspection

A. References

Reference	Title
27-51-00-040-801	Trailing Edge Flap System Deactivation (P/B 201)
27-51-00-440-801	Trailing Edge Flap System Reactivation (P/B 201)
27-51-00-860-803	Extend the Trailing Edge Flaps (P/B 201)
27-51-00-860-804	Retract the Trailing Edge Flaps (P/B 201)
27-81-00-040-801	Leading Edge Flaps and Slats Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
27-81-00-860-803	Leading Edge Flaps and Slats Extension (P/B 201)
27-81-00-860-804	Leading Edge Flaps and Slats Retraction (P/B 201)

B. Location Zones

Zone	Area
500	Left Wing
600	Right Wing

C. Examine the Trailing Edge Flaps

SUBTASK 05-51-08-010-001

(1) Extend the trailing edge flaps, do this task: Extend the Trailing Edge Flaps, TASK 27-51-00-860-803.

SUBTASK 05-51-08-040-001

WARNING DO THE TRAILING EDGE FLAP DEACTIVATION PROCEDURE BEFORE YOU DO WORK ON THE FLAP SYSTEM. WITH THE FLAPS ACTIVATED, THE FLAPS CAN MOVE AND CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

(2) Do the deactivation procedure for the trailing edge flap system, do this task: Trailing Edge Flap System Deactivation, TASK 27-51-00-040-801.

SUBTASK 05-51-08-210-001

(3) Examine the trailing edge flap components as follows:

(a) Examine the external skin of all flaps.

(b) Examine the flaps adjacent to the support structure for openings, distortions, or split sealant.

NOTE: Corrosion of the internal structure can be caused by splits in the sealant beads.

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D. Examine the Leading Edge Flaps and Slats, if applicable

SUBTASK 05-51-08-010-002

(1) Extend the leading edge flaps and slats, do this task: Leading Edge Flaps and Slats Extension, TASK 27-81-00-860-803.

SUBTASK 05-51-08-040-002

> **WARNING** DO THE DEACTIVATION PROCEDURE FOR THE LEADING EDGE FLAPS AND SLATS. THE FLAPS AND SLATS MOVE QUICKLY. INJURIES TO PERSONNEL, AND DAMAGE TO EQUIPMENT CAN OCCUR.

(2) Do the deactivation procedure for the leading edge flap/slat system, do this task: Leading Edge Flaps and Slats Deactivation, TASK 27-81-00-040-801.

SUBTASK 05-51-08-210-002

(3) Examine the leading edge flaps and slat components as follows:

(a) Examine all of the flaps and slat skins.

(b) Examine the slats adjacent to main track and auxiliary arm attachments for openings, distortion, or split sealant.

NOTE: Corrosion of the internal structure can be caused by splits in the sealant beads.

SUBTASK 05-51-08-211-001

> **WARNING** DO NOT LET OBJECTS GET IN THE HOUSING ASSEMBLY OF THE SLAT TRACK. THIS WILL HELP PREVENT A PUNCTURE OF THE HOUSING ASSEMBLY THAT COULD CAUSE A FUEL LEAK. THE FUEL LEAK COULD CAUSE A FIRE AND POSSIBLE DEATH OR INJURY TO PERSONNEL.

(4) Visually examine the area to make sure that there are no objects in the slat track housing assembly.

E. Put the Airplane Back to its Usual Condition if you will not do the Phase II Inspection

SUBTASK 05-51-08-440-001

(1) Do the activation procedure for the trailing edge flap system, do this task: Trailing Edge Flap System Reactivation, TASK 27-51-00-440-801.

SUBTASK 05-51-08-440-002

(2) Do the activation procedure for the leading edge flap/slat system, do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

SUBTASK 05-51-08-410-001

(3) Retract the trailing edge flaps, do this task: Retract the Trailing Edge Flaps, TASK 27-51-00-860-804.

SUBTASK 05-51-08-410-002

(4) Retract the leading edge flaps and slats, do this task: Leading Edge Flaps and Slats Retraction, TASK 27-81-00-860-804.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-51-08-210-802

3. Phase II Inspection

A. References

Reference	Title
27-51-00-040-801	Trailing Edge Flap System Deactivation (P/B 201)
27-51-00-440-801	Trailing Edge Flap System Reactivation (P/B 201)
27-51-00-860-803	Extend the Trailing Edge Flaps (P/B 201)
27-51-00-860-804	Retract the Trailing Edge Flaps (P/B 201)
27-51-11 P/B 401	INBOARD TRAILING EDGE FLAP - REMOVAL/INSTALLATION
27-51-15 P/B 401	INBOARD FLAP TRACKS - REMOVAL/INSTALLATION
27-51-25 P/B 401	OUTBOARD FLAP TRACKS - REMOVAL/INSTALLATION
27-81-00-040-801	Leading Edge Flaps and Slats Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
27-81-00-860-803	Leading Edge Flaps and Slats Extension (P/B 201)
27-81-00-860-804	Leading Edge Flaps and Slats Retraction (P/B 201)
27-81-21 P/B 401	LEADING EDGE SLAT - REMOVAL/INSTALLATION

B. Location Zones

Zone	Area
500	Left Wing
600	Right Wing

C. Trailing Edge Flaps Inspection, if applicable

SUBTASK 05-51-08-010-003

(1) Extend the trailing edge flaps, do this task: Extend the Trailing Edge Flaps, TASK 27-51-00-860-803.

SUBTASK 05-51-08-040-003

> **WARNING** DO THE TRAILING EDGE FLAP DEACTIVATION PROCEDURE BEFORE YOU DO WORK ON THE FLAP SYSTEM. WITH THE FLAPS ACTIVATED, THE FLAPS CAN MOVE AND CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

(2) Do the deactivation procedure for the trailing edge flap system, do this task: Trailing Edge Flap System Deactivation, TASK 27-51-00-040-801.

SUBTASK 05-51-08-210-003

(3) Examine the trailing edge flap components as follows:

(a) The flap tracks

(b) The flap linkages

(c) The track attachment points

(d) The flap track support fittings

(e) The wing in-spar surfaces near flap support fittings

(f) The flap carriages for cracks

1) The forward and aft main roller bolt assemblies including the bearings and mounting bolts (Figure 204, Figure 205).

a) To avoid re-rigging, remove, examine, and re-install the bolts one at a time.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

b) If the cotter pin and nut cannot be removed, remove flaps to easier inspect the carriages and remove the main roller bolt assemblies (PAGEBLOCK 27-51-11/401).

(g) The actuator support structure

(h) The actuator and drive mechanism.

SUBTASK 05-51-08-010-005

(4) Remove all of the trailing edge flap support-track fuse pins and bolts:

- INBOARD FLAP TRACKS - REMOVAL/INSTALLATION, PAGEBLOCK 27-51-15/401
- OUTBOARD FLAP TRACKS - REMOVAL/INSTALLATION, PAGEBLOCK 27-51-25/401.

(a) Remove the fuse pin or bolt one at a time.

1) Examine the fuse pins or bolts for cracks or distortion.

2) If it is necessary, replace removed fuse pins or bolts with new fuse pins or bolts.

(b) Make sure that all the fuse pins and bolts have been re-installed:

- INBOARD FLAP TRACKS - REMOVAL/INSTALLATION, PAGEBLOCK 27-51-15/401
- OUTBOARD FLAP TRACKS - REMOVAL/INSTALLATION, PAGEBLOCK 27-51-25/401.

D. Leading Edge Flaps and Slats Inspection, if applicable

SUBTASK 05-51-08-010-004

(1) Extend the leading edge flaps and slats, do this task: Leading Edge Flaps and Slats Extension, TASK 27-81-00-860-803.

SUBTASK 05-51-08-040-004

WARNING DO THE DEACTIVATION PROCEDURE FOR THE LEADING EDGE FLAPS AND SLATS. THE FLAPS AND SLATS MOVE QUICKLY. INJURIES TO PERSONNEL, AND DAMAGE TO EQUIPMENT CAN OCCUR.

(2) Do the deactivation procedure for the leading edge flap/slat system, do this task: Leading Edge Flaps and Slats Deactivation, TASK 27-81-00-040-801.

SUBTASK 05-51-08-210-004

(3) Examine the leading edge flap and slat components as follows:

(a) External skins of flaps and slats

(b) Leading edge flap hinge rib and linkage attachments

(c) Slat auxiliary and main tracks

(d) Leading edge flap and slat support ribs and adjacent skin panels

(e) All drive mechanisms and related support structure.

(f) Remove slat main track and auxiliary track roller bolts one at a time (PAGEBLOCK 27-81-21/401).

NOTE: Retaining pin can be inserted to hold the roller bearing or slat while the bolt is removed.

1) Make sure the bolts are not cracked, bent, or show other signs of damage.

2) If it is necessary, replace removed bolts with new bolts.

(g) Make sure that all bolts have been re-installed (PAGEBLOCK 27-81-21/401).

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-51-08-211-002

WARNING	DO NOT LET OBJECTS GET IN THE HOUSING ASSEMBLY OF THE SLAT TRACK. THIS WILL HELP PREVENT A PUNCTURE OF THE HOUSING ASSEMBLY THAT COULD CAUSE A FUEL LEAK. THE FUEL LEAK COULD CAUSE A FIRE AND POSSIBLE DEATH OR INJURY TO PERSONNEL.

(4) Examine the area to make sure that there are no objects in the slat track housing assembly.

E. Put the Airplane Back to Its Usual Condition

SUBTASK 05-51-08-420-001

(1) If it is necessary, install the removed components, or install replacement parts.

SUBTASK 05-51-08-440-003

(2) Do the activation procedure for the trailing edge flap system, do this task: Trailing Edge Flap System Reactivation, TASK 27-51-00-440-801.

SUBTASK 05-51-08-440-004

(3) Do the activation procedure for the leading edge flap/slat system, do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

SUBTASK 05-51-08-410-003

(4) Retract the trailing edge flaps, do this task: Retract the Trailing Edge Flaps, TASK 27-51-00-860-804.

SUBTASK 05-51-08-410-004

(5) Retract the leading edge flaps and slats, do this task: Leading Edge Flaps and Slats Retraction, TASK 27-81-00-860-804.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

1 PHASE I AND PHASE II INSPECTIONS CAN BE DONE IN LIEU OF CONTACTING BOEING.

2 IF ANY DAMAGE RELATED TO AN OVERLOAD EVENT IS FOUND DURING THE PHASE I INSPECTION, THEN DO THE PHASE II INSPECTION BEFORE THE NEXT FLIGHT. REPAIR OR REPLACE COMPONENTS IF NECESSARY BEFORE NEXT FLIGHT.

2813569 S0000647896_V4

Flap/Slat Down Overspeed or Above 20,000 ft Condition Logic Flowchart
Figure 201/05-51-08-990-803

ECCN 9E991 BOEING PROPRIETARY - See title page for details

1 PHASE I AND PHASE II INSPECTIONS CAN BE DONE IN LIEU OF CONTACTING BOEING.

2 IF ANY DAMAGE RELATED TO AN OVERLOAD EVENT IS FOUND DURING THE PHASE I INSPECTION, THEN DO THE PHASE II INSPECTION BEFORE THE NEXT FLIGHT. REPAIR OR REPLACE COMPONENTS IF NECESSARY BEFORE NEXT FLIGHT.

2813575 S0000647901_V5

Flap/Slat Down Overspeed Condition - Trailing Edge
Figure 202/05-51-08-990-804

ECCN 9E991 BOEING PROPRIETARY - See title page for details

1 PHASE I AND PHASE II INSPECTIONS CAN BE DONE IN LIEU OF CONTACTING BOEING.

2 IF ANY DAMAGE RELATED TO AN OVERLOAD EVENT IS FOUND DURING THE PHASE I INSPECTION, THEN DO THE PHASE II INSPECTION BEFORE THE NEXT FLIGHT. REPAIR OR REPLACE COMPONENTS IF NECESSARY BEFORE NEXT FLIGHT.

3081891 S0000837653_V1

Flap/Slat Down Overspeed Condition - Leading Edge
Figure 203/05-51-08-990-805

ECCN 9E991 BOEING PROPRIETARY - See title page for details

LEFT WING
(RIGHT WING IS EQUIVALENT)

2557861 S0000610242_V1

Inboard Flap Carriage Inspection
Figure 204/05-51-08-990-801 (Sheet 1 of 2)

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INBOARD FLAP INBOARD CARRIAGE

2557862 S0000610243_V1

Inboard Flap Carriage Inspection
Figure 204/05-51-08-990-801 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Outboard Flap Carriage Inspection
Figure 205/05-51-08-990-802 (Sheet 1 of 3)

I

ECCN 9E991 BOEING PROPRIETARY - See title page for details

OUTBOARD FLAP OUTBOARD CARRIAGE

B

OUTBOARD FLAP INBOARD CARRIAGE

C

2558245 S0000610247_V1

Outboard Flap Carriage Inspection
Figure 205/05-51-08-990-802 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

2557864 S0000610248_V1

Outboard Flap Carriage Inspection
Figure 205/05-51-08-990-802 (Sheet 3 of 3)

I

ECCN 9E991 BOEING PROPRIETARY - See title page for details

OVERWEIGHT TAXI - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. **General**

A. Overweight Taxi is defined as taxiing at a weight that is more than the maximum-taxi weight (MTW) as specified in the Airplane Flight Manual (AFM).

(1) Before flight, you must decrease the airplane weight to that specified by the Airplane Flight Manual for takeoff.

B. Inspection Criteria; An immediate structural inspection is necessary if you:

(1) Taxi the airplane by more than 0.5% of the maximum-taxi-weight (MTW).

(2) Taxi the airplane overweight at any weight over the Maximum Design Taxi Weight (MTW) and have any of these conditions:

(a) High speed ground turn

(b) Sharp radius turn

(c) Heavy braking

(d) Taxi over rough pavement

(e) Pivoting (sharp radius turning with brakes on).

(3) If the criteria for the above paragraphs have not been met, no inspection is necessary.

(a) But, you must decrease the airplane weight to that specified by the Airplane Flight Manual before takeoff.

C. The Inspections

(1) The inspection is divided into Phase 1 and Phase 2.

(2) If the inspection for Phase 1 shows no signs of damage, the inspection is complete.

(3) If the Phase 1 inspection shows any sign of damage, the Phase 2 inspection must be done.

D. Inspections, Repairs, and Replacements

(1) When this procedure tells you to "examine" a part, look for these conditions:

(a) Cracks

(b) Structure that pulled apart

(c) Loose paint (paint flakes)

(d) Twisted parts (distortion)

(e) Bent parts

(f) Wrinkles or buckles in structure

(g) Fastener holes that became larger or longer

(h) Loose fasteners

(i) Missing fasteners (fasteners that have pulled out or are gone)

(j) Delaminations (a component with one or more layers pulled apart)

(k) Parts that are not aligned correctly

(l) Interference (clearance that is not sufficient between two parts)

(m) Discoloration (heat damage)

(n) Nicks or gouges

(o) Other signs of damage.

(2) Replace or repair the components that have one or more of the conditions given above.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-51-09-212-801

2. Phase I Inspection

A. Airplane Inspection

SUBTASK 05-51-09-212-003

(1) Do the inspection of the main and nose landing gear.

(a) Examine all tires and wheels.

(b) Examine the support structure.

(c) Look for signs of fluid leakage at the top and bottom of the outer cylinder of the shock strut.

NOTE: A small quantity of hydraulic fluid on the surface of the inner cylinder of the shock strut is satisfactory.

SUBTASK 05-51-09-212-004

(2) Do the inspection of the landing gear, fuselage, and wing.

(a) Look for fuel leaks, and other fluid leaks, in the areas that follow:

1) All wheel well areas of the body, wing, and nose landing gear.

2) The lower external surface of the fuselage in the area of the wing-to-body fairing.

3) The wing.

END OF TASK

TASK 05-51-09-210-801

3. Phase 2 Inspection

A. References

Reference	Title
07-11-01-580-815	Lift the Airplane with the Jacks (P/B 201)
07-11-01-580-816	Lower the Airplane Off the Jacks (P/B 201)
07-11-21-580-801	Lift the Airplane Nose with the Nose Jack at Jack Point D (P/B 201)
07-11-21-580-802	Lower the Airplane Nose Off of the Jack (P/B 201)
12-15-31 P/B 301	MAIN LANDING GEAR SHOCK STRUT - SERVICING
12-15-41 P/B 301	NOSE LANDING GEAR SHOCK STRUT - SERVICING
32-11-00 P/B 401	MAIN LANDING GEAR - REMOVAL/INSTALLATION
32-21-00 P/B 401	NOSE LANDING GEAR - REMOVAL/INSTALLATION
32-32-00 P/B 501	MAIN GEAR EXTENSION AND RETRACTION - ADJUSTMENT/TEST
32-33-00 P/B 501	NOSE GEAR EXTENSION AND RETRACTION - ADJUSTMENT/TEST
32-51-00 P/B 501	NOSE WHEEL STEERING SYSTEM - ADJUSTMENT/TEST

B. Airplane Inspection

SUBTASK 05-51-09-212-005

(1) Do the inspection of the main landing gear and support structure.

(a) Make sure the shock strut pressures are normal and the hydraulic fluids are at the correct levels MAIN LANDING GEAR SHOCK STRUT - SERVICING, PAGEBLOCK 12-15-31/301.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(b) Lift the airplane with jacks Lift the Airplane with the Jacks, TASK 07-11-01-580-815.

(c) Examine the inner and outer cylinder lugs.

(d) Examine all structural components of the main landing gear and carefully examine the components that follow:

1) Shock strut
2) Trunnion Link
3) Drag strut
4) Torsion links
5) Side strut
6) Walking beam fitting of the shock strut
7) Walking beam for the main gear actuator
8) Linkage fittings of the walking beam and actuator
9) The attach nut of the orifice support tube (signs of fluid leakage)
10) Strut doors and the mechanism that retracts and extends the doors

(e) Examine the support structure of the main landing gear and carefully examine the components that follow:

1) Landing gear beam
2) Support fittings for the landing gear beam:
   a) Inboard
   b) Outboard.
3) Trunnion support fittings and attachment:
   a) Forward
   b) Aft
4) Stabilizer link and fittings between the rear spar and landing gear beam
5) Body fitting for side strut and uplock attachment

(f) Examine all of the pin joints and fuse pin connections.

(g) If you found tire damage in Phase 1, do the steps that follow.

1) Remove and examine the wheel structure.
2) Remove and examine the brake assembly.
3) Examine the axles.

(h) If one or more of the conditions that follow occurred; remove, disassemble, and examine all parts of the shock strut MAIN LANDING GEAR - REMOVAL/INSTALLATION, PAGEBLOCK 32-11-00/401.

1) The shock strut pressures were sufficiently low to cause damage.
2) They hydraulic fluid levels were sufficiently low to cause damage.
3) You found damage to one or more of the parts during your inspection of the landing gear.

   NOTE: Do not remove the orifice support tube to examine it.

(i) Make sure the main landing gear retracts and extends correctly MAIN GEAR EXTENSION AND RETRACTION - ADJUSTMENT/TEST, PAGEBLOCK 32-32-00/501.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(j) Lower the airplane from the jacks Lower the Airplane Off the Jacks, TASK 07-11-01-580-816

SUBTASK 05-51-09-212-006

(2) Do the inspection of the nose landing gear and support structure.

(a) Make sure the shock strut pressures are normal and the hydraulic fluids are at the correct levels NOSE LANDING GEAR SHOCK STRUT - SERVICING, PAGEBLOCK 12-15-41/301.

(b) Lift the nose of the airplane with jacks Lift the Airplane Nose with the Nose Jack at Jack Point D, TASK 07-11-21-580-801.

(c) If you found tire damage in Phase 1, do the steps that follow.

1) Remove and examine the wheel structure

2) Examine the axle

(d) Examine all structural components of the nose landing gear and carefully examine the components that follow:

1) Shock strut

2) Torsion links

3) Drag strut

4) Lock links

5) Drag brace link

6) The attach nut of the orifice support tube (signs of fluid leakage)

(e) Examine the wheel well area and carefully examine the parts that follow:

1) Web (the left and right sidewalls)

2) Aft bulkhead

3) Trunnion attachments

4) Drag strut attachments

(f) Examine the wheel well bulkheads and fuselage outboard of nose wheel well at (Body Stations 294.5 and 360).

NOTE: You can do this inspection on the forward side through the access holes in the sidewalls of the nose wheel well. Examine the aft side of the bulkhead at Body Station 294.5 from the electronics compartment.

(g) If one or more of the conditions that follow occurred remove, disassemble, and examine all parts of the shock strut NOSE LANDING GEAR - REMOVAL/INSTALLATION, PAGEBLOCK 32-21-00/401.

1) The shock strut pressures were sufficiently low to cause damage.

2) The hydraulic fluid levels were sufficiently low to cause damage.

3) You found damage to one or more of the parts during your inspection of the landing gear.

NOTE: Do not remove the orifice support tube to examine it.

(h) Make sure the nose landing gear steering system is adjusted and operates correctly NOSE WHEEL STEERING SYSTEM - ADJUSTMENT/TEST, PAGEBLOCK 32-51-00/501.

(i) Make sure the nose landing gear retracts and extends correctly NOSE GEAR EXTENSION AND RETRACTION - ADJUSTMENT/TEST, PAGEBLOCK 32-33-00/501.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(j) Lower the nose of the airplane from the jacks Lower the Airplane Nose Off of the Jack, TASK 07-11-21-580-802.

SUBTASK 05-51-09-212-007

(3) Do the inspection of the fuselage.

NOTE: If you find external damage to the fuselage, always examine the adjacent internal structure.

(a) Examine the lower fuselage structure.

NOTE: Examine carefully in the area below the body crease from Body Station 727 to 100 inches (254cm) aft.

(b) Examine carefully these components (Body Stations 540 through 727A):

1) Keel beam chords

2) Stiffeners

3) Webs and splices

(c) Also examine carefully the top of the fuselage between S-6 left and S-6 right (Body Stations 540, 664, 727).

(d) Examine the upper and lower fuselage skin panels forward and aft of the wing.

NOTE: Permanent wrinkles frequently occur on the lower side of the fuselage skins aft of Body Station 727. An internal inspection is necessary if you found wrinkles that were not there before the landing. Examine the wrinkles carefully for cracks.

(e) Examine the wing-to-fuselage joints (Body Stations 540 and 664).

(f) Examine the fuselage skin joints above the landing gear beam.

C. Put the Airplane Back to its Usual Condition

SUBTASK 05-51-09-430-001

(1) Install the components you removed or install replacement components.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

DRAGGED ENGINE NACELLE/FAN BLADE OUT/ENGINE SEIZURE/THRUST REVERSER AND ATTACH POINTS DAMAGE - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. General

A. This procedure contains the following task:

(1) Dragged engine nacelle, fan blade out, engine seizure, engine, strut, and thrust reverser damaged conditional inspection.

B. This procedure gives an inspection for the conditions that follow:

(1) For the engine and strut after a dragged engine nacelle condition.

(2) After an engine seizure and other types of engine and strut damage.

(3) After an engine fan blade out and subsequent windmilling vibration.

(4) After a vibrational condition caused by loss of cowling or engine parts other than fan blades.

(5) After damage caused when hit by ground support equipment; except for minor, localized ground support equipment impact to the strut or cowling.

NOTE: These inspections are not necessary when the operator finds that small scratches/dents, etc, were not caused by the conditions in this procedure.

C. When the conditional inspection tells you to "examine" a component, look for these conditions (repair or replace components, if it is necessary):

(1) Cracks

(2) Pulled apart structure

(3) Excessive looseness or wear

(4) Twisted parts (distortion)

(5) Bent components

(6) Loose fasteners

(7) Fasteners holes that became larger or longer

(8) Fasteners that have pulled out or are missing

(9) Excessive loading

(10) Peening of pins and bushings

(11) Bushing/bearing damage

(12) Bushing bearing fusion

(13) Lug distortion or damage

(14) Bolt distortion

(15) Misalignment

(16) Interference

(17) Other obvious or unusual signs of damages.

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TASK 05-51-10-210-801

2. Dragged Engine Nacelle/Fan Blade Out/Engine Seizure/Engine and Strut Damage Conditional Inspection

A. References

Reference	Title
05-51-42-200-802	Engine Blade Out - EE Bay and Flight Deck Panels Inspection (P/B 201)
27-51-00-040-801	Trailing Edge Flap System Deactivation (P/B 201)
27-51-00-440-801	Trailing Edge Flap System Reactivation (P/B 201)
27-81-00-040-801	Leading Edge Flaps and Slats Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
54-52-06-010-801	Aft Fairing Access Panel Removal (P/B 401)
54-53-01-400-801	Strut Access Panel Installation (P/B 401)
54-53-02-410-801	Forward Strut Fairing Panel (Thrust Reverser Strut Fairing) Installation (P/B 401)
71-00-00-800-802-F00	Engine Foreign Object Damage and Birdstrike Inspection (P/B 601)
71-00-02-000-801-F00	Power Plant - Removal (P/B 401)
78-31-00-040-802-F00	Thrust Reverser Deactivation For Ground Maintenance (P/B 201)
78-31-00-440-803-F00	Thrust Reverser Activation After Ground Maintenance (P/B 201)
78-31-06-200-801-F00	Blocker Door Inspection (Visual) (P/B 601)

B. Location Zones

Zone	Area
400	Powerplant and Nacelle Struts

C. Examine the Struts and Nacelles, and Adjacent Structure

SUBTASK 05-51-10-040-001

> **WARNING**
> MAKE SURE THAT PERSONS AND EQUIPMENT ARE CLEAR OF THE LE AND TE FLAPS AND FLAP DRIVE MECHANISMS BEFORE YOU MOVE THE FLAP CONTROL LEVER. WITH HYDRAULIC POWER REMOVED, THE FLAPS WILL MOVE AUTOMATICALLY BY ELECTRICAL POWER WHEN YOU MOVE THE FLAP CONTROL LEVER. THIS CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

(1) Do the steps that follow to deactivate the flaps and slats:

(a) Do this task: Leading Edge Flaps and Slats Deactivation, TASK 27-81-00-040-801.

(b) Do this task: Trailing Edge Flap System Deactivation, TASK 27-51-00-040-801.

SUBTASK 05-51-10-040-002

> **WARNING**
> DO THE DEACTIVATION PROCEDURE TO PREVENT THE OPERATION OF THE THRUST REVERSER. THE ACCIDENTAL OPERATION OF THE THRUST REVERSER CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(2) Do this task: Thrust Reverser Deactivation For Ground Maintenance, TASK 78-31-00-040-802-F00.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-51-10-210-001

(3) Do the inspection of the struts and nacelles, and the adjacent structure.

(a) Visually examine the areas that follow:

1) The nacelle strut external surface

2) The nacelle inlet, fan cowl, thrust reverser and exhaust (ground support equipment impacts)

3) The lower surface of the nacelle cowlings (ground impact)

4) Engine fan blades (full or partial fan blade loss).

(b) If damage is found in the areas noted above (except for minor, localized ground support equipment impacts), do these steps:

1) Remove the nacelle strut access doors.

2) Remove the forward strut thrust reverser and overwing fairings.

3) Remove the forward strut fairing thumbnail fairing.

4) Remove the aft strut fairing panels, do this task: Aft Fairing Access Panel Removal, TASK 54-52-06-010-801.

5) Open the fan cowl and thrust reverser.

(c) Visually examine the components that follow for cracks, signs of offset deformation, or crank shafting of pins and/or bushings:

1) Strut fuse pin and link pin bores (perform examination in place - remove retention hardware)

2) Wing and strut fittings common to fuse and link pins

3) Strut external upper spar and side skins

4) Strut internal structure, including bulkheads and frames

5) Forward engine mount assembly and aft mount assembly including thrust links.

SUBTASK 05-51-10-210-002

(4) Visually examine the areas that follow:

(a) Thrust reverser sleeves

(b) Blocker door linkage for bent or broken links, do this task: Blocker Door Inspection (Visual), TASK 78-31-06-200-801-F00

(c) Inlet crushable spacers and look for loose attach bolts

(d) Thrust reverser hinges and latches

(e) Fan cowl hinges and latches.

SUBTASK 05-51-10-210-003

(5) If you think an engine seizure or internal engine damage has occurred, examine the engine.

(a) Do this task: Engine Foreign Object Damage and Birdstrike Inspection, TASK 71-00-00-800-802-F00.

(b) Remove the engine if it is necessary, do this task: Power Plant - Removal, TASK 71-00-02-000-801-F00.

SUBTASK 05-51-10-210-004

(6) Examine the EEBay and flight deck, do this task: Engine Blade Out - EE Bay and Flight Deck Panels Inspection, TASK 05-51-42-200-802.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

D. Put the Airplane Back to It's Usual Condition

SUBTASK 05-51-10-410-001

(1) Install all the components you removed if they are serviceable, or install replacement parts.

(a) Do this task: Strut Access Panel Installation, TASK 54-53-01-400-801.

(b) Do this task: Forward Strut Fairing Panel (Thrust Reverser Strut Fairing) Installation, TASK 54-53-02-410-801.

SUBTASK 05-51-10-440-001

WARNING DO THE ACTIVATION PROCEDURE FOR THE OPERATION OF THE THRUST REVERSER. BE CAREFUL OF THE ACCIDENTAL OPERATION OF THE THRUST REVERSER. IF YOU DO NOT OBEY, INJURIES TO PERSONNEL AND DAMAGE TO EQUIPMENT CAN OCCUR.

(2) Do this task: Thrust Reverser Activation After Ground Maintenance, TASK 78-31-00-440-803-F00.

SUBTASK 05-51-10-440-002

WARNING MAKE SURE THAT PERSONS AND EQUIPMENT ARE CLEAR OF THE LE AND TE FLAPS AND FLAP DRIVE MECHANISMS BEFORE YOU MOVE THE FLAP CONTROL LEVER. WITH HYDRAULIC POWER REMOVED, THE FLAPS WILL MOVE AUTOMATICALLY BY ELECTRICAL POWER WHEN YOU MOVE THE FLAP CONTROL LEVER. THIS CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

(3) Do the steps that follow to activate the flaps and slats:

(a) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

(b) Do this task: Trailing Edge Flap System Reactivation, TASK 27-51-00-440-801.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

GALLEY SPILLAGE - MAINTENANCE PRACTICES

1. General

A. This procedure has one task.

(1) This task is to do an inspection and the clean-up of the areas of contamination after a liquid is spilled in the galley.

B. If liquids are spilled inside the galley, you must remove all signs of liquid and fully dry the areas of contamination immediately.

C. If the floor area of the galley area is not sealed correctly, liquid contamination can result in corrosion of the floor structure.

NOTE: Moisture above the galley floor can go through small holes in the floor surface area and stay out of view. This could possibly cause unwanted damage to the airplane structure or to equipment in the area below the galley floor.

TASK 05-51-13-211-801

2. Galley Spill Conditional - Inspection

A. General

(1) This inspection procedure is to be done when liquid has been spilled in the galley area.

NOTE: When a small amount of liquid is spilled, an inspection is not usually necessary.

(2) In the galley areas, a water (liquid) barrier is installed to contain liquid when it is spilled. To protect the water barrier, vinyl mats cover the galley floor.

(3) In the adjacent entry and service door thresholds, waste water drains are installed to remove liquids (gray water) from the floor. These drain holes must be kept free from blockages.

(4) The integrity of the water barrier seal, in the forward galley areas, is most important because the location of the electronic equipment compartment is directly below the forward galley.

(5) A leak from the forward galley which has a damaged water barrier, into the compartment below, could possibly cause serious damage to the electronic equipment. The result could be a possible hazard to the flight safety of the airplane.

(6) In all areas where gray water contamination has to be removed and cleaned, you must use an approved disinfectant to kill all harmful micro-organisms.

(7) The flight safety of the airplane, together with the safety of health and the prevention of bad smells, must be your first consideration when you do this task.

B. References

(1) MISCELLANEOUS MATERIALS - MAINTENANCE PRACTICES, PAGEBLOCK 20-30-51/201

(2) EQUIPMENT/FURNISHINGS - CLEANING/PAINTING, PAGEBLOCK 25-00-00/701

(3) ENTRY AND SERVICE AREA FLOOR COVERING - REMOVAL/INSTALLATION, PAGEBLOCK 25-27-21/401

(4) GALLEYS, SECTION 25-31

(5) SEALS AND SEALING - MAINTENANCE PRACTICES, PAGEBLOCK 51-31-00/201

(6) CABIN FLOORS, SECTION 53-21

(7) WATER BARRIER - REPAIRS, PAGEBLOCK 53-21-11/801

C. Equipment

(1) Workstand

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D. Consumable Materials

(1) Gown - Disposal

(2) Gloves - Disposable

(3) Shop Coat - Disposable

(4) Mask, face - Disposable

(5) Glasses - Safety

(6) Cloth, lint-free

(7) Cheesecloth

(8) Disinfectant - Deodorizer Lysol

E. Access

(1) Location Zones

(a) 104 Forward Galley (1)

(b) 106 Forward Galley (2)

(c) 109 Aft Galley (3)

(d) 114 Aft Galley (4)

(e) 118 Aft Galley (6)

(f) 205 Electronic Compartment

(g) 218 Aft Cargo Compartment

(h) 219 Aft Cargo-Compartment Door

(i) 220 Aft Cargo-Compartment Equipment-Bay

(2) Access Panels

(a) 1201 Electronic-Equipment Compartment Door

(b) 4504 Aft Cargo-Compartment Door

F. References

Reference	Title
20-30-31 P/B 201	CLEANERS AND POLISHES - MAINTENANCE PRACTICES
20-30-51 P/B 201	MISCELLANEOUS MATERIALS - MAINTENANCE PRACTICES
25-00-00 P/B 701	EQUIPMENT/FURNISHINGS - CLEANING/PAINTING
25-27-21 P/B 401	ENTRY AND SERVICE AREA FLOOR COVERING - REMOVAL/INSTALLATION
25-31	GALLEYS
38-31-00 P/B 201	GRAY WATER/DRAIN SYSTEM - MAINTENANCE PRACTICES
51-31-00 P/B 201	SEALS AND SEALING - MAINTENANCE PRACTICES
53-21	CABIN FLOORS
53-21-00 P/B 801	POLYURETHANE WATERSEAL - REPAIRS
53-21-00-000-801	Passenger Cabin Floor Panel - Removal (P/B 401)
53-21-00-300-801	Repair the Polyurethane Waterseal (P/B 801)
53-21-00-400-801	Passenger Cabin Floor Panel - Installation (P/B 401)
53-21-11 P/B 801	WATER BARRIER - REPAIRS

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G. Procedure

SUBTASK 05-51-13-160-001

(1) In the galley where the liquid was spilled, use a clean cloth or a sponge to remove all liquid from the floor of the galley area.

SUBTASK 05-51-13-010-001

(2) In the galley area where the liquid was spilled, at the next maintenance opportunity, remove the floor area covering ENTRY AND SERVICE AREA FLOOR COVERING - REMOVAL/INSTALLATION, PAGEBLOCK 25-27-21/401, to do an inspection of the waterseal.

NOTE: The waterseal of the galley area can be damaged if care is not taken when you remove the vinyl floor mats.

SUBTASK 05-51-13-160-002

(3) Use approved cleaning agents and disinfectants when you clean areas where blue water contamination has occurred CLEANERS AND POLISHES - MAINTENANCE PRACTICES, PAGEBLOCK 20-30-31/201.

SUBTASK 05-51-13-160-003

(4) Make sure the door threshold drain, adjacent to the galley area, is clear and free from blockages GRAY WATER/DRAIN SYSTEM - MAINTENANCE PRACTICES, PAGEBLOCK 38-31-00/201.

SUBTASK 05-51-13-212-001

(5) Inspect the fillet seal at the base of the galley for signs of damage.

SUBTASK 05-51-13-212-002

(6) Inspect the floor waterseal for signs of damage to materials and sealants.

SUBTASK 05-51-13-910-001

(7) If you find signs of damage to seals and/or sealing, refer to the approved repairs POLYURETHANE WATERSEAL - REPAIRS, PAGEBLOCK 53-21-00/801and WATER BARRIER - REPAIRS, PAGEBLOCK 53-21-11/801.

SUBTASK 05-51-13-010-002

(8) If the inspection is applicable to the forward galley, open the electronic-equipment compartment door for access.

SUBTASK 05-51-13-010-003

(9) If the inspection is applicable to the aft galley, open the aft cargo-compartment door for access, and remove the access panel on the rear bulkhead of the aft cargo- compartment.

SUBTASK 05-51-13-212-003

(10) Use a strong light and do a close visual examination of the area below the floor of the galley.

SUBTASK 05-51-13-360-001

(11) If you find signs of moisture below the galley area, in electronic-equipment compartment or the aft cargo-compartment equipment-bay, do the steps that follow:

(a) Use a clean cloth or a sponge to absorb and remove all moisture from the area.

(b) Do an examination of all the waste-water drain tubes and related clamps for signs of a leak.

(c) Tighten all clamps and/or replace damaged drain tubes as necessary.

(d) Examine the floor beams, intercostals and structure for signs of moisture and/or corrosion.

(e) Do an inspection of installed equipment, in the applicable equipment compartment for signs of contamination.

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1) If you find signs of moisture on equipment electrical cables, use a dry air supply to remove all moisture from the contaminated areas.

   NOTE: Electrical cable looms can hold moisture between the separate wires. If possible, open the wires in a contaminated cable when you dry the cable.

2) Do a check of contaminated connectors for moisture ingress and dry as necessary.

   NOTE: If you think a connector is contaminated with moisture, you must disconnect and fully examine the connector and the related equipment connector.

3) If you find signs of moisture, use a clean cloth or a dry air supply to remove all moisture and fully dry the contaminated components.

SUBTASK 05-51-13-942-001

(12) If you do not find signs of moisture and the water barrier is in a serviceable condition, do the close out procedure.

NOTE: The removal of the galley and repairs to the floor water barrier are only necessary when signs of damage and leaks in the galley floor are found.

SUBTASK 05-51-13-010-004

(13) If your inspection shows damage to the water barrier of the galley floor area and/or shows the moisture travel to go below the galley floor, remove the applicable galley.

SUBTASK 05-51-13-010-005

(14) If necessary, remove the galley floor (TASK 53-21-00-000-801).

SUBTASK 05-51-13-160-004

(15) Fully clean the area and the floor panels and make sure you remove all the remaining sealant.

SUBTASK 05-51-13-350-001

(16) If corrosion is found on the airframe, refer to the Structural Repair Manual (SRM).

SUBTASK 05-51-13-420-001

(17) Install the galley floor (TASK 53-21-00-400-801, TASK 53-21-00-300-801).

SUBTASK 05-51-13-410-001

(18) Install the water barrier in the galley WATER BARRIER - REPAIRS, PAGEBLOCK 53-21-11/801.

SUBTASK 05-51-13-420-002

(19) Install the galley (as applicable).

SUBTASK 05-51-13-710-001

(20) If an equipment is found to have been contaminated with moisture, you must do an operational test of the equipment after all the moisture has been removed.

SUBTASK 05-51-13-940-001

(21) Do the close out procedure as follows:

   (a) Install the galley floor covering ENTRY AND SERVICE AREA FLOOR COVERING - REMOVAL/INSTALLATION, PAGEBLOCK 25-27-21/401.

   (b) If applicable, close the electronic-equipment compartment door.

   (c) If applicable, install the access panel on the rear bulkhead of the aft cargo compartment and close the aft cargo compartment door.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

MERCURY SPILLAGE CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. General

A. This section has a task to detect, isolate, examine, and clean the airplane after a mercury spill.

(1) Mercury spills that are not detected and cleaned immediately after a spill can spread and become very difficult to clean or cause extensive structural damage.

(2) Mercury spill containment and cleanup is recommended to be performed by personnel that have specialized training with mercury spills and hazardous material removal.

TASK 05-51-14-210-801

2. Mercury Spillage Conditional Inspection

A. References

Reference	Title
25-80-00-000-801	Insulation Blanket Removal (P/B 401)
25-80-00-400-801	Insulation Blanket Installation (P/B 401)

B. General

SUBTASK 05-51-14-160-001

(1) A mercury spill must be considered hazardous, and immediate action must be taken to isolate, inspect, and clean the aircraft.

(2) The corrosive action of mercury is very rapid in pitting and intergranular.

(3) Mercury amalgamates quickly with aluminum alloys at room temperature if the oxide film on the aluminum has been scratched or damaged.

(a) Once a small area of aluminum has been amalgamated, corrosion and liquid metal embrittlement occurs. This process is accelerated by moisture and particularly by salt water.

(4) The amalgamation of stressed aluminum structure may also result in rapid cracking similar to stress corrosion cracking.

(5) Mercury is not consumed in the amalgamation process. As the aluminum oxidizes, it separates from the amalgam and the mercury continues to attack fresh aluminum.

(6) The presence of organic finishes, greases or a thick continuous oxide layer retards the amalgamation process.

(7) When elemental mercury leaks on to an all-metallic structure, severe structural strength degradation can occur.

(a) The rate of the diffusion of the mercury into a metal is related to the type of metal touched by the mercury.

(b) The diffusion is also related to the type of finish protection on the metal.

(c) When the diffusion has started, it cannot be stopped.

(d) Structural degradation after a mercury spill is not always visually apparent until a load is applied to the structure.

(8) The inspection, removal, or repair must be made before the next flight.

(9) Structural repairs are necessary if there are signs of mercury contamination.

(10) Make sure there is no detectable mercury in the airplane.

(a) Use mercury sniffers and X-ray equipment (if available) to detect mercury.

(b) The airplane is only clean when there is no detectable mercury.

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C. Personal Protection

SUBTASK 05-51-14-160-002

(1) Throughout the decontamination process follow these steps:

(a) Monitor the mercury vapor levels near the spill area and protect personnel from exposure.

(b) Look for new free mercury deposits around the suspect spill area.

(c) Limit the number of persons around and on the airplane to the minimum required.

(d) Allow only persons trained in mercury spillage cleanup.

(2) Mercury vapor can cause effects in the central and peripheral nervous systems, lungs, kidneys, skin and eyes in humans. Acute exposure to high concentrations of mercury vapor causes severe respiratory damage, while chronic exposure to lower levels is primarily associated with central nervous system damage. Chronic exposure to mercury is also associated with behavioral changes and alterations in peripheral nervous system.

(a) Mercury Exposer Limits are based on local regulations. Refer to your local regulations for applicable exposure limits.

1) The following exposure levels are also available for your reference:

NOTE: Check the web sites for the latest information and exposure limits.

a) Per the US Environmental Protection Agency (EPA):

<1> For a 24 hours daily (continuous) exposer the safe limit for chronic inhalation of elementary mercury is 0.3 µg/m³ (microgram per cubic meter). This limit should be safe for 24 hour exposure of general population.

<2> The Lowest-Observed Adverse Effect Level (LOAEL) is 25 µg/m³ (converted to LOAEL [ADJ] of 9 µg/m³). The LOAEL is based on an 8-hour TWA occupational exposure. LOAEL [ADJ] limit is based on an 8-hour per day and 40 hours per week TWA occupational exposure. (Source http://www.epa.gov/iris/subst/0370.htm#refinhal).

b) Per the US Occupational Safety and Health Administration (OSHA):

<1> Permissible exposure limit (PEL) for mercury vapor is 100 µg/m³ of air as a ceiling limit. A worker's exposure to mercury vapor shall at no time exceed this ceiling level.

<2> OSHA recognizes the National Institute for Occupational Safety and Health (NIOSH) established recommended exposure limit (REL) for mercury vapor of 50 µg/m³ as a TWA for up to a 10-hour workday and a 40-hour workweek.

<3> OSHA also recognizes American Conference of Governmental Industrial Hygienists (ACGIH) assigned mercury vapor threshold limit value (TLV) of 25 µg/m³ as a TWA for a normal 8-hour workday and a 40-hour workweek. (Source http://www.osha.gov/SLTC/healthguidelines/mercuryvapor/recognition.html)

(3) Large amounts of mercury will vaporize at normal temperatures.

(a) Ventilate enclosed space because the air mass can become dangerous to personal health.

(4) Free mercury or amalgam must not be picked up by hand.

(5) Clean tools with soap and hot water or steam bath.

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(a) Discard drill bits after use on structure contaminated by mercury.

(6) Mercury can attach easily to clothing.

(a) Use protective mats or cardboard to prevent contamination of clothing and the spread of mercury to other areas.

(7) Mercury is highly toxic and spreads very easily from one surface to another by adhering to hands, shoes, clothes, tools, etc.

(a) The following precautions for mercury spills should be strictly followed:

1) Avoid contact with surfaces suspected of being contaminated. Use wood or fiber sheets to support body while working in the area.

2) Wear wing socks (shoe protectors) and protective (disposable) clothing in contaminated area to prevent scratching metal surfaces. Properly dispose of socks after use.

3) Do not wear clothing used in contaminated areas on jobs in uncontaminated areas. Dispose of wing socks and protective clothing into unused metal container outside of aircraft. Contact the Waste Management Service.

4) Wash shoes with soap and water. Clean all tools that have been used in contaminated area with steam or hot water and soap. Discard any drill bits used on mercury contaminated areas. Thoroughly clean vacuum cleaner, if used.

5) Always wash thoroughly with soap and water after contacting mercury. Keep hands away from mouth. Do not eat, smoke, or blow nose without first washing your hands thoroughly.

6) Appreciable amounts of mercury will vaporize at normal temperatures. A stagnant air will become dangerous to personal health.

7) Do not use cleaning aids such as solvents, solids, or polishes on contaminated areas. Such materials may promote corrosion.

8) If hands become contaminated with mercury while working with cleaning equipment, do not touch any exposed metal in surrounding area, as you may contaminate it.

D. Isolation of the Mercury

SUBTASK 05-51-14-160-003

(1) Isolate the mercury spill area to prevent contamination to other areas.

(2) Evaluate the spill for cleanup.

NOTE: Depending on the amount and extent of the spill, consider using a specialized cleanup company that has trained personnel for handling mercury spills and cleanup of hazardous materials.

(3) Make a record of the general quantity of the mercury spilled.

(4) Make a record of the location where the mercury was spilled.

(5) When mercury is found on floor, do not remove coverings, access/inspection plates, screws, rivets, bolts, etc., from floor until all free mercury is removed.

(6) Isolate the spilled mercury and avoid enlargement of the contaminated area. The following precautions are advised:

(a) If mercury is found on the floor, do not remove coverings, access/inspection plates, screws, rivets, bolts, etc., from the floor until all free mercury is removed.

1) Any hole which is left open in the contaminated area of the floor may allow mercury to spread to structure underneath the floor.

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(b) If hands become contaminated, do not touch any exposed metal in the surrounding area in case it becomes contaminated.

(c) Mercury spreads easily from one surface to another by adhering to hands, shoes, clothes, tools, etc. Keep traffic to a minimum in the contaminated area.

(d) Consider protecting uncontaminated areas by taping down protective material such as plastic sheets or toweling. Plastic sheeting or toweling can also be taped over a contaminated area to isolate it while equipment is being collected for the removal of mercury.

E. Detection and Cleanup

SUBTASK 05-51-14-160-004

(1) Because of the urgency involved in removing mercury from the airplane, most of these procedures utilize materials that are readily available locally. However, the use of some special equipment is beneficial in ensuring that all traces of mercury are removed, and the sources of supply for these items are as follows:

(a) Hg vacuum cleaner: Nilfisk of America Inc. (V57573).

(b) Sensing device (mercury sniffer): Beckman Industrial Corp. (V73138), or Sunshine Scientific Instruments Inc. (V06030).

(c) Nickel-plated carbon-fiber brushes: International Research and Development Co.

(d) Fine copper wire brush: Produced locally or commercially available.

(e) Mercury sponge: J.T. Baker Chemical Co. (V70829). Volume

(2) A grayish-white powder or fuzzy coating on aluminum surfaces indicates the presence of corrosion caused by spilled mercury.

(3) The presence of even small amounts of mercury can be detected by a sniffer.

NOTE: This is an electronic device that is sensitive to mercury vapor.

SUBTASK 05-51-14-160-005

(4) Inspect the metal floor, seat tracks, cargo rails, and adjacent structure for mercury and corrosion.

(a) Inspect skin and internal structure below point of spillage.

(b) Also inspect lowest point in fuselage below cargo compartment floor if mercury spill has occurred in cargo area.

NOTE: Mercury liquid will flow to lowest level.

(5) Inspect areas suspected of having mercury contamination using a 10X magnifying glass.

(a) If corrosion of aluminum has started there will be a light grayish “Christmas Tree” fuzz or gray powdery dust deposit, and severe structural damage may follow.

(6) If corrosion is evident and cleanup cannot be completed immediately, coat contaminated area with corrosion preventative compound or engine oil.

NOTE: This helps to slow down the corrosion rate and also helps to prevent spreading of mercury contamination.

(7) When mercury spills occur in lower cargo compartment, use a portable X-ray machine (if available) along the outside lower surface of the fuselage to check suspected hidden corrosion areas between the skin, stringers, and frames below the floor.

(a) Droplets of mercury will show on a radiograph as small white spots.

(b) Corrosion and embrittlement will appear as tree-like forms completely penetrating a structural component.

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(c) While the basic X-ray exposure and film density parameters are acceptable to Boeing, it is recommended to reverse the film and X-ray tube placement.

(d) X-Ray evaluation only needs to be performed in areas that are suspected to be contaminated.

1) Special attention must be given to the area along joints and crevices, e.g. skin/stringer joint, stringer clips.

WARNING

DO NOT GET MERCURY IN YOUR MOUTH, EYES, OR ON YOUR SKIN. DO NOT BREATHE THE FUMES FROM THE MERCURY. WEAR PROTECTIVE SPLASH GOGGLES AND GLOVES WHEN YOU CLEAN A MERCURY SPILL. MERCURY IS POISONOUS AND CAN CAUSE INJURY TO PERSONS.

WARNING

FULLY REMOVE ALL MERCURY FROM THE AIRPLANE. MERCURY CAN CAUSE INJURIES TO PERSONNEL, AND DAMAGE TO EQUIPMENT.

(8) Remove all free mercury without delay. The following methods of removal are suggested, the more primitive methods are less effective than those requiring special equipment, but any possible method should be attempted whereby speed is essential.

(a) Use paper or cardboard troughs to scoop up the mercury.

(b) Use a high-powered mercury vacuum cleaner with a trap, if available. Figure 201 (Sheet 1) for a suggested method of making a trap.

1) Locate the vacuum outside the airplane in a well ventilated location to reduce the possibility of contamination to other areas.

2) The size of the pickup hose from the container should be about ¼-inch in diameter to increase the amount of suction applied to the mercury.

NOTE: Due to the weight of mercury, the container will catch the mercury before it can enter the vacuum cleaner hose.

(c) An all rubber storage battery water syringe, or a medicine dropper, may be used to remove mercury if the trap-type glass container and vacuum cleaner are not available.

(d) Cellulose tape may be used to pick up very tiny particles of mercury. General cleanup and inspection (using equipment available) should be made immediately after spillage occurs or is detected.

(e) A fine copper wire brush can also be used to pick up mercury. It is suggested that a suitable brush could be manufactured locally by using the fine wires used in domestic flexible electrical cable. The procedure for using the copper brush is as follows:

1) Use one of the special mercury pickup brushes that attract the mercury. Foam pads are also commercially available that will pick up mercury.

2) Dip the brush in nitric acid (HN03) to clean the wires.

3) Dip the brush into water to remove the acid.

4) Dip the brush into alcohol to remove the water.

5) Pick up the mercury with the brush. Mercury adheres to the copper wires by forming an amalgam. After the brush has collected a quantity of mercury it can be shaken off into a suitable container, and the picking up process continued.

(9) Remove the insulation blankets in the spill area and discard them, do this task: Insulation Blanket Removal, TASK 25-80-00-000-801.

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(a) Also remove all of the insulation blankets that are downstream of the spill.

NOTE: Make sure you remove all blankets that go to the nearest lateral fluid dams.

(10) Where there is evidence of the presence of mercury in joints, between faying surfaces, or trapped in any way between structural members, they must be disassembled as necessary to permit complete removal of the mercury.

(11) Inspect bronze/brass control cable turnbuckle barrels for mercury discoloration. Replace if slightest discoloration is detected.

SUBTASK 05-51-14-750-001

(12) Heat Cycling and Ventilation (optional):

(a) Boeing is aware of the use of a heat cycle to vaporize mercury at the microscopic level.

1) This process has been used by the industry in an effort to completely eliminate mercury from the airplane.

2) This process includes monitoring vapor levels at the elevated temperatures, and venting the aircraft to remove the trace amounts

3) This process is for mercury removal process when visual indication is not entirely possible.

(b) The heat and vent process is accomplished multiple times, reaching temperatures as high as 138°F (59°C).

NOTE: External sources are exclusively used for heating. Aircraft air conditioning packs and equipment cooling are not used to heat aircraft to ensure systems are isolated and vapors are not cycled throughout clean areas. Upon reactivation of aircraft, the aircraft air conditioning and the ECS are cycled to ensure vents are cleared and cabin is clean.

1) Heating to such levels is more than 2.5 times the vaporization temperature (mercury readily vaporizes at 55°F (13°C).

2) Six remote thermometers are used to monitor internal temperatures for 12-hour periods to ensure aircraft structure reaches the elevated temperatures.

3) Following the heat, the aircraft is vented for 12 hours to clear the vapor overboard.

4) Each cycle of heat and ventilation can give significant drops in vapor levels at high and low temperatures.

F. Put the Airplane Back to It's Usual Condition

SUBTASK 05-51-14-410-002

(1) Install the components that you removed or install replaceable parts.

(a) Do this task: Insulation Blanket Installation, TASK 25-80-00-400-801.

——— END OF TASK ———

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NOTE:

MERCURY VAPOR MAY CONTAMINATE THE VACUUM CLEANER.
CLEAN THOROUGHLY AFTER USE.

2182833 S0000482713_V2

Vacuum Cleaner Mercury Trap
Figure 201/05-51-14-990-801

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BRAKE SEIZURE CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. General

A. This procedure contains the task to examine the wheel assemblies and brakes of the main landing gear after a brake seizure condition.

TASK 05-51-15-210-801

2. Brake Seizure Conditional Inspection

A. References

Reference	Title
05-51-07-210-801	High Energy Stop (P/B 201)
32-41-41-000-801	Main Landing Gear Brake Removal (P/B 401)
32-41-41-700-803	Main Landing Gear Brake Check (Wheel Removed from the Airplane) (P/B 601)
32-45-00-700-802	Wheels Inspection (Wheel Removed from the Airplane) (P/B 601)
32-45-00-700-803	Tires - Inspection (P/B 601)
32-45-11-000-801	Main Landing Gear Wheel and Tire Assembly Removal (P/B 401)

B. Location Zones

Zone	Area
700	Landing Gear and Landing Gear Doors

C. Examine the Main Landing Gear Wheels and Brakes

SUBTASK 05-51-15-000-001

(1) Remove the wheel and tire assembly of the main landing gear, do this task: Main Landing Gear Wheel and Tire Assembly Removal, TASK 32-45-11-000-801.

SUBTASK 05-51-15-210-005

(2) Inspect the tires and wheels as follows:

(a) Do this task: Wheels Inspection (Wheel Removed from the Airplane), TASK 32-45-00-700-802.

(b) Do this task: Tires - Inspection, TASK 32-45-00-700-803.

SUBTASK 05-51-15-000-002

(3) Remove the seized brake unit, do this task: Main Landing Gear Brake Removal, TASK 32-41-41-000-801.

(a) Examine the brake unit grease O-ring seal(s), installed on the inner diameter of the brake, and make sure they are not damaged by heat or wear, do this task: Main Landing Gear Brake Check (Wheel Removed from the Airplane), TASK 32-41-41-700-803.

(b) Examine the wheel bearing seal adjacent to the brake and replace the seal if it has been damaged by heat.

SUBTASK 05-51-15-210-006

(4) Examine the brake sleeve and axle.

(a) If you find signs of an overheat condition, do this task: High Energy Stop, TASK 05-51-07-210-801.

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SUBTASK 05-51-15-210-007

(5) Examine the paint on the axles (High Energy Stop, TASK 05-51-07-210-801).

NOTE: Also look on the adjacent areas of the inner cylinder.

(a) Look for a brown color that is caused by an overheat condition.

(b) If the paint is a brown color, repair the damage.

D. Put the Airplane Back to its Usual Condition

SUBTASK 05-51-15-840-001

(1) Install the components you removed if they are serviceable, or install replacement parts.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FLAT SPOTTED TIRES - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. General

A. This procedure contains the task to inspect the wheels and brakes after the tires have become flat spotted.

(1) Flat spotted tires are from a locked wheel slide condition and not from a structural failure of the tire.

(2) You must do the inspections in the sequence given in this procedure to find the cause of the locked wheel condition.

B. The inspections are divided into two types.

(1) The first type of inspection is for conditions where only one tire is flat spotted.

(2) The second type of inspection is for conditions where multiple tires are flat spotted.

TASK 05-51-16-210-801

2. Flat Spotted Tires Conditional Inspection

A. References

Reference	Title
32-41-00-710-801	Normal and Alternate Brake Application - Functional Test (P/B 501)
32-41-41-700-802	Main Landing Gear Brake Fast Check (Wheel Installed on the Airplane) (P/B 601)
32-42-00-710-802	Transducer Operational Test (P/B 501)
32-42-00-720-801	Antiskid/Autobrake Control Unit Operational Test (P/B 501)
32-42-00-720-803	Antiskid Valve Operational Test (P/B 501)
32-42-31-000-801	Antiskid Valve Removal (P/B 401)
32-42-31-400-801	Antiskid Valve Installation (P/B 401)
32-44-00-710-801	Parking Brake System - Operational Test (P/B 501)
32-45-00-700-801	Wheels Fast Check (Wheel Installed on the Airplane) (P/B 601)
32-45-00-700-803	Tires - Inspection (P/B 601)

B. Location Zones

Zone	Area
700	Landing Gear and Landing Gear Doors

C. One Flat Spotted Tire Condition

SUBTASK 05-51-16-210-001

(1) Do the inspections that follow after a one flat spotted tire condition:

(a) Examine the tire.

1) Do this task: Tires - Inspection, TASK 32-45-00-700-803.

(b) Examine the wheel.

1) Do this task: Wheels Fast Check (Wheel Installed on the Airplane), TASK 32-45-00-700-801.

(c) Examine the brake.

1) Do this task: Main Landing Gear Brake Fast Check (Wheel Installed on the Airplane), TASK 32-41-41-700-802.

(d) Make sure the brake will operate correctly and is in a serviceable condition.

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1) Do this task: Normal and Alternate Brake Application - Functional Test, TASK 32-41-00-710-801.

(e) Make sure the routing of the hydraulic lines and the wiring runs are correct.

(f) Do a functional test for the antiskid/autobrake system.

1) Do this task: Antiskid/Autobrake Control Unit Operational Test, TASK 32-42-00-720-801.

(g) Do the operational test for the antiskid valve.

1) Do this task: Antiskid Valve Operational Test, TASK 32-42-00-720-803.

(h) Do the transducer spin test and make sure that the correct brake releases when the transducer motion stops.

1) Do this task: Transducer Operational Test, TASK 32-42-00-710-802.

(i) If the tests above show that the system works correctly and the inspections above do not show damage, replace the antiskid valve for the affected wheel.

1) Remove the antiskid valve, do this task: Antiskid Valve Removal, TASK 32-42-31-000-801.

2) Install a new antiskid valve, do this task: Antiskid Valve Installation, TASK 32-42-31-400-801.

D. Multiple Flat Spotted Tire Condition

SUBTASK 05-51-16-200-001

(1) Do the inspections that follow after a multiple flat spotted tire condition:

(a) Examine the tires.

1) Do this task: Tires - Inspection, TASK 32-45-00-700-803.

(b) Examine the wheels.

1) Do this task: Wheels Fast Check (Wheel Installed on the Airplane), TASK 32-45-00-700-801.

(c) Examine the brakes.

1) Do this task: Main Landing Gear Brake Fast Check (Wheel Installed on the Airplane), TASK 32-41-41-700-802.

(d) Make sure the brakes will operate correctly and are in a serviceable condition.

1) Do this task: Normal and Alternate Brake Application - Functional Test, TASK 32-41-00-710-801.

(e) Make sure the routing of the hydraulic lines and the wiring runs are correct.

(f) Do the operational test for the antiskid valve.

1) Do this task: Antiskid Valve Operational Test, TASK 32-42-00-720-803.

(g) Do the transducer spin test and make sure that the correct brakes release when the transducer motion stops.

1) Do this task: Transducer Operational Test, TASK 32-42-00-710-802.

(h) Make sure the hydraulic return filter is not blocked.

(i) Make sure the parking brake valve operates correctly.

1) Do this task: Parking Brake System - Operational Test, TASK 32-44-00-710-801.

2) Also make sure that the valve is fully open when the parking brake releases.

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(j) Do a BITE test for the Antiskid/Autobrake system, do this task: Antiskid/Autobrake Control Unit Operational Test, TASK 32-42-00-720-801.

1) Make sure the Antiskid/Autobrake system works correctly.

E. Put the Airplane Back to Its Usual Condition

SUBTASK 05-51-16-410-001

(1) Install all the components you removed if they are serviceable, or install replacement parts.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

WHEEL BEARING FAILURE/DAMAGE CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. **General**
   A. This inspection must be done before the next flight of the airplane.
   B. This section has two tasks:
      (1) Wheel Bearing Failure.
      (2) Heat Damage Inspection of the Axle.

TASK 05-51-17-210-801

2. **Wheel Bearing Failure**

A. General

(1) This section gives an inspection procedure for landing gear wheels, brakes, axle sleeves, and axles after a wheel bearing failure.

(2) The degradation of wheel bearing components can occur as follows:
   (a) Lubrication that is incorrect or not sufficient
   (b) A decrease of the wheel bearing preload
   (c) Contamination in the bearing
   (d) Other damage that occurs.

(3) When you operate with damaged wheel bearings, it will cause heat in the adjacent parts:
   (a) The axles
   (b) The axle sleeves
   (c) The spacers
   (d) The wheel hubs.

(4) These parts can have scores if the bearing damage causes a seizure and then causes rotation that is relative to the adjacent parts.

(5) Do an inspection of the wheel bearings carefully during each tire change.

(6) The failure of a wheel bearing can be found by the symptoms or conditions that follow:
   (a) Contamination of the wheel bearing grease with unwanted material.
   (b) Metal particles or fragments in the area of the wheel and the brake
   (c) The hubcap is damaged or is missing (main gear only)
   (d) A wheel that is canted more than usual.
   (e) The wheel and tire assembly are missing.

B. References

Reference	Title
32-41-41-000-801	Main Landing Gear Brake Removal (P/B 401)
32-41-41-400-801	Main Landing Gear Brake Installation (P/B 401)
32-41-41-700-803	Main Landing Gear Brake Check (Wheel Removed from the Airplane) (P/B 601)
32-42-11-000-801	Transducer Removal (P/B 401)
32-42-21-400-801	Antiskid/Autobrake Control Unit Installation (P/B 401)
32-45-00-700-801	Wheels Fast Check (Wheel Installed on the Airplane) (P/B 601)

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(Continued)

Reference	Title
32-45-11-000-801	Main Landing Gear Wheel and Tire Assembly Removal (P/B 401)
32-45-21-000-801	Nose Landing Gear Wheel and Tire Assembly - Removal (P/B 401)

C. Location Zones

Zone	Area
700	Landing Gear and Landing Gear Doors

D. Wheel Inspection

SUBTASK 05-51-17-210-001

(1) Do the wheel inspection, do this task: Wheels Fast Check (Wheel Installed on the Airplane), TASK 32-45-00-700-801.

(a) When a main wheel shows signs of a wheel bearing failure, or other signs of damage, do this task: Main Landing Gear Wheel and Tire Assembly Removal, TASK 32-45-11-000-801.

NOTE: The wheel and tire assembly, with the bearings, must be sent to the shop for disassembly and a detailed inspection.

(b) When a nose wheel shows signs of a wheel bearing failure or other signs of damage, do this task: Nose Landing Gear Wheel and Tire Assembly - Removal, TASK 32-45-21-000-801.

NOTE: The wheel and tire assembly, and the bearings must be sent to the shop to be disassembled and inspected.

(c) Make sure the wheels that are removed have the correct wheel bearings installed.

E. Brake Inspection

SUBTASK 05-51-17-210-002

(1) Do an inspection of the brake assembly (main landing gear only).

(a) Do this task: Main Landing Gear Brake Check (Wheel Removed from the Airplane), TASK 32-41-41-700-803.

(b) Examine the parts that follow:

1) Rotors

2) Stators

3) Torque tube backing plate

4) Other parts of the brake assembly that can become damaged.

(c) When a brake assembly shows signs of damage or does not operate correctly, remove the brake assembly, do this task: Main Landing Gear Brake Removal, TASK 32-41-41-000-801.

NOTE: The brake assembly must be sent to the shop to be disassembled and inspected.

F. Axle Inspection

SUBTASK 05-51-17-210-003

(1) Do an inspection of the main gear axle and axle sleeve.

(a) Remove the components that follow if they have not been removed:

NOTE: Make sure you do a check for damage.

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1) Do this task: Main Landing Gear Brake Removal, TASK 32-41-41-000-801.
2) Do this task: Transducer Removal, TASK 32-42-11-000-801.

(b) Remove the grease or corrosion inhibitive compound (CIC) from the axle if it is necessary.

(c) Visually examine the components that follow and look for paint or primer discoloration, blistering, and structural damage:

NOTE: Discoloration is green primer that has turned brown or black and/or enamel turned yellow, brown, or black.

NOTE: Damage is scoring, metal transfer, and/or displacement of material.

1) The outer diameter of the axle sleeve, check for scoring.

NOTE: Scoring will be caused when the wheel bearing turns on the axle sleeve.

a) Repair or replace the sleeve if necessary.

2) The brake sleeve, check for scoring on the end adjacent to the inner wheel bearing cone.

a) Repair or replace the sleeve if necessary.

(d) Visually examine the axle nut and washer for signs of scores or other damage.

1) Replace or repair the nut and washer if necessary.

(e) If there is no damage, discoloration, or blistering, you can leave the axle in service as it is.

NOTE: No more inspections to the axle are necessary.

(f) If the axle has signs of heat damage, do this task: Heat Damage Inspection of the Axle, TASK 05-51-17-210-802.

G. Put the Airplane Back to Its Usual Condition

SUBTASK 05-51-17-410-001

(1) Install all of the components you removed if they are serviceable, or install replacement parts.

(a) Do this task: Main Landing Gear Brake Installation, TASK 32-41-41-400-801.

(b) Do this task: Antiskid/Autobrake Control Unit Installation, TASK 32-42-21-400-801.

END OF TASK

TASK 05-51-17-210-802

3. Heat Damage Inspection of the Axle

A. References

Reference	Title
05-51-07-280-801	Heat Damage Inspection (Ammonium Persulfate Solution) (P/B 201)
32-11-85-000-801	Main Landing Gear Axle Removal (P/B 401)
51-21-98-300-801	Heat, Weather and Oil Resistant Inorganic Protective Coating Application (P/B 701)

B. Location Zones

Zone	Area
700	Landing Gear and Landing Gear Doors

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C. Main Landing Gear (MLG) Axle

SUBTASK 05-51-17-210-004

(1) Examine the MLG axle for heat damage as follows:

NOTE: This step is necessary only when the axle sleeve show signs of scoring, discoloration, or other damage, and the axle sleeve has been removed.

(a) If it is necessary to reapply the heat-resistant protective coating, do this task: Heat, Weather and Oil Resistant Inorganic Protective Coating Application, TASK 51-21-98-300-801.

(b) Examine the light-gray hydraulic-fluid resistant paint on the axle.

1) Look for a brown color caused when the paint becomes too hot.

(c) Do a check for discoloration of the chrome plating on the axle lands where the sleeve touches.

WARNING	THE POWER CABLE OF THE BORESCOPE MUST BE IN GOOD CONDITION. IF THERE ARE CIRCUMFERENTIAL CUTS, FRAYED AREAS, OR RUPTURES TO THE EXTERNAL RUBBER COVER OF THE CABLE, INJURY TO PERSONS CAN OCCUR.

(d) Examine the green primer on the inner surfaces (bore) of the axle with a borescope.

1) Use the borescope to a minimum depth of 16 inches and look for discoloration or blistered paint.

2) The green primer will turn to a light brown or black color when it becomes too hot.

NOTE: If the paint shows only a small discoloration, you can do the heat damage inspection when the airplane goes back to the primary base.

NOTE: Do not make more than three landings before you do this inspection.

SUBTASK 05-51-17-210-005

(2) If signs of heat damage to the main landing gear axle is found, do this task: Heat Damage Inspection (Ammonium Persulfate Solution), TASK 05-51-07-280-801.

(a) Remove the axle if it is necessary, do this task: Main Landing Gear Axle Removal, TASK 32-11-85-000-801.

SUBTASK 05-51-17-350-001

(3) If you find signs of damage in the areas that follow, repair or replace the damaged components:

NOTE: Heat damage to the cadmium plate can cause cadmium embrittlement of the steel substrate.

(a) The cadmium plate on the axle bore shows signs of heat damage.

(b) The chrome plate on the outer part of the axle shows signs of heat damage.

D. Nose Landing Gear (NLG) Axle

SUBTASK 05-51-17-210-006

(1) Do an inspection of the nose landing gear axle.

(a) Visually examine the parts that follow for scores or other damage:

1) The wheel bearing washer

2) The axle nut

3) The inner wheel bearing spacer.

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(b) Replace or repair the components if necessary.

(c) Examine the NLG axle for damage.

1) Look for scores or discoloration of the chrome plated bearing lands on the axle.

2) Examine the light-gray, hydraulic-fluid-resistant, paint on the axle.

a) The paint will become a brown color when it becomes too hot.

WARNING	THE POWER CABLE OF THE BORESCOPE MUST BE IN GOOD CONDITION. IF THERE ARE CIRCUMFERENTIAL CUTS, FRAYED AREAS, OR RUPTURES TO THE EXTERNAL RUBBER COVER OF THE CABLE, INJURY TO PERSONS CAN OCCUR.

3) Examine the green primer on the inner surfaces (bore) of the axle with a borescope.

a) Use the borescope to a minimum depth of 7 inches and look for discoloration or blistering

b) The green primer will turn to a light brown or black color when it becomes too hot.

NOTE: If the paint shows only a small discoloration, you can do the heat damage inspection when the airplane goes back to the primary base.

NOTE: Do not make more than three landings before you do this inspection.

SUBTASK 05-51-17-210-007

(2) If signs of heat damage to the nose gear axle are found, do this task: Heat Damage Inspection (Ammonium Persulfate Solution), TASK 05-51-07-280-801.

SUBTASK 05-51-17-350-002

(3) If you find signs of damage in the areas that follow, repair or replace the damaged components:

NOTE: Heat damage to the cadmium plate can cause cadmium embrittlement of the steel substrate.

(a) The cadmium plate on the axle bore shows signs of heat damage

(b) The chrome plate on the outer part of the axle shows signs of heat damage.

E. Put the airplane back to its usual condition.

SUBTASK 05-51-17-400-001

(1) Install all of the components you removed if they are serviceable, or install replacement parts.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

BIRD/HAIL STRIKE CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. **General**

A. This procedure contains these two tasks:

(1) Bird strike and in-flight hail strike conditional inspection.

(2) Hail strike on the ground conditional inspection.

TASK 05-51-18-210-801

2. **Bird Strike and In-flight Hail Strike Conditional Inspection**

A. General

(1) All of the inspections are visual unless shown differently in the procedure.

(2) Examine the external surfaces of the airplane structure in the general area of the bird/in-flight hail strike.

(a) If the initial inspection shows structural damage, then the internal structure must be inspected.

(b) If the bird/in-flight hail struck the nose radome, the inside of the radome must be inspected even if no damage is found on the exterior of the nose radome.

1) If the outer skin-to-core of the radome does not compress when you apply strong finger pressure to impact area, then do the internal inspection at or before 3 flight cycles.

(c) Also inspect the hydraulic, pneumatic, and other systems in the area of the bird/in-flight hail strike for damage.

(3) When the conditional inspection tells you to "examine" a component, look for these conditions (repair or replace components, if it is necessary):

(a) Cracks

(b) Pulled apart structure

(c) Loose paint (paint flakes)

(d) Twisted parts (distortion)

(e) Bent components

(f) Ruptures

(g) Loose fasteners

(h) Fasteners holes that became larger or longer

(i) Fasteners that have pulled out or are gone

(j) Delaminations

(k) Fiber breakouts

(l) Misalignment

(m) Interference

(n) Other signs of damage.

(4) If damage is found during these inspections, go to the related maintenance manual section for the repair.

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B. References

Reference	Title
12-40-04-100-801	Bird Strike Cleaning (P/B 201)
27-51-00-040-801	Trailing Edge Flap System Deactivation (P/B 201)
27-51-00-440-801	Trailing Edge Flap System Reactivation (P/B 201)
27-51-00-710-801	Trailing Edge Flap System Operational Test (P/B 501)
27-81-00-040-801	Leading Edge Flaps and Slats Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
27-81-00-700-801	Leading Edge Flap and Slat Operational Test in Primary Mode (P/B 501)
71-00-00-800-802-F00	Engine Foreign Object Damage and Birdstrike Inspection (P/B 601)
SRM 51-10-02	Structural Repair Manual

C. Location Zones

Zone	Area
111	Radome
300	Empennage
400	Powerplant and Nacelle Struts
500	Left Wing
600	Right Wing
700	Landing Gear and Landing Gear Doors

D. Bird Strike and In-flight Hail Strike Conditional Inspection

SUBTASK 05-51-18-040-001

WARNING PUT ON EQUIPMENT FOR PROTECTION BEFORE YOU TOUCH THE BIRD CARCASS, BLOOD, GUTS, AND RESIDUE. THIS CAN CONTAIN BACTERIA AND VIRUSES THAT CAN CAUSE ILLNESSES, AND INJURIES TO PERSONNEL.

WARNING DO NOT LET THE BIRD CARCASS OR OTHER PIECES OF THE BIRD TOUCH YOUR SKIN. DISCARD THE BIRD PIECES IN A PLASTIC DISPOSAL BAG. THE BIRD PIECES CAN CONTAIN INFECTIOUS MATERIALS (BACTERIA AND VIRUSES). THEY CAN CAUSE ILLNESSES, AND INJURIES TO PERSONNEL.

(1) Before you touch any area of the airplane that may have been affected by the bird strike, do this task: Bird Strike Cleaning, TASK 12-40-04-100-801.

WARNING DO THE DEACTIVATION PROCEDURE FOR THE LEADING EDGE FLAPS AND SLAT ACTUATION SYSTEMS. DO NOT OPERATE FLAPS AND SLATS ACTUATION SYSTEMS DURING THIS INSPECTION. FAILURE TO OBEY THIS WARNING CAN CAUSE INJURY TO PERSONS AND DAMAGE TO EQUIPMENT.

(2) Extend the Leading edge flap and slat system and the trailing edge flap system in the full extend position.

(a) Do the deactivation procedure for the leading edge flap and slat system, do this task: Leading Edge Flaps and Slats Deactivation, TASK 27-81-00-040-801.

(b) Do the deactivation procedure for the trailing edge flap system, do this task: Trailing Edge Flap System Deactivation, TASK 27-51-00-040-801.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-51-18-210-001

(3) Examine the areas that follow, in particular, inspect the nearby components of these systems if evidence of bird remains or structural damage are found.

(a) The external areas of the radome for:

1) Cracks
2) Delamination
3) Soft spots
4) Core damage.

(b) The internal areas of the radome for:

1) Cracks
2) Delamination
3) Soft spots
4) Core damage.

(c) The pilots' windows for:

1) Delamination
2) Spalling
3) Cracks.

(d) The forward-body nose section "eyebrow" area above the windows and radome.

(e) The wing.

(f) The winglet.

(g) The nacelle strut.

(h) The leading edge fairing of the horizontal stabilizer.

(i) The leading edge fairing of the vertical stabilizer.

(j) Examine the strut panels, doors, and structure.

(k) Examine the wing leading edge and the wing trailing edge structure, panels, and doors.

1) Also examine the two sides of the honeycomb panels for:

a) Cracks
b) Delamination
c) Soft spots
d) Core damage.

(l) Examine the leading edge slat mechanism and track fairing links.

(m) Examine the trailing edge flat mechanism and track fairing links.

(n) Examine the flight control surfaces.

(o) The passengers windows for:

1) Displacement of the outer panel
2) Crazing
3) Cracks
4) Other types of window damage.

(p) Examine the nose landing gear doors and linkage.

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(q) Examine the main landing gear doors and linkage.

(r) If the landing gear was extended during the bird/in-flight hail strike, examine the landing gear.

SUBTASK 05-51-18-210-002

(4) Do a general visual inspection of each engine nose cowl and the engine intake for signs of bird strike or foreign object damage.

(a) If there is indication of a bird strike or foreign object damage, do this task: Engine Foreign Object Damage and Birdstrike Inspection, TASK 71-00-00-800-802-F00.

SUBTASK 05-51-18-210-003

(5) Examine the external fuselage structure.

(a) If you find external damage, get access to the internal areas and examine:

1) All of the frames

2) The fittings and the component mounts

3) All of the components in the area

4) The pipes

5) The pulleys

6) The mechanical linkage

7) Refer to SRM 51-10-02 for the analysis and continued service of airplanes with hail damage.

SUBTASK 05-51-18-210-004

(6) Inspect the hydraulic, pneumatic, and other systems in the area of the bird/in-flight hail strike for damage.

SUBTASK 05-51-18-440-005

(7) Do the activation procedure for the leading edge flap and slat system, do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

SUBTASK 05-51-18-440-006

(8) Do the activation procedure for the trailing edge flap system, do this task: Trailing Edge Flap System Reactivation, TASK 27-51-00-440-801.

SUBTASK 05-51-18-710-001

(9) Do the tests that follow if you worked on the system subsequent to the inspection for damage:

(a) Do this task: Leading Edge Flap and Slat Operational Test in Primary Mode, TASK 27-81-00-700-801.

(b) Do this task: Trailing Edge Flap System Operational Test, TASK 27-51-00-710-801.

E. Put the Airplane Back to It's Usual Condition

SUBTASK 05-51-18-400-001

(1) Install the components you removed or install replacement parts.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-51-18-212-801

3. Hail Strike on the Ground Conditional Inspection

A. General

(1) This inspection is required if hail reported as GR 0.25 in. (6.35 mm) or greater in size strikes the aircraft.

(a) If the GR hail struck the nose radome, the inside of the radome must be inspected even if no damage is found on the exterior of the nose radome.

1) If the outer skin-to-core of the radome does not compress when you apply strong finger pressure to impact area, then do the internal inspection at or before 3 flight cycles.

(b) For GR hail less than 0.25 in. (6.35 mm), no inspection is required.

(2) This inspection is not required if GS hail strikes the aircraft.

(a) GS hail is defined as white, opaque grains of ice. The pellets are round or sometimes conical and are less than 0.2 in. (5.1 mm) in diameter.

B. References

Reference	Title
27-51-00 P/B 201	TRAILING EDGE FLAP SYSTEM - MAINTENANCE PRACTICES
27-51-00-710-801	Trailing Edge Flap System Operational Test (P/B 501)
27-81-00 P/B 201	LEADING EDGE FLAP AND SLAT CONTROL SYSTEM - MAINTENANCE PRACTICES
27-81-00-700-801	Leading Edge Flap and Slat Operational Test in Primary Mode (P/B 501)
SRM 51-10-01-0G-0	Structural Repair Manual

C. Location Zones

Zone	Area
200	Upper Half of Fuselage
300	Empennage
400	Powerplant and Nacelle Struts
500	Left Wing
600	Right Wing
700	Landing Gear and Landing Gear Doors
800	Doors

D. Additional Information

NOTE: Additional information useful for this procedure may be found in these references:

- TRAILING EDGE FLAP SYSTEM - MAINTENANCE PRACTICES, PAGEBLOCK 27-51-00/201
- LEADING EDGE FLAP AND SLAT CONTROL SYSTEM - MAINTENANCE PRACTICES, PAGEBLOCK 27-81-00/201

ECCN 9E991 BOEING PROPRIETARY - See title page for details

E. Hail Strike on the Ground Conditional Inspection

SUBTASK 05-51-18-040-002

> **WARNING** DO THE DEACTIVATION PROCEDURE FOR THE LEADING EDGE FLAPS AND SLATS. THE FLAPS AND SLATS MOVE QUICKLY. INJURIES TO PERSONNEL, AND DAMAGE TO EQUIPMENT CAN OCCUR.

(1) Do the deactivation procedure for the leading edge flap system: LEADING EDGE FLAP AND SLAT CONTROL SYSTEM - MAINTENANCE PRACTICES, PAGEBLOCK 27-81-00/201.

SUBTASK 05-51-18-040-003

> **WARNING** DO THE TRAILING EDGE FLAP DEACTIVATION PROCEDURE BEFORE YOU DO WORK ON THE FLAP SYSTEM. WITH THE FLAPS ACTIVATED, THE FLAPS CAN MOVE AND CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

(2) Do the deactivation procedure for the trailing edge flap system: TRAILING EDGE FLAP SYSTEM - MAINTENANCE PRACTICES, PAGEBLOCK 27-51-00/201.

SUBTASK 05-51-18-212-001

(3) Do the visual examinations of the areas that follow:

NOTE: When you examine the honeycomb panels, look at the two sides for cracks, delaminations, soft spots and core damage.

(a) The nose radome.

(b) The wings, for signs of hail damage to the areas that follow:

1) All horizontal surfaces
2) Leading edges
3) Trailing edges
4) Panels.

(c) The winglets.

(d) The flight control surfaces.

(e) The leading edge fairings on the horizontal stabilizer.

(f) The leading edge fairings on the vertical stabilizer.

(g) The external fuselage structure.

1) If signs of hail damage to the external fuselage structure is found, refer to SRM 51-10-01-0G-0 for the aerodynamic smoothness and investigation and clean-up of damage.

(h) The flight compartment windows, for signs of hail damage as follows:

1) Cracks
2) Displacement of the outer window
3) Other types of window damage.

(i) The forward fuselage section above the flight compartment windows and the radome.

(j) The wing tip fairings and navigation lights.

(k) The passenger and cargo doors.

(l) The nacelle strut.

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(m) The nose landing gear doors.

(n) The main landing gear doors.

(o) The passenger compartment windows for signs of hail damage as follows:

1) Cracks

2) Displacement of the outer window

3) Crazing

4) Other types of window damage.

(p) Examine the nose cowl and the engine for signs of foreign object damage.

LOM 466-999

(q) The broadband radome.

LOM ALL

SUBTASK 05-51-18-212-002

(4) The allowable damage shown in the Structural Repair Manual is to be used to define the limits of damage within each component.

SUBTASK 05-51-18-440-003

(5) Do the reactivation procedure for the leading edge flap system: LEADING EDGE FLAP AND SLAT CONTROL SYSTEM - MAINTENANCE PRACTICES, PAGEBLOCK 27-81-00/201.

SUBTASK 05-51-18-440-004

(6) Do the reactivation procedure for the trailing edge flap system: TRAILING EDGE FLAP SYSTEM - MAINTENANCE PRACTICES, PAGEBLOCK 27-51-00/201.

SUBTASK 05-51-18-710-002

(7) Do the tests that follow if you worked on the system subsequent to the inspection for damage:

(a) Do this task: Leading Edge Flap and Slat Operational Test in Primary Mode, TASK 27-81-00-700-801.

(b) Do this task: Trailing Edge Flap System Operational Test, TASK 27-51-00-710-801.

END OF TASK

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LIGHTNING STRIKE CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. **General**

A. After an airplane lightning strike report, an examination of the airplane is done to find possible damage.

B. The term “Examination” is intended to direct airline personnel to find lightning strike damage as described in these procedures and is not an indication of intensity, access or tools recommended.

C. This procedure has two tasks:

(1) Inspection for Lightning Strike Damage

NOTE: The Phase I Inspection is necessary to defer the Phase II Inspection for 50 flight cycles, if applicable. The Phase I Inspection is not necessary if the Phase II inspection will be completed immediately.

(a) Phase I Inspection

(b) Phase II Inspection

(2) Inspection and Operational Check of Radio and Navigation Systems

D. Lightning Strike Examination

(1) The lightning strike inspection is divided into two phases.

(a) Phase I - Inspection of metallic structures, non-metallic (composite) structures and system components.

(b) Phase II - General Visual Inspection (GVI) of all areas.

(2) A maximum interval of 50 flight cycles to do the Phase II inspection applies if one of these conditions occurs:

(a) The Phase I inspection found no external lightning strike damage.

(b) An estimate and/or repair of the external lightning strike damage found by the Phase I inspection is done.

NOTE: Use the related Structural Repair Manual (SRM) or an approved procedure to make the necessary repairs.

E. The metal fuselage and wing supply the basic protection from lightning for the fuel system and critical electronic systems.

(1) Necessary protection is also supplied for the non-metal structure by aluminum mesh (the rudder has a picture frame configuration).

(2) The external structure prevents fuel ignition and electrical/electronic system damage.

(3) Critical electronic systems also rely on wire shields and proper shield terminations for indirect effects protection.

F. Typical lightning strike behavior

(1) There will be a minimum of two strike points at different areas of the airplane surface, an entrance and an exit.

(2) When lightning initially strikes on the forward fuselage or engine nacelles, it will move rearward over the fuselage surface or over the wing surface.

(3) On the wing surface, the lightning will move aft of the nacelle or aft of the extended ends of the leading edge slats.

(4) When lightning initially strikes the aft area of the empennage or wing surface, it will stay there until the lightning current stops.

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(5) Lightning strike entrance and exit points are typically found in Zone 1, but also occur in Zone 2 and 3.

(6) Lightning strikes in Zone 1 typically exit a different location in Zone 1. The external components most likely to be hit are listed below (Figure 202):

(a) wing leading edge

(b) wing trailing edge

(c) wingtips

(d) engines

(e) vertical fin tip

(f) horizontal stabilizer tips

(g) elevators

(h) nose radome.

(7) Areas where initial lightning strikes typically do not occur are as follows:

(a) drain masts

(b) pitot probes

(c) blade antennas

(d) extended ends of leading edge slats

(e) trailing edge flap track fairing tips

(f) landing gear.

G. Direct Damage occurs when there is a visible effect that degrades the performance of a structure or components. Typical indications are as follows:

(1) Metallic surfaces appear burned, melted or show signs of metal distortion, and may have small circular melted marks of approximately ⅛ in. (3 mm) in diameter.

(2) Non-metallic surfaces (composite) appear burned, punctured or delaminated, and may have burns or black marks up to 4 in. (102 mm) in diameter.

(3) Marks appear along the larger area of a trailing edge surface.

(4) Holes appear in the skin, created from high intensity lightning.

(5) Skins and fasteners appear burned or discolored.

(6) Fluid leakage appears from damaged aluminum hydraulic tubing joints on the vertical stabilizer, or horizontal stabilizer, or empennage.

H. Indirect Damage can result from the large electrical transients caused by lightning. Typical indications are as follows:

(1) Failures in electrical/electronic systems equipment.

(2) Degraded or disturbed wire shielding and shield termination.

(3) Problems occur with components located external to the pressurized fuselage.

NOTE: While the electrical system is protected from a possibility of direct lightning strike to electrical/electronic wires and cables, damage can occur. A high intensity lightning strike can produce electromagnetic fields within the unpressurized areas that are large enough to cause possible damage to the electrical system components.

I. Static dischargers, located on the tips and trailing edges of airfoils, are frequently hit and damaged by lightning.

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(1) The primary function of a static discharger is to dissipate static charges to prevent interference on communication and navigation equipment.

(2) Some static dischargers are put in areas to prevent damage to lights or other system components from a lightning strike.

(3) These devices do not prevent the lightning strikes on the airplane.

J. System Verification

(1) If a system malfunction is reported by the flight crew then a system check is required.

(2) All installed systems required for flight must be operational.

TASK 05-51-19-210-804

2. Phase I Examination

A. General

(1) Use of visual aids from the ground is acceptable to perform the following procedure.

(2) If a system malfunction is reported by the flight crew then a system check is required.

(3) Any requests for engineering analysis and repairs must contain the following information:

(a) Clearly defined damage:

1) Damage location defined with dimensioned on the production drawings and photos for reference.

2) Damage extent.

3) Cause of damage.

(b) Proposed repair Plan.

(c) Any limitations - equipment, materials, etc.

(d) Status of the aircraft and airplane Return to Service date.

(e) Desired outcome (Permanent, Time Limited/Temporary, or Ferry Flight).

B. References

Reference	Title
23-61-00-210-801	Static Discharger Inspection (P/B 601)
27-11-00-710-801	Aileron - Response (Operational) Test (P/B 501)
27-21-00-700-815-002	Rudder Centering Test (P/B 501)
27-21-00-700-816-002	Rudder Pedal Forces Test (P/B 501)
27-21-00-700-817-002	Rudder Travel Test (P/B 501)
27-21-00-700-819-002	Rudder Trim System Test (P/B 501)
27-31-00-700-815	Elevator Tab Control System - Operational Test (P/B 501)
27-31-00-710-801	Elevator and Elevator Trim Control System - Operational Test (P/B 501)
27-31-00-710-802	Elevator Control Column Override - Operational Test (P/B 501)
28-41-00-710-801	Operational Test - Fuel Quantity Indicating System (P/B 501)
28-41-00-720-801	Comparison Check - Fuel Quantity Indicating System (FQIS) with the Fuel Measuring Sticks (P/B 501)
33-44-00-710-801	Anti-Collision Lights - Operational Test (P/B 501)
33-51-00-720-801	Emergency Lights - Operational Check (P/B 501)
34-11-01-200-804	Pitot Probe Detailed Inspection (P/B 601)
34-11-02-200-803	Static Port - Detailed Inspection (P/B 601)

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(Continued)

Reference	Title
34-21-05-200-801	Angle of Attack Sensor - Inspection (P/B 601)
34-23-00-820-801	Compass Calibration Tool – Master Compass Option (P/B 201)
34-23-00-820-802	Formal Compass Swing and Compass Card - Airplane Inertial Reference System (IRS) Option (P/B 201)
34-23-00-820-803	Standby Magnetic Compass - Degaussing (P/B 201)

C. Location Zones

Zone	Area
100	Lower Half of Fuselage
200	Upper Half of Fuselage
300	Empennage
400	Powerplant and Nacelle Struts
500	Left Wing
600	Right Wing
700	Landing Gear and Landing Gear Doors
800	Doors

D. Phase I - Metallic Surfaces and System Components

SUBTASK 05-51-19-210-019

(1) Perform a ground level inspection from the ground of Zones 1, 2, and 3 visible external metallic surfaces including flight controls and externally mounted airplane components for signs of lightning strike damage (Figure 202).

NOTE: Use of stands or ladders are not required.

(a) Look for visible signs of discolored paint, burn marks, melted areas, or holes in skin.

(b) If any damage is found, the damage must be assessed and/or repaired immediately per the Structural Repair Manual (SRM) or approved method.

1) A maximum interval of 50 flight cycles to do the Phase II inspection applies if one of these conditions occurs:

a) The Phase I inspection found no external lightning strike damage.

b) An estimate and/or repair of the external lightning strike damage found by the Phase I inspection is done.

NOTE: Use the SRM or an approved procedure to make the necessary repairs.

NOTE: Continued revenue operation up to 50 flight cycles after a lightning strike is acceptable for metallic structures 0.036 in. (0.914 mm) or thicker.

SUBTASK 05-51-19-210-020

(2) Perform a General Visual Inspection (GVI) around the fuel areas of the wing torque box (Figure 201).

NOTE: A wing torque box includes outboard wing, wing center section, and side of the body structure. The outboard wing consists of upper and lower skin panels and front and rear spar with ribs located perpendicular to the rear spar. The center section is contained of an inspar wing box and wing to body interface structure.

(a) If any damage was found, assess and/or repair the damage per the SRM or approved method.

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SUBTASK 05-51-19-210-051

(3) Perform a ground level inspection from the ground of the Angle of Attack (AOA) sensors, the pitot probes, static ports, and the surrounding areas for damage.

(a) Look for damage to the AOA sensors.

1) If damage is found, do this task Angle of Attack Sensor - Inspection, TASK 34-21-05-200-801.

(b) Look for damage to the pitot probes.

1) If damage is found, do this task Pitot Probe Detailed Inspection, TASK 34-11-01-200-804.

(c) Look for damage to the static ports.

1) If damage is found, do this task Static Port - Detailed Inspection, TASK 34-11-02-200-803.

(d) If any damage is found around the AOA sensors, pitot probes and static ports.

1) The damage must be assessed and/or repaired per the SRM or approved method.

a) Look for burns, punctures, discolored paint, and general skin distortion.

b) A maximum interval of 50 flight cycles to do the Phase II inspection applies if one of these conditions occurs:

<1> Lightning strike damage is not found during Phase I GVI from the ground, or

<2> Lightning strike damage found during Phase I inspection is assessed and/or repaired per the SRM or approved method.

NOTE: Continued revenue operation up to 50 flight cycles after a lightning strike is acceptable for metallic structures 0.036 in. (0.914 mm) or thicker.

SUBTASK 05-51-19-210-022

(4) Perform a ground level inspection from the ground of all external lights for lightning strike damage.

(a) Look for broken light assemblies, broken or cracked lenses, or other visible damage.

(b) Repair or replace damaged parts as necessary until the light functions properly.

(c) If damage was found on the Anti-Collision or Emergency Lights, do a test of the lights that follow:

1) Do this task: Anti-Collision Lights - Operational Test, TASK 33-44-00-710-801.

2) Do this task: Emergency Lights - Operational Check, TASK 33-51-00-720-801.

SUBTASK 05-51-19-700-008

(5) Perform a ground level inspection of the flight control metallic components for signs of lightning strike damage.

(a) If flight controls show signs of damage, examine the surface hinges, bearings and bondings for signs of damage.

(b) If no damage is found, do a basic operational check of the flight controls as follows:

NOTE: If the flight controls operate correctly after you do these steps, no more inspections are necessary.

1) Move the rudder, control wheel and control column in both directions.

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2) Make sure that there is full travel and the flight controls move freely.

NOTE: Hold the nose wheel during the rudder check to prevent nose wheel movement. You can hold the nose wheel if you put in the steering lockout pin or remove the torsion link pin.

SUBTASK 05-51-19-720-005

(6) If the rudder system did not operate correctly during the operational check of the flight controls steps above, do a functional test of the rudder system.

(a) Do this task: Rudder Trim System Test, TASK 27-21-00-700-819-002.

(b) Do this task: Rudder Pedal Forces Test, TASK 27-21-00-700-816-002.

(c) Do this task: Rudder Travel Test, TASK 27-21-00-700-817-002.

(d) Do this task: Rudder Centering Test, TASK 27-21-00-700-815-002.

SUBTASK 05-51-19-720-006

(7) If the elevator system did not operate correctly during the operational check of the flight controls steps above, do a functional test of the elevator system.

(a) Do this task: Elevator Control Column Override - Operational Test, TASK 27-31-00-710-802.

(b) Do this task: Elevator Tab Control System - Operational Test, TASK 27-31-00-700-815.

(c) Do this task: Elevator and Elevator Trim Control System - Operational Test, TASK 27-31-00-710-801.

SUBTASK 05-51-19-720-007

(8) If the aileron system did not operate correctly during the operational check of the flight controls steps above, do a functional test of the ailerons.

(a) Do this task: Aileron - Response (Operational) Test, TASK 27-11-00-710-801.

SUBTASK 05-51-19-210-024

(9) Perform a ground level inspection from the ground of the Wingtips or Winglets for lightning strike damage.

(a) Examine the fuel vent outlet and surge tanks for signs of damage.

(b) If any damage was found, address the damage per SRM or approved method.

SUBTASK 05-51-19-210-025

(10) Perform a ground level inspection from the ground of the Static Dischargers for lightning strike damage.

(a) If any Static Dischargers are damaged or missing, assess with Static Discharger Inspection, TASK 23-61-00-210-801.

E. Phase I Examination - Non-Metallic Surfaces and System Components

SUBTASK 05-51-19-210-037

(1) Perform a ground level inspection of Zones 1, 2, and 3 external composite surfaces for signs of lightning strike damage including all flight control surfaces (Figure 202).

NOTE: Use of stands or ladders are not required.

(a) Look for discolored paint, burns, punctures and delamination of composite honeycomb sandwich structure.

(b) A maximum interval of 50 flight cycles to do the Phase II inspection applies if one of these conditions occurs:

1) The Phase I inspection found no external lightning strike damage.

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2) An estimate and/or repair of the external lightning strike damage found by the Phase I inspection is done.

NOTE: Use the related SRM or an approved procedure to make the necessary repairs.

(c) Examine the external surfaces from the ground of the nose radome for burns, punctures, and pin holes in the composite honeycomb sandwich structure. If damage is found, examine the internal surfaces and components under the nose radome.

(d) If lightning strike damage is found, examine all composite structure in perimeter of damaged area for signs of delamination.

1) Use instrumental or non-instrumental Non-Destructive Inspection (NDI) tap testing to find composite structure delamination you cannot see.

NOTE: For a tap test, use a solid metal disk and tap the area adjacent to the damaged area lightly. If there is delamination, you will hear a sound that is different than the sound of a solid bonded area. Refer to Nondestructive Test Manual.

2) If any damage was found, address the damage per SRM or approved method.

SUBTASK 05-51-19-210-050

(2) Perform a ground level inspection of the flight control composite components for signs of lightning strike damage.

(a) If the flight control composite components show signs of lightning strike damage, perform a GVI of these items:

1) Surface hinges.

2) Bearings.

3) Bondings.

(b) If no damage is found, do a basic operational check of the flight controls as follows, unless already performed in Phase I Inspection:

NOTE: If the flight controls operate correctly after you do these steps, no more inspections are necessary.

1) Move the rudder, control wheel and control column in both directions.

2) Make sure that there is full travel and the flight controls move freely.

NOTE: Hold the nose wheel during the rudder check to prevent nose wheel movement. You can hold the nose wheel if you put in the steering lockout pin or remove the torsion link pin.

SUBTASK 05-51-19-720-008

(3) If the rudder system did not operate correctly during the operational check of the flight controls steps above, do a functional test of the rudder system.

(a) Do this task: Rudder Trim System Test, TASK 27-21-00-700-819-002.

(b) Do this task: Rudder Pedal Forces Test, TASK 27-21-00-700-816-002.

(c) Do this task: Rudder Travel Test, TASK 27-21-00-700-817-002.

(d) Do this task: Rudder Centering Test, TASK 27-21-00-700-815-002.

SUBTASK 05-51-19-720-009

(4) If the elevator system did not operate correctly during the operational check of the flight controls steps above, do a functional test of the elevator system.

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(a) Do this task: Elevator Control Column Override - Operational Test, TASK 27-31-00-710-802.

(b) Do this task: Elevator Tab Control System - Operational Test, TASK 27-31-00-700-815.

(c) Do this task: Elevator and Elevator Trim Control System - Operational Test, TASK 27-31-00-710-801.

SUBTASK 05-51-19-720-010

(5) If the aileron system did not operate correctly during the operational check of the flight controls steps above, do a functional test of the ailerons.

(a) Do this task: Aileron - Response (Operational) Test, TASK 27-11-00-710-801.

SUBTASK 05-51-19-210-048

(6) Perform a ground level inspection of the Wingtips or Winglets composite structure.

(a) If any damage was found, address the damage per SRM or approved method.

SUBTASK 05-51-19-800-001

(7) The Phase II Inspection of the airplane can be deferred for up to 50 flight cycles after the accomplishment of Phase I Inspection.

F. External Wire Shields Inspection

SUBTASK 05-51-19-211-016

(1) Do the visual inspections that follow:

NOTE: If the lightning strike entrance and exit points can not be identified, then the external wire shield visual check is not required.

NOTE: If there are no wire shield termination(s) in the area of the lightning strike entrance or exit points, then the external wire shield visual check is not required.

(a) In the area of the lightning strike entrance and exit points, do a visual check for damage to the wire shield terminations.

(b) If the flight crew has reported a problem with any system after the lightning strike, do a visual check for damage to wire shield terminations for that systems wiring.

(c) If damage is found at wire shield termination(s), check the full length of the wire bundle.

(d) Repair any damage found and do an operational check of the system that had the damage.

G. System Internal Test

SUBTASK 05-51-19-700-006

(1) If a lightning strike caused a system malfunction, do a full test of the defective system.

SUBTASK 05-51-19-700-007

(2) Do a check of the standby magnetic compass system only if the flight crew found a deviation that is more than is permitted:

(a) Do this task: Standby Magnetic Compass - Degaussing, TASK 34-23-00-820-803.

(b) If necessary, do this task: Formal Compass Swing and Compass Card - Airplane Inertial Reference System (IRS) Option, TASK 34-23-00-820-802 or Compass Calibration Tool – Master Compass Option, TASK 34-23-00-820-801.

SUBTASK 05-51-19-710-033

(3) Make sure that the fuel quantity system is accurate.

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(a) Do the operational test for the Fuel Quantity Indication System (FQIS) type on your airplane, do this task: Operational Test - Fuel Quantity Indicating System, TASK 28-41-00-710-801.

(b) If the FQIS test shows any problems, do this task: Comparison Check - Fuel Quantity Indicating System (FQIS) with the Fuel Measuring Sticks, TASK 28-41-00-720-801.

H. Inspection and Operational Check of Radio and Navigation Systems

NOTE: All installed systems required for flight must be operational.

SUBTASK 05-51-19-210-029

(1) Refer to Figure 203 to determine if an operational check is necessary.

(2) Do this task: Inspection and Operational Check of Radio and Navigation Systems, TASK 05-51-19-710-801.

END OF TASK

TASK 05-51-19-210-805

3. Phase II Inspection

A. General

(1) Any requests for engineering analysis and repairs must contain the following information:

(a) Clearly defined damage:

NOTE: If a 50 flight cycle deferral is provided, perform these steps on or before the 50 flight cycle limit.

1) Damage location defined with dimensioned on the production drawings and photos for reference.

2) Damage extent.

3) Cause of damage

(b) Proposed repair Plan.

(c) Any limitations - equipment, materials, etc.

(d) Status of the aircraft and airplane Return to Service date.

(e) Desired outcome (Permanent, Time Limited/Temporary, or Ferry Flight).

B. References

Reference	Title
23-61-00-760-801	Static Discharger Resistance Measurement (P/B 601)
27-11-00-710-801	Aileron - Response (Operational) Test (P/B 501)
27-21-00-700-815-002	Rudder Centering Test (P/B 501)
27-21-00-700-816-002	Rudder Pedal Forces Test (P/B 501)
27-21-00-700-817-002	Rudder Travel Test (P/B 501)
27-21-00-700-819-002	Rudder Trim System Test (P/B 501)
27-31-00-700-815	Elevator Tab Control System - Operational Test (P/B 501)
27-31-00-710-801	Elevator and Elevator Trim Control System - Operational Test (P/B 501)
27-31-00-710-802	Elevator Control Column Override - Operational Test (P/B 501)
28-41-00-710-801	Operational Test - Fuel Quantity Indicating System (P/B 501)
28-41-00-720-801	Comparison Check - Fuel Quantity Indicating System (FQIS) with the Fuel Measuring Sticks (P/B 501)

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Reference	Title
33-44-00-710-801	Anti-Collision Lights - Operational Test (P/B 501)
33-51-00-710-801	Emergency Lights - Operational Test (P/B 501)
34-23-00-820-801	Compass Calibration Tool – Master Compass Option (P/B 201)
34-23-00-820-802	Formal Compass Swing and Compass Card - Airplane Inertial Reference System (IRS) Option (P/B 201)
34-23-00-820-803	Standby Magnetic Compass - Degaussing (P/B 201)

C. Location Zones

Zone	Area
100	Lower Half of Fuselage
200	Upper Half of Fuselage
300	Empennage
400	Powerplant and Nacelle Struts
500	Left Wing
600	Right Wing
700	Landing Gear and Landing Gear Doors
800	Doors

D. Phase II - Inspection

SUBTASK 05-51-19-210-030

(1) Perform a General Visual Inspection (GVI) of Zone 1 surface areas for signs of a lightning strike damage (Figure 202).

(a) Utilize any available equipment at the time to examine required areas of the aircraft.

(b) Zone 1 includes these areas:

1) Wing Leading Edge
2) Wing Trailing Edge
3) Wingtips
4) Engines
5) Vertical Fin Tip
6) Horizontal Stabilizer Tips
7) Elevators
8) Nose Radome

(c) Do the examination that follows:

1) Examine all metallic external surfaces for any evidence of visible external lightning strike damage.
2) Examine all composite structures for discolored paint, burned, or punctured skin.

(d) Examine the external surfaces carefully to find the entrance and exit points of lightning strike.

(e) Make sure to look in the areas where one surface stops and another surface starts (for example, butt joints and lap joints).

(f) Examine the external surfaces of the nose radome for burns, punctures, and pin holes in the composite honeycomb sandwich structure. If damage is found, examine the internal surfaces and components under the nose radome.

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(g) Examine the external metallic structure looking for signs of lightning strike damage such as: holes, pits, melting, burns or discoloration.

(h) Examine the external composite surfaces for discolored paint, burns or punctures.

1) If lightning strike damage is found, examine all composite structure in perimeter of damaged area for signs of delamination.

NOTE: Types of damage you cannot see, like delamination, can extend to the areas beyond the lightning strike damage. You can find delamination by instrumental Non-Destructive Inspection (NDI) methods or by a tap test.

2) Use instrumental or non-instrumental NDI tap testing to find composite structure delamination you cannot see.

NOTE: For a tap test, use a solid metal disk and tap the area adjacent to the damaged area lightly. If there is delamination, you will hear a sound that is different than the sound of a solid bonded area. Refer to Nondestructive Test Manual.

CAUTION

SEAL OR REPAIR ALL DAMAGE. IF YOU DO NOT SEAL OR REPAIR ALL DAMAGE, MOISTURE CAN GET IN. MOISTURE CAN CAUSE MORE INTERNAL DAMAGE.

(i) Repair or seal the damaged areas per the Structural Repair Manual (SRM).

SUBTASK 05-51-19-210-031

(2) Perform a GVI of Zone 2 surface areas for signs of lightning strike damage (Figure 202).

(a) Make sure to look in the areas where one surface stops and the other surface starts (for example, butt joints and lap joints).

(b) Examine the Angle of Attack (AOA) sensors.

1) Do a movement check of the AOA sensors.

NOTE: The movement must be smooth and must not have any rough spots in the travel range during the movement check.

2) Examine for melted seals or if the AOA sensors are damaged.

(c) Examine the pitot probes, static ports, and the areas around them for damage and look for burns, punctures, discolored paint, and general skin distortion.

1) If damage is found, the damage must be assessed and/or repaired per the SRM or approved method.

(d) Examine the metallic structure looking for signs of lightning strike damage such as: holes, pits, melting, burns or discoloration.

(e) Examine the external composite surfaces for discolored paint, burns or punctures.

1) If lightning strike damage is found, examine all composite structure in perimeter of damaged area for signs of delamination.

NOTE: Types of damage you cannot see, like delamination, can extend to the areas beyond the lightning strike damage. You can find delamination by instrumental NDI methods or by a tap test.

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2) Use instrumental or non-instrumental NDI tap testing to find composite structure delamination you cannot see.

NOTE: For a tap test, use a solid metal disk and tap the area adjacent to the damaged area lightly. If there is delamination, you will hear a sound that is different than the sound of a solid bonded area. Refer to Nondestructive Test Manual.

CAUTION

SEAL OR REPAIR ALL DAMAGE. IF YOU DO NOT SEAL OR REPAIR ALL DAMAGE, MOISTURE CAN GET IN. MOISTURE CAN CAUSE MORE INTERNAL DAMAGE.

(f) Repair or seal the damaged areas per the SRM.

SUBTASK 05-51-19-210-032

(3) Examine the Zone 3 surface areas for signs of lightning strike (Figure 202).

(a) Do the examination that follows:

1) Examine all the external surfaces carefully to find the entrance and exit points of lightning strike.

2) Make sure to look in the areas where one surface stops and another surface starts (for example, butt joints and lap joints).

3) Examine the metallic structure looking for signs of lightning strike damage such as: holes, pits, melting, burns or discoloration.

4) Examine the external composite surfaces for discolored paint, burns or punctures.

a) If lightning strike damage is found, examine all composite structure in perimeter of damaged area for signs of delamination.

NOTE: Types of damage you cannot see, like delamination, can extend to the areas beyond the lightning strike damage. You can find delamination by instrumental NDI methods or by a tap test.

b) Use instrumental or non-instrumental NDI tap testing to find composite structure delamination you cannot see.

NOTE: For a tap test, use a solid metal disk and tap the area adjacent to the damaged area lightly. If there is delamination, you will hear a sound that is different than the sound of a solid bonded area. Refer to Nondestructive Test Manual.

CAUTION

SEAL OR REPAIR ALL DAMAGE. IF YOU DO NOT SEAL OR REPAIR ALL DAMAGE, MOISTURE CAN GET IN. MOISTURE CAN CAUSE MORE INTERNAL DAMAGE.

(b) Repair or seal the damaged areas per the SRM.

SUBTASK 05-51-19-210-033

(4) Examine all of the external lights carefully.

(a) Look for these items:

1) Broken light assemblies.

2) Broken or cracked lenses.

3) Other visible damage.

(b) If you find damaged lights, do these steps:

ECCN 9E991 BOEING PROPRIETARY - See title page for details

1) Examine these items:
   a) The internal wires of the light fixture for damage.
   b) The first 3 ft (1 m) of wiring from the damaged light in the direction of the circuit breaker.
   c) The circuit breaker terminals and the first 1 in. (25 mm) of wires from the terminals.
2) Repair or replace damaged parts as necessary until the light functions properly.
3) If the circuit breaker did not trip, then no further inspections for the wiring of the damaged light are required.
4) If the circuit breaker did trip, then locate the source of the anomaly and repair as necessary.

(c) Do a test of the lights that follow:
   1) Do this task: Anti-Collision Lights - Operational Test, TASK 33-44-00-710-801.
   2) Do this task: Emergency Lights - Operational Test, TASK 33-51-00-710-801.

SUBTASK 05-51-19-210-034

(5) If the flight control components show signs of lightning strike damage, perform a GVI of these items:
   (a) Surface hinges.
   (b) Bearings.
   (c) Bondings.

SUBTASK 05-51-19-210-049

(6) If no damage is found, do a basic operational check of the flight controls as follows:

   NOTE: If the flight controls operate correctly after you do these steps, no more inspections are necessary.

   (a) Move the rudder, control wheel, and control column in both directions.
   (b) Make sure that there is full travel and the flight controls move freely.

      NOTE: Hold the nose wheel during the rudder check to prevent nose wheel movement. You can hold the nose wheel if you put in the steering lockout pin or remove the torsion link pin.

SUBTASK 05-51-19-720-011

(7) If the rudder system did not operate correctly during the operational check of the flight controls steps above, do a functional test of the rudder system.
   (a) Do this task: Rudder Trim System Test, TASK 27-21-00-700-819-002.
   (b) Do this task: Rudder Pedal Forces Test, TASK 27-21-00-700-816-002.
   (c) Do this task: Rudder Travel Test, TASK 27-21-00-700-817-002.
   (d) Do this task: Rudder Centering Test, TASK 27-21-00-700-815-002.

SUBTASK 05-51-19-720-012

(8) If the elevator system did not operate correctly during the operational check of the flight controls steps above, do a functional test of the elevator system.
   (a) Do this task: Elevator Control Column Override - Operational Test, TASK 27-31-00-710-802.
   (b) Do this task: Elevator Tab Control System - Operational Test, TASK 27-31-00-700-815.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(c) Do this task: Elevator and Elevator Trim Control System - Operational Test, TASK 27-31-00-710-801.

SUBTASK 05-51-19-720-013

(9) If the aileron system did not operate correctly during the operational check of the flight controls steps above, do a functional test of the ailerons.

(a) Do this task: Aileron - Response (Operational) Test, TASK 27-11-00-710-801.

SUBTASK 05-51-19-210-035

(10) Perform a GVI of the wingtips or winglets composite structure.

(a) If the composite structure show signs of a lightning strike damage, address the damage per the SRM or approved method.

E. Static Dischargers Inspection

SUBTASK 05-51-19-210-036

(1) Do the inspections that follow:

(a) Make sure that the static dischargers are attached, installed correctly, and not broken.

(b) Examine the dischargers for the following:

1) Burns.

2) Rough coating.

3) Pitted metal discharger retainers.

(c) Examine the dischargers for the following:

NOTE: Bent pins must be made straight.

1) Broken pins.

2) Bent pins.

3) Blunted tungsten pins.

(d) Look at the discharger for the following:

1) Erosion of the discharger coating.

NOTE: The leading edge erosion of the discharger must not extend more than 1/3 of the total length of the discharger.

2) Peeling of the tip cup.

SUBTASK 05-51-19-700-001

(2) Do a resistance test if there is a damaged static discharger, do this task: Static Discharger Resistance Measurement, TASK 23-61-00-760-801.

F. External Wire Shields Inspection

SUBTASK 05-51-19-211-015

(1) Do the visual inspections that follow:

NOTE: If the lightning strike entrance and exit points can not be identified, then the external wire shield visual check is not required.

NOTE: If there are no wire shield termination(s) in the area of the lightning strike entrance or exit points, then the external wire shield visual check is not required.

(a) In the area of the lightning strike entrance and exit points, do a visual check for damage to the wire shield terminations.

(b) If the flight crew has reported a problem with any system after the lightning strike, do a visual check for damage to wire shield terminations for that systems wiring.

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(c) If damage is found at wire shield termination(s), check the full length of the wire bundle.

(d) Repair any damage found and do an operational check of the system that had the damage.

G. System Internal Test

SUBTASK 05-51-19-700-002

(1) If a lightning strike caused a system malfunction, do a full test of the defective system.

SUBTASK 05-51-19-700-003

(2) Do a check of the standby magnetic compass system only if the flight crew found a deviation that is more than is permitted:

(a) Do this task: Standby Magnetic Compass - Degaussing, TASK 34-23-00-820-803.

(b) If necessary, do this task: Formal Compass Swing and Compass Card - Airplane Inertial Reference System (IRS) Option, TASK 34-23-00-820-802 or Compass Calibration Tool – Master Compass Option, TASK 34-23-00-820-801.

SUBTASK 05-51-19-710-032

(3) Make sure that the fuel quantity system is accurate.

(a) Do the operational test for the Fuel Quantity Indication System (FQIS) type on your airplane, do this task: Operational Test - Fuel Quantity Indicating System, TASK 28-41-00-710-801.

(b) If the FQIS test shows any problems, do this task: Comparison Check - Fuel Quantity Indicating System (FQIS) with the Fuel Measuring Sticks, TASK 28-41-00-720-801.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

COMPOSITE APPLICATION
(SHADED AREAS CONTAIN COMPOSITE STRUCTURE, UNSHADED AREAS ARE METAL STRUCTURE)

WING TORQUE BOX

1 AIRPLANES WITHOUT WINGLETS

2 AIRPLANES WITH WINGLETS

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Composite Application
Figure 201/05-51-19-990-806

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-51-19-710-801

4. Inspection and Operational Check of Radio and Navigation Systems

A. General

(1) Refer to Figure 203 to determine if an operational check is necessary.

NOTE: It is not necessary to examine the coaxial cables and the connectors if the: (a) Radio system had no problems during and after the incident, and the system antenna was not damaged; or (b) Operational checks were done and no problems were found.

B. References

Reference	Title
20-10-72-210-801	Coaxial Cable Inspection (P/B 201)
22-11-00-740-801	Digital Flight Control System (DFCS) - Operational Test (P/B 501)
23-11-00-730-801	HF Communication System - System Test (P/B 501)
23-12-00-730-801	VHF Communication System - System Test (P/B 501)
23-15-00-710-801	Satellite Communications (SATCOM) System - Operational Test (P/B 501)
23-15-40-710-801	Iridium SATCOM System - Operational Test (P/B 501)
23-24-00-730-802-002	ELT System - System Test (P/B 501)
23-24-00-730-803-003	ELT System - System Test (P/B 501)
23-24-00-730-804-001	ELT System - System Test (P/B 501)
23-28-00-700-801	SELCAL System - Operational Test (P/B 501)
31-62-00-710-801	Common Display System - Operational Test (P/B 501)
34-31-00-710-801	Instrument Landing System - Operational Test (P/B 501)
34-32-00-710-801	Marker Beacon System - Operational Test (P/B 501)
34-33-00-710-801	Low Range Radio Altimeter (LRRA) System - Operational Test (P/B 501)
34-43-00-710-802-001	Weather Radar (WXR) System - Operational Test (P/B 501)
34-43-00-710-803-002	Weather Radar (WXR) System - Operational Test (P/B 501)
34-43-00-710-804-003	Weather Radar (WXR) System - Operational Test (P/B 501)
34-45-00-710-801	TCAS - Operational Test (P/B 501)
34-51-00-710-801	VOR System - Operational Test (P/B 501)
34-53-00-710-801	Air Traffic Control System - Operational Test (P/B 501)
34-55-00-710-801	DME System - Operational Test (P/B 501)
34-57-00-730-802	Automatic Direction Finder System - System Test (P/B 501)
34-58-00-710-802	Global Positioning System - Operational Test (P/B 501)
53-52-00-200-801	Nose Radome - Inspection (P/B 601)

C. Location Zones

Zone	Area
100	Lower Half of Fuselage
200	Upper Half of Fuselage

D. Inspection of the Radio and Navigations Systems

SUBTASK 05-51-19-210-009

(1) Examine the systems that follow for damage:

(a) High Frequency (HF)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(b) Very High Frequency (VHF)

(c) VHF Omnidirectional Range (VOR)

(d) Distance Measuring Equipment (DME)

(e) Air Traffic Control (ATC)

(f) Instrument Landing System (ILS)

LOM 402, 404, 406, 407, 411, 412, 415, 416, 420, 422-428, 432-434, 437-447, 450-460, 464-999

(g) Automatic Direction Finder (ADF)

LOM ALL

(h) Radio Altimeter (RA)

(i) Marker Beacon (MB) Systems

(j) Global Positioning System (GPS)

LOM 429-431, 437, 438, 464, 465

(k) Satellite Communications System (SATCOM)

LOM ALL

(l) Traffic Alert and Collision Avoidance System (TCAS)

LOM 402, 404, 406, 407, 411, 416, 420, 422-434, 437-447, 450-999

LOM (m) Emergency Locator Transmitter (ELT)

LOM **LOM ALL**

SUBTASK 05-51-19-210-017

(2) Examine the antennas for damage.

(a) Replace damaged antennas as necessary.

NOTE: Replace the antennas if there is damage that lets water into the antenna, or as part of system malfunction troubleshooting. Antennas with lightly damaged finishes, small cracks, chips, peeling, or erosion are serviceable if the system operates correctly.

SUBTASK 05-51-19-210-018

(3) Examine the coaxial cables and connectors for damage if it is necessary.

NOTE: If one or more of the previous systems have problems with their operational checks, examine and do a test of the coaxial cables and connectors.

(a) Replace the damaged coaxial cables if it is necessary.

SUBTASK 05-51-19-210-010

(4) Examine the nose radome as follows:

NOTE: You can refer to the following task for guidance when completing the steps below, but it is not required: Nose Radome - Inspection, TASK 53-52-00-200-801.

(a) Look for pin holes, punctures, and paint that has chipped.

1) If pinholes or punctures are found, check the radome for trapped moisture according to the referenced task above.

(b) Make sure the radome conductor straps are attached correctly to the radome.

(c) Repair or replace the lightning diverter strips if they are damaged.

(d) If the radome is damaged, examine the antenna and the waveguide for damage.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

E. Radio and Navigation System Operational Checks

SUBTASK 05-51-19-710-009

(1) Do a check of the HF Systems (if installed), do this task: HF Communication System - System Test, TASK 23-11-00-730-801.

(a) Do an operational check on some frequencies of each HF system.

(b) Do a ground check of each system with a station that is a minimum of 100 miles away.

(c) Monitor some frequencies on each system to make sure the HF receiver operates.

SUBTASK 05-51-19-710-010

(2) VHF System, do this task: VHF Communication System - System Test, TASK 23-12-00-730-801.

(a) Do a ground check of each VHF system with the local control tower facility to make sure the system works.

(b) Monitor some frequencies on each system to make sure the VHF receiver works.

SUBTASK 05-51-19-710-011

(3) VOR System

(a) Do this task: VOR System - Operational Test, TASK 34-51-00-710-801.

LOM 402, 404, 406, 407, 411, 412, 415, 416, 420, 422-428, 432-434, 437-447, 450-460, 464-999

SUBTASK 05-51-19-710-012

(4) ADF System

(a) Do this task: Automatic Direction Finder System - System Test, TASK 34-57-00-730-802.

(b) Select a local AM broadcast or non direction beacon (NDB) station, then verify loud and clear ADF audio is heard and the ADF needle to the selected bearing (station).

LOM ALL

SUBTASK 05-51-19-710-013

(5) Radar System

(a) Do this task: Weather Radar (WXR) System - Operational Test, TASK 34-43-00-710-802-001 or Weather Radar (WXR) System - Operational Test, TASK 34-43-00-710-803-002 or Weather Radar (WXR) System - Operational Test, TASK 34-43-00-710-804-003.

(b) Make sure the system reads targets at applicable ranges.

SUBTASK 05-51-19-710-014

(6) RA System

(a) Do this task: Low Range Radio Altimeter (LRRA) System - Operational Test, TASK 34-33-00-710-801.

SUBTASK 05-51-19-710-015

(7) DME System

(a) Do this task: DME System - Operational Test, TASK 34-55-00-710-801.

SUBTASK 05-51-19-710-016

(8) ATC System

(a) Do this task: Air Traffic Control System - Operational Test, TASK 34-53-00-710-801.

SUBTASK 05-51-19-710-017

(9) MB System

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(a) Do this task: Marker Beacon System - Operational Test, TASK 34-32-00-710-801.

SUBTASK 05-51-19-710-018

(10) ILS System

(a) Do this task: Instrument Landing System - Operational Test, TASK 34-31-00-710-801.

SUBTASK 05-51-19-210-011

(11) Examine and do a test of the coaxial cables and connectors if it is necessary. Do this task: Coaxial Cable Inspection, TASK 20-10-72-210-801.

SUBTASK 05-51-19-710-021

(12) Common Display Unit

(a) Do this task: Common Display System - Operational Test, TASK 31-62-00-710-801.

SUBTASK 05-51-19-710-022

(13) GPS

(a) Do this task: Global Positioning System - Operational Test, TASK 34-58-00-710-802.

LOM 429-431, 464

SUBTASK 05-51-19-710-023

(14) SATCOM

(a) Do this task: Satellite Communications (SATCOM) System - Operational Test, TASK 23-15-00-710-801.

LOM 437, 438, 465

SUBTASK 05-51-19-710-030

(15) Iridium SATCOM

(a) Do this task: Iridium SATCOM System - Operational Test, TASK 23-15-40-710-801.

LOM ALL

SUBTASK 05-51-19-710-024

(16) TCAS

(a) Do this task: TCAS - Operational Test, TASK 34-45-00-710-801.

LOM 402, 404, 406, 407, 411, 416, 420, 422-434, 437-447, 450-999

SUBTASK 05-51-19-710-026

LOM (17) ELT

LOM (a) Do this task: ELT System - System Test, TASK 23-24-00-730-803-003 or ELT System -
LOM System Test, TASK 23-24-00-730-802-002 or ELT System - System Test,
LOM TASK 23-24-00-730-804-001.

LOM **LOM ALL**

SUBTASK 05-51-19-710-027

(18) Digital Flight Control System (DFCS)

(a) Do this task: Digital Flight Control System (DFCS) - Operational Test, TASK 22-11-00-740-801.

SUBTASK 05-51-19-710-035

(19) Selective Call System (SELCAL)

(a) Do this task: SELCAL System - Operational Test, TASK 23-28-00-700-801.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

F. Put the Airplane Back to Its Usual Condition

SUBTASK 05-51-19-410-001

(1) Install the components you removed if they are serviceable, or install replacement parts.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

External Lightning Strike Areas
Figure 202/05-51-19-990-801

ECCN 9E991 BOEING PROPRIETARY - See title page for details

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Lightning Strike Inspections Logic Flow Diagram
Figure 203/05-51-19-990-803

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FILIFORM CONDITION ON EXTERIOR DECORATIVE SURFACES (CONDITIONAL INSPECTION)

1. General

A. Filiform corrosion (FC) is a type of corrosion that may occur between the clad aluminum surface of the fuselage and the exterior decorative paint. FC appears as worm-like strands underneath the paint. Refer to IDENTIFICATION TYPES AND CAUSES, SUBJECT 51-00-50 for definition of FC.

B. There are two common initiation locations for FC on the fuselage. The first is common to the edges of parts and the second is common to fasteners. Moisture can ingress under the paint at these locations. FC usually does not penetrate through the clad layer of the aluminum.

TASK 05-51-21-210-801

2. Filiform Corrosion - (Conditional Inspection)

A. General

(1) The standard for the inspection is a General Visual Inspection.

NOTE: The Limited Return to Service Plan (LRTS) is only applicable to filiform corrosion.

(2) If FC is found, do a Limited Inspection in 30 days.

(a) The Limited Inspection is specified to areas prone to FC (Figure 201). These areas include:

- Butt joints
- Lap splices
- Cutouts
- Areas on and around fasteners common to the skin panels and lap splices
- Access doors

(b) All inspection areas are below the lower lap splice of the window belt at stringer S-14.

(3) Mild to moderate filiform corrosion (FC) that does not advance to severe must be removed within 3 years.

(4) The LRTS plan can be used if mild to moderate FC is found. All severe FC must be removed within 30 days with glass-bead blasting per SRM 51-10-02 or CORROSION REMOVAL, SUBJECT 51-00-53.

(a) The LRTS plan has repeated inspections and surveys.

1) The repeat inspections are mandatory every 120 days after the discovery of the FC.

2) The LRTS plan is not applicable if all known areas of FC are removed from the aircraft. Subject aircraft can return to service.

B. References

Reference	Title
51-00-53	CORROSION REMOVAL
SRM 51-10-02	Structural Repair Manual

C. Tools/Equipment

Reference	Description
STD-4055	6 Inch Minimum Length Stainless Steel Pocket Ruler, 1/32" And 1/64" Increments, or Mm And Cm Increments
STD-6732	Camera - 35mm, Single Lens Reflex Type
STD-14360	Flashlight

ECCN 9E991 BOEING PROPRIETARY - See title page for details

D. Location Zones

Zone	Area
100	Lower Half of Fuselage

E. Limited Inspection Procedure

SUBTASK 05-51-21-210-001

(1) Put the aircraft in an area that is free from rain and other conditions that can affect a visual inspection.

NOTE: Rain and moisture can prevent correct identification of FC. The inspection location must be dry.

SUBTASK 05-51-21-210-002

(2) Document each location of FC with a minimum of three pictures with a camera, STD-6732.

(a) A wide view picture to show the general location on the aircraft.

1) Include a monument in the picture. This will help to find the general area of the FC.

(b) A nearer picture, in the limits of the first picture, to show the location of the FC.

(c) A close-up picture of the FC.

1) Use a pocket ruler, STD-4055 to show the initial area dimension of the FC.

2) Identify the stations and stringer locations surrounding the FC.

3) A flashlight, STD-14360 can be used to help identify FC.

a) The flashlight angle can be varied to help maximize the contrast of the FC. Use a direction which shows the FC clearly.

NOTE: A recommended angle is 15 degrees or less.

(3) Compare the FC found with the images in Figure 202 and Figure 203.

(a) For mild to moderate FC, use one of the two options:

1) Option 1:

a) Utilize the LRTS plan, reference Figure 204.

2) Option 2:

a) Remove all found instances of FC with glass-bead blasting. Refer to SRM 51-10-02 or CORROSION REMOVAL, SUBJECT 51-00-53. LRTS plan is not applicable and the aircraft can return to service.

(b) For severe FC:

1) Severe FC must be removed from the aircraft within 30 days of initial discovery with glass-bead blasting. Refer to SRM 51-10-02 or CORROSION REMOVAL, SUBJECT 51-00-53.

NOTE: The LRTS plan is not applicable to severe FC.

(c) If mild to moderate and severe FC is found, do one of the two options:

1) Option 1:

a) Utilize the LRTS plan for the mild to moderate FC.

b) Severe FC must be removed from the aircraft within 30 days of initial discovery with glass-bead blasting. Refer to SRM 51-10-02 or CORROSION REMOVAL, SUBJECT 51-00-53.

NOTE: The LRTS plan is not applicable to severe FC.

2) Option 2:

ECCN 9E991 BOEING PROPRIETARY - See title page for details

a) Remove all instances of FC from the aircraft with glass-bead blasting. Refer toSRM 51-10-02 or CORROSION REMOVAL, SUBJECT 51-00-53. The LRTS plan is not applicable and the aircraft can return to service.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Filiform Corrosion Inspection Areas
Figure 201/05-51-21-990-801

ECCN 9E991 BOEING PROPRIETARY - See title page for details

MILD FILIFORM CORROSION

NOTE:

MILD FILIFORM CORROSION IS IDENTIFIED AS HAVING ANY OF THE FOLLOWING CONDITIONS:

- FILIFORM INITIATION POINTS VISIBLE ALONG EDGE
- SHORT TO LONG SINGLE FILAMENTS
- THE DESCRIPTION AND IMAGES ARE GENERALIZED AND SHOULD NOT BE CONSIDERED TO BE ALL INCLUSIVE.

2894466 S0000689544_V3

Filiform Corrosion - Edge Ratings
Figure 202/05-51-21-990-802 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

MODERATE FILIFORM CORROSION

NOTE:

MODERATE FILIFORM CORROSION IS IDENTIFIED AS HAVING ANY OF THE FOLLOWING CONDITIONS:

- MULTIPLE SHORT AND LONG FILAMENTS, THICKER AND GREATER DENSITY COMPARED TO MILD FILIFORM
- FILAMENTS BRANCHING OR MERGING
- BLISTERS FORMING
- THE DESCRIPTION AND IMAGES ARE GENERALIZED AND SHOULD NOT BE CONSIDERED TO BE ALL INCLUSIVE
- IF AN OPERATOR OR MRO HAS DIFFICULTY DETERMINING IF THE RATING OF A SPECIFIC FILIFORM CORROSION FINDING IS "MODERATE" OR "SEVERE", THEN THE FINDING SHOULD BE CONSIDERED "SEVERE" AND ADDRESSED PER SECTION 2. ALTERNATIVELY, OPERATORS AND MROS MAY CONTACT BOEING WITH DETAILS OF THE FINDING(S) IN QUESTION IN ORDER TO OBTAIN SUPPORT WITH PROPERLY IDENTIFYING THE RATING.

2894472 S0000689594_V3

Filiform Corrosion - Edge Ratings
Figure 202/05-51-21-990-802 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SEVERE FILIFORM CORROSION

NOTE:

SEVERE FILIFORM CORROSION IS IDENTIFIED AS HAVING ANY OF THE FOLLOWING CONDITIONS:

- MULTIPLE BLISTERED FILAMENTS
- FILAMENTS AND BLISTERS ARE INDISTINGUISHABLE
- BLISTERS AND/OR FILIFORM PRESENT LENGTHWISE AND CONTINUOUS ALONG EDGE
- THE DESCRIPTION AND IMAGES ARE GENERALIZED AND SHOULD NOT BE CONSIDERED TO BE ALL INCLUSIVE
- IF AN OPERATOR OR MRO HAS DIFFICULTY DETERMINING IF THE RATING OF A SPECIFIC FILIFORM CORROSION FINDING IS "MODERATE" OR "SEVERE", THEN THE FINDING SHOULD BE CONSIDERED "SEVERE" AND ADDRESSED PER SECTION 2. ALTERNATIVELY, OPERATORS AND MROS MAY CONTACT BOEING WITH DETAILS OF THE FINDING(S) IN QUESTION IN ORDER TO OBTAIN SUPPORT WITH PROPERLY IDENTIFYING THE RATING.

2894479 S0000689599_V3

Filiform Corrosion - Edge Ratings
Figure 202/05-51-21-990-802 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

MILD FILIFORM CORROSION

NOTE:

MILD FILIFORM CORROSION IS IDENTIFIED AS HAVING ANY OF THE FOLLOWING CONDITIONS:

- FILIFORM INITIATION POINTS VISIBLE ON OR AROUND FASTENER.
- SINGLE OR MULTIPLE THIN FILAMENTS.
- THE DESCRIPTION AND IMAGES ARE GENERALIZED AND SHOULD NOT BE CONSIDERED TO BE ALL INCLUSIVE.

2894484 S0000689548_V3

Filiform Corrosion - Fastener Ratings
Figure 203/05-51-21-990-803 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

MODERATE FILIFORM CORROSION

NOTE:

MODERATE FILIFORM CORROSION IS IDENTIFIED AS HAVING ANY OF THE FOLLOWING CONDITIONS:

- MULTIPLE SHORT AND LONG FILAMENTS, THICKER AND GREATER DENSITY COMPARED TO MILD FILIFORM
- FILAMENTS BRANCHING OR MERGING
- BLISTERS FORMING
- THE DESCRIPTION AND IMAGES ARE GENERALIZED AND SHOULD NOT BE CONSIDERED TO BE ALL INCLUSIVE
- IF AN OPERATOR OR MRO HAS DIFFICULTY DETERMINING IF THE RATING OF A SPECIFIC FILIFORM CORROSION FINDING IS "MODERATE" OR "SEVERE", THEN THE FINDING SHOULD BE CONSIDERED "SEVERE" AND ADDRESSED PER SECTION 2. ALTERNATIVELY, OPERATORS AND MROS MAY CONTACT BOEING WITH DETAILS OF THE FINDING(S) IN QUESTION IN ORDER TO OBTAIN SUPPORT WITH PROPERLY IDENTIFYING THE RATING.

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Filiform Corrosion - Fastener Ratings
Figure 203/05-51-21-990-803 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SEVERE FILIFORM CORROSION

NOTE:

SEVERE FILIFORM CORROSION IS IDENTIFIED AS HAVING ANY OF THE FOLLOWING CONDITIONS:

- MULTIPLE BLISTERED FILAMENTS
- FILAMENTS AND BLISTERS ARE INDISTINGUISHABLE
- BLISTERS AND/OR FILIFORM CONTINUOUS AROUND THE FASTENER
- THE DESCRIPTION AND IMAGES ARE GENERALIZED AND SHOULD NOT BE CONSIDERED TO BE ALL INCLUSIVE
- IF AN OPERATOR OR MRO HAS DIFFICULTY DETERMINING IF THE RATING OF A SPECIFIC FILIFORM CORROSION FINDING IS "MODERATE" OR "SEVERE", THEN THE FINDING SHOULD BE CONSIDERED "SEVERE" AND ADDRESSED PER SECTION 2. ALTERNATIVELY, OPERATORS AND MROS MAY CONTACT BOEING WITH DETAILS OF THE FINDING(S) IN QUESTION IN ORDER TO OBTAIN SUPPORT WITH PROPERLY IDENTIFYING THE RATING.

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Filiform Corrosion - Fastener Ratings
Figure 203/05-51-21-990-803 (Sheet 3 of 3)

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1 MILD/MODERATE FILIFORFM CORROSION (FC) THAT DOES NOT ADVANCE TO SEVERE MUST BE REMOVED WITHIN 3 YEARS OF INITIAL DISCOVERY.

2 REMOVE FC WITH GLASS-BEAD BLASTING PER SRM 51-10-02 OR AMM 51-00-53.

3 ONCE ALL THE FC HAS BEEN REMOVED FROM THE SUBJECT AIRCRAFT, IT IS NO LONGER REQUIRED TO ABIDE BY THE INSPECTION CYCLES OF THE LRTS PLAN.

4 DOCUMENT FC AREAS AND PERFORM REPEAT INSPECTION AT DOCUMENTED FC AREAS IF THE AIRCRAFT IS UNDER THE LRTS PLAN.

5 IF SEVERE FC IS DISCOVERED, REMOVAL OF THE SEVERE FC IS REQUIRED WITHIN 30 DAYS TO ALLOW AIRCRAFT TO OPERATE UNDER THE LRTS PLAN.

6 SEVERE FC THAT IS DISCOVERED MUST BE REMOVED WITHIN 30 DAYS.

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Limited Return to Service Plan
Figure 204/05-51-21-990-804

ECCN 9E991 BOEING PROPRIETARY - See title page for details

HYDRAULIC FLUID REACTION WITH TITANIUM - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. General

A. This section gives procedures to examine bare, painted, or gold coated titanium parts.

(1) The inspection is necessary when the titanium touches fire resistant hydraulic fluid.

(2) If the temperature of the hydraulic fluid is less than 270°F (132°C), then the hydraulic fluid is considered low temperature for the purposes of this inspection.

(3) If the temperature of the hydraulic fluid is greater than 270°F (132°C), or if the hydraulic fluid leaks onto a High Temperature Duct, or if hydraulic fluid leaks into engine strut torque box, then the hydraulic fluid is considered high temperature for the purposes of this inspection. Additional cleaning steps are required in these cases.

NOTE: Hydraulic fluid above 270°F (132°C) will cause embrittlement of the titanium.

(4) Signs of hydraulic fluid contamination are a light glossy brown film, or a dull black carbonaceous residue.

(a) Also, look for a bare surface on painted titanium ducts.

TASK 05-51-22-210-801

2. Inspection of Titanium Parts When Contaminated With Fire-Resistant Hydraulic Fluid

A. References

Reference	Title
20-30-31-910-801	Cleaners and Polishes (P/B 201)
20-30-51-910-801	Miscellaneous Materials (P/B 201)

B. Tools/Equipment

Reference	Description
STD-1064	Scraper - Phenolic, Hard Resin

C. Consumable Materials

Reference	Description	Specification
B00005	Cleaner - Alkaline - Cee Bee 280	BAC5744
B00008	Cleaner - Alkaline - Oakite 204	
B00015	Cleaner - Heavy Duty, Multipurpose - Calla 301A	BAC5744, AMS 1526-A, AMS 1550-A
B00062	Solvent - Acetone (99.5% Grade)	ASTM D 329 (Supersedes O-A-51)
B00094	Solvent - Toluene	A-A-59107
B00130	Alcohol - Isopropyl	TT-I-735
B00153	Solvent - Toluene, Nitration	JAN-T-171 Grade A
B00230	Cleaner - Metal - Altrex B	
B00402	Cleaner - Aerospace Equipment	MIL-PRF-87937
B00638	Cleaner - Acidic Liquid - Honey Bee 60 (McGean-Rohco)	
B50085	Solvent - Skykleen 1000	BAC5750
C00314	Coating - Low Emissivity Gold Coating	BMS10-82 Type I

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(Continued)

Reference	Description	Specification
G00034	Cotton Wiper - Process Cleaning Absorbent Wiper (Cheesecloth, Gauze)	AMS3819 Class 1 Grade A or B Form 1 (Supersede BMS15-5 CL A)

D. Examine the Titanium Parts

NOTE: Titanium parts found in hydraulic fluid areas have a flat, black inorganic finish, or a gold coat for protection.

NOTE: Make sure that the black finish is not hydraulic fluid.

SUBTASK 05-51-22-210-001

(1) Examine all of the titanium parts in these areas for contamination, and metal or paint deterioration:

NOTE: Look for contamination, metal deterioration, or paint deterioration.

(a) High temperature ducts:

1) the ducts in the wheel well areas
2) the engine fan case
3) the engine fire walls
4) the ducts in the aft fuselage between the pressure bulkhead and the APU firewall
5) the pneumatic ducting along the leading edge of the wing

(b) Other Titanium Parts:

1) engine strut torque box interior structure

NOTE: Engine strut torque box interior structure have a high temperature coating that is olive or beige color depending on age.

2) the landing gear beam
3) the APU support structure
4) the stabilizer links

E. Cleaning Contaminated Titanium Parts

SUBTASK 05-51-22-110-001

(1) To clean the titanium parts that were contaminated with low-temperature hydraulic fluid, do the following:

NOTE: When hydraulic fluid leaks onto a High Temperature Duct, the hydraulic fluid should be considered high temperature.

(a) Clean the titanium with a manual cleaner such as the ones that follow, do this task: Cleaners and Polishes, TASK 20-30-31-910-801

1) solvent, B00153.
2) Altrex B cleaner, B00230.
3) Honey Bee 60 cleaner, B00638.
4) solvent, B50085.

(b) Remove the hydraulic fluid residue with solvent, B50085, or solvent, B00062, and hard resin phenolic scraper, STD-1064.

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SUBTASK 05-51-22-100-001

(2) Clean and treat titanium parts that were contaminated with high-temperature hydraulic fluid, do the steps that follow:

CAUTION	DO NOT USE A VAPOR DEGREASER OR METHYL ALCOHOL TO CLEAN TITANIUM PARTS OR TITANIUM ALLOY PARTS. ALSO, DO NOT USE CHLORINATED MANUAL SOLVENTS ON TITANIUM OR TITANIUM ALLOY PARTS. DO NOT APPLY THESE MATERIALS TO TITANIUM THAT YOU WILL USE IN TEMPERATURES MORE THAN 600°F. IF YOU DO NOT OBEY THESE INSTRUCTIONS, DAMAGE TO THE TITANIUM PARTS CAN OCCUR.

(a) Clean the titanium to remove the oil and other foreign material with solvent, B00094.

1) Do this task: Cleaners and Polishes, TASK 20-30-31-910-801.

(b) Remove the soft hydraulic fluid and the remaining hard hydraulic fluid contamination (shows as a light glossy, brown film) with cleaner, B00402.

NOTE: The following cleaners are optional to cleaner, B00402: Cee Bee 280 cleaner, B00005, Oakite 204 cleaner, B00008, and Calla 301A cleaner, B00015.

1) Do this task: Cleaners and Polishes, TASK 20-30-31-910-801.

2) To remove the thick layers of the remaining hard hydraulic fluid contamination, let the cleaner set for approximately 20 to 40 minutes.

3) After the contamination is soft, remove it with a hard resin phenolic scraper, STD-1064.

NOTE: Do not use a power brush or abrasive blast to remove the contamination.

a) You can use a light abrasive to remove the remaining dried fluid, do this task: Miscellaneous Materials, TASK 20-30-51-910-801.

(c) Replace all parts that show paint deterioration and/or metal that is etched.

(d) For gold-plated titanium ducts, also do the following:

1) Clean the gold coated titanium ducts with a lint-free cotton wiper, G00034, and isopropyl alcohol, B00130.

2) When the duct is clean, you can apply BMS 10-82 low emissivity gold coating, C00314, to provide a protective coating for the duct.

F. Put the Airplane Back to It's Initial Condition

SUBTASK 05-51-22-400-001

(1) Install the components you removed if they are serviceable.

(a) If the components are not serviceable, install replacement parts.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

CABIN OVERPRESSURE CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. General

A. This task examines components which can be damaged because of overpressurization.

TASK 05-51-24-200-801

2. Cabin Overpressurization Conditional Inspection

A. General

(1) Equipment connected to pitot static systems will not be damaged by internal cabin pressure.

(2) Equipment temporarily disconnected from pitot static systems, or carried as spares, may be damaged by cabin pressure greater than 16 psia (110 kPa).

B. Precautions

(1) If personnel are in the airplane during a test, they must be in good physical condition. If any person experiences pain during pressure change, you must lower the rate of change of pressure or make the absolute pressure stable immediately until the person can either make the pressure equal in their ears, or be removed from the airplane.

NOTE: The ability to adjust to increasing or decreasing pressure is an individual characteristic, and one which varies from day to day depending upon a person's health. People with sinus or ear problems should not be exposed to pressure changes. Similarly a person experiencing headache, toothache, head cold, hay fever, etc., should be excluded from airplane during test. Individuals subjected to pressure changes should be trained in techniques for venting the ears.

C. References

Reference	Title
35-12-00-800-801	Bleed the Crew Oxygen System Prior to System Maintenance or Repair (P/B 201)

D. Procedure

SUBTASK 05-51-24-720-001

(1) If a cabin overpressurization occurs that is more than 16 psia (110 kPa), but less than 21 psia (145 kPa), do the step that follow:

(a) Do a check of all components with pitot static connections that were disconnected, or carried as spares when the overpressurization occurred.

SUBTASK 05-51-24-720-002

(2) If a cabin overpressurization occurs that is more than 21 psia 145 kPa), do the steps that follow:

(a) Do the above step for pressurization between 16 and 21 psia (110 and 145 kPa).

(b) Do a check of the oxygen mask regulators from the oxygen system in the crew cabin, do this task: Bleed the Crew Oxygen System Prior to System Maintenance or Repair, TASK 35-12-00-800-801.

E. Put the Airplane Back to It's Usual Condition

SUBTASK 05-51-24-410-001

(1) Install the components you removed if they are serviceable, or install replacement parts.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EXTREME DUST OR SAND CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. General

A. This section gives procedures to examine the dust and sand sensitive areas on the airplane when there are extreme dust or sand conditions.

B. This procedure is for extreme dust and sand conditions during the two conditions that follow:

(1) The airplane's flight path went through a cloud of extreme dust or sand.

(2) If the airplane was parked or taxiing during the extreme dust or sand condition.

TASK 05-51-27-210-801

2. Extreme Dust or Sand Conditional Inspection

A. References

Reference	Title
12-11-00-680-801	Fuel System Sumping (P/B 301)
12-14-01-600-801	Potable Water System - Drain (P/B 301)
12-40-00-100-801	Clean (Wet Wash) the External Surfaces of the Airplane (P/B 201)
12-40-00-100-803	Clean (Waterless Wash) the External Surfaces of the Airplane (P/B 201)
21-31-03-000-801	Aft Outflow Valve Assembly Removal (P/B 401)
21-32-01-000-801	Positive Pressure Relief Valve Removal (P/B 401)
21-32-02-000-801	Positive Pressure Relief Valve Filter Removal (P/B 401)
21-32-03-000-801	Negative Pressure Relief Valve Removal (P/B 201)
21-51-01-000-802-002	Left Flow Control and Shutoff Valve - Removal (P/B 401)
21-51-01-000-805-002	Right Flow Control and Shutoff Valve - Removal (P/B 401)
21-51-01-000-806-003	Left Flow Control and Shutoff Valve Removal (P/B 401)
21-51-01-000-807-003	Right Flow Control and Shutoff Valve Removal (P/B 401)
21-51-04-000-802-002	Air Cycle Machine Removal (P/B 401)
21-51-08-000-802	High Pressure Water Separator Removal (P/B 401)
21-51-12-000-801	Condenser Removal (P/B 401)
21-51-21-000-801	Ram Air Inlet Actuator Removal (P/B 401)
21-51-22-000-801	Ram Air Inlet Deflector Door - Removal (P/B 401)
21-51-22-000-802	Ram Air Inlet Deflector Door Shaft Assembly - Removal (P/B 401)
21-51-23-000-801	Ram Air Inlet Modulation Panels - Removal (P/B 401)
21-61-10-100-801	Cabin Temperature Sensor Cleaning (P/B 201)
28-11-11-000-802	Surge Tank Access Door Removal (P/B 401)
29-11-00-200-801	Hydraulic Fluid - Check (P/B 601)
30-21-11-000-801	Engine Cowl TAI Valve - Removal (P/B 401)
35-12-00-700-801	Crew Oxygen Stowage Box Test (Mask Stowed in Stowage Box) (P/B 501)
35-12-00-700-802	Crew Oxygen Mask-Regulator Test (P/B 501)
35-22-00-700-801	Passenger Oxygen System - Automatic Actuation Functional Test (P/B 501)
36-11-02-000-801	Bleed Air Check Valve - Removal (P/B 401)
36-11-03-000-801	Bleed Air Regulator Removal (P/B 401)

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(Continued)

Reference	Title
36-11-04-000-801	PRSOV Removal (P/B 401)
36-11-05-000-801	Thermostat Removal (P/B 401)
36-11-06-000-801	High Stage Valve Removal (P/B 401)
36-11-07-000-801	High Stage Regulator Removal (P/B 401)
36-12-01-000-801	Bleed Air Precooler Removal (P/B 401)
36-12-02-000-801	Precooler Control Valve Removal (P/B 401)
36-12-03-000-801	Precooler Control Valve Sensor Removal (P/B 401)
36-13-03-000-801	Ground Pneumatic Connector Check Valve Removal (P/B 401)
36-13-04-000-801	Bleed Air Isolation Valve Removal (P/B 401)
36-14-02-000-801	APU Check Valve Removal (P/B 401)
36-21-01-000-801	Duct Pressure Transducer Removal (P/B 401)
38-11-03-000-801	Fill/Overflow Valve Removal (P/B 401)
38-14-01-000-801	Water Quantity Transmitter Removal (P/B 401)
38-42-10-960-801	Bleed Air Filter Element Replacement (P/B 401)
47-32-04-000-802	NGS Filter Element - Removal (P/B 401)
49-31-21-000-801	Inlet Fuel Filter Element Removal (P/B 401)
49-52-13-000-801	Bleed Air Duct Removal (P/B 401)
49-81-11-200-801	Exhaust Duct Muffler Inspection (P/B 601)
49-91-12-000-801	Oil Filter Elements Removal (P/B 401)
49-91-41-200-801	Oil Cooler Inspection (P/B 601)
71-00-00-200-802-F00	Inspection of the Engine After Volcanic Ash, Dust or Sand Ingestion (P/B 601)
80-11-03-000-801-F00	Start Valve Removal (P/B 401)

B. Location Zones

Zone	Area
100	Lower Half of Fuselage
200	Upper Half of Fuselage
300	Empennage
400	Powerplant and Nacelle Struts
500	Left Wing
600	Right Wing
700	Landing Gear and Landing Gear Doors

C. Extreme Dust or Sand Conditional Inspection

SUBTASK 05-51-27-200-011

(1) Examine the windshield.

> **CAUTION** DO NOT OPERATE THE WINDSHIELD WIPERS ON DRY GLASS. ALWAYS SUPPLY WATER TO THE WINDSHIELDS BEFORE YOU OPERATE THE WIPER. THE WIPER WILL CAUSE DAMAGE TO A DRY WINDSHIELD.

(a) Make sure that the windshield is free from dust or sand.

SUBTASK 05-51-27-200-007

(2) Examine the surfaces that follow to make sure that they are free from dust or sand.

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(a) Fuselage.

(b) Upper surfaces of the wings and other control surfaces.

SUBTASK 05-51-27-200-005

(3) Examine the areas that follow to make sure that they are free from dust or sand.

(a) Probes.

(b) Sensors.

(c) Ports.

1) Including static ports and pitot tubes.

(d) Vents.

(e) Drains.

(f) Left and right ram air inlets.

(g) Cabin pressure outflow valve.

(h) Positive pressure relief valves.

SUBTASK 05-51-27-200-008

(4) Examine the leading edge flaps.

(a) Make sure that they are not damaged.

SUBTASK 05-51-27-200-003

(5) Examine the power plant areas that follow to make sure that they are free from dust or sand.

(a) Engine inlet and cowling.

(b) Indicator probes.

(c) Fan and blades.

1) Make sure that the fan blades are free to turn and are not damaged.

(d) Do the inspection before the next flight if there is dust or sand in the power plant areas (TASK 71-00-00-200-802-F00).

SUBTASK 05-51-27-200-012

(6) Examine the fuel tank vents.

(a) Make sure that they are free from dust or sand.

SUBTASK 05-51-27-200-002

(7) Examine the landing gear areas that follow to make sure that they are free from dust or sand.

(a) Landing gear shock struts.

(b) Landing gear actuator pushrods.

(c) Landing gear uplock actuator pushrods.

(d) Landing gear doors.

SUBTASK 05-51-27-200-001

(8) Examine the control surfaces that follow to make sure that they are free from dust or sand.

(a) Vertical stabilizer.

(b) Horizontal stabilizer.

(c) Stabilizer trim mechanisms.

(d) Flap screw mechanisms.

(e) Leading edges.

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1) Make sure that all leading edges are not damaged.

SUBTASK 05-51-27-211-001

(9) Visually examine all the exposed portions of the flight control cable.

(a) Make sure that they are free from sand and dust.

SUBTASK 05-51-27-200-010

(10) Examine the Auxiliary Power Unit (APU) areas that follow to make sure that they are free from dust or sand.

(a) Do the next check to be sure that there is no damage to the APU:

1) Operate the APU on the ground and monitor the pneumatic performance in the modes that follow:

a) The Main Engine Start (MES) operating mode.

b) The Environmental Control System (ECS) operating mode.

NOTE: Use the applicable APU manufacturer recommendations for engine inspection for flights through areas of low level dust or sand concentrations.

(b) Examine the inlet and exhaust ducts for dust or sand contamination.

NOTE: Do not do a borescope inspection on the APU.

1) If there is dust or sand in the APU inlet or exhaust ducts, look for dust or sand in the components that follow:

a) Do this task: Oil Cooler Inspection, TASK 49-91-41-200-801.

b) Do this task: Oil Filter Elements Removal, TASK 49-91-12-000-801.

c) Do this task: Inlet Fuel Filter Element Removal, TASK 49-31-21-000-801.

d) Do this task: Exhaust Duct Muffler Inspection, TASK 49-81-11-200-801.

e) Do this task: Bleed Air Duct Removal, TASK 49-52-13-000-801.

SUBTASK 05-51-27-200-004

(11) Examine the air conditioning systems to make sure that they are free from dust or sand.

(a) Do the steps that follow to examine the air conditioning system:

1) Examine the aft outflow valve, do this task: Aft Outflow Valve Assembly Removal, TASK 21-31-03-000-801.

a) If you find dust or sand in the valve, clean or replace the valve.

2) Remove and examine the negative pressure relief doors, do this task: Negative Pressure Relief Valve Removal, TASK 21-32-03-000-801.

a) If you find dust or sand in the door area, clean or replace the door and linkage.

3) Remove and examine the positive pressure relief valves, do this task: Positive Pressure Relief Valve Removal, TASK 21-32-01-000-801.

a) If you find dust or sand in the valves, clean or replace the valves.

4) Remove and examine the positive pressure relief valve filters, do this task: Positive Pressure Relief Valve Filter Removal, TASK 21-32-02-000-801.

a) If you find dust or sand in the filters, clean or replace the filters.

5) Examine the ram air inlet deflector door, do this task: Ram Air Inlet Deflector Door - Removal, TASK 21-51-22-000-801.

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a) If you find dust or sand in the deflectors, clean the deflectors and movable joints.

6) Examine the ram air inlet deflector door shaft assemblies, do this task: Ram Air Inlet Deflector Door Shaft Assembly - Removal, TASK 21-51-22-000-802.

a) If you find dust or sand in the shaft assemblies, clean the shaft assemblies.

7) Examine the ram air inlet modulation panels, do this task: Ram Air Inlet Modulation Panels - Removal, TASK 21-51-23-000-801.

a) If you find dust or sand in the modulation panels, clean the panels and movable joints.

8) Examine the ram air inlet modulation panel shaft assemblies.

a) If you find dust or sand in the shaft assemblies, clean the shaft assemblies.

9) Examine the ram air exhaust modulation louver assemblies.

a) If you find dust or sand in the louver assemblies, clean the louvers, bearings and movable joints.

10) Examine the ram air inlet actuators, do this task: Ram Air Inlet Actuator Removal, TASK 21-51-21-000-801.

a) If you find dust or sand in the actuators, clean or replace the actuators.

11) Remove and examine the Air Cycle Machine (ACM), do this task: Air Cycle Machine Removal, TASK 21-51-04-000-802-002.

a) Check for dust or sand in the ACM valves.

<1> If you find dust or sand in the ACM valves, clean or replace the ACM.

b) If the aircraft has an ACM that was only on a -800 or -900 aircraft, do the steps that follow:

<1> Remove the high pressure water separator, do this task: High Pressure Water Separator Removal, TASK 21-51-08-000-802.

<2> Examine the water for contamination.

<3> If there is contamination in the water of the high pressure water separator, do the steps that follow.

<a> Remove the ACM, do this task: Air Cycle Machine Removal, TASK 21-51-04-000-802-002.

<b> Inspect the ACM for torus erosion.

NOTE: Torus erosion occurs when atmospheric contamination in the bleed air is trapped in the ACM torus. This moves about in the torus and erodes the inner surface of the torus.

c) If the aircraft has an ACM that was on a -600 or -700 aircraft, do the steps that follow.

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<1> Inspect the ACM for torus erosion.

NOTE: The high pressure water separator used on the -800 and -900 model airplanes removes contamination with the water prior to the air entering the ACM turbine. However, if the ACM was installed on a -600 or -700 model airplane, then used on a -800 or -900 model airplane, the torus wall of the ACM may have begun to erode prior to being installed on the -800 or -900 airplane.

NOTE: Torus erosion is caused because atmospheric contamination in the bleed air is trapped in the ACM torus and moves around the torus, which erodes the inner surface of the torus.

12) Remove and examine the air cycle cooling pack primary and secondary heat exchangers.

a) If you find dust or sand in the heat exchangers, clean or replace the heat exchangers.

NOTE: For more information, refer to the applicable manufacturer component maintenance manual.

13) Examine the water extract nozzles and drain lines.

a) Clean the water extract nozzles and drain lines if dust or sand is found.

14) Remove and examine the condensers, do this task: Condenser Removal, TASK 21-51-12-000-801.

a) If you find dust or sand in the condensers, clean or replace the condensers.

15) Remove and examine the flow control pack valves, do these tasks: Right Flow Control and Shutoff Valve - Removal, TASK 21-51-01-000-805-002 or Right Flow Control and Shutoff Valve Removal, TASK 21-51-01-000-807-003. Left Flow Control and Shutoff Valve - Removal, TASK 21-51-01-000-802-002 or Left Flow Control and Shutoff Valve Removal, TASK 21-51-01-000-806-003.

a) If you find dust or sand in the pack valves, clean or replace the pack valves.

16) Remove and examine the recirculating air fans.

a) If you find dust or sand in the fans, clean or replace the fans.

17) Remove and examine one of the trim air nozzles.

a) If you find dust or sand in one of the trim nozzles, remove and clean all of the trim nozzles.

18) Remove and examine the recirculation air filters.

a) If you find dust or sand in the filters, clean or replace the filters.

19) Remove and examine the recirculation air check valves.

a) If you find dust or sand in the valves, clean or replace the valves.

20) Remove and examine the equipment cooling overboard exhaust valve.

a) If you find dust or sand in the valve, remove or replace the valve.

21) Remove and examine the exhaust fans and check valves.

a) If you find dust or sand in the fans or valves, clean or replace the fans and valves.

22) Remove and examine the pack temperature control valve.

a) If you find dust or sand in the control valves, clean or replace the valves.

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23) Do a visual examination of the temperature sensors and connectors in both air conditioning pack bays.
    a) Make sure that the temperature sensors and connectors are not damaged and are installed correctly.
24) Make sure that the flight compartment and cabin temperature sensors are not clogged.
    a) If you find dust or sand in the flight compartment or cabin temperature sensors, clean or replace the sensors, do this task: Cabin Temperature Sensor Cleaning, TASK 21-61-10-100-801.
25) Remove and examine the trim air valve.
    a) If you find dust or sand in the valves, clean or replace the valves.

LOM 406, 407, 412, 415, 422-434, 437-447, 450-999; LOM 402, 404, 411, 416, 420 POST SB 737-47-1003

SUBTASK 05-51-27-200-013

(12) Nitrogen Generation System (NGS).
    (a) Examine the NGS filter (TASK 47-32-04-000-802).
        1) If you find dust or sand in the NGS filter, clean or replace the filter, if necessary.

LOM ALL

SUBTASK 05-51-27-200-014

(13) Pneumatic System.
    (a) Examine the pneumatic system.
        1) Do this task: Bleed Air Precooler Removal, TASK 36-12-01-000-801.
        2) If you find dust or sand in the bleed air precooler, remove the components that follow and look for dust or sand.
            a) Do this task: High Stage Valve Removal, TASK 36-11-06-000-801.
            b) Do this task: PRSOV Removal, TASK 36-11-04-000-801.
            c) Do this task: Bleed Air Check Valve - Removal, TASK 36-11-02-000-801.
            d) Do this task: Start Valve Removal, TASK 80-11-03-000-801-F00.
            e) Do this task: Precooler Control Valve Removal, TASK 36-12-02-000-801.
            f) Do this task: Bleed Air Isolation Valve Removal, TASK 36-13-04-000-801.
            g) Do this task: APU Check Valve Removal, TASK 36-14-02-000-801.
            h) Do this task: Ground Pneumatic Connector Check Valve Removal, TASK 36-13-03-000-801.
            i) Do this task: Engine Cowl TAI Valve - Removal, TASK 30-21-11-000-801.
            j) Do this task: Duct Pressure Transducer Removal, TASK 36-21-01-000-801.
            k) Do this task: High Stage Regulator Removal, TASK 36-11-07-000-801.
            l) Do this task: Bleed Air Regulator Removal, TASK 36-11-03-000-801.
            m) Do this task: Thermostat Removal, TASK 36-11-05-000-801.
            n) Do this task: Precooler Control Valve Sensor Removal, TASK 36-12-03-000-801.

SUBTASK 05-51-27-200-015

(14) Fuel System.

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(a) Examine the fuel system for dust or sand contamination.

1) Look for dust or sand in a fuel sample from each fuel tank sump, do this task: Fuel System Sumping, TASK 12-11-00-680-801.

2) Look for dust or sand in a fuel sample from each surge tank sump (if there is fuel in the surge tanks).

3) Visually inspect for dust or sand in each surge tank, do this task: Surge Tank Access Door Removal, TASK 28-11-11-000-802.

SUBTASK 05-51-27-200-016

(15) Oxygen System.

(a) If you find dust or sand in the passenger and control cabin, examine the oxygen system.

1) Remove the stowage boxes for the mask and regulator and look for dust or sand, do this task: Crew Oxygen Stowage Box Test (Mask Stowed in Stowage Box), TASK 35-12-00-700-801.

2) Examine portable oxygen masks for dust or sand, do this task: Crew Oxygen Mask-Regulator Test, TASK 35-12-00-700-802.

3) Examine the passenger oxygen masks for dust or sand, do this task: Passenger Oxygen System - Automatic Actuation Functional Test, TASK 35-22-00-700-801.

SUBTASK 05-51-27-200-017

(16) Potable Water System.

(a) Examine the potable water system for dust or sand contamination.

1) Remove the bleed air filter and look for dust or sand contamination, do this task: Bleed Air Filter Element Replacement, TASK 38-42-10-960-801.

2) If there is dust or sand in the air filter, do these steps:

a) Visually inspect for dust or sand in a sample from the potable water tanks, do this task: Potable Water System - Drain, TASK 12-14-01-600-801.

b) Remove the fill/overflow valves and look for dust or sand contamination, do this task: Fill/Overflow Valve Removal, TASK 38-11-03-000-801.

c) Remove the water quantity transmitters and look for dust or sand contamination, do this task: Water Quantity Transmitter Removal, TASK 38-14-01-000-801.

SUBTASK 05-51-27-200-018

(17) Hydraulic System.

(a) Examine the hydraulic system for signs of dust or sand contamination.

1) Visually inspect for dust or sand in a sample of the hydraulic fluid, do this task: Hydraulic Fluid - Check, TASK 29-11-00-200-801.

D. Clean the Dust or Sand Contamination

SUBTASK 05-51-27-100-001

(1) If you find dust or sand in the areas you examined, remove the dust or sand.

(a) Do this task: Clean (Wet Wash) the External Surfaces of the Airplane, TASK 12-40-00-100-801 or Clean (Waterless Wash) the External Surfaces of the Airplane, TASK 12-40-00-100-803.

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E. Put the Airplane Back to Its Usual Condition

SUBTASK 05-51-27-400-001

(1) Install the components you removed if they are serviceable, or install replacement parts.

(2) Operate the air conditioning packs and check for the conditions that follow:

(a) Unusual noise or vibration.

(b) Leaking on all ducting in the two air conditioning pack bays.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

ICE OR SNOW CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. General

A. This section gives the task to examine the airplane surface when there are ice or snow or slush conditions.

(1) When there is ice, snow, frost, and/or slush conditions before a flight, examine the surfaces of the airplane.

TASK 05-51-28-210-801

2. Ice or Snow Condition Maintenance Practices

A. References

Reference	Title
12-33-01-600-802	Cold Weather Maintenance Procedure (P/B 301)

B. Location Zones

Zone	Area
100	Lower Half of Fuselage
200	Upper Half of Fuselage
300	Empennage
500	Left Wing
600	Right Wing

C. Procedure

SUBTASK 05-51-28-210-001

(1) When there are ice or snow conditions, examine the airplane.

(a) Look at the areas that follow for ice or snow:

1) the fuselage.
2) the wings.
3) the TE flaps.
4) the LE flaps.
5) the LE slats.
6) the ailerons.
7) the stabilizers.
8) the elevators.
9) the rudder.
10) the accessible areas of the balance panels.
11) the accessible areas of control surface hinge points and hinges.
12) the gaps between wing structure and aileron nose.
13) the gaps between fin and rudder nose.
14) the gaps between horizontal stabilizer and elevator nose.
15) the engine fan blades.

(b) The areas that follow must not have any snow or ice on them before takeoff:

1) the total area of wing upper surface.
2) the wing leading edge.

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3) all control surfaces.

4) all tab surfaces.

5) balance panel cavities.

6) the engine fan blades.

(c) Look in the engine inlet cowl for ice and snow.

1) Make sure the fan turns freely.

2) If there is ice on the engine fan blades, do this task: Cold Weather Maintenance Procedure, TASK 12-33-01-600-802

SUBTASK 05-51-28-610-001

(2) If there is ice, snow, slush, and/or frost, do the step that follows:

(a) Do this task: Cold Weather Maintenance Procedure, TASK 12-33-01-600-802.

——— END OF TASK ———

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EXCEEDING MAXIMUM NOSE LANDING GEAR TOWING ANGLE OR MAXIMUM TOWING LOAD (CONDITIONAL INSPECTION) - MAINTENANCE PRACTICES

1. General

A. The following procedure is required for an accidental turn of the nose landing gear greater than the maximum steering angle with torsion links attached, steering from the flight deck with the towbar installed and the steering system activated, or towing more than the maximum towing loads.

NOTE: Exceeding maximum steering angle with torsion links attached is also known as an oversteer.

B. This inspection procedure is divided into two phases (Phase I and Phase II)

(1) If the inspection during Phase I does not show that damage has occurred, no more inspections are necessary.

(2) If the Phase I inspection shows that damage has occurred, the Phase II inspection must be done.

(3) The Phase I inspection should be completed prior to the Phase II inspection.

C. When the conditional inspection tells you to "examine" a component, look for these conditions (replace or repair components, if it is necessary).

(1) Cracks

(2) Pulled apart structure

(3) Loose paint (paint flakes)

(4) Twisted parts (distortion)

(5) Leakage

(6) Bent components

(7) Fasteners holes that become larger or longer

(8) Loose fasteners

(9) Fasteners that have pulled out or are gone

(10) Delaminations

(11) Misalignment

(12) Interference

(13) Other signs of damage.

TASK 05-51-29-200-801

2. Phase I Inspection

A. References

Reference	Title
09-11-00-990-803	Figure: Towing Loads and Turning Radius (P/B 201)
32-45-00-700-801	Wheels Fast Check (Wheel Installed on the Airplane) (P/B 601)
32-45-00-700-802	Wheels Inspection (Wheel Removed from the Airplane) (P/B 601)
32-45-00-700-803	Tires - Inspection (P/B 601)
32-51-31-220-801	Inspect Nose Gear Steering Cables (P/B 601)

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B. Location Zones

Zone	Area
700	Landing Gear and Landing Gear Doors

C. Nose Landing Gear Area, Exceeding Maximum Steering Angle, Maximum Towing Load.

Figure 09-11-00-990-803

SUBTASK 05-51-29-200-001

(1) Examine the nose landing gear areas that follow:

(a) The tires, do this task: Tires - Inspection, TASK 32-45-00-700-803.

(b) The wheels, do this task: Wheels Fast Check (Wheel Installed on the Airplane), TASK 32-45-00-700-801.

1) If the examination finds any wheels damaged, do this task: (Wheels Inspection (Wheel Removed from the Airplane), TASK 32-45-00-700-802).

(c) If damage occurred during towing with or without a towbar, do these steps:

1) Verify the axle is not bent or deformed.

2) Examine the axle threads for excessive damage.

3) Examine the following pins for signs of crank shafting, cracks or other gross defects:

a) Torsion Link Pin, upper

b) Torsion Link Pin, lower

c) Torsion Link Pin, apex

d) Steering Collar Pins

(d) Make sure all of the fasteners are installed in the correct positions.

(e) Make sure there are no loose fasteners in the web of the nose wheel well near the trunnion support.

(f) Examine the steering cable control system for signs of cable overload, do this task: Inspect Nose Gear Steering Cables, TASK 32-51-31-220-801.

1) Verify the pulley brackets are not deformed.

2) Verify the proper cable rigging.

(g) Examine the nose gear steering actuator rods for signs of necking or contact with the steering collar .

1) Verify the actuator rods are not bent.

(h) Examine the actuator rod end attachments to the steering collar for signs of deformation and excessive freeplay.

(i) Examine the actuator trunnion attachments to the steering plates for signs of deformation and excessive freeplay.

(j) Examine the nose gear torque links for signs of deformation and excessive freeplay.

(k) Operationally check the steering system by commanding slow tiller inputs in both directions.

1) Verify no system binding occurs and there is no leakage from steering actuator trunnions and rod seals and steering metering valve.

(l) Examine the upper and lower ends of the shock strut of the nose gear for fluid leakage.

(m) Examine the outer cylinder of the nose landing gear.

(n) Examine the nose landing gear inner cylinder at tow fittings.

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(o) Examine the nose landing gear inner cylinder torsion links attach lugs.

(p) Examine the nose landing gear trunnions for signs of damage.

(q) Examine the nose landing gear trunnion attachment areas.

1) Examine bolted connections (attaching upper end of outer cylinder and upper end of upper drag brace).

(r) Examine both upper and lower drag brace segments, attach lugs, and pins.

(s) Examine the doors, hinges and retraction mechanism of the nose landing gear and the nose landing gear taxi light bracket for signs of damage.

——— END OF TASK ———

TASK 05-51-29-200-802

3. Phase II Inspection

A. References

Reference	Title
12-15-41-610-802	Nose Landing Gear Shock Strut Servicing, Airplane on the Ground (P/B 301)
32-21-00-200-801	Nose Landing Gear Inspection (P/B 601)
32-21-00-700-801	Nose Landing Gear Torsional Freeplay Inspection (P/B 601)
32-33-00-710-801	Operational Test for the Nose Landing Gear (P/B 501)
32-35-00-730-801	Nose Gear Manual Extension System Test - Airplane on Jacks (P/B 501)
32-51-00-700-801	Nose Wheel Steering System Test (P/B 501)

B. Location Zones

Zone	Area
700	Landing Gear and Landing Gear Doors

C. Nose Landing Gear Operational Check

SUBTASK 05-51-29-200-002

(1) Retract and then extend the nose landing gear with the normal system to make sure it operates correctly.

(a) Do this task: Operational Test for the Nose Landing Gear, TASK 32-33-00-710-801.

(b) Retract and then extend the nose landing gear with the manual system to make sure it operate correctly.

1) Do this task: Nose Gear Manual Extension System Test - Airplane on Jacks, TASK 32-35-00-730-801.

D. Nose Landing Gear Inspections

SUBTASK 05-51-29-200-003

(1) Examine the nose landing gear areas that follow:

(a) Do this task: Nose Landing Gear Inspection, TASK 32-21-00-200-801.

(b) Do this task: Nose Landing Gear Torsional Freeplay Inspection, TASK 32-21-00-700-801.

(c) Examine the shock strut of the nose landing gear for fluid leakage.

(d) Examine the shock strut of the nose landing gear to make sure the pressure is satisfactory.

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1) Do this task: Nose Landing Gear Shock Strut Servicing, Airplane on the Ground, TASK 12-15-41-610-802.

(e) Remove the inner cylinder if:

1) There is visible damage to any of the following structural components:

a) Nose landing gear inner cylinder.

b) Nose landing gear outer cylinder

c) Drag strut

2) There are signs of a shock strut fluid leak.

3) It is known the maximum towing load has been exceeded.

(f) If you remove the inner cylinder, examine the inner cylinder as follows:

1) Perform a visual examination looking for distortion and cracks.

2) Do a dimensional inspection.

3) Do an NDT inspection, if appropriate.

(g) Do a check of the rigging of the steering mechanism.

1) Do this task: Nose Wheel Steering System Test, TASK 32-51-00-700-801.

——— END OF TASK ———

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VOLCANIC ASH CONDITION - MAINTENANCE PRACTICES

1. General

A. This procedure has two tasks:

(1) Inspect the airplane for damage caused by an operational encounter of volcanic ash.

(2) Inspect a parked airplane for contamination in volcanic ash fallout conditions.

TASK 05-51-31-210-801

2. Volcanic Ash Operational Encounter Conditional Inspection

A. General

(1) This inspection is divided into three phases (Phase I, Phase II and Phase III).

(a) Phase I (IA and IB) is a general visual inspection for one or more of the following:

1) The flight crew reported the airplane flight path was through a cloud of visual volcanic ash.

2) The airplane lands or takes off in volcanic ash fallout conditions.

NOTE: Fallout is identified as ash drifting down from the air, or is blown about by the wind. Fallout is also caused by the ash being blown or moved about because of the movement of airplanes and ramp vehicles.

3) An airplane encounters volcanic ash while operating on the ground during volcanic ash fallout conditions.

(b) Phase II is applicable when any of the Phase IB inspections show positive results.

(c) Phase III is applicable when any of the Phase II inspections show positive results.

(2) Volcanic ash has the qualities that follow:

(a) It is hard and highly abrasive.

(b) It usually contains trace chemicals which can be acidic (pH between 2 and neutral).

(c) It can cause erosion/abrasion, etching or shot peening on exposed surfaces and remove protective finishes.

(d) The dimensions of most ash particles are less than 5 microns with trace amounts that are more than 50 microns.

(e) It resembles talcum powder.

(f) It stays on exposed lubricated surfaces.

(g) Able to enter small orifices and pass by seals.

(h) Can cause unusual wear and contamination of many airplane systems and filter elements.

WARNING

DO NOT GET VOLCANIC ASH IN YOUR MOUTH, EYES, OR ON YOUR SKIN. PUT ON A RESPIRATOR MASK THAT REMOVES VOLCANIC ASH PARTICLES SUFFICIENTLY. PUT ON CLOTHES AND GOGGLES (OR OTHER APPROVED EYE PROTECTION) THAT KEEP VOLCANIC ASH OFF YOU. VOLCANIC ASH CAN CAUSE INJURIES TO PERSONNEL AND DAMAGE TO EQUIPMENT.

(3) Volcanic ash can cause discomfort and injury to persons during fallout conditions, and during inspection and cleaning.

(a) Precautions must be followed when you work in a volcanic ash environment. This will prevent the entry of volcanic ash into your eyes and your respiratory (breathing) system.

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(4) Guidance for flight through areas of low level volcanic ash concentrations.

(a) Boeing guidance is to always avoid operation in visible ash.

(b) For operations in low volcanic ash concentrations (not visible), the Airframe and Systems can handle these operations without requiring unique or special inspections outside the normal operating and maintenance experience of individual airlines.

(c) Airframe and systems degradation can occur at different rates within many operating environments. As this normal degradation occurs and varies between operating environments, airlines typically adjust their maintenance practices to ensure airplane degradation (e.g. plugged heat exchangers, filters, abrasions, etc.) doesn't cause unscheduled airplane downtime. This same maintenance philosophy applies to operations in low levels of ash concentrations. A continuous operation in areas of low level volcanic ash concentrations is of interest to Boeing in collecting operator observations and experiences. If significant observations are discovered beyond normal variations currently known, Boeing will share these observations and any improved recommendations for maintenance practices. The diagram in Fig. 201 illustrates general areas where Boeing recommends increased observation during normal hanger visits, and potential temporary adjustments for maintenance programs based on the observations, to prevent unscheduled maintenance. Observations should include signs of unusual or accelerated abrasions and / or ash accumulation.

(5) Volcanic ash encounters can show these properties inside the engine:

(a) As the ash goes through the combustor, it can change from ash to a glass material in a plastic flow or a molten condition.

(b) In the molten condition, the ash will have very high adhesive qualities.

1) The ash will bond to the nozzle guide vanes of the high pressure turbine.

2) The ash will also bond to the rotor blades of the high pressure turbine.

a) When the ash bonds to these components, it causes a decrease in the turbine flow area.

b) The ash also causes a decrease of nozzle guide vane and turbine blade cooling air.

(c) It may obstruct fuel injectors and cause engine shutdown.

(d) Ash usually accumulates in the turbine section and can continue to cause damage unless fully cleaned.

(e) Ash can cause erosion of the High Pressure Compressor (HPC) airfoils.

(6) Indicators for the flight crew that an airplane has encountered volcanic ash in flight are related to odor, visibility, haze, changing engine conditions, airspeed, pressurization, and static discharges.

(a) Odor - When encountering a volcanic ash cloud, flight crews usually notice a smoky or acrid odor that can smell like electrical smoke, burned dust, or sulfur.

1) Smoke or dust appearing in the flight deck which may cause the flight crew to don oxygen masks.

(b) Visibility - Flight deck windshields become opaque with limited or no view.

(c) Haze - Flight crews, as well as cabin crews and passengers, can see a haze develop within the airplane. Dust can settle on surfaces.

1) Sharp distinct shadows cast by landing lights as compared to the diffused shadows observed in clouds.

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(d) Changing engine conditions - Surging, torching from the tailpipe, and flameouts can occur. Engine temperatures can change unexpectedly and a white or orange glow can appear at the engine inlets.

1) Multiple engine malfunctions, such as stalls, increasing Exhaust Gas Temperature (EGT), torching, flameout, and loss of thrust causing immediate departure from assigned altitude.

2) On engine restart attempts, engines may accelerate to idle very slowly, especially at high altitudes.

(e) Airspeed - If volcanic ash fouls the pitot tube, the indicated airspeed can decrease or fluctuate erratically.

(f) Pressurization - Cabin pressure can change, including possible loss of cabin pressurization.

(g) Static discharges – An electrostatic discharge/St. Elmo's Fire or glow can occur. In these instances, blue-colored sparks can appear to flow up the outside of the windshield or a white glow can appear at the leading edges of the wings or at the front of the engine inlets.

1) An electrostatic discharge/St. Elmo's Fire around the windshields.

NOTE: This electrical discharge is often referred as St. Elmo's Fire, which is an electrical weather phenomenon where luminous plasma is created by a coronal discharge originating from a grounded object in an atmospheric electric field (such as those generated by thunderstorms or thunderstorms created by a volcanic explosion).

2) A bright glow in the engine inlets along with subsequent engine shutdown.

(7) The following is a guide to help identify positive volcanic ash results versus false positive results. Minimum experience inspecting for volcanic ash may induce a number of probable results which have not been recognized previously, but are well known results caused by normal operation.

(a) results caused by in-flight volcanic ash encounters are usually symmetrically on both sides of the airplane.

NOTE: Positive results on one side of the airplane can be from single engine taxi ground operations or operation through ash that is not uniform thickness.

(b) If there are signs of volcanic ash on one engine, the other engine(s) should show the same signs.

1) For example, results in one pack system should be similar on all packs.

2) For example, an engine spinner or inlet lip skin shows abrasion, the other engine(s) should show similar abrasion.

(c) Volcanic ash typically has a light grey color and looks like talcum powder.

(d) Black or dark debris on the aircraft skin, engine and fan blades are normal debris usually caused by industrial dust.

(e) Yellow or green debris inside of pitot tubes and/or similar sensors may are typical of plant pollen.

(f) White debris on acoustic panels of the engine inlet, fan blades, outlet guide vanes etc. can be residuals of water.

(g) White signs on the fuselage and wings can be caused by aircraft dry cleaning.

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(h) A check of the maintenance history in the area of your results may indicate residual material from recent maintenance.

1) For example, a relubrication of the fan blades may also cause unusual debris on spinner, blades and engine inlet.

B. References

Reference	Title
12-11-00-680-801	Fuel System Sumping (P/B 301)
12-14-01-600-801	Potable Water System - Drain (P/B 301)
21-31-03-000-801	Aft Outflow Valve Assembly Removal (P/B 401)
21-32-01-000-801	Positive Pressure Relief Valve Removal (P/B 401)
21-32-02-000-801	Positive Pressure Relief Valve Filter Removal (P/B 401)
21-32-03-000-801	Negative Pressure Relief Valve Removal (P/B 201)
21-51-01-000-802-002	Left Flow Control and Shutoff Valve - Removal (P/B 401)
21-51-01-000-805-002	Right Flow Control and Shutoff Valve - Removal (P/B 401)
21-51-01-000-806-003	Left Flow Control and Shutoff Valve Removal (P/B 401)
21-51-01-000-807-003	Right Flow Control and Shutoff Valve Removal (P/B 401)
21-51-04-000-802-002	Air Cycle Machine Removal (P/B 401)
21-51-08-000-802	High Pressure Water Separator Removal (P/B 401)
21-51-12-000-801	Condenser Removal (P/B 401)
21-51-21-000-801	Ram Air Inlet Actuator Removal (P/B 401)
21-51-22-000-801	Ram Air Inlet Deflector Door - Removal (P/B 401)
21-51-22-000-802	Ram Air Inlet Deflector Door Shaft Assembly - Removal (P/B 401)
21-51-23-000-801	Ram Air Inlet Modulation Panels - Removal (P/B 401)
21-61-10-100-801	Cabin Temperature Sensor Cleaning (P/B 201)
24-11-21-000-801	Integrated Drive Generator (IDG) Air/Oil Cooler - Removal (P/B 401)
27-51-00-440-801	Trailing Edge Flap System Reactivation (P/B 201)
27-81-00-080-801	Leading Edge Flap and Slat Locks Removal (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
27-81-00-480-801	Leading Edge Flap and Slat Locks Installation (P/B 201)
28-11-11-000-802	Surge Tank Access Door Removal (P/B 401)
29-11-00-200-801	Hydraulic Fluid - Check (P/B 601)
30-11-11-000-801	Wing Thermal Anti-Icing Shutoff Valve Removal (P/B 401)
30-21-11-000-801	Engine Cowl TAI Valve - Removal (P/B 401)
32-11-00-200-801	Main Landing Gear Inspection (P/B 601)
32-21-00-200-801	Nose Landing Gear Inspection (P/B 601)
32-41-31-000-801	Brake Metering Valve Removal (P/B 401)
32-41-41-700-802	Main Landing Gear Brake Fast Check (Wheel Installed on the Airplane) (P/B 601)
32-41-93-700-801	Alternate Brake Selector Valve Test (P/B 401)
33-41-00-960-801	Wing Illumination Light - Lamp Replacement (P/B 201)
33-42-01-960-801	Fixed Landing Light - Lamp Replacement (P/B 201)
33-42-01-960-803	Fixed Landing Light - Main Array Assembly Replacement (P/B 201)

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(Continued)

Reference	Title
33-42-02-960-802	Retractable Landing Light - Light Assembly Replacement (P/B 201)
33-43-11-960-802	Forward Position Light with Dual Lens - Lamp Replacement (P/B 201)
33-43-12-960-801	Aft Position Light - Lamp Replacement (P/B 201)
33-44-01-960-803	Upper Anti-Collision Light - Lens Replacement (P/B 201)
33-44-02-960-803	Lower Anti-Collision Light - Lens Replacement (P/B 201)
33-44-04-960-803	Tail Anti-Collision Light - Lens Replacement (P/B 201)
33-45-01-960-801	Taxi Light - Lamp Replacement (P/B 201)
33-45-02-900-801	Runway Turnoff Light - Light Assembly Replacement (P/B 201)
33-45-02-960-801	Runway Turnoff Light - Lamp Replacement (P/B 201)
35-12-00-700-801	Crew Oxygen Stowage Box Test (Mask Stowed in Stowage Box) (P/B 501)
35-12-00-700-802	Crew Oxygen Mask-Regulator Test (P/B 501)
35-22-00-700-801	Passenger Oxygen System - Automatic Actuation Functional Test (P/B 501)
36-11-02-000-801	Bleed Air Check Valve - Removal (P/B 401)
36-11-03-000-801	Bleed Air Regulator Removal (P/B 401)
36-11-04-000-801	PRSOV Removal (P/B 401)
36-11-05-000-801	Thermostat Removal (P/B 401)
36-11-06-000-801	High Stage Valve Removal (P/B 401)
36-11-07-000-801	High Stage Regulator Removal (P/B 401)
36-12-01-000-801	Bleed Air Precooler Removal (P/B 401)
36-12-02-000-801	Precooler Control Valve Removal (P/B 401)
36-12-03-000-801	Precooler Control Valve Sensor Removal (P/B 401)
36-13-03-000-801	Ground Pneumatic Connector Check Valve Removal (P/B 401)
36-13-04-000-801	Bleed Air Isolation Valve Removal (P/B 401)
36-14-02-000-801	APU Check Valve Removal (P/B 401)
36-21-01-000-801	Duct Pressure Transducer Removal (P/B 401)
38-11-03-000-801	Fill/Overflow Valve Removal (P/B 401)
38-11-04-960-801	Water Filter Replacement (P/B 401)
38-14-01-000-801	Water Quantity Transmitter Removal (P/B 401)
38-42-10-960-801	Bleed Air Filter Element Replacement (P/B 401)
47-32-04-000-802	NGS Filter Element - Removal (P/B 401)
49-31-21-000-801	Inlet Fuel Filter Element Removal (P/B 401)
49-52-13-000-801	Bleed Air Duct Removal (P/B 401)
49-81-11-200-801	Exhaust Duct Muffler Inspection (P/B 601)
49-91-12-000-801	Oil Filter Elements Removal (P/B 401)
49-91-41-200-801	Oil Cooler Inspection (P/B 601)
71-00-00-200-802-F00	Inspection of the Engine After Volcanic Ash, Dust or Sand Ingestion (P/B 601)
80-11-03-000-801-F00	Start Valve Removal (P/B 401)

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C. Location Zones

Zone	Area
100	Lower Half of Fuselage
200	Upper Half of Fuselage
300	Empennage
400	Powerplant and Nacelle Struts
500	Left Wing
600	Right Wing
700	Landing Gear and Landing Gear Doors
800	Doors

D. Phase IA General Visual Inspection

SUBTASK 05-51-31-210-018

(1) Do a visual inspection of the airframe for abrasion damage:

(a) Radome for unusual abrasion

(b) Wing leading edges, landing lights and navlight glazings for unusual abrasion or crazing.

(c) Cockpit windows for unusual abrasion, cracking, crazing, discoloration or decreased visibility.

(d) Landing gear painted surfaces for abrasion.

(e) Pack ram air inlets for unusual abrasion.

SUBTASK 05-51-31-210-020

(2) Do a visual inspection of the sensors and probes for abrasion damage:

(a) Angle of Attack (AOA) sensors for unusual abrasion and free movement

(b) TAT probes for unusual abrasion

(c) Pitot tubes for unusual abrasion

(d) Static ports for unusual abrasion.

SUBTASK 05-51-31-210-021

(3) Do a visual inspection of the following areas for ash contamination:

(a) Engine inlet lip skins, fan blades, and spinners

(b) Pitot probes and static ports

(c) Drain holes (bilge drains and engine drains)

(d) Lubricated surfaces (actuator rams, landing gear inner cylinders)

(e) Pack ram air inlets.

SUBTASK 05-51-31-210-022

(4) Do a visual inspection of the Auxiliary Power Unit (APU) for damage:

NOTE: Inspection can be performed from ground level.

NOTE: Use the applicable APU manufacturer recommendations for engine inspection for flights through areas of low level volcanic ash concentrations.

(a) APU inlet for unusual abrasion

(b) APU exhaust for unusual abrasion

(c) APU drains for abnormal conditions such as excessive or unexpected fuel or oil drainage.

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SUBTASK 05-51-31-210-023

(5) Do a visual inspection of each engine for damage:

NOTE: Use the applicable engine manufacturer recommendations for engine inspection and sampling for flights through areas of low level volcanic ash concentrations.

(a) Engine nose cowl inlet lips for unusual abrasion

(b) Engine spinner for unusual abrasion

(c) Fan Outlet Guide Vane (OGV)s leading edge for unusual abrasion (through fan blades).

SUBTASK 05-51-31-210-024

(6) If any of the Phase IA inspections show positive results, then the Phase IB inspection must be completed before the next flight.

NOTE: Typically, damage from volcanic ash encounters occur symmetrically on both sides of the aircraft. You may also extend the visual inspections to leading edges of stabilizers, antennae etc., as far as visible from ground, to confirm the inspection results.

E. Phase IB General Visual Inspection

SUBTASK 05-51-31-200-001

(1) Borescope first stages of HPC and High Pressure Turbine (HPT) blades for unusual abrasion or ash deposit on one engine.

(a) If the one engine does not show signs of unusual abrasion or grey dust accumulation, the other engine(s) do not need to be inspected.

SUBTASK 05-51-31-200-004

(2) If any of the Phase IB inspections show positive results, then the Phase II inspection must be completed before the next flight.

F. Phase II Inspection

SUBTASK 05-51-31-200-002

(1) Engines

(a) Do the steps that follow to examine each engine.

1) Examine each engine for damage, do this task: Inspection of the Engine After Volcanic Ash, Dust or Sand Ingestion, TASK 71-00-00-200-802-F00.

2) Examine the engine control mechanisms and linkages for volcanic ash.

a) Examine the Variable Stator Vane (VSV) and Variable Bleed Valve (VBV) systems for volcanic ash.

NOTE: These are mechanically controlled by a series of linkages to adjust the airflow through the engine.

b) Examine the High Pressure Turbine Active Clearance Control (HPTACC) and Low Pressure Turbine Active Clearance Control (LPTACC) valves and tubing for volcanic ash.

(b) If any of the Phase II inspections show positive results, then the Phase III inspection must be completed before the next flight.

G. Phase III

SUBTASK 05-51-31-200-003

(1) Examine the Air Condition Systems

(a) Do the steps that follow to examine the air conditioning system:

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1) Examine the aft outflow valve, do this task: Aft Outflow Valve Assembly Removal, TASK 21-31-03-000-801.
   a) If you find volcanic ash in the valve, clean or replace the valve.
2) Remove and examine the negative pressure relief doors, do this task: Negative Pressure Relief Valve Removal, TASK 21-32-03-000-801.
   a) If you find volcanic ash in the door area, clean or replace the door and linkage.
3) Remove and examine the positive pressure relief valves, do this task: Positive Pressure Relief Valve Removal, TASK 21-32-01-000-801.
   a) If you find volcanic ash in the valves, clean or replace the valves.
4) Remove and examine the positive pressure relief valve filters, do this task: Positive Pressure Relief Valve Filter Removal, TASK 21-32-02-000-801.
   a) If you find volcanic ash in the filters, clean or replace the filters.
5) Examine the ram air inlet deflector door, do this task: Ram Air Inlet Deflector Door - Removal, TASK 21-51-22-000-801.
   a) If you find volcanic ash in the deflectors, clean the deflectors and movable joints.
6) Examine the ram air inlet deflector door shaft assemblies, do this task: Ram Air Inlet Deflector Door Shaft Assembly - Removal, TASK 21-51-22-000-802.
   a) If you find volcanic ash in the shaft assemblies, clean the shaft assemblies.
7) Examine the ram air inlet modulation panels, do this task: Ram Air Inlet Modulation Panels - Removal, TASK 21-51-23-000-801.
   a) If you find volcanic ash in the modulation panels, clean the panels and movable joints.
8) Examine the ram air inlet modulation panel shaft assemblies.
   a) If you find volcanic ash in the shaft assemblies, clean the shaft assemblies.
9) Examine the ram air exhaust modulation louver assemblies.
   a) If you find volcanic ash in the louver assemblies, clean the louvers, bearings and movable joints.
10) Examine the ram air inlet actuators, do this task: Ram Air Inlet Actuator Removal, TASK 21-51-21-000-801.
   a) If you find volcanic ash in the actuators, clean or replace the actuators.
11) Remove and examine the Air Cycle Machine (ACM)s, do this task: Air Cycle Machine Removal, TASK 21-51-04-000-802-002.
   a) Check for volcanic ash in the ACM valves.
      <1> If you find volcanic ash in the ACM valves, clean or replace the ACM.
   b) If the aircraft has an ACM that was only on a -800 or -900 aircraft, do the steps that follow.
      <1> Remove the high pressure water separator, do this task: High Pressure Water Separator Removal, TASK 21-51-08-000-802.
      <2> Examine the water for contamination.
      <3> If there is contamination in the water of the high pressure water separator, do the steps that follow.

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<a> Remove the ACM, do this task: Air Cycle Machine Removal, TASK 21-51-04-000-802-002.

<b> Inspect the ACM for torus erosion.

NOTE: Torus erosion is caused because atmospheric contamination in the bleed air is trapped in the ACM torus and moves around the torus, which erodes the inner surface of the torus.

c) If the aircraft has an ACM that was on a -600 or -700 aircraft, do the steps that follow.

<1> Inspect the ACM for torus erosion.

NOTE: The high pressure water separator used on the -800 and -900 model airplanes removes contamination with the water prior to the air entering the ACM turbine. However, if the ACM was installed on a -600 or -700 model airplane, then used on a -800 or -900 model airplane, the torus wall of the ACM may have begun to erode prior to being installed on the -800 or -900 airplane.

NOTE: Torus erosion is caused because atmospheric contamination in the bleed air is trapped in the ACM torus and moves around the torus, which erodes the inner surface of the torus.

12) Remove and examine the air cycle cooling pack primary and secondary heat exchangers.

a) If you find volcanic ash in the heat exchangers, clean or replace the heat exchangers.

NOTE: For more information, refer to the Honeywell CMM 21-50-14.

13) Make sure that the heat exchanger passes the Pressure Flow Tests to verify that the unit is fully cleaned and not clogged.

a) Do this every 2000-3000 hours.

14) Examine the water extract nozzles and drain lines.

a) Clean the water extract nozzles and drain lines if volcanic ash is found.

15) Remove and examine the condensers, do this task: Condenser Removal, TASK 21-51-12-000-801.

a) If you find volcanic ash in the condensers, clean or replace the condensers.

16) Remove and examine the flow control pack valves, do this task: Left Flow Control and Shutoff Valve Removal, TASK 21-51-01-000-806-003 or Right Flow Control and Shutoff Valve - Removal, TASK 21-51-01-000-805-002 or Right Flow Control and Shutoff Valve Removal, TASK 21-51-01-000-807-003 or Left Flow Control and Shutoff Valve - Removal, TASK 21-51-01-000-802-002.

a) If you find volcanic ash in the pack valves, clean or replace the pack valves.

17) Remove and examine the recirculating air fans.

a) If you find volcanic ash in the fans, clean or replace the fans.

18) Remove and examine one of the trim air nozzles.

a) If you find volcanic ash in one of the trim nozzles, remove and clean all of the trim nozzles.

19) Remove and examine the recirculation air filters.

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a) If you find volcanic ash in the filters, clean or replace the filters.

20) Remove and examine the recirculation air check valves.

a) If you find volcanic ash in the valves, clean or replace the valves.

21) Remove and examine the equipment cooling automatic flow control valve.

a) If you find volcanic ash in the valve, remove or replace the valve.

22) Remove and examine the exhaust fans and check valves.

a) If you find volcanic ash in the fans or valves, clean or replace the fans and valves.

23) Remove and examine the pack temperature control valve.

a) If you find volcanic ash in the control valves, clean or replace the valves.

24) Do a visual examination of the temperature sensors and connectors in both air conditioning pack bays.

a) Make sure that the temperature sensors and connectors are not damaged and are installed correctly.

25) Make sure that the flight compartment and cabin temperature sensors are not clogged.

a) If you find volcanic ash in the flight compartment or cabin temperature sensors, clean or replace the sensors, do this task: Cabin Temperature Sensor Cleaning, TASK 21-61-10-100-801.

26) Remove and examine the trim air valve.

a) If you find volcanic ash in the valves, clean or replace the valves.

LOM 406, 407, 412, 415, 422-434, 437-447, 450-999; LOM 402, 404, 411, 416, 420 POST SB 737-47-1003

SUBTASK 05-51-31-200-020

(2) Nitrogen Generation System (NGS)

(a) Examine the NGS Filter (NGS Filter Element - Removal, TASK 47-32-04-000-802).

1) If you find volcanic ash in the NGS filter, clean or replace the filter, if necessary.

LOM ALL

SUBTASK 05-51-31-200-005

(3) Pneumatic System

(a) Examine the pneumatic system

1) Do this task: Bleed Air Precooler Removal, TASK 36-12-01-000-801.

2) If you find ash in the bleed air precooler, remove the components that follow and look for volcanic ash.

a) Do this task: High Stage Valve Removal, TASK 36-11-06-000-801.

b) Do this task: PRSOV Removal, TASK 36-11-04-000-801.

c) Do this task: Bleed Air Check Valve - Removal, TASK 36-11-02-000-801.

d) Do this task: Start Valve Removal, TASK 80-11-03-000-801-F00.

e) Do this task: Precooler Control Valve Removal, TASK 36-12-02-000-801.

f) Do this task: Bleed Air Isolation Valve Removal, TASK 36-13-04-000-801.

g) Do this task: APU Check Valve Removal, TASK 36-14-02-000-801.

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h) Do this task: Ground Pneumatic Connector Check Valve Removal, TASK 36-13-03-000-801.

i) Do this task: Engine Cowl TAI Valve - Removal, TASK 30-21-11-000-801.

j) Do this task: Duct Pressure Transducer Removal, TASK 36-21-01-000-801.

k) Do this task: High Stage Regulator Removal, TASK 36-11-07-000-801.

l) Do this task: Bleed Air Regulator Removal, TASK 36-11-03-000-801.

m) Do this task: Thermostat Removal, TASK 36-11-05-000-801.

n) Do this task: Precooler Control Valve Sensor Removal, TASK 36-12-03-000-801.

SUBTASK 05-51-31-200-006

(4) External Light Lens

(a) Examine all of the external lights lenses for abrasions and damage.

NOTE: If the lights or lenses are frosted or damaged, replace then when it is possible.

1) Do this task: Wing Illumination Light - Lamp Replacement, TASK 33-41-00-960-801.

2) Do this task: Fixed Landing Light - Lamp Replacement, TASK 33-42-01-960-801 or Fixed Landing Light - Main Array Assembly Replacement, TASK 33-42-01-960-803.

LOM 402, 404, 406, 407, 411, 412, 415, 416, 420, 422-434, 437-447, 450-461

3) Do this task: Retractable Landing Light - Light Assembly Replacement, TASK 33-42-02-960-802.

LOM ALL

4) Do this task: Forward Position Light with Dual Lens - Lamp Replacement, TASK 33-43-11-960-802.

5) Do this task: Aft Position Light - Lamp Replacement, TASK 33-43-12-960-801.

6) Do this task: Upper Anti-Collision Light - Lens Replacement, TASK 33-44-01-960-803.

7) Do this task: Lower Anti-Collision Light - Lens Replacement, TASK 33-44-02-960-803.

8) Do this task: Tail Anti-Collision Light - Lens Replacement, TASK 33-44-04-960-803.

LOM 402, 404, 406, 407, 411, 412, 415, 416, 420, 422-434, 437-447, 450-461

9) Do this task: Taxi Light - Lamp Replacement, TASK 33-45-01-960-801.

LOM ALL

10) Do this task: Runway Turnoff Light - Lamp Replacement, TASK 33-45-02-960-801 or Runway Turnoff Light - Light Assembly Replacement, TASK 33-45-02-900-801.

SUBTASK 05-51-31-200-007

(5) Fuel System

(a) Examine the fuel system for volcanic ash contamination.

1) Look for ash in a fuel sample from each fuel tank sump, do this task: Fuel System Sumping, TASK 12-11-00-680-801.

2) Look for ash in a fuel sample from each surge tank sump (if there is fuel in the surge tanks).

3) Visually inspect for ash in each surge tank, do this task: Surge Tank Access Door Removal, TASK 28-11-11-000-802.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-51-31-200-008

(6) Oxygen System

(a) If you find volcanic ash in the passenger and control cabin, examine the oxygen system.

1) Remove the stowage boxes for the mask and regulator and look for ash, do this task: Crew Oxygen Stowage Box Test (Mask Stowed in Stowage Box), TASK 35-12-00-700-801.

2) Examine portable oxygen masks for ash, do this task: Crew Oxygen Mask-Regulator Test, TASK 35-12-00-700-802.

3) Examine the passenger oxygen masks for ash, do this task: Passenger Oxygen System - Automatic Actuation Functional Test, TASK 35-22-00-700-801.

SUBTASK 05-51-31-200-009

(7) APU

(a) Operate the APU on the ground and monitor APU pneumatic performance and operability in both Main Engine Start (MES) and Environmental Control System (ECS) operating modes to confirm no significant damage has occurred to the APU.

NOTE: Use the applicable APU manufacturer recommendations for engine inspection for flights through areas of low level volcanic ash concentrations.

(b) Examine the APU for volcanic ash contamination.

NOTE: Do not perform a borescope inspection of the APU.

1) Examine the inlet and exhaust ducts for ash contamination.

2) If there is ash in the APU inlet or exhaust ducts, look for volcanic ash in the components that follow:

a) Do this task: Oil Cooler Inspection, TASK 49-91-41-200-801.

b) Do this task: Oil Filter Elements Removal, TASK 49-91-12-000-801.

c) Do this task: Inlet Fuel Filter Element Removal, TASK 49-31-21-000-801.

d) Do this task: Exhaust Duct Muffler Inspection, TASK 49-81-11-200-801.

e) Do this task: Bleed Air Duct Removal, TASK 49-52-13-000-801.

SUBTASK 05-51-31-200-010

(8) Potable Water System

(a) Examine the potable water system for volcanic ash contamination.

1) Remove the bleed air filter and look for ash contamination, do this task: Bleed Air Filter Element Replacement, TASK 38-42-10-960-801.

2) If there is ash in the air filter, do these steps:

a) Visually inspect for ash in a sample from the potable water tanks, do this task: Potable Water System - Drain, TASK 12-14-01-600-801.

LOM 437, 438, 463

b) Visually inspect for ash contamination in the water filter, do this task: Water Filter Replacement, TASK 38-11-04-960-801.

LOM ALL

c) Remove the fill/overflow valves and look for ash contamination, do this task: Fill/Overflow Valve Removal, TASK 38-11-03-000-801.

d) Remove the water quantity transmitters and look for ash contamination, do this task: Water Quantity Transmitter Removal, TASK 38-14-01-000-801.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-51-31-200-011

(9) Smoke Detectors

(a) Examine all of the cargo compartment smoke detectors for volcanic ash contamination.

SUBTASK 05-51-31-200-012

(10) Fire Extinguisher Bottle Nozzles

(a) Examine the nozzles of the fire extinguisher bottles that follow for volcanic ash contamination:

1) The engine fire extinguisher bottles

2) The APU fire extinguisher bottle.

SUBTASK 05-51-31-200-013

(11) Engine Accessories

(a) Examine the engine accessories that follow for volcanic ash contamination:

1) Examine the integrated drive generator air and oil cooler for ash, do this task: Integrated Drive Generator (IDG) Air/Oil Cooler - Removal, TASK 24-11-21-000-801.

SUBTASK 05-51-31-200-014

(12) Nacelle

(a) Examine for abrasion damage on all streamwise transverse interfaces between nacelle components to include:

NOTE: The external surfaces and the internal duct surfaces of the nacelle components must be inspected.

1) Inlet lip skin to inlet barrel skin

2) Inlet to fan cowl interfaces

3) Fan cowl to thrust reverser interfaces

4) Thrust reverser to Core Cowl for those installations with a separate core cowl.

(b) Examine for abrasion damage on all streamwise transverse edges of access panels and latch access doors.

(c) Examine all latch mechanisms for debris contamination.

(d) Examine all hinge mechanisms for debris contamination.

(e) Examine the drag links for abrasion damage and drag link attach ends for debris contamination.

(f) Examine the TR blocker door hinges for debris contamination and streamwise transverse edges for erosion damage.

(g) Examine the nacelle seals for debris contamination.

1) If contamination is present, clean the seals and lands of the particulate contamination.

(h) Examine the Thrust Reverser Actuation System (TRAS) for particulate contamination.

SUBTASK 05-51-31-200-015

(13) Landing Gear

(a) Examine the landing gear components that follow for volcanic ash contamination:

NOTE: If you find volcanic ash, remove the ash.

1) The bare inner cylinders of the nose and main landing gear shocks struts.

2) All bare piston rods on all hydraulic actuators.

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3) All attachment points for the landing gear components.

4) All landing gear:

a) door hinges

b) lock mechanisms

c) Do this task: Main Landing Gear Inspection, TASK 32-11-00-200-801.

d) Do this task: Nose Landing Gear Inspection, TASK 32-21-00-200-801.

e) all cables and pulleys

f) all proximity switches.

5) Landing gear brakes, do this task: Main Landing Gear Brake Fast Check (Wheel Installed on the Airplane), TASK 32-41-41-700-802.

a) The selector valves, do this task: Alternate Brake Selector Valve Test, TASK 32-41-93-700-801.

b) The brake metering valves, do this task: Brake Metering Valve Removal, TASK 32-41-31-000-801.

SUBTASK 05-51-31-200-016

(14) Hydraulic Systems

(a) Examine the hydraulic system for signs of volcanic ash contamination.

1) Visually inspect for ash in a sample of the hydraulic fluid, do this task: Hydraulic Fluid - Check, TASK 29-11-00-200-801.

SUBTASK 05-51-31-200-017

(15) Flight Controls

(a) Examine the flight controls for signs of volcanic ash contamination:

NOTE: The flight control include the ailerons, elevator, rudder, leading edge flaps and slats, and spoilers.

WARNING DO NOT GO INTO THE WING LEADING EDGE AND TRAILING EDGE AREAS BEFORE YOU INSTALL SAFETY LOCKS. IF YOU DO NOT OBEY, INJURY TO PERSONNEL FROM ACCIDENTAL FLAP/SLAT OPERATION CAN OCCUR.

1) Do this task: Leading Edge Flap and Slat Locks Installation, TASK 27-81-00-480-801.

2) Examine the bare actuator piston rods of the components that follow:

a) the ailerons

b) the elevator

c) the rudder

d) the leading edge flaps and slats

e) the spoilers.

3) the control cables in unpressurized areas

4) the stabilizer jackscrew

5) the flight control surface hinges

6) the trailing edge flap tracks

7) the flap ball screw surfaces

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8) the flap mechanisms
9) the trailing edge flap track fairings and linkages
10) the leading edge flap and slat mechanisms
11) the aileron and elevator balance panels.

SUBTASK 05-51-31-200-018

(16) Wing and Nacelle Anti-Ice System

(a) Examine the anti-ice system for signs of volcanic ash contamination.

1) Remove the anti-ice valves for the wing and look for volcanic ash contamination, do this task: Wing Thermal Anti-Icing Shutoff Valve Removal, TASK 30-11-11-000-801.

2) Remove the anti-ice valves for the inlet cowl from the engine and look for volcanic ash contamination, do this task: Engine Cowl TAI Valve - Removal, TASK 30-21-11-000-801.

SUBTASK 05-51-31-200-019

(17) Internal Areas of the Airplane

(a) Examine the internal areas of the airplane that follow for signs of volcanic ash contamination.

1) Visually inspect ash on these components in the upper and main compartments:

a) the flight compartment
b) the powered crew seats
c) the flight instruments
d) the electrical/electronic control panels
e) the passenger compartment
f) the closets
g) the passenger seats
h) the lavatories
i) the lavatory components
j) the galleys
k) the galley components
l) the floor coverings
m) refrigeration/chiller units (if installed)

2) baggage and cargo systems
3) electrical and electronic compartments
4) Electronic Equipment Racks
5) control cables and mechanisms.

H. Put the Airplane Back to Its Usual Condition

SUBTASK 05-51-31-420-001

(1) Install the components you removed if they are serviceable, or install replacement parts.

SUBTASK 05-51-31-860-001

(2) Do this task: Leading Edge Flap and Slat Locks Removal, TASK 27-81-00-080-801.

SUBTASK 05-51-31-860-002

(3) Do this task: Trailing Edge Flap System Reactivation, TASK 27-51-00-440-801.

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SUBTASK 05-51-31-860-003

(4) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

END OF TASK

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Airframe and Systems Observation Areas
Figure 201/05-51-31-990-801

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TASK 05-51-31-200-801

3. Volcanic Ash Ground Fallout Conditional Inspection

A. General

(1) This task has information to examine a parked airplane for contamination in volcanic ash fallout conditions.

(2) Fallout is identified as ash drifting down from the air, or is blown about by the wind. Fallout is also caused by the ash being blown or moved about because of the movement of airplanes and ramp vehicles.

(3) For airplanes parked in fallout conditions, protect all inlets of systems, probes, static ports, engines, gaps, etc. with suitable covers.

(a) Any covered areas should have appropriate streamers or markings, to be removed before operation.

(4) Volcanic ash has the qualities that follow:

(a) It is hard and highly abrasive.

(b) It usually contains trace chemicals which can be acidic (pH between 2 and neutral).

(c) It can cause erosion/abrasion, etching or shot peening on exposed surfaces and remove protective finishes.

(d) The dimensions of most ash particles are less than 5 microns with trace amounts that are more than 50 microns.

(e) It resembles talcum powder.

(f) It stays on exposed lubricated surfaces.

(g) Able to enter small orifices and pass by seals.

(h) Can cause unusual wear and contamination of many airplane systems and filter elements.

WARNING

DO NOT GET VOLCANIC ASH IN YOUR MOUTH, EYES, OR ON YOUR SKIN. PUT ON A RESPIRATOR MASK THAT REMOVES VOLCANIC ASH PARTICLES SUFFICIENTLY. PUT ON CLOTHES AND GOGGLES (OR OTHER APPROVED EYE PROTECTION) THAT KEEP VOLCANIC ASH OFF YOU. VOLCANIC ASH CAN CAUSE INJURIES TO PERSONNEL AND DAMAGE TO EQUIPMENT.

(5) Volcanic ash can cause discomfort and injury to persons during fallout conditions, and during inspection and cleaning.

(a) Precautions must be followed when you work in a volcanic ash environment. This will prevent the entry of volcanic ash into your eyes and your respiratory (breathing) system.

(6) The following is a guide to help identify positive volcanic ash findings versus false positive findings. Minimum experience inspecting for volcanic ash may induce a number of probable findings which have not been recognized previously, but are well known findings caused by normal operation.

(a) Black or dark debris on the aircraft skin, engine and fan blades are normal debris usually caused by industrial dust.

(b) Yellow or green debris inside of pitot tubes and/or similar sensors may are typical of plant pollen.

(c) White debris on acoustic panels of the engine inlet, fan blades, outlet guide vanes etc. can be residuals of water.

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(d) White signs on the fuselage and wings can be caused by aircraft dry cleaning.

(e) A check of the maintenance history in the area of your findings may indicate residual material from recent maintenance.

1) For example, a relubrication of the fan blades may also cause unusual debris on spinner, blades and engine inlet.

B. References

Reference	Title
12-40-00-100-805	Clean the Exterior Surface of Volcanic and Fire Ash (P/B 201)

C. Procedure

SUBTASK 05-51-31-211-001

(1) Examine the airplane exterior surfaces and the area (ground, service equipment, buildings) around the airplane for any indication of ash.

(a) If no ash is found, no more inspection or cleaning is necessary.

(2) If any ash is found, remove all traces of the ash, including areas such as the fuselage crown, horizontal surfaces, inlets, wheel wells, and exposed chrome common to landing gear.

(a) Do this task: Clean the Exterior Surface of Volcanic and Fire Ash, TASK 12-40-00-100-805.

SUBTASK 05-51-31-210-019

(3) Make sure the area around the airplane is free from ash.

NOTE: Coordinate with the local airport authority to make sure the ramps, taxiways, and runways are clear from ash contamination.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TAIL STRIKE/SKID CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. General

A. This inspection procedure must be done if an airplane tail strike (tail dragged or touched the runway) occurred when the airplane landed or during a takeoff.

(1) If the green part of the warning decal on the aft side of the tail skid cartridge is not visible, a tail strike may have occurred.

B. The tail skid assembly located on the keel line consists of a drag lever, with a drag shoe.

(1) The tail skid assembly is designed to drag the drag shoe along the ground and also to compress the crushable cartridge in the shock absorber.

C. Damage can occur to the fuselage when the tail touches the runway.

(1) If you find damage, refer to the applicable Structural Repair Manual (SRM) procedures.

D. This procedure has the following task(s):

(1) Tail Strike Inspection.

(2) Tail Skid Inspection.

TASK 05-51-32-210-801

2. Tail Strike Inspection

A. References

Reference	Title
27-41-00-700-801	Stabilizer Manual Trim and Trim Indicator - Test (P/B 501)
27-41-11-000-801	Horizontal Stabilizer - Removal (P/B 401)
27-41-11-400-801	Horizontal Stabilizer Installation (P/B 401)
27-41-41-210-801	Stabilizer Control Mechanism Detail Visual Inspection (P/B 601)
51-21-99 P/B 701	DECORATIVE EXTERIOR PAINT SYSTEM - CLEANING/PAINTING

B. Location Zones

Zone	Area
100	Lower Half of Fuselage
144	Area Below Aft Cargo Compartment - Right
145	Aft Cargo Compartment Equipment Bay - Left
310	Fuselage - Body Station 1016.00 to Body Station 1217.00

C. Tail Strike Inspection Procedure

SUBTASK 05-51-32-210-003

(1) Examine the tail skid assembly drag shoe for tail strike damage as follows:

(a) Do this task: Tail Skid Inspection, TASK 05-51-32-210-802.

(b) If there is no damage to the bottom of the fuselage and you do not have to replace the crushable cartridge, it is not necessary to continue with the Tail Strike Inspection. Continue to Put the Airplane Back to Its Usual Condition.

SUBTASK 05-51-32-210-005

(2) Inspect the external skin surfaces of the lower aft fuselage.

(a) Look from station 947 (approximate aft of the cargo bay aft bulkhead) to the APU compartment.

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1) Look at the following areas for broken, bent, (distorted), missing parts or other damage:
   a) The APU firewall
   b) The APU drain
   c) The doors of the APU compartment
   d) The drain mast.
2) Inspect the upper fuselage structure aft of the wing rear spar for buckled structure, cracks and paint that has flaked.

(b) Inspect for fasteners that are loose or missing.

SUBTASK 05-51-32-200-001

(3) Examine all of the external and internal structure of the fuselage, section 48, Body Station (BSTA) 1016, that you can get access to and/or is called out in this procedure for signs of buckling, deformation or damage.

NOTE: Look at the structure from the rear pressure bulkhead to the aft end of the airplane.

(a) Do a detailed visual inspection of the exterior fuselage skin 10 in. (25.4 cm) forward and aft of the BSTA 1016 skin butt joint between stringers S-10L and S-10R.

NOTE: Gain access to the exterior of the fuselage skin at BS 1016 under the vertical stabilizer fairing, 323AL and 323AR.

(b) Do a detailed visual inspection of the entire aft side of the BSTA 1016 aft pressure bulkhead.

1) Give particular attention to the upper bulkhead structure between skin stringers S-10L and S-10R.

NOTE: Access to the interior unpressurized aft pressure bulkhead area is through the aft access hatch, 311BL.

SUBTASK 05-51-32-210-007

(4) When you find external damage, inspect the fuselage internally as follows:

(a) In the area of the tail strike:
   1) Inspect for bent or cracked stringers, frames, or clips.
   2) Inspect for buckled or wrinkled webs.
   3) Inspect for loose or missing fasteners and paint that has flaked.
   4) Inspect the lower area of the aft pressure bulkhead for damage.

(b) Aft pressure bulkhead at BSTA 1016:

1) Examine at BSTA 1016 the upper center web installation on the forward side of the pressure bulkhead for any damage.

NOTE: Gain access to inspect the upper center web installation by removing the galley and lavatories as necessary.

SUBTASK 05-51-32-800-001

(5) If damage is found in the above paragraphs, use the applicable Structural Repair Manual (SRM) and do the repairs.

D. Stabilizer Position Indicator System Procedure

SUBTASK 05-51-32-210-008

(1) Inspect the stabilizer position indication system components, do this task: Stabilizer Manual Trim and Trim Indicator - Test, TASK 27-41-00-700-801.

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(a) Inspect for broken cables.

(b) Inspect for cables that are out of the pulley groove.

(c) When there is no internal damage to the fuselage structure, do the operational test for the stabilizer position indication system.

1) Do this task: Stabilizer Control Mechanism Detail Visual Inspection, TASK 27-41-41-210-801.

2) Do this task: Stabilizer Manual Trim and Trim Indicator - Test, TASK 27-41-00-700-801.

(d) When there is internal damage to the fuselage structure, do the system test for the stabilizer position indicating system.

SUBTASK 05-51-32-210-009

(2) If the stabilizer position indicating system components are damaged:

(a) Do this task: Horizontal Stabilizer - Removal, TASK 27-41-11-000-801

(b) Do this task: Horizontal Stabilizer Installation, TASK 27-41-11-400-801.

E. Put the Airplane Back to Its Usual Condition

SUBTASK 05-51-32-410-002

(1) Install all of the components you removed if the components are serviceable, or install replacement parts.

SUBTASK 05-51-32-370-001

(2) If the tail skid drag shoe is within tolerance and the paint finish on the lower surface of the tail skid drag shoe has been gouged or scratched by contact with the runway, paint the skid drag shoe in accordance with the Decorative Exterior Finishes procedure (DECORATIVE EXTERIOR PAINT SYSTEM - CLEANING/PAINTING, PAGEBLOCK 51-21-99/701).

NOTE: If the tail skid drag shoe scratch or gouge damage is not painted over, a person may interpret the damage as new and request an unnecessary inspection. The addition of paint can help to determine when new tail strikes have occurred.

SUBTASK 05-51-32-200-005

(3) Make sure that pressurization mode selector is in the AUTO position.

END OF TASK

TASK 05-51-32-210-802

3. Tail Skid Inspection

A. References

Reference	Title
32-71-00-200-801	Tailskid Cartridge Assembly - Inspection/Check (P/B 601)
32-71-00-900-801	Tailskid Shoe Inspection (P/B 601)
32-71-00-960-803	Replacement of the Tail Skid Warning Decal (P/B 201)

B. Location Zones

Zone	Area
100	Lower Half of Fuselage
144	Area Below Aft Cargo Compartment - Right
145	Aft Cargo Compartment Equipment Bay - Left
310	Fuselage - Body Station 1016.00 to Body Station 1217.00

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C. Tail Skid Inspection

SUBTASK 05-51-32-210-010

(1) Inspect the external tail drag surfaces.

NOTE: You must examine the warning placard for the cartridge assembly at the next possible check after the tail strike. The skirt fairing for the tail skid does not extend again because of gravity as a result of time.

(a) Visually inspect the tail skid and skin surfaces of the lower aft fuselage, do this task: Tailskid Shoe Inspection, TASK 32-71-00-900-801.

1) Make sure that the tail drag shoe is serviceable and within tolerance limits.

(b) Make sure that the crushable cartridge is within serviceable limits, do this task: Tailskid Cartridge Assembly - Inspection/Check, TASK 32-71-00-200-801.

(c) Inspect the tailskid drag assembly for cracks or fractures.

(d) Examine the tail skid fuse pin for signs of shear.

(e) Inspect from zone 140 to the APU compartment for signs of the conditions that follow:

NOTE: This inspection is the lower area of Section 47 and 48.

1) Look for signs of scrapes and cracked or buckled belly skin. Also look for fasteners that are loose or are not there:

a) scrapes

b) holes

c) cracked skin

d) burns

e) buckled belly skin

f) loose fasteners

g) missing fasteners.

SUBTASK 05-51-32-210-012

(2) Inspect the internal tail drag surfaces.

(a) When you find external damage, examine the fuselage internally in the area of the tail drag.

(b) Look for bent or cracked:

1) stringers

2) frames

3) clips

4) wrinkled webs

5) look for loose or missing fasteners.

(c) Examine the lower area of the aft pressure bulkhead for damage.

SUBTASK 05-51-32-800-003

(3) If you find internal or external damage, use the applicable Structural Repair Manual (SRM) for the repairs.

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SUBTASK 05-51-32-200-003

(4) If you found damage to the bottom of the fuselage, or you have to replace the crushable cartridge, do this task: Tail Strike Inspection, TASK 05-51-32-210-801.

NOTE: It is not necessary to repeat inspection steps that have already been performed as part of the tail skid inspection procedure.

SUBTASK 05-51-32-200-004

(5) Examine the tail skid warning decal.

(a) If missing, do this task: Replacement of the Tail Skid Warning Decal, TASK 32-71-00-960-803.

D. Put the Airplane Back to Its Usual Condition

SUBTASK 05-51-32-410-003

(1) Install all of the components you removed if they are serviceable, or install replacement parts.

SUBTASK 05-51-32-200-006

(2) Make sure that pressurization mode selector is in the AUTO position.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

HOT AIR DUCT RUPTURE CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. General

A. This section has two tasks to examine the airplane after a hot air duct rupture.

B. The first task examines the airplane structure for possible heat damage caused by a ruptured duct.

C. The second task examines the airplane nacelle structure for possible structural damage caused by a ruptured duct that has occurred below the strut for which there was a subsequent deployment of the affected thrust reverser.

TASK 05-51-34-210-801

2. Airplane Structure Hot Air Duct Rupture Conditional Inspection

A. Location Zones

Zone	Area
100	Lower Half of Fuselage
400	Powerplant and Nacelle Struts
500	Left Wing
600	Right Wing

B. Procedure

SUBTASK 05-51-34-210-001

(1) Examine the area of the airplane structure which has had a high heat condition caused by a ruptured pneumatic duct.

(a) If you find damage, refer to the Structural Repair Manual (SRM) and the Non Destructive Test Manual (51-00-00, Part 6) for the repairs.

C. Put the Airplane Back to It's Usual Condition

SUBTASK 05-51-34-410-001

(1) Install the components you removed if they are serviceable, or install replacement parts.

END OF TASK

TASK 05-51-34-200-802

3. Nacelle Structure Hot Air Duct Rupture Conditional Inspection

A. Location Zones

Zone	Area
400	Powerplant and Nacelle Struts

B. Procedure

SUBTASK 05-51-34-210-002

(1) Contact Boeing for specifics of information related to the inspection of the inner wall for both location and the method of inspection.

C. Put the Airplane Back to It's Usual Condition

SUBTASK 05-51-34-410-002

(1) Install the components you removed if they are serviceable, or install replacement parts.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

OVERWEIGHT LANDING - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. **General**

A. This inspection is for overweight landings that are not called hard by the flight crew. Inspections for hard landings, or overweight and hard landings, or high drag or high side load conditions are covered in procedure HARD LANDING OR OVERWEIGHT/HARD LANDING OR HIGH DRAG/SIDE LOAD CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION), PAGEBLOCK 05-51-01/201.

B. The Inspection

(1) The inspection is a visual inspection of the landing gear.

(a) If the flight crew recorded that the landing was not hard on the main and nose landing gears, then no inspections are needed. Additionally, flight data may be used to waive the main gear inspection if available and the criteria described below are met.

(b) If damage is found during this inspection then the Hard Landing inspection in procedure HARD LANDING OR OVERWEIGHT/HARD LANDING OR HIGH DRAG/SIDE LOAD CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION), PAGEBLOCK 05-51-01/201 must be performed.

C. High Drag or High Side Load Condition

(1) A High Drag or High Side Load condition occurs if one or more of the following conditions is met:

(a) The flight crew reported a “high drag load” or “high side load” event.

(b) The airplane ran off the prepared surface.

(c) The airplane landed short of the prepared surface.

(d) The airplane made a landing and one or more tires were blown.

(e) One or more of the landing gear hit an obstacle.

D. Hard Main Gear Landing

(1) A Hard Main Gear Landing occurs if one of the following conditions is met:

(a) The landing is reported by the flight crew as:

1) “hard landing” without specifying if it was hard on the main or nose gear, or

2) “hard main gear landing”, or

3) “hard bounced landing”.

E. Hard Nose Gear Landing

(1) A Hard Nose Gear Landing occurs if one of the following conditions is met:

(a) The landing is reported by the flight crew as:

1) “hard landing” without specifying if it was hard on the main or nose gear, or

2) “hard nose gear landing”, or

3) “hard bounced landing”, or

4) a landing where the nose gear contacted the prepared surface before the main gears.

F. Overweight Landing

(1) For the purpose of this inspection, an Overweight Landing occurs when:

(a) The landing weight is greater than the Maximum Landing Weight (MLW) plus 1000 lb (454 kg).

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G. The Inspection Logic

NOTE: The Flight Crew Training Manual states the following for overweight landings: “if the overweight landing was not a hard landing the flight crew should record that the landing was not a hard landing”.

(1) If it was a Hard Main or Nose Gear Landing or a High Drag or High Side Load Condition, do the HARD LANDING OR OVERWEIGHT/HARD LANDING OR HIGH DRAG/SIDE LOAD CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION), PAGEBLOCK 05-51-01/201, instead of the Overweight Landing inspection.

NOTE: The Overweight Landing inspection is not required when the landing was both overweight and hard because the inspection steps contained within this procedure are duplicated in the Hard Landing Inspection.

(2) If the flight crew recorded that the overweight landing was “not hard on the nose landing gear” then no inspection is needed for the nose landing gear. Otherwise, do the Nose Landing Gear portion of the Overweight Landing inspection (Overweight Landing Inspection, TASK 05-51-35-210-801).

(3) If the flight crew recorded that the overweight landing was “not hard on the main landing gear” then no inspection is needed for the main landing gear. Otherwise, do the Main Landing Gear portion of the Overweight Landing inspection (Overweight Landing Inspection, TASK 05-51-35-210-801). Alternatively, the main landing gear inspection can be waived if all of the following are true:

(a) It was not a bounced landing, and

(b) The Center of Gravity (CG) vertical load factor from the flight recorded data (or equivalent recording device) was less than or equal to the threshold for the corresponding roll angle of Figure 201.

NOTE: The CG vertical load factor threshold may only be used if the recording sample rate for VERTICAL ACCELERATION is at least 8 samples/sec, if the landing was not bounced and if the roll angle is less than or equal to 6 degrees.

NOTE: The CG vertical load factor (VERTICAL ACCELERATION) and roll angle (ROLL ATTITUDE) are determined from the Flight Data Recorder (FDR) or equivalent recording device. The load factor is the maximum value of VERTICAL ACCELERATION that occurs in the first one-second period after touchdown and prior to speedbrake deployment. The roll angle is the maximum absolute value of ROLL ATTITUDE in the one second period prior to the maximum load factor.

(4) If damage is found during any of the necessary inspections from this section, this task must be performed before the next flight: HARD LANDING OR OVERWEIGHT/HARD LANDING OR HIGH DRAG/SIDE LOAD CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION), PAGEBLOCK 05-51-01/201.

NOTE: There may not be any applicable inspections.

H. When the conditional inspection tells you to "examine" a component, look for these conditions (replace or repair components, if it is necessary).

(1) Cracks

(2) Pulled apart structure or unusual gaps

(3) Loose paint (paint flakes)

(4) Discoloration

(5) Twisted parts (distortion)

(6) Wrinkles or buckles in the structure

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(7) Bent components
(8) Loose fasteners
(9) Fasteners that have pulled out or are gone
(10) Delamination
(11) Fiber breakage
(12) Misalignment
(13) Interference
(14) Nicks or gouges
(15) Cracked fillet seals on sealed assemblies
(16) Other signs of damage.

TASK 05-51-35-210-801

2. Overweight Landing Inspection

A. References

Reference	Title
32-11-00-200-801	Main Landing Gear Inspection (P/B 601)
32-21-00-200-801	Nose Landing Gear Inspection (P/B 601)

B. Location Zones

Zone	Area
100	Lower Half of Fuselage
300	Empennage
500	Left Wing
600	Right Wing
700	Landing Gear and Landing Gear Doors

C. Overweight Landing Inspection

SUBTASK 05-51-35-210-022

(1) If the logic requires to inspect the main landing gear, examine the areas of the main landing gear that follow:

(a) Examine the main landing gear tires and wheels for signs of damage.

(b) Examine the upper and lower ends of the main landing gear shock strut for signs of hydraulic fluid leakage, (Main Landing Gear Inspection, TASK 32-11-00-200-801).

NOTE: A small quantity of hydraulic fluid on the inner cylinder is satisfactory.

SUBTASK 05-51-35-210-024

(2) If the logic requires to inspect the nose landing gear, examine the areas of the nose landing gear that follow:

(a) Examine the tires and wheels of the nose landing gear for signs of damage.

(b) Examine the upper and lower ends of the shock strut of the nose landing gear for signs of hydraulic fluid leakage, (Nose Landing Gear Inspection, TASK 32-21-00-200-801).

NOTE: A small quantity of hydraulic fluid on the inner cylinder is satisfactory.

END OF TASK

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LEGEND:

LANDING WEIGHT > MLW+1000 Lbs (454 kg), 16+ SAMPLES/SEC

LANDING WEIGHT > MLW+1000 Lbs (454 kg), 8+ SAMPLES/SEC

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CG Load Factor Chart
Figure 201/05-51-35-990-805

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WINGLET STRIKE CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. General

A. This inspection procedure must be done if an airplane winglet strike occurred when the airplane was parked, taxiing, or towing.

B. The winglet is situated on the tip of the wing and is attached to the wing closure rib.

C. If a winglet is damaged, there can also be damage to the wing.

(1) If you find damage to the wing, refer to the Structural Repair Manual (SRM) procedures.

D. This procedure has the following task:

(1) Winglet Strike Inspection

TASK 05-51-36-210-801

2. Winglet Strike Inspection

A. References

Reference	Title
57-21-21-000-801	Winglet Removal (P/B 401)
57-21-21-400-801	Winglet Installation (P/B 401)
737 NDT Part 6, 51-00-00	Structures - General

B. Location Zones

Zone	Area
500	Left Wing
527	Left Winglet
534	Left Wing - Dry Bay
600	Right Wing
627	Right Winglet
634	Right Wing - Dry Bay

C. Winglet Strike Inspection Procedure.

SUBTASK 05-51-36-211-001

(1) Remove the damaged winglet (Winglet Removal, TASK 57-21-21-000-801).

(a) Do a detailed visual inspection of the winglet to wing attachments.

SUBTASK 05-51-36-211-002

(2) Do a detailed visual inspection of the closure rib for evidence of cracks, buckling, elongated holes or other damage.

NOTE: Use 10x magnification around the winglet attach fastener holes.

SUBTASK 05-51-36-211-003

(3) Do a detailed visual inspection to these areas, for evidence of cracking, buckling or other damage:

(a) Closure rib forward and aft attach fitting.

(b) Adjacent areas of the front and rear spar including chords and web from both the forward and aft sides.

SUBTASK 05-51-36-211-004

(4) Do a detailed visual inspection of the upper and lower inspar skins adjacent to the closure rib for evidence of cracking or buckling.

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SUBTASK 05-51-36-250-001

(5) Do a high frequency eddy current inspection of each winglet attach bolt hole in the closure rib and the bolt holes common to the forward and aft rib attach fittings (737 NDT Part 6, 51-00-00, Procedure 16).

(a) Make sure no cracks exist.

SUBTASK 05-51-36-250-002

(6) Do a high frequency eddy current inspection of the aft surface of the forward closure rib attach fitting around each of the fasteners that attach the fitting to the front spar (737 NDT Part 6, 51-00-00, Procedure 23).

(a) Make sure no cracks exist.

SUBTASK 05-51-36-250-003

(7) Do a high frequency eddy current inspection of the forward surface of the aft closure rib attach fitting around each of the fasteners that attach the fitting to the rear spar (737 NDT Part 6, 51-00-00, Procedure 23).

(a) Make sure no cracks exist.

SUBTASK 05-51-36-250-004

(8) Do a high frequency eddy current inspection of the upper and lower inspar skins around each of the fasteners that attach the closure rib to the skin (737 NDT Part 6, 51-00-00, Procedure 23).

(a) Make sure no cracks exist.

SUBTASK 05-51-36-250-005

(9) Do a high frequency eddy current inspection of the upper and lower inspar skins around each of the fasteners that attach the front spar to the skin within 8 in. (203 mm) of the end rib (737 NDT Part 6, 51-00-00, Procedure 23).

(a) Make sure no cracks exist.

SUBTASK 05-51-36-250-006

(10) Do a high frequency eddy current inspection of the upper and lower inspar skins around each of the fasteners that attach the rear spar to the skin within 8 in. (203 mm) of the end rib (737 NDT Part 6, 51-00-00, Procedure 23).

(a) Make sure no cracks exist.

SUBTASK 05-51-36-210-001

(11) Do a general visual inspection of the upper and lower wing surfaces for any additional damage.

SUBTASK 05-51-36-410-001

(12) Put the airplane back to its usual condition.

(a) If there is damage to structure (attached to winglet), use the applicable Structural Repair Manual and do repairs.

NOTE: This structure (attached to winglet) includes the closure rib, front spar, rear spar, upper and lower inspar skins.

(b) Replace the winglet (Winglet Installation, TASK 57-21-21-400-801).

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

NOSE LANDING GEAR AND FORWARD FUSELAGE - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. **General**

A. This inspection is for hard landings, or overweight landings, or high drag or high side load conditions. It defines the nose landing gear and forward fuselage inspections for those conditions. Inspections of other structure for these same conditions are covered in procedures HARD LANDING OR OVERWEIGHT/HARD LANDING OR HIGH DRAG/SIDE LOAD CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION), PAGEBLOCK 05-51-01/201 and OVERWEIGHT LANDING - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION), PAGEBLOCK 05-51-35/201.

B. The Inspection

(1) The inspection contains one phase inspection (Phase I).

(a) After Phase I inspection is complete, return to the inspection: HARD LANDING OR OVERWEIGHT/HARD LANDING OR HIGH DRAG/SIDE LOAD CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION), PAGEBLOCK 05-51-01/201, and complete the inspection.

C. High Drag or High Side Load Condition

(1) A High Drag or High Side Load condition occurs if one or more of the following conditions is met:

(a) The flight crew reported a “high drag load” or “high side load” event.

(b) The airplane ran off the prepared surface.

(c) The airplane landed short of the prepared surface.

(d) The airplane made a landing and one or more tires were blown.

(e) One or more of the landing gear hit an obstacle.

D. Hard Main Gear Landing

(1) A Hard Main Gear Landing occurs if one of the following conditions is met:

(a) The landing is reported by the flight crew as:

1) “hard landing” without specifying if it was hard on the main or nose gear, or

2) “hard main gear landing”, or

3) “hard bounced landing”.

E. Hard Nose Gear Landing

(1) A Hard Nose Gear Landing occurs if one of the following conditions is met:

(a) The landing is reported by the flight crew as:

1) “hard nose gear landing”, or

2) “hard landing” without specifying if it was hard on the main or nose gear, or

3) “hard bounced landing”, or

4) a landing where the nose gear contacted the prepared surface before the main gears.

F. Overweight Landing

(1) For the purpose of this inspection, an Overweight Landing occurs when:

(a) The landing weight is greater than the Maximum Landing Weight plus 1000 lb (454 kg).

G. The Inspection Logic

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(1) Do the following inspections when the flight crew reports a hard landing or high drag or high side load condition.

(2) Did the flight crew state either of the following: It was not a Hard Nose Gear Landing, or it was hard on the main gear only

(a) Yes: The inspections in this procedure are not required.

(b) No: Do the Phase I inspection before the next flight.

(3) If damage is found in the Phase I inspection, the Hard Landing Phase II inspections must be completed before the next flight.

(4) If directed to this procedure from the different inspection, then at the completion of this procedure, return to the inspection where you came from and complete that inspection.

H. When the conditional inspection tells you to "examine" a component, look for these conditions (replace or repair components, if it is necessary).

(1) Cracks

(2) Pulled apart structure or unusual gaps

(3) Loose paint (paint flakes)

(4) Discoloration

(5) Twisted parts (distortion)

(6) Wrinkles or buckles in the structure

(7) Bent components

(8) Fastener holes that become larger or deformed

(9) Loose fasteners

(10) Fasteners that have pulled out or are gone

(11) Delamination

(12) Fiber breakage

(13) Misalignment

(14) Interference

(15) Nicks or gouges

(16) Cracked fillet seals on sealed assemblies

(17) Other signs of damage.

TASK 05-51-37-200-806

2. Phase I Inspection

A. References

Reference	Title
32-45-00-700-801	Wheels Fast Check (Wheel Installed on the Airplane) (P/B 601)
32-45-00-700-802	Wheels Inspection (Wheel Removed from the Airplane) (P/B 601)
32-45-00-700-803	Tires - Inspection (P/B 601)
32-45-21 P/B 401	NOSE LANDING GEAR WHEEL AND TIRE ASSEMBLY - REMOVAL/INSTALLATION
32-45-21-000-801	Nose Landing Gear Wheel and Tire Assembly - Removal (P/B 401)

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(Continued)

Reference	Title
32-45-21-400-801	Nose Landing Gear Wheel and Tire Assembly - Installation (P/B 401)
SRM 51-10-03	Structural Repair Manual

B. Location Zones

Zone	Area
100	Lower Half of Fuselage
200	Upper Half of Fuselage
710	Subzone - Landing Gear: Nose Landing Gear and Landing Gear Doors

C. Nose Landing Gear Area

SUBTASK 05-51-37-210-026

(1) Examine the nose landing gear tires for damage (Tires - Inspection, TASK 32-45-00-700-803).

(2) Examine the wheels for damage; cracks, loose and/or missing tie-bolts (Wheels Fast Check (Wheel Installed on the Airplane), TASK 32-45-00-700-801).

(3) Examine the upper and lower ends of the nose landing gear shock strut for signs of hydraulic fluid leakage.

NOTE: A small quantity of hydraulic fluid on the inner cylinder is satisfactory.

(4) Examine the outer cylinder of the nose landing gear.

(5) Examine the nose landing gear areas that follow:

(a) Place a level on the outboard wheel rim.

1) Make sure both wheels are vertical.

(b) The nose wheel well.

1) Make sure all of the fasteners are installed in the correct positions.

2) Make sure there are no loose fasteners in the web of the nose wheel well near the trunnion support.

3) Examine the doors, hinges and retraction mechanism of the nose landing gear.

(c) If the airplane departed the prepared surface, do these steps:

1) After examination of the wheels and tires, do this step if the wheels and tires are not damaged:

a) Do the recovery and/or movement of the airplane to the prepared surface.

NOTE: The airplane can be towed to a location where further inspections and examinations will be performed.

2) After examination of the wheels and tires, do this step if the damage to the wheels and tires prevents the recovery and/or movement of the airplane to the prepared surface:

a) Replace the wheel and tire assemblies to allow recovery and movement of the airplane (NOSE LANDING GEAR WHEEL AND TIRE ASSEMBLY - REMOVAL/INSTALLATION, PAGEBLOCK 32-45-21/401).

3) After the airplane has been moved to a location for further examination, and before next flight, do these steps:

a) Do this task: Nose Landing Gear Wheel and Tire Assembly - Removal, TASK 32-45-21-000-801.

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b) Examine the axle for damage.

c) Do this task: (Wheels Inspection (Wheel Removed from the Airplane), TASK 32-45-00-700-802).

d) Do this task: Nose Landing Gear Wheel and Tire Assembly - Installation, TASK 32-45-21-400-801.

e) If the wheel and tire assemblies were replaced during the airplane recovery, clean the wheel and tire assemblies of unwanted material.

f) After the wheel and tire assemblies have been cleaned, examine the wheels and tires for damage (Tires - Inspection, TASK 32-45-00-700-803, Wheels Fast Check (Wheel Installed on the Airplane), TASK 32-45-00-700-801).

g) If no damage is found, the wheels and tires are serviceable.

4) Do an operational check of the nose landing gear steering system.

D. Fuselage Inspections

SUBTASK 05-51-37-210-027

(1) Perform a walk around General Visual Examination of the forward fuselage from the ground and examine the structure for damage in the upper or lower fuselage.

(a) Examine the fuselage for buckles/wrinkles or other damage.

NOTE: If any damage is detected in this step or the following steps, inspections to determine the full extent of the damage must be done with sufficient lighting and from within touching distance.

(2) Examine the Reduced Vertical Separation Minimum (RVSM) areas around probes and static ports.

(a) If obvious visual damage is found, then perform an RVSM check using this task: SRM 51-10-03.

E. Cabin Inspections

SUBTASK 05-51-37-210-028

(1) Do the following cabin inspections to find possible damage, if not already performed in a previous task:

(a) Do a visual inspection of all ceiling panels (and video monitors, if applicable) for dislodging and evidence due to impact damage.

(b) Do a visual inspection of all overhead bins for evidence of looseness or impact damage.

SUBTASK 05-51-37-211-003

(2) Do a detailed visual inspection of the latches, stops, potting inserts, and all fasteners on all ceiling panels equipped with video monitors.

(a) If any defect is found, repair or replace as necessary.

(b) If ceiling panels without video monitors are found displaced or damaged: Check for correct latching and installation. Repair if necessary.

SUBTASK 05-51-37-210-029

(3) If overhead stowage bins have impact damage or are loose: repair if necessary.

END OF TASK

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TASK 05-51-37-200-803

3. Phase II Inspection

A. References

Reference	Title
05-51-01-210-802	Phase II Inspection (P/B 201)

B. Location Zones

Zone	Area
100	Lower Half of Fuselage
200	Upper Half of Fuselage
710	Subzone - Landing Gear: Nose Landing Gear and Landing Gear Doors

C. Nose Landing Gear Areas

SUBTASK 05-51-37-210-010

(1) Do the Nose Landing Gear Area inspection of the Hard Landing Phase II Inspection, TASK 05-51-01-210-802 to check for any additional damage.

D. Forward Fuselage Areas

SUBTASK 05-51-37-210-011

(1) Do the Fuselage and Wing Area inspections of the Hard Landing Phase II Inspection, TASK 05-51-01-210-802 to check for any additional damage.

E. Put the Airplane Back to Its Usual Condition

SUBTASK 05-51-37-860-001

(1) Install the components you removed or install replacement components.

——— END OF TASK ———

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ENGINE BLADE OUT - EE BAY AND FLIGHT DECK PANELS- MAINTENANCE PRACTICES

1. General

A. This subject will address the maintenance practices as appropriate following a significant blade loss event and prior to returning the airplane to revenue service. Significant blade loss events will be considered those which result in excess of 0.75 blade equivalent unbalance and/or have reports of abnormally high vibration levels reported during flight.

B. The following are the minimum maintenance inspection checks:

(1) General Visual Check

(2) Electrical Equipment Rack (E1, E2, E3, E4, E5, and E8) Inspection.

TASK 05-51-42-210-802

2. Engine Blade Out - General Visual Check

A. General Visual Check

SUBTASK 05-51-42-211-001

(1) When you do the general visual check, look for the conditions that follow.

NOTE: Repair all damage found per the standard SRM procedure.

(a) Cracks

(b) Pulled apart structure

(c) Loose paint (paint flakes)

(d) Twisted parts (distortion)

(e) Bent components

(f) Fastener holes that become larger or longer

(g) Loose fasteners

(h) Fasteners that have pulled out or are gone

(i) Delaminations

(j) Misalignment

(k) Interference

(l) Excessive looseness or wear

(m) Excessive loading

(n) Peening of pins and bushings

(o) Bushing/bearing damage

(p) Bushing bearing fusion

(q) Bolt distortion

(r) Lug distortion or damage

(s) Other signs of damage

END OF TASK

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TASK 05-51-42-200-802

3. Engine Blade Out - EE Bay and Flight Deck Panels Inspection

A. References

Reference	Title
20-10-07-000-801	E/E Box Removal (P/B 201)
20-10-07-400-801	E/E Box Installation (P/B 201)

B. Electrical Equipment Rack Inspection

SUBTASK 05-51-42-200-002

(1) Inspect for damage in the areas that follow:

NOTE: Repair all damage found per the standard SRM procedure.

(a) E1 electrical equipment rack stanchions and its attachments to structure, shelves, and trays, do this task: E/E Box Removal, TASK 20-10-07-000-801.

(b) E2 electrical equipment rack stanchions and its attachments to structure, shelves, and trays, do this task: E/E Box Removal, TASK 20-10-07-000-801.

(c) E3 electrical equipment rack stanchions and its attachments to structure, shelves, and trays, do this task: E/E Box Removal, TASK 20-10-07-000-801.

(d) E4 electrical equipment rack stanchions and its attachments to structure, shelves, and trays, do this task: E/E Box Removal, TASK 20-10-07-000-801.

(e) E5 electrical equipment rack stanchions and its attachments to structure, shelves, and trays, do this task: E/E Box Removal, TASK 20-10-07-000-801.

(f) E8 electrical equipment rack stanchions and its attachments to structure, shelves, and trays, if installed, do this task: E/E Box Removal, TASK 20-10-07-000-801.

C. Flight Deck Panel Inspection

SUBTASK 05-51-42-210-003

(1) Inspect for damage in the flight deck panels that follow:

NOTE: Repair all damage found per the standard SRM procedure.

(a) P1 Captain instrument Panel

(b) P2 Center Instrument Panel

(c) P3 First Officer Instrument Panel

(d) P5 Forward and Aft Overhead Panels

(e) P7 Glareshield Panel

(f) P8 Aft Electronic Panel

(g) P9 Forward Electronic Panel

(h) P18 Component Circuit Breaker Panel

D. Put the Airplane Back to Its Usual Condition

SUBTASK 05-51-42-410-001

(1) Re-install the E/E boxes removed for inspection access, do this task: E/E Box Installation, TASK 20-10-07-400-801.

(2) Re-install all flight deck panels removed for inspection access.

END OF TASK

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NACELLE/STRUT PRESSURE RELIEF DOORS OPEN CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. **General**
   A. This procedure contains two tasks:
      (1) Examine the Nacelle/Strut Structure
      (2) Examine the Pneumatic Ducts.
   B. The pressure relief doors are made to open to prevent too much pressure in the nacelle/strut structure.
      (1) There can be too much pressure in the nacelle/strut when a pneumatic duct breaks.
      (2) Also, the pressure relief doors can open if a condition occurs which can cause temporary or permanent distortion.
         (a) Example conditions are as follows, but others can also occur:
            1) hard Landings
            2) severe turbulence
            3) engine Vibration

TASK 05-51-44-200-801

2. **Examine the Nacelle/Strut Structure**

   A. Location Zones

Zone	Area
400	Powerplant and Nacelle Struts

   B. Procedure

SUBTASK 05-51-44-210-001

(1) Examine the nacelle/strut inner and outer surfaces for:

NOTE: Carefully examine the surfaces for discoloration and/or paint that is flaked. This could be a sign of a broken pneumatic duct.

(a) distortion
(b) cracks
(c) pulled rivets
(d) rivets which are missing
(e) discolored paint
(f) paint that is flaked.

END OF TASK

TASK 05-51-44-210-801

3. **Examine the Pneumatic Ducts**

   A. Location Zones

Zone	Area
400	Powerplant and Nacelle Struts

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B. Procedure

SUBTASK 05-51-44-210-002

(1) Examine the components that follow:

(a) hard ducts

(b) flexible sense lines for cracks and tears.

(c) clamps for tightness

(d) nuts for tightness

(e) fasteners for tightness.

C. Put the Airplane Back to Its Initial Condition

SUBTASK 05-51-44-410-001

(1) Install the components you removed if they are serviceable.

(a) If the components are not serviceable, install replacement parts.

——— END OF TASK ———

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LANDING GEAR OPERATION ABOVE DESIGN SPEED CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. **General**

A. This procedure contains the task to inspect the airplane when the landing gear has been operated in flight at speeds more than the permitted placard speed.

TASK 05-51-47-210-801

2. **Landing Gear Operation Above Design Speed Condition, Conditional Inspection**

A. Location Zones

Zone	Area
700	Landing Gear and Landing Gear Doors

B. Examine the Main Gear Door Areas

SUBTASK 05-51-47-210-001

(1) Examine main landing gear areas that follow:

(a) The doors.

(b) The hinges.

(c) The linkage and linkage support structure.

(d) The fairing panels.

1) Look for:

a) distortion

b) cracks

c) misalignment

d) displacement

e) fastener holes that are elongated or torn

f) fasteners that have pulled out

g) fastener locations where fasteners are not there

h) other signs of damage.

SUBTASK 05-51-47-210-002

(2) Examine the systems that are installed in the wheel wells of the main landing gear for damage or possible malfunction.

C. Examine the Nose Gear Door Area

SUBTASK 05-51-47-210-003

(1) Examine the nose landing gear areas that follow:

(a) The doors.

(b) The hinges.

(c) The linkage and linkage support structure.

(d) The fairing panels.

1) Look for:

a) distortion

b) cracks

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c) misalignment

d) displacement

e) fastener holes that are elongated or torn

f) fasteners that have pulled out

g) fastener locations where fasteners are not there

h) other signs of damage.

SUBTASK 05-51-47-210-004

(2) Examine the systems that are installed in the nose wheel well for damage or possible malfunction.

D. Put the Airplane Back to Its Usual Condition

SUBTASK 05-51-47-410-001

(1) Install the components that were removed, or install replacement parts.

END OF TASK

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FUEL IMBALANCE EXCEEDANCE CONDITIONAL INSPECTION - MAINTENANCE PRACTICE

1. General

A. This procedure contains the task for maintenance actions or structural inspections related to exceeding the Airplane Flight Manual (AFM) fuel imbalance limits.

TASK 05-51-48-211-801

2. Fuel Imbalance Exceedance - Conditional Inspection

A. General

(1) The Airplane Flight Manual (AFM) for the 737 models identifies that the lateral fuel imbalance between main wing tanks must be scheduled to be zero. Random fuel imbalance between main wing tanks for towing, taxi, takeoff, flight, or landing is limited to 1000 lb (454 kg).

Operators experiencing fuel imbalances greater than 1000 lb (454 kg) should review the below criteria for evaluation of what maintenance actions or structural inspections are required.

B. References

Reference	Title
05-51-01 P/B 201	HARD LANDING OR OVERWEIGHT/HARD LANDING OR HIGH DRAG/SIDE LOAD CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)
05-51-04-210-801	Severe or Unusual Turbulence, Excessive Maneuver, Buffet, or Speeds More than the Design Limits Conditional Inspection (P/B 201)

C. Location Zones

Zone	Area
131	Center Section Wing Box, Body Station 540.00 to Body Station 663.75 - Left
132	Center Section Wing Box, Body Station 540.00 to Body Station 663.75 - Right
531	Left Wing - Center Fuel Tank, Rib 1 to Rib 5
532	Left Wing - Main Tank, Rib 5 to Rib 22, Wing Station 204.25 to Wing BL 643.50
631	Right Wing - Center Fuel Tank, Rib 1 to Rib 5
632	Right Wing - Main Tank, Rib 5 to Rib 22, Wing Station 204.25 to Wing Station 643.50

D. Evaluation

NOTE: Boeing developed the following questions that operators can use to do an evaluation for wing tank lateral fuel imbalances exceeding 1000 lb (454 kg).

SUBTASK 05-51-48-210-001

(1) If the imbalance exceedance occurred during flight (climb/cruise/descent), then the following questions apply:

(a) Was the amount of imbalance greater than or equal to 3000 lb (1361 kg)?

1) If yes, do this task: Severe or Unusual Turbulence, Excessive Maneuver, Buffet, or Speeds More than the Design Limits Conditional Inspection, TASK 05-51-04-210-801.

(b) Was the amount of imbalance greater than 1000 lb (454 kg) but less than 3000 lb (1361 kg)?

1) If yes, the following questions apply:

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a) Did the airplane encounter any moderate turbulence (gusts) during the imbalance?

<1> If yes, do this task: Severe or Unusual Turbulence, Excessive Maneuver, Buffet, or Speeds More than the Design Limits Conditional Inspection, TASK 05-51-04-210-801.

b) Did the airplane experience significant load factors or perform rapid or large alternating control inputs during the imbalance?

<1> If yes, do this task: Severe or Unusual Turbulence, Excessive Maneuver, Buffet, or Speeds More than the Design Limits Conditional Inspection, TASK 05-51-04-210-801.

SUBTASK 05-51-48-210-002

(2) If the imbalance exceedance occurred during landing, then the following questions apply:

(a) Was the amount of imbalance greater than or equal to 3000 lb (1361 kg)?

1) If yes, do the visual inspection portion of HARD LANDING OR OVERWEIGHT/HARD LANDING OR HIGH DRAG/SIDE LOAD CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION), PAGEBLOCK 05-51-01/201.

(b) Was the amount of imbalance greater than 1000 lb (454 kg) but less than 3000 lb (1361 kg)?

1) If yes, the following questions apply:

a) Was there a large roll angle during landing?

<1> If yes, do the visual inspection portion of HARD LANDING OR OVERWEIGHT/HARD LANDING OR HIGH DRAG/SIDE LOAD CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION), PAGEBLOCK 05-51-01/201.

SUBTASK 05-51-48-210-003

(3) If the imbalance exceedance occurred during takeoff, taxi, or towing, then the following questions apply:

(a) Was the amount of imbalance greater than or equal to 3000 lb (1361 kg)?

1) If yes, do the high drag/side load inspection (HARD LANDING OR OVERWEIGHT/HARD LANDING OR HIGH DRAG/SIDE LOAD CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION), PAGEBLOCK 05-51-01/201).

(b) Was the amount of imbalance greater than 1000 lb (454 kg) but less than 3000 lb (1361 kg)?

1) If yes, the following questions apply:

a) Was noticeable runway roughness encountered during takeoff, taxi, or towing?

<1> If yes, do the high drag/side load inspection (HARD LANDING OR OVERWEIGHT/HARD LANDING OR HIGH DRAG/SIDE LOAD CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION), PAGEBLOCK 05-51-01/201).

b) Did the airplane experience a hard ground turn or a significant side load event during taxi or towing?

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<1> If yes, do the high drag/side load inspection (HARD LANDING OR OVERWEIGHT/HARD LANDING OR HIGH DRAG/SIDE LOAD CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION), PAGEBLOCK 05-51-01/201).

c) Was hard braking applied during taxi or towing?

<1> If yes, do the high drag/side load inspection (HARD LANDING OR OVERWEIGHT/HARD LANDING OR HIGH DRAG/SIDE LOAD CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION), PAGEBLOCK 05-51-01/201).

NOTE: If a lateral imbalance exceedance has persisted for an unknown number of flights for a particular airplane, Boeing requires that all the inspections noted above be performed. This is due to the increased probability that the aircraft would have experienced loads above those typically encountered in normal operation.

NOTE: If none of the inspections above are applicable to the particular event, the airplane may return to revenue service. If inspections are determined necessary based on the operator's answers to the questions above, all inspections must be performed before the airplane may return to revenue service.

END OF TASK

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TASK 05-51-51-200-801

1. Extreme High Wind Event - Conditional Inspection

A. General

(1) This procedure has information for an aircraft that has had an extreme high wind event while parked or moored.

(a) Extreme high wind events are tornadoes and microbursts.

(b) Evidence of an extreme high wind event are if the airplane moved over the chocks or if there are tire skid marks on the ground where the airplane was parked. This may indicate that the airplane has moved from the position in which it was originally parked.

1) If the airplane has moved over wheel chocks, it can cause damage to the tires, wheels, and landing gear.

(2) Extreme high wind events are variable and unpredictable.

(3) Extreme high winds from the side and aft direction while parked can cause damage to the aircraft flight control surfaces and flight control mechanisms internal to the wings, horizontal stabilizer, and vertical stabilizer. It is possible that this damage will not be seen during a walk-around or during pre-flight checks. The integrity of the flight controls is very important to the safe flight of the airplane.

(4) When the conditional inspection tells you to “examine” a component, look for these damage conditions:

- Cracks
- Twisted parts (distortion)
- Misalignment
- Wrinkles
- Buckles
- Pulled apart structure
- Loose paint (paint flakes)
- Loose fasteners
- Fasteners that have pulled out or are missing
- Fastener holes that become larger or longer
- Delaminations
- Interference
- Other signs of damage

(5) When the conditional inspection tells you to do a “detailed visual inspection” of a component, look for these damage conditions:

- Cracks
- Deformation
- Loose components
- Sheared components
- Bent components
- Missing attachments

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- Distortion

(6) Boeing recommends that operators give Boeing the results of this procedure (if you find damage or if you do not find damage).

NOTE: Boeing recommends that when the operator gives Boeing their results they title the message “Extreme High Wind Event Inspection Results.”

(a) Boeing recommends that the operator give the data that follows when contacting Boeing.

1) The results of the inspections listed below for the flight controls, doors, and landing gear.
2) The results of cycling the flight controls.
3) If the airplane has moved from the location where it was parked.
   a) If the airplane moved over the chocks.
      <1> If the main landing gear tires or nose landing gear tires have been replaced.
   b) If there are tire skid marks on the ground.
4) Wind characteristics:
   a) Wind direction and airplane parking direction (angle between the two directions)
   b) Average wind speed
   c) Maximum wind gust speed
   d) Type of wind event
5) Gross Weight
6) Center of Gravity (CG)
7) Airplane Restraints
   a) chocks
   b) mooring configuration
   c) brakes
8) Surface Conditions
   a) icy
   b) wet
   c) dry
   d) clean
   e) dirty/sandy
   f) ground friction test
9) Ambient Air Temperature (C°) at time of event

B. References

Reference	Title
07-11-01-580-815	Lift the Airplane with the Jacks (P/B 201)
07-11-01-580-816	Lower the Airplane Off the Jacks (P/B 201)
07-11-03-580-801	Lift the Main Landing Gear Axles with the Axle Jacks (P/B 201)
07-11-03-580-802	Lift the Airplane Nose Landing Gear with the Axle Jack at Jack Point E (P/B 201)

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(Continued)

Reference	Title
07-11-21-580-801	Lift the Airplane Nose with the Nose Jack at Jack Point D (P/B 201)
07-11-21-580-802	Lower the Airplane Nose Off of the Jack (P/B 201)
27-51-00-860-803	Extend the Trailing Edge Flaps (P/B 201)
27-81-00-860-803	Leading Edge Flaps and Slats Extension (P/B 201)
32-13-11 P/B 401	MAIN LANDING GEAR SHOCK STRUT DOORS - REMOVAL/INSTALLATION
32-45-11 P/B 401	MAIN LANDING GEAR WHEEL AND TIRE ASSEMBLY - REMOVAL/INSTALLATION
32-45-21 P/B 401	NOSE LANDING GEAR WHEEL AND TIRE ASSEMBLY - REMOVAL/INSTALLATION

C. Extreme High Wing Event Conditional Inspection

SUBTASK 05-51-51-200-002

(1) Flight Controls

(a) Examine the external surfaces of the flight control surfaces that follow for damage.

1) Flaps

2) Slats

3) Ailerons

4) Spoilers

5) Elevators

6) Rudder

7) If there is damage, do a detailed visual inspection of the surface(s) that have damage.

a) Do a detailed visual inspection of the surface(s) that have damage.

b) Inspect the surface hinge line for surface over-travel.

8) If there is structural damage to the control surface, refer to the applicable Structural Repair Manual (SRM) procedure.

(b) Examine the actuator attach points and support structure.

(c) Examine the hinge attach structure of the flaps, the flaps at the rear spar, slats, ailerons, spoilers, elevators, and rudder for damaged and loose parts.

1) Make sure that the flaps are in the fully extended position (TASK 27-51-00-860-803, TASK 27-81-00-860-803).

2) If there is damage or any loose parts, do the steps that follow.

a) Do a detailed visual inspection of the applicable actuator, control surface, attach fittings, and support structure.

b) If there is structural damage to the component, refer to the applicable Structural Repair Manual (SRM) procedures.

(d) Move the flaps, slats, spoilers, ailerons, elevators, and rudder through their usual range of movement.

1) Make sure that the surfaces move freely and that there is no interference with the structure or components around them.

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a) If the surface does not move freely or if there is interference with the structure or components around it, refer to the applicable Structural Repair Manual (SRM) procedures.

2) Make sure that there is a ground observer during the flight control surface movement.

a) Make sure that there is communication set up between the ground observer and the personnel in the flight deck.

b) Make sure that the ground observer can see all flight control surfaces.

c) Operate each flight control system through its full range of movement.

d) Make sure that the flight control positions are correct as monitored by the ground observer.

SUBTASK 05-51-51-200-003

(2) Doors

WARNING	DO NOT OPERATE A DOOR THAT WAS OPEN DURING A VERY HIGH WIND EVENT UNTIL IT IS INSPECTED FOR DAMAGE. LOSS OF LIFT POWER, ENERGIZING OF EMERGENCY EQUIPMENT, OR FAILURE OF HOLD-OPEN SYSTEMS CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(a) Examine each external door of the airplane that was open at the time of the high wind event.

NOTE: For example: doors for stairs, fuselage doors, maintenance access panels, engine cowling, and landing gear doors (excluding main gear shock strut doors).

NOTE: If a door was closed and latched during the extreme high wind event, no inspection of that door is necessary.

1) Examine the door hinge and door open/close mechanism for evidence of damage.

NOTE: Examples of damage evidence are: looseness, cracking, chipped or cracked coatings, and distortion.

a) If evidence of damage is found, do the steps that follow.

<1> Do a detailed visual inspection of the structure around the door, the door structure, the mechanical parts of the door, and the mechanical parts attached to the surrounding structure.

<a> If there is damage to the door or surrounding structure, refer to the applicable Structural Repair Manual (SRM) procedures.

NOTE: Structural damage may be hidden behind attached components. If visible damage is identified, additional inspections may be necessary.

<b> If there is damage to the mechanical parts, repair or replace the damaged components, as necessary.

2) Examine the exterior skin surface of the door for evidence of damage.

NOTE: Examples of damage evidence are: cracks, buckles, chipped or cracked coatings, and loose or missing attach parts.

a) If evidence of damage is found, do the steps that follow.

<1> Do a detailed visual inspection of the exterior skin surface of the door.

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<a> If there is damage to the exterior skin surface, refer to the applicable Structural Repair Manual (SRM) procedures.

3) Operate the door through the normal range of motion (from open to close).

a) Make sure that there is no interference or binding due to deformation of the door or fuselage structure, or fuselage supports.

NOTE: Damage may be hidden behind attached components. If visible or operational damage is identified, additional inspections may be necessary.

<1> If there is interference or binding, do the steps that follow.

<a> Do a detailed visual inspection of the fuselage supports.

<b> If there is damage to the fuselage supports, repair or replace the components, as necessary.

4) Operate the door latching and locking mechanism, if installed.

a) Make sure that there is no interference or binding due to deformation of the mechanism.

NOTE: Damage may be hidden behind attached components. If visible or operational damage is identified, additional inspections may be necessary.

<1> If there is interference or binding, do the steps that follow.

<a> Do a detailed visual inspection of the fuselage mechanisms.

<b> If there is damage to the mechanism, repair or replace the components, as necessary.

SUBTASK 05-51-51-200-004

(3) Landing Gear

(a) Jack the main landing gear, do this task: Lift the Airplane with the Jacks, TASK 07-11-01-580-815 or Lift the Main Landing Gear Axles with the Axle Jacks, TASK 07-11-03-580-801.

(b) Examine the main landing gear areas as follows:

1) The tires

a) If the airplane has moved over the main landing gear wheel chocks, replace the tire(s) that moved over the chock(s), do this task: MAIN LANDING GEAR WHEEL AND TIRE ASSEMBLY - REMOVAL/INSTALLATION, PAGEBLOCK 32-45-11/401.

2) The wheels

3) The shock strut of the main gear for fluid leakage

4) The top end of the shock strut for cracks and bolt distortion

5) The landing gear beam

6) If moored, inspect for damage at and near the mooring equipment interface locations.

7) If the airplane departed the prepared surface, do the steps that follow.

a) Remove the wheels and examine the wheel/brake interface.

<1> Remove any dirt, debris, or foreign objects.

b) Remove and examine the brake units.

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<1> Remove any dirt, debris, or foreign objects.

c) Remove the brake sleeves and examine the axles.

<1> Remove any dirt, debris, or foreign objects.

8) The main landing gear axles

9) The main landing gear tow fittings

10) The skins, attach points, and linkages of the main gear shock strut doors

a) If evidence of damage is found, do the steps that follow:

<1> Do a detailed visual inspection of the structure around the door, the door structure, the mechanical parts of the door, and the mechanical parts attached to the surrounding structure.

<2> If there is damage to the surrounding structure, refer to the applicable Structural Repair Manual (SRM) procedures.

NOTE: Structural damage may be hidden behind attached components. If visible damage is identified, additional inspections may be necessary.

<3> If there is damage to the door structure, mechanical parts, repair or replace the damaged components, as necessary: do the applicable task MAIN LANDING GEAR SHOCK STRUT DOORS - REMOVAL/INSTALLATION, PAGEBLOCK 32-13-11/401.

(c) Jack the nose landing gear, do this task: Lift the Airplane Nose with the Nose Jack at Jack Point D, TASK 07-11-21-580-801 or Lift the Airplane Nose Landing Gear with the Axle Jack at Jack Point E, TASK 07-11-03-580-802.

(d) Examine the nose landing gear areas as follows:

1) The tires

a) If the airplane has moved over the nose landing gear wheel chocks, replace the nose landing gear tires, do this task: NOSE LANDING GEAR WHEEL AND TIRE ASSEMBLY - REMOVAL/INSTALLATION, PAGEBLOCK 32-45-21/401.

2) The wheels

3) The nose wheel well.

a) Make sure that all of the fasteners are installed in the correct positions.

b) Make sure that there are no loose fasteners in the web of the nose wheel well near the trunnion support.

c) Examine the upper and lower ends of the shock strut of the nose gear for fluid leakage.

d) Examine the outer cylinder of the nose landing gear.

e) Examine the doors, hinges, and retraction mechanism of the nose landing gear.

4) If moored, inspect for damage at and near the mooring equipment interface locations.

5) If the airplane departed the prepared surface, do the following:

a) Remove and examine the wheels.

<1> Remove any dirt, debris, or foreign objects.

b) Do an operational check of the nose landing gear steering system.

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6) The nose landing gear axle

7) The nose landing gear tow fitting

D. Put the Airplane Back to Its Usual Condition

SUBTASK 05-51-51-580-001

(1) If necessary, lower the airplane off the related jacks:

(a) For the airplane, do this task: Lower the Airplane Off the Jacks, TASK 07-11-01-580-816.

(b) For the airplane nose, do this task: Lower the Airplane Nose Off of the Jack, TASK 07-11-21-580-802.

SUBTASK 05-51-51-580-002

(2) If necessary, lower the airplane off the related axle jacks:

(a) For the main landing gear, do this task: Lift the Main Landing Gear Axles with the Axle Jacks, TASK 07-11-03-580-801.

(b) For the nose landing gear, do this task: Lift the Airplane Nose Landing Gear with the Axle Jack at Jack Point E, TASK 07-11-03-580-802.

SUBTASK 05-51-51-400-001

(3) Install the components that were opened for checks.

SUBTASK 05-51-51-080-001

(4) Remove all tools and equipment from the work area.

END OF TASK

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Heavy Water Spray from Tires During Takeoff and Landing - Conditional Inspection

TASK 05-51-52-200-801

1. Heavy Water Spray from Tires During Takeoff and Landing - Inspection/Check

A. General

(1) This procedure has one task:

(a) This task is to inspect the aircraft exterior when there is possible water damage.

B. Procedure

SUBTASK 05-51-52-211-001

(1) Make sure that the exterior components are attached correctly and are not damaged.

(a) Examine the areas that follow.

1) Wing leading edge structure between the fuselage and the engine.
2) Lower surfaces of the fuselage.
3) Antenna and water drain masts.
4) Landing gear doors.
5) Inboard trailing edge flap panels.
6) Landing gear hydraulic plumbing.
   a) Make sure that the plumbing is attached correctly.
   b) Look closely at the lower surface of the track.
7) Electrical conduits.
8) Switches, switch targets, and mounting brackets.
9) Temperature sensors and electrical connectors.

(b) If damage to any of the exterior components is found, see the SRM for repairs.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

INTERIOR ICE CONDITION - MAINTENANCE PRACTICES

1. General

A. In the usual operation of the airplane, air comes through the airplane structure. During flight, the water vapor in the air can condense and freeze in the airplane. When you continuously operate the airplane in cold weather, ground temperatures below the freezing point will not let the ice melt. Too much ice will lower the performance of the airplane below the permitted values.

TASK 05-51-53-210-801

2. Interior Ice Removal

(Figure 201)

A. General

(1) This task is for the removal of interior ice for these conditions:

NOTE: This procedure will remove the ice build-up on the inside of the airplane structure.

(a) Airplanes that have continuous operation in cold weather

(b) Ice is found on interior equipment, furnishings, electrical components, wiring, control cables, pulleys, door mechanisms, or structure.

(2) In the usual operation of the airplane, air comes through the airplane structure. During flight, the water vapor in the air can condense and freeze in the airplane. When you continuously operate the airplane in cold weather, ground temperatures below the freezing point will not let the ice melt. Too much ice will lower the performance of the airplane below the permitted values.

B. References

Reference	Title
51-41-11-200-801	External Drainage Inspection/Check (P/B 601)

C. Location Zones

Zone	Area
100	Lower Half of Fuselage
200	Upper Half of Fuselage

D. Upper Lobe Ice Inspection

SUBTASK 05-51-53-010-001

(1) Get access to the main deck overhead above WL 270 in the front, middle and aft stations.

(a) To get access on passenger airplanes, you must also remove some of the main deck ceiling panels.

SUBTASK 05-51-53-010-002

(2) Remove or lift the insulation blankets to do a check for ice.

(a) Look for ice collection in the main deck ceiling areas.

1) If you do not find ice, do the Lower Lobe Ice Inspection.

2) If you do find ice, do the Overall Airplane Ice Removal.

E. Lower Lobe Ice Inspection

NOTE: Do this procedure to find if ice has collected in the lower lobes (below WL 210).

SUBTASK 05-51-53-010-003

(1) Remove the floor panels over the aisle in the main deck at approximately STA 660.

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SUBTASK 05-51-53-210-001

(2) Look for ice collection between the longitudinal floor beams over the wing box and wheel well.

SUBTASK 05-51-53-010-004

(3) Remove the sidewall liners in the aft lower cargo compartment at approximately STA 747.

SUBTASK 05-51-53-210-002

(4) Look for ice collection in the bilge area.

(a) If you do find ice, do the Overall Airplane Ice Removal.

(b) If you do not find ice, no further action is necessary.

F. Overall Airplane Ice Removal

NOTE: Do this procedure to remove all ice that has collected throughout the airplane structure.

SUBTASK 05-51-53-580-001

(1) Move the airplane to a hangar where the air temperature is above 32°F (0°C).

SUBTASK 05-51-53-010-005

(2) Open the doors on the main deck to let the air flow freely.

SUBTASK 05-51-53-010-006

(3) Remove all the main deck seats and floor panels to get access to the ice.

SUBTASK 05-51-53-010-007

(4) Remove the insulation blankets from the sidewall and below the floor in the forward and aft lower lobe cargo compartment where it is possible.

NOTE: This will let the water flow freely to the structural drains and will make sure the blankets do not get wet.

SUBTASK 05-51-53-010-008

(5) Remove the insulation blankets in the nose wheel well area (forward of the EE bay).

SUBTASK 05-51-53-660-002

WARNING

DO NOT PUT HOT AIR DIRECTLY ON HALON OR OXYGEN BOTTLES. IF YOU PUT HOT AIR ON THE HALON OR OXYGEN BOTTLES, THE BOTTLES CAN EXPLODE.

CAUTION

THE TEMPERATURE OF THE HOT AIR MUST NOT BE ABOVE 150° F (70° C). HOT AIR CAN CAUSE DAMAGE TO AIRPLANE SYSTEMS.

(6) Use a conditioned ground cart to blow hot air on the open airplane structure in the lower lobes and main deck (if it is applicable) to melt the ice that has collected.

SUBTASK 05-51-53-610-001

(7) Make sure the airplanes structural drains in the bilge are open to let the water drain.

(a) Do this task: External Drainage Inspection/Check, TASK 51-41-11-200-801.

SUBTASK 05-51-53-660-003

(8) Use Figure 201 to find the time needed to melt the ice.

NOTE: You can use a conditioned ground cart to heat the inside of the airplane. This will shorten the time needed to melt the ice.

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SUBTASK 05-51-53-020-001

(9) You must remove or dry all wet insulation blankets before you install them again.

SUBTASK 05-51-53-840-002

(10) After the water drains, put the airplane back to its usual condition.

END OF TASK

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Air Temperature Outside Airplane Time Required to Melt Interior Ice
Figure 201/05-51-53-990-801

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TIRE TREAD LOSS OR TIRE BURST - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. General

A. This procedure contains the task to inspect the airplane after a tire has lost it's tread, or has burst.

B. When a landing gear tire loses its tread or a tire bursts, a careful inspection of some areas is necessary.

(1) These inspections look for damage and/or blockage caused by pieces of the tire.

C. Damage caused by the tire pieces can be seen as pieces of rubber and/or bitumen marks on the surface of the structure.

TASK 05-51-54-210-801

2. Tire Tread Loss or Tire Burst Conditional Inspection

A. References

Reference	Title
05-51-16-210-801	Flat Spotted Tires Conditional Inspection (P/B 201)
27-11-00-700-803	Manual Reversion Control Friction Test (P/B 501)
27-11-00-700-804	Control Wheel - Centering Check (P/B 501)
27-11-00-700-805	Aileron Control Wheel Force Test (P/B 501)
27-11-00-700-806	Aileron Spring Cartridge and Transfer Mechanism Functional Test (P/B 501)
27-11-00-700-807	Control Wheel Travel Stop Test (P/B 501)
27-11-00-700-809	Aileron Travel Test (P/B 501)
27-11-00-720-801	Aileron Power Control Unit (PCU) Pogos - Functional Test (P/B 501)
27-11-00-730-801	Aileron Trim Response Test (P/B 501)
27-11-00-820-804	Aileron Feel and Centering Unit Adjustment (P/B 501)
27-51-00-210-801	Trailing Edge Flap Drive System Inspection (P/B 601)
27-51-00-720-803	Alternate Flap Control System Functional Test (P/B 501)
27-51-00-730-801	Trailing Edge Flap System Test (P/B 501)
27-59-00-730-801	Flap Skew Detection System Functional Test (P/B 501)
27-61-00-710-801	Spoiler Control System Operational Test (P/B 501)
27-61-00-820-801	Spoiler Control Cables Adjustment (P/B 501)
27-61-00-820-802	Ratio Changer Input Rod Adjustment (P/B 501)
27-61-00-820-805	Spoiler Mixer Adjustment (P/B 501)
27-62-00-000-801	Ground Spoiler Control Valve Adjustment (P/B 501)
27-62-00-710-801	Speed Brake Control System Operational Test (P/B 501)
27-62-00-800-803	Speed Brake Lever Friction Test (P/B 501)
27-62-51-000-801	Ground Spoiler Interlock Valve Cable Removal (P/B 401)
27-62-51-400-801	Ground Spoiler Interlock Valve Cable Installation (P/B 401)
27-81-00-860-801	Leading Edge Flap and Slat System Operation With Primary Control (P/B 201)
27-81-00-860-802	Leading Edge Flap and Slat System Operation With Alternate Control (P/B 201)
32-45-00-700-803	Tires - Inspection (P/B 601)
71-00-00-800-802-F00	Engine Foreign Object Damage and Birdstrike Inspection (P/B 601)

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B. Location Zones

Zone	Area
100	Lower Half of Fuselage
300	Empennage
500	Left Wing
600	Right Wing
700	Landing Gear and Landing Gear Doors

C. Procedure

SUBTASK 05-51-54-210-001

(1) Do the steps that follow to inspect for damage after a tire tread loss or tire burst:

(a) Examine the areas that follow for damage, delamination, or local separation, and soft spots because of core crush:

NOTE: To find delamination or local separation areas, tap the surface with a coin. To find areas of core crush, push on the surface.

1) The wing upper inboard fixed trailing edge panel
2) The wing lower inboard fixed trailing edge panel
3) The inboard trailing edge flaps
4) The inboard trailing edge fairings
5) The Very High Frequency (VHF) No. 2 Antenna
6) The lower fuselage wing-to-body fuselage panels.

(b) Examine the inboard trailing edge flaps for tire fragments lodged in linkages or in flap carriages (main and foreflap sequence carriages).

(c) Examine the components that follow for damage and blockage because of pieces of the tire.

1) The trailing edge flap jackscrews
2) The actuating linkages
3) The actuating rods.

(d) Examine the landing gear wheel well areas as follows for damage, distortion, and blockage from pieces of the tire.

1) The wheel well doors
2) The wheel well door actuating rods
3) The hydraulic plumbing
4) The flap drive torque tubes
5) The control cables and mechanisms
6) The frangible hydraulic fittings located in the wheel well fairing

(e) Examine the landing gear structure and assemblies, related components and hydraulic lines for damage, distortion, leakage, and blockage from pieces of tire:

1) The shock strut doors
2) The side strut assembly.
3) The lower side strut assembly and lug which connects to the shock strut door.
4) The torsion links
5) The brake hydraulic hoses

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6) The air/ground sensors

7) The shimmy damper

(f) On the right landing gear assembly, examine the ground spoiler interlock valve cable for damage and freedom of movement. If damage is found or the movement of the cable is not correct, do these tasks:

Ground Spoiler Interlock Valve Cable Removal, TASK 27-62-51-000-801

Ground Spoiler Interlock Valve Cable Installation, TASK 27-62-51-400-801

(g) Examine the other tires for possible damage; do this task: Tires - Inspection, TASK 32-45-00-700-803.

NOTE: Carefully inspect the other tires for slash and/or wire penetration damage of the tread or the sidewall.

1) If the damaged tire is deflated, or is more than 20% below the specified pressure, replace the wheel and tire assembly that is on the same axle.

(h) If the tire burst was because of a tire skid, do this task: Flat Spotted Tires Conditional Inspection, TASK 05-51-16-210-801.

SUBTASK 05-51-54-210-002

(2) Examine the engine nacelles and inlets for damage when the nose landing gear or left/right main landing gear tire/tires tread is lost or the tire/tires have burst, do this task: Engine Foreign Object Damage and Birdstrike Inspection, TASK 71-00-00-800-802-F00.

SUBTASK 05-51-54-210-003

(3) If it is determined that the tire burst occurred when the landing gear was retracted, you must look for damage in the wheel well areas.

(a) If the damage is visible on the forward bulkhead, do these tasks:

- Aileron Feel and Centering Unit Adjustment, TASK 27-11-00-820-804
- Manual Reversion Control Friction Test, TASK 27-11-00-700-803
- Control Wheel - Centering Check, TASK 27-11-00-700-804
- Aileron Control Wheel Force Test, TASK 27-11-00-700-805
- Aileron Spring Cartridge and Transfer Mechanism Functional Test, TASK 27-11-00-700-806
- Control Wheel Travel Stop Test, TASK 27-11-00-700-807
- Aileron Travel Test, TASK 27-11-00-700-809
- Aileron Power Control Unit (PCU) Pogos - Functional Test, TASK 27-11-00-720-801
- Aileron Trim Response Test, TASK 27-11-00-730-801
- Spoiler Control System Operational Test, TASK 27-61-00-710-801
- Spoiler Control Cables Adjustment, TASK 27-61-00-820-801
- Ratio Changer Input Rod Adjustment, TASK 27-61-00-820-802
- Spoiler Mixer Adjustment, TASK 27-61-00-820-805
- Speed Brake Control System Operational Test, TASK 27-62-00-710-801
- Ground Spoiler Control Valve Adjustment, TASK 27-62-00-000-801
- Speed Brake Lever Friction Test, TASK 27-62-00-800-803.

(b) If the damage is visible on the aft bulkhead, do these tasks:

- Trailing Edge Flap System Test, TASK 27-51-00-730-801

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- Alternate Flap Control System Functional Test, TASK 27-51-00-720-803
- Trailing Edge Flap Drive System Inspection, TASK 27-51-00-210-801
- Flap Skew Detection System Functional Test, TASK 27-59-00-730-801
- Leading Edge Flap and Slat System Operation With Primary Control, TASK 27-81-00-860-801
- Leading Edge Flap and Slat System Operation With Alternate Control, TASK 27-81-00-860-802

(c) If there is no visible damage on either bulkhead, do the tasks assigned above for both damage on the forward and aft bulkheads.

D. Put the Airplane Back to It's Usual Condition

SUBTASK 05-51-54-410-001

(1) Install all the components you removed if they are serviceable, or install replacement parts.

——— END OF TASK ———

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SMOKE OR FUMES IN CABIN - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. General

A. This procedure contains the information to perform an inspection to determine the cause of smoke or fumes entering the cabin during operation.

TASK 05-51-56-200-801

2. Smoke or Fumes in Cabin (Conditional Inspection)

A. References

Reference	Title
FIM 21-00 TASK 806	Smoke or Fumes in the Cabin, Source Unknown - Fault Isolation

B. Examine the Cabin

SUBTASK 05-51-56-280-001

(1) If smoke or fumes are detected in the cabin during airplane operation, do this task: Smoke or Fumed in the Cabin, Source Unknown - FIM 21-00 TASK 806.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

ACID OR VACUUM WASTE SYSTEM SPILLAGE CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. General

A. This procedure has one task.

(1) A conditional inspection for acid or vacuum waste system spillage.

B. This task has an inspection and clean up procedure for areas where an acidic substance has touched the airplane. Acid spills, unless neutralized, can rapidly corrode metallic structure.

C. There are two primary sources of acid and vacuum waste spillage.

(1) The primary source of acid spillage is in the battery compartments where acid electrolytes may overflow during charging or spill during battery servicing.

(2) The primary source of vacuum waste spills/leaks is vertically below lavatory tubing runs or drain tube runs, and adjacent to waste holding tank(s). Trace the flow path of the substance along the structure.

D. Acid based corrosion removal compounds and airplane cleaners are used quite extensively during routine maintenance repair. Vacuum waste is acidic, spills/leaks do occur at times and thorough neutralizing and/or rinsing is necessary to preclude corrosion damage.

E. Containers of acid concentrates or acid based chemicals may be part of a cargo and may be broken during loading or unloading. Spillage from such sources are usually larger in scale than spills previously mentioned. It is, therefore, advisable that the acid spillage (including vacuum waste) be neutralized as soon as possible.

F. Operators should also be cognizant of the fact that acids may deteriorate nonmetallic materials such as fabrics, wood, leather, etc.

TASK 05-51-57-000-802

2. Corrosion Removal After Acid Spills

A. Tools/Equipment

Reference	Description
STD-122	Brush
STD-419	Gloves - Rubber, Elbow Length
STD-421	Goggles - Eye Protection
STD-774	Respirator - Full-Face, Air Purifying (with filters/cartridges)
STD-815	Sponge
STD-1392	Shield - Facial Protection
STD-1393	Aprons
STD-1394	Boots
STD-1395	Head Gear
STD-3904	Goggles - Safety
STD-6391	Mop - long handle (4 - 5 foot), or long wooden stick with shop cloth attached to one end
STD-8874	Brush - Soft

B. Consumable Materials

Reference	Description	Specification
B00095	Compound - Sodium Bicarbonate	ASTM D928

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(Continued)

Reference	Description	Specification
B00334	Cleaner - Sodium Bicarbonate	ASTM D928, or commercially available product
G00009	Compound - Organic Corrosion Inhibiting	BMS3-23
G50071	Compound - Corrosion Inhibiting, Heavy Duty	BMS3-35
G50412	Paper - Litmus (Used to find the acidity or alkalinity of a liquid solution)	
G51294	Cloth - 100% Synthetic or Blended Synthetic, Cotton or Cellulose Material	AMS3819 Class 2 Grade A

C. Procedure

SUBTASK 05-51-57-912-004

WARNING DO NOT LET THE ACIDS TOUCH YOU. YOU MUST WEAR CLOTHING THAT SUPPLIES PROTECTION. YOU MUST WEAR GLOVES AND A FACE SHIELD. THE ACIDS ARE POISONOUS AND CAN CAUSE INJURIES TO PERSONS. IF THE ACID GETS INTO YOUR EYES, FLUSH YOUR EYES WITH COOL WATER. GET MEDICAL AID IMMEDIATELY.

(1) Take these precautions when you work with an acid spill or vacuum waste system spills/leaks condition:

(a) Adequate protective clothing (rubber or plastic gloves, goggles, face shields, aprons, boots, head gear, etc.) should be worn when handling or working in acid contaminated areas.

1) elbow length rubber gloves, STD-419
2) safety goggles, STD-3904 or eye protection goggles, STD-421
3) face shield, STD-1392 or full-face respirator, STD-774
4) aprons, STD-1393
5) boots, STD-1394
6) head gear, STD-1395

(b) Wash hands after using acid neutralizing treatment solution and/or materials before eating or smoking.

(c) Waste materials, solvents, chemical solutions, wiping rags, masking materials, etc., shall be collected and disposed of safely.

SUBTASK 05-51-57-942-002

(2) Do these steps to isolate the contaminated area:

(a) Do not allow acid spills to spread from areas of contamination.

(b) Using plastic sheets is advised for protection of equipment beneath battery areas. If equipment is operating, venting requirements should be maintained.

(c) Consider protecting uncontaminated areas by taping down protective material such as plastic sheets.

SUBTASK 05-51-57-112-003

(3) Do these steps to clean the area of an acid spillage:

(a) If equipment is adjacent to the treatment area use plastic sheets to cover the equipment to prevent inadvertent splashing of acids or treatment fluids.

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(b) Wipe up excess fluids with cloth and discard cloth into plastic container for disposition.

(c) Mix sodium bicarbonate cleaner, B00334 or compound, B00095 with water to create a solution that will neutralize the acid.

(d) Apply the solution with a cloth, G51294, mop, STD-6391, brush, STD-122, or sponge, STD-815.

1) Make sure the solution goes into the contaminated faying surface joints.

NOTE: A pressure application of the solution can be necessary to flush the faying surface joints and some access areas fully.

(e) Apply the solution until bubbles cease in the acid/solution.

NOTE: When the bubbles cease, the acid has become neutral.

(f) Then allow the solution to remain on the surface for an additional 5 minutes after the bubbles stop.

(g) Remove the solution with mop, STD-6391 or sponge, STD-815.

(h) Flush the area with large quantities of clean water. Pressure application may be required to flush the joint thoroughly.

1) Rub the surface with a soft brush, STD-8874.

(i) Do a test of the cleaned area with litmus paper, G50412.

NOTE: The litmus paper should read between 7 and 8 when the area is fully cleaned.

(j) Wipe dry with clean cloth, G51294.

SUBTASK 05-51-57-410-001

(4) Do these steps to put the airplane back to its usual condition:

(a) After thoroughly dry, repair or replace damaged finishes if it is necessary. Refer to PGBLK 51-00-58-2 and PGBLK 51-00-59-2 for protective finish systems.

(b) Apply water displacing corrosion inhibiting compound, G50071 or corrosion inhibiting compound, G00009 over entire area.

NOTE: For details of how to apply the corrosion inhibiting compound, refer to PGBLK 51-00-59-2.

NOTE: If insulation blankets have become contaminated with vacuum waste, they must be replaced to prevent reintroduction of the of the acidic substance on the structure.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

GROUND HANDLING EQUIPMENT HITS AIRPLANE OR PART DEPARTS AIRPLANE (CONDITIONAL INSPECTION) - MAINTENANCE PRACTICES

1. General
   A. This procedure has steps to do an inspection after ground handling equipment hits the airplane or parts depart the airplane.
   B. An impact incident can be more than allowable damage limits.
   C. Visually examine the external surfaces of the airplane in the general area of the impact which includes the nearest support structure.
      (1) If you find damage at the support structure, internal NDI inspections and disassembly is possible.
   D. When the conditional inspection tells you to examine a component, look for these conditions:
      (1) Cracks
      (2) Gaps
      (3) Damaged paint
      (4) Discoloration
      (5) Scuffing
      (6) Twisted or distorted parts
      (7) Dents, gouges, scratches
      (8) Elongated or distorted fastener holes
      (9) Loose or missing fasteners
      (10) Delamination
      (11) Fiber damage
      (12) Soft spots
      (13) Core damage
      (14) Misalignment
      (15) Interference
      (16) Other signs of damage.
   E. Description of Low Velocity, High Energy Impact Events
      (1) You can think of an impact incident as a Low Velocity, High Energy Blunt Impact when the type, force, or cause is more than the structure was first designed for without the result of damage you can see. Examples of events which can be considered Low Velocity, High Energy Blunt Impacts are (but are not limited to):
         (a) An airport jetway that hits the fuselage at more than normal operational speeds or angles.
         (b) Ground Support Equipment that hits the structure.
         (c) Ground Support Equipment that does not have the correct protection that hits the airplane structure.
         (d) Impact by a blunt, high-mass object at low speed.
         (e) Impact by parts that depart the airplane in flight.
      (2) If any damage is found that is within the applicable allowable damage limits in the Structural Repair Manual (SRM) for that structure, this inspection is not required.

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TASK 05-51-59-200-801

2. Ground Handling Equipment Hits the Airplane or Part Departs the Airplane Inspection

A. Examine the Airplane Structure

SUBTASK 05-51-59-210-001

(1) Visually examine the external structure adjacent to the 12 in. (305 mm) of the impact location.

(a) If you find signs of damage, refer to the applicable SRM procedure for repair.

(2) Visually examine the internal support structure behind or adjacent to the 12 in. (305 mm) external area around the impact location.

(a) If you find signs of damage, refer to the applicable SRM procedure for repair.

SUBTASK 05-51-59-960-001

(3) If a part has departed the airplane, do the steps that follow.

(a) Replace the departed part.

(b) Visually examine the airplane structure aft of the location of the departed part.

NOTE: Look for multiple impact locations along the structure.

1) If you find signs of damage, refer to the applicable SRM procedure for repair.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

AIRFRAME VIBRATION CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. General

A. This procedure has this task:

(1) A check to locate the cause of in-flight airframe vibration with steps to eliminate or reduce this vibration.

TASK 05-51-67-280-801

2. Conditional Inspection

(Figure 201)

A. General

(1) It is possible to feel vibration equivalent to Mach buffet in the forward cabin when these conditions occur:

(a) At high speed, the trailing edge flaps can cause the vibration.

(b) At low speeds on climb and in cruise, these parts can cause the vibration:

1) Ground spoiler float

2) Too much freeplay in the outboard aileron and tab

3) Loose doors and fairings.

B. References

Reference	Title
20-50-11-910-801	Standard Torque Values (P/B 201)
21-51-23-400-801	Ram Air Inlet Modulation Panels - Installation (P/B 401)
27-09-91-200-804	Horizontal Stabilizer - Inspection (P/B 601)
27-31-00-820-801	Elevator Control Cables EA and EB and Pitch Force Transducers - Adjustment (P/B 501)
27-51-11-820-801	Inboard Trailing Edge Flap Adjustment (P/B 501)
27-51-12-200-801	Inboard Aft Flap Inspection (P/B 601)
27-51-13-200-802	Inboard Flap Inboard Carriage Inspection (P/B 601)
27-51-21-820-801	Outboard Trailing Edge Flap Adjustment (P/B 501)
27-51-28-820-801	Outboard Flap Outboard Support Fairing Adjustment (P/B 501)
32-13-21-000-801	Main Landing Gear Wing Door Adjustment (P/B 501)
32-22-11-000-802	Nose Landing Gear Wheel Well Doors Adjustment (P/B 501)
49-11-00-200-801	APU Power Plant Inspection (P/B 601)
49-15-00-700-801	Air Inlet Door Test (P/B 501)
49-15-11-200-801	Air Inlet Seal Inspection (P/B 601)
53-31-21-000-801	Vortex Generator Assembly Removal (P/B 401)
72-21-02-200-801-F00	Fan Module Inspection (P/B 601)
SRM 51-40-6	Structural Repair Manual

C. Conditional Inspection

SUBTASK 05-51-67-210-001

(1) For vibration symptom and maintenance action in-flight airframe vibration, see Figure 201.

SUBTASK 05-51-67-280-001

(2) If most of the vibrations are in the forward and aft fuselage, with the trailing edge flaps in the up position, do these steps:

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(a) Examine the elevator.

1) Make sure that there is not too much freeplay in these parts for the elevator trim tab:

a) The tab pushrod

b) The tab lockout mechanism

c) The tab hinges.

2) Make sure that the hinge fitting bolts on the elevator are not loose.

3) Do a check for the hinge bolts on the elevator balance panel.

4) Make sure that these parts on the elevator output torque tubes are not loose or worn:

a) The bolts that attach the inner or outer torque tubes

b) The crank

c) The control

d) The pushrod

e) The elevator mast fitting.

5) Make sure that the elevator hinge seals and nose seals are installed correctly without damage.

(b) Examine the doors, panels, and fairings.

1) Make sure that all the doors, panels, and fairings are correctly aligned and attached.

2) Examine all wing-to-body fairing panels with particular attention to the 149A7654 and 149A7555 fairing panels for loose attach fasteners.

a) Do a visual check of the panels from inside the wheel well for signs of failure or wear grooves.

b) Apply axial pressure to the fastener heads from outside in an upward direction to check for loose fasteners.

<1> If loose, retighten and check the self locking feature of nutplates (TASK 20-50-11-910-801).

(c) Examine the landing gear doors.

1) Make sure that the nose and main gear doors are aligned and all the seals are installed without damage.

2) Make sure that the nose gear doors are adjusted correctly.

(d) Examine the horizontal stabilizer.

1) Make sure that the hinge bearing for the horizontal stabilizer does not have too much freeplay (TASK 27-09-91-200-804).

(e) Check the elevator control cable tension (TASK 27-31-00-820-801).

(f) Examine the Auxiliary Power Unit (APU).

1) Inspect the APU, do this task: APU Power Plant Inspection, TASK 49-11-00-200-801.

2) Make sure that the compartments for the APU inlet door are not loose or worn (TASK 49-15-11-200-801).

3) Make sure that the APU inlet door is in the closed position (TASK 49-15-00-700-801).

(g) Examine the aft vortex generators (not installed on all airplanes).

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1) Make sure that the vortex generators on the aft body are not loose and do not have damage (TASK 53-31-21-000-801).

SUBTASK 05-51-67-280-002

(3) If most of the vibrations are in the wing root area, with the trailing edge flaps in the up position, do these steps:

(a) Examine the trailing edge flaps.

1) Make sure that the trailing edge panels on the top of the wings are adjusted correctly (TASK 27-51-21-820-801).

2) Make sure that the flap track fairing on the outboard trailing edge is not loose and does not have damage (TASK 27-51-28-820-801).

3) Make sure that the aft flap on the trailing edge is not delaminated and is in good condition (SRM 51-40-6).

(b) Examine the ram air system.

1) Make sure that the seals on the ram air inlet modulation panel are attached (TASK 21-51-23-400-801).

(c) Examine the main landing gear door.

1) Make sure that the wing door for the main landing gear is adjusted correctly (TASK 32-13-21-000-801).

SUBTASK 05-51-67-280-003

(4) If there is vibration in the wing root area, with the trailing flaps extended between 2 and 5 units, do these steps:

(a) Examine the flaps.

1) Do a check for vertical freeplay in the flap assembly on the trailing edge (TASK 27-51-11-820-801).

2) Make sure that the sequence carriage bearing for the inboard flap is not worn (TASK 27-51-13-200-802).

3) Do a check for freeplay in the aft segment of the inboard flap on the trailing edge.

a) Make sure that the cam roller bearing of the actuating mechanism on the aft segment is not worn and is in good condition.

4) Make sure that the panels on the trailing edge on the top of the wing are adjusted correctly (TASK 27-51-21-820-801).

5) Do a check for the interface blade seals.

6) Make sure that the access panel to the slat actuator for the leading edge is not loose.

7) Make sure that the trailing edge aft flaps are in good condition.

8) Make sure that the inboard mid flap seal plate is in good condition (TASK 27-51-12-200-801).

NOTE: A misadjusted seal plate can cause a humming noise that can be heard at the seats just aft of the wing.

SUBTASK 05-51-67-280-004

(5) If there is vibration with noise, do these steps:

(a) Make sure that there is sealant at the wing-to-body fairing.

(b) Do a check of the ground service check swing valve.

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(c) Make sure that the air distribution ducts are not loose and do not vibrate.

(d) Make sure that the nose landing gear door is adjusted correctly (TASK 32-22-11-000-802).

SUBTASK 05-51-67-280-005

(6) If there is vibration and possibly noise mostly above the wing, do these steps:

(a) Make sure that the seal door for the Krueger flap on the wing leading edge is adjusted correctly.

(b) Do a check for low frequency engine vibrations.

(c) Make sure that the fan rotor is balanced (TASK 72-21-02-200-801-F00).

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

CHECK NUMBER	CHECKS AND SYMTOMS	INSPECTIONS/TEST/MAINTENANCE
1	HMU Related Vibration (Lateral Oscillation/Vibration) Low frequency (5 to 20 Hz) vibration felt in the crew compartment and aft empennage. Lateral oscillation/ vibration usually felt during engine power changes. In some cases the vibration is felt during climb only. Key visual parameters may be a slight N1 fluctuation (0.1 to 0.5% N1) and the affected engine nacelle can be noticeably shaking. No change in AVM indication. No audible noise.	Do the following: 1. Should vibration occur, a slight engine speed change (±1 percent N1) may move the airframe out of the vibratory mode. 2. Change the thrust lever position one engine at a time to find the engine which is causing the vibration by observing any N1 fluctuations or engine movement. 3. Remove and replace the hydro mechanical unit (HMU) of the suspect engine (AMM 73-21-10/401) at the earliest maintenance convenience.
2	N2 Tone (HPC Mode) Clear, audible harmonic tone/ vibration during descent above 15,000 ft. at idle power, or on ground at idle power. The tone can be detected by flight crew or passengers (highest nose in mid cabin). Tactile vibration and/or AVM gauge movement from a normal position of approximately 0.20 scalar units (no tone) to approximately 1.0 units (with tone).	Do the following: 1. Other than an optional slight throttle increase by the flight crew to minimuze the noise tone level, no crew or maintenance action is required. 2. AVM download can confirm HPC and/or HPT peak vibration levels, near 68% N2. Otherwise refer to AMM 71-00-00/201, Engine limits.
3	Buzzsaw Noise (Fan Blade) Audible response during takeoff and low altitude climb described as a buzzsaw noise. No increase in vibration levels. Most perceptible in the forward cabin.	Do the following: 1. No action required. This is a characteristic of the engine.

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Vibration Symptom and Maintenance Action In-Flight Airframe Vibration
Figure 201/05-51-67-990-802 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

CHECK NUMBER	CHECKS AND SYMTOMS	INSPECTIONS/TEST/MAINTENANCE
4	N1 Related Vibration (fan Unbalance) High Frequency (50-90 Hz). Typically characterized as an audible "rumble" or "growl" Increased noise level at cruise, top of climb and/on hold power. Flight deck and cabin noise are roughly similar. Tactile vibration may exist.	Do The Following: 1. Download AVM data to determine if trim balance is required. Note: Some operators have adopted the practice of performing an engine trim balance per AMM 71-00-00/501 test 14A when engine vibration is between 1.5 and 2.0 units. These operators have found this to be an effective means for managing engine vibration.
5	Start Rumble Very loud growl that occurs at low power such as during starts and near minimum idle. No observable change in engine vibration level. Ground phenomena only.	Do the following: 1. Replace the HMU within five cycles for units that demostrate intermittent rumble on start or idle. 2. If the rumble is sustained or occurs above idle, replace HMU prior to next flight.
6	High frequency vibration usually manifested as a sound but is some cases might be felt. The vibration can be constant during all phases of flight and may vary with increased airspeed. Vibration might be heard/felt in a specified location or may be transmitted to a broad area of the airframe.	Do the following: 1. Adjust nose landing gear doors (AMM 32-22-11/501). Check all fasteners for security of attachment. 2. Adjust main landing gear shock strut and wing doors (AMM 32-13-11/501 and AMM 32-13-21/501). Check all fasteners for security of attachment. 3. Check for the missing sealant at the wing-to-body fairing. 4. Check lower fuselage doors, access panels and hatches located in the vicinity of the crew compartment. 5. Examine all wing-to-body fairing panels for loose attach fasteners. 6. Check seals common to leading edge flap (AMM 27-81-11/401).

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Vibration Symptom and Maintenance Action In-Flight Airframe Vibration
Figure 201/05-51-67-990-802 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

CHECK NUMBER	CHECKS AND SYMTOMS	INSPECTIONS/TEST/MAINTENANCE
7	Vibration in rudder pedals Vibration may be felt or heard in aft galley. Vibration may disappear with rudder or rudder trim input.	Do the following: 1. Confirm vibration is unrelated to an engine or engines. 2. Check NLG (AMM 32-22-11/501), MLG (AMM 32-13-11/501 and AMM 32-13-21/501) door rigging and seal installation. 3. At a convenient maintenance opportunity when manpower and materials are available, incorporate SB 737-55-1069 retrofit to add seal at rudder to fuselage interface. 4. Evaluate incorporation of SB 737-55-1062, scheduled for May 1999, Rudder LE Rib Addition/Inspection.
8	Elevator/Elevator Tab Related Vibration Vibration felt in the flight deck with higher levels felt in the aft cabin that can occur during any phase of flight. Vibration levels diminish with reduction in airspeed. Vibration may be triggered by deployment of speedbrakes.	Do the following: 1. Inspect elevator tab hinges, visually inspect elevator tab mechanism, control rods, and control rod to tab attachment per SB 737-55A1072 or AMM 27-31-32/601. 2. Perform elevator tab freeplay inspection per SB 737-55A1072 or AMM 27-31-32/601. 3. Conduct elevator inspections per AMM 27-31-32-200-805. **NOTE:** If no faults are found after accomplishment of the aforementioned inspections, contact Boeing prior to further revenue flight.

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Vibration Symptom and Maintenance Action In-Flight Airframe Vibration
Figure 201/05-51-67-990-802 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

MAIN LANDING GEAR SHIMMY/VIBRATION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. **General**

A. This inspection applies to airplanes during landing and takeoff that have experienced a main landing gear (MLG) shimmy or vibration.

NOTE: Shimmy is defined as a rapid and violent torsional oscillation / vibration of the MLG caused by asymmetric wheel spin on one main landing gear.

B. The Inspection

(1) This inspection is divided into two phases (Phase I and Phase II).

(2) The Phase I inspection is applicable when a MLG shimmy/vibration occurs during landing and takeoff.

(a) If the inspection during Phase I does not show that damage has occurred, no more inspections are necessary.

(b) If the Phase I inspection shows that damage has occurred, the Phase II inspection must be done.

(3) The pilot must make the decision if this structural examination is necessary.

(a) If a structural examination is necessary, do the procedure "Phase I Inspection" in this section.

C. When the conditional inspection tells you to "examine" a component, look for these conditions (replace or repair components, if it is necessary).

(1) Cracks

(2) Pulled apart structure

(3) Loose paint (paint flakes)

(4) Twisted parts (distortion)

(5) Bent components

(6) Fasteners holes that become larger or longer

(7) Loose fasteners

(8) Fasteners that have pulled out or are gone

(9) Delaminations

(10) Misalignment

(11) Interference

(12) Other signs of damage.

TASK 05-51-68-210-801

2. **Phase I Inspection**

A. References

Reference	Title
27-11-00-710-801	Aileron - Response (Operational) Test (P/B 501)
27-51-00-210-801	Trailing Edge Flap Drive System Inspection (P/B 601)
27-51-00-440-801	Trailing Edge Flap System Reactivation (P/B 201)
27-51-00-710-801	Trailing Edge Flap System Operational Test (P/B 501)
27-61-00-710-801	Spoiler Control System Operational Test (P/B 501)
27-81-00-080-801	Leading Edge Flap and Slat Locks Removal (P/B 201)

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(Continued)

Reference	Title
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
27-81-00-480-801	Leading Edge Flap and Slat Locks Installation (P/B 201)
32-11-00-200-801	Main Landing Gear Inspection (P/B 601)
32-11-51-000-801	Main Landing Gear Upper Torsion Link Removal (P/B 401)
32-11-51-020-801	Main Landing Gear Torsion Link Disconnection (P/B 401)
32-11-51-200-801	Main Landing Gear Torsion Links Inspection (P/B 601)
32-11-51-400-801	Main Landing Gear Upper Torsion Link Installation (P/B 401)
32-11-51-400-803	Main Landing Gear Torsion Link Connection (P/B 401)
49-13-11-200-803	APU Mounts Inspection (APU Installed) (P/B 601)

B. Location Zones

Zone	Area
100	Lower Half of Fuselage
500	Left Wing
600	Right Wing
700	Landing Gear and Landing Gear Doors

C. Main Landing Gear Areas

SUBTASK 05-51-68-210-001

(1) Examine the main landing gear areas as follows:

(a) The tires.

(b) The wheels.

(c) The shock strut of the main gear for fluid leakage.

(d) The doors and linkage of the main gear strut.

(e) The wiring.

(f) The brackets, sensors and hydraulic tubing (Main Landing Gear Inspection, TASK 32-11-00-200-801).

(g) The actuators.

(h) The top end of the shock strut for cracks and bolt distortion.

(i) The landing gear beam.

(j) The trunnion.

(k) The stabilizer beams.

(l) The inboard attachment of main landing gear beam.

(m) Outboard attachment of main landing gear beam.

(n) Examine the MLG torsion links and attachments (Main Landing Gear Torsion Links Inspection, TASK 32-11-51-200-801).

NOTE: Look for damage and deformation.

1) Remove the upper torsion link pin, do this task: Main Landing Gear Upper Torsion Link Removal, TASK 32-11-51-000-801.

a) Examine the pin for damage, cracks, missing chrome, or a bent shaft.

b) Examine the bushings in the outer cylinder lugs and the upper torsion link lugs for damage, cracks and deformation.

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c) If damage, cracks, or deformation is found on the bushings or the pin, further inspection of the MLG must be performed per the Phase II inspection.

d) If no damage is found, install the upper torsion link pin, do this task: Main Landing Gear Upper Torsion Link Installation, TASK 32-11-51-400-801.

2) Disconnect the apex joint of the torsion links, do this task: Main Landing Gear Torsion Link Disconnection, TASK 32-11-51-020-801.

a) Examine damper shaft and attachment hardware for damage, wear and deformation.

b) Verify that straight and tapered sleeves are installed in the correct positions.

c) If damage, cracks, or deformation is found on the damper shaft, further inspection of the MLG must be performed per the Phase II inspection.

d) If no damage is found, connect the apex joint of the torsion links, do this task: Main Landing Gear Torsion Link Connection, TASK 32-11-51-400-803.

D. Fuselage Areas

SUBTASK 05-51-68-210-002

(1) Examine the fuselage areas that follow:

(a) Examine the upper and lower fuselage skin panels forward and aft of the wing.

NOTE: Permanent wrinkles frequently occur on the lower side of the fuselage skins aft of STA 727.

(b) If you found wrinkles on the skin panels and you did not know they were there before, make an internal inspection.

NOTE: If the wrinkles were there before, make a careful inspection of the wrinkles for cracks.

(c) Examine the keel beam chords, stiffeners, webs and splices at station 663 thru 727A.

SUBTASK 05-51-68-200-001

(2) Examine the external fuselage skin at BS 1016 and the aft side of the pressure bulkhead for signs of buckling, deformation or damage.

(a) Do a detailed visual inspection of the exterior fuselage skin 10 in. (25.4 cm) forward and aft of the BS 1016 skin butt joint between stringers S-10L and S-10R.

NOTE: Gain access to the exterior of the fuselage skin at BS 1016 under the vertical stabilizer fairing, 323AL and 323AR.

(b) Do a detailed visual inspection of the entire aft side of the BS 1016 aft pressure bulkhead. Give particular attention to the upper bulkhead structure between skin stringers S-10L and S-10R.

NOTE: Access to the interior unpressurized aft pressure bulkhead area is through the aft access hatch, 311BL.

E. Electrical Equipment Rack Inspection

SUBTASK 05-51-68-210-010

(1) Do the visual inspection of the electrical equipment racks for damage:

(a) Visually inspect the electrical equipment racks attachments to structure, shelves, and trays.

(b) If damage is found do the detailed electrical equipment rack inspection (TASK 05-51-68-210-802).

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F. APU Structure Inspection

SUBTASK 05-51-68-200-003

(1) Inspect the APU Mounts (APU Installed), do this task: APU Mounts Inspection (APU Installed), TASK 49-13-11-200-803.

G. Wing Areas

SUBTASK 05-51-68-210-003

(1) Examine the wing areas that follow:

WARNING	DO NOT GO INTO THE WING LEADING EDGE AND TRAILING EDGE AREAS BEFORE YOU INSTALL SAFETY LOCKS. IF YOU DO NOT OBEY, INJURY TO PERSONNEL FROM ACCIDENTAL FLAP/SLAT OPERATION CAN OCCUR.

(a) Install the leading edge flaps and slat locks.

1) Do this task: Leading Edge Flap and Slat Locks Installation, TASK 27-81-00-480-801.

(b) The strut-to-wing fairing panels on the upper and lower nacelle.

1) Make sure the fasteners are installed in the correct position.

(c) Examine the wing leading edge fairing for displacement and other signs of damage.

(d) Do the following inspections with attention to find possible damage to:

1) Carriage number 2, both inboard and outboard side of the carriage.

2) Track number 1 and track number 2 of the inboard and outboard lower flanges of the track.

3) Carriage number 1 and number 2 forward and aft roller bolts.

4) Bellcrank number 1 and number 2.

5) Aft flap program tracks, Outboard flap.

6) Trailing edge flaps.

a) Examine the trailing edge flaps, do this task: Trailing Edge Flap Drive System Inspection, TASK 27-51-00-210-801.

<1> If damage is found, refer to the Phase II for more detailed examinations of the flaps (TASK 05-51-68-210-802).

7) Perform the following operational checks:

a) Do this task: Trailing Edge Flap System Operational Test, TASK 27-51-00-710-801.

b) Do this task: Spoiler Control System Operational Test, TASK 27-61-00-710-801.

c) Do this task: Aileron - Response (Operational) Test, TASK 27-11-00-710-801.

(e) If installed, examine winglets for damage, cracks, and deformation.

H. Cabin Inspections

SUBTASK 05-51-68-210-004

(1) Do the following cabin inspections that follow to find possible damage:

(a) Do a visual inspection of all ceiling panels for dislodging.

(b) Do a visual inspection of all ceiling overhead bins for evidence of looseness.

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(c) Do a detailed visual inspection of all ceiling panels equipped with video monitors.

1) Inspect latches, stops, potting inserts and all fasteners.

(d) Continue the Cabin Inspection in the Phase II inspection if any cabin damage was found in the above Cabin Inspections including the ceiling panels, central overhead bins, or the video monitors. If no damage was found, no further cabin inspection is required and it is not necessary to continue the cabin inspection in Phase II.

I. Put the Airplane Back to Its Usual Condition

SUBTASK 05-51-68-410-003

(1) Install the components you removed if they are serviceable, or install replacement parts.

SUBTASK 05-51-68-080-003

(2) Remove the leading edge flaps and slat locks.

(a) Do this task: Leading Edge Flap and Slat Locks Removal, TASK 27-81-00-080-801.

SUBTASK 05-51-68-440-005

(3) Do the activation procedure for the trailing edge flap system.

(a) Do this task: Trailing Edge Flap System Reactivation, TASK 27-51-00-440-801.

SUBTASK 05-51-68-440-006

(4) Do the activation procedure for the leading edge flap and slat system.

(a) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

END OF TASK

TASK 05-51-68-210-802

3. Phase II Inspection

A. References

Reference	Title
07-11-01-580-815	Lift the Airplane with the Jacks (P/B 201)
12-15-31-610-802	Main Landing Gear Shock Strut Servicing, Airplane on the Ground (P/B 301)
20-10-07-000-801	E/E Box Removal (P/B 201)
25-23-61-000-801	Passenger Service Unit (PSU) - Removal (P/B 201)
25-23-61-000-804	Passenger Service Unit - Removal (P/B 401)
27-51-00-040-801	Trailing Edge Flap System Deactivation (P/B 201)
27-51-00-440-801	Trailing Edge Flap System Reactivation (P/B 201)
27-51-12-200-801	Inboard Aft Flap Inspection (P/B 601)
27-51-22-200-801	Outboard Aft Flap Inspection (P/B 601)
27-51-23-200-801	Outboard Flap Outboard Carriage Inspection (P/B 601)
27-81-00-040-801	Leading Edge Flaps and Slats Deactivation (P/B 201)
27-81-00-080-801	Leading Edge Flap and Slat Locks Removal (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
27-81-00-480-801	Leading Edge Flap and Slat Locks Installation (P/B 201)
32-11-00-200-801	Main Landing Gear Inspection (P/B 601)
32-32-00-710-801	Main Landing Gear Operational Test (P/B 501)
32-33-00-710-801	Operational Test for the Nose Landing Gear (P/B 501)
32-34-00-730-801	Main Gear Manual Extension System Test - Airplane on Jacks (P/B 501)

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(Continued)

Reference	Title
57-15-00-000-801	Landing Gear Support Beam Removal (P/B 401)
57-15-00-200-801	Landing Gear Support Beam - Inspection (P/B 601)
71-00-00-200-803-F00	Inspection Of The Engine After A Hard Landing (P/B 601)

B. Location Zones

Zone	Area
100	Lower Half of Fuselage
200	Upper Half of Fuselage
500	Left Wing
600	Right Wing
700	Landing Gear and Landing Gear Doors

C. Landing Gear

SUBTASK 05-51-68-710-001

(1) Do the landing gear checks that follow to make sure the landing gear operates correctly.

NOTE: Continue the following inspection if any landing gear damage was found in the above Phase I inspection.

(a) Do this task: Lift the Airplane with the Jacks, TASK 07-11-01-580-815.

(b) Retract and then extend the main landing gear with the normal system to make sure they operate correctly.

1) Do this task: Main Landing Gear Operational Test, TASK 32-32-00-710-801.

(c) Retract and then extend the nose landing gear with the normal system to make sure it operates correctly.

1) Do this task: Operational Test for the Nose Landing Gear, TASK 32-33-00-710-801.

(d) Retract and then extend the main landing gear with the manual system to make sure they operate correctly.

1) Do this task: Main Gear Manual Extension System Test - Airplane on Jacks, TASK 32-34-00-730-801.

(e) Retract and then extend the nose landing gear with the manual system to make sure it operates correctly.

1) Do this task: Operational Test for the Nose Landing Gear, TASK 32-33-00-710-801.

D. Main Landing Gear Areas

SUBTASK 05-51-68-210-005

(1) Do the steps that follow to examine the main landing gear:

NOTE: Continue the following inspection if any landing gear area damage was found in the above Phase I inspection.

(a) Do these steps if you remove a wheel because of a blown tire:

1) Examine the brake assemblies for damage.

2) Examine the wheel bearings for roughness.

3) Examine the axle for damage.

(b) Examine the forward and aft trunnion area of the outer cylinder.

(c) Examine the sliding surface of the inner cylinder.

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(d) Remove the upper and lower torsion links and examine the following:

1) Visually inspect the bushings and lugs.

2) Examine and inspect the dimensions of the attachment lugs and pins.

NOTE: If deformation is found, remove the bushings and check the dimensions of the lug bores and faces.

(e) Examine the axle.

(f) Examine and check the dimensions of the outer and inner cylinder torsion link lugs.

NOTE: If deformation is found, remove the bushings and check the dimensions of the lug bores and faces.

(g) Examine the side strut linkage.

(h) Examine the actuator walking beam and linkage fittings.

(i) Examine the fuse pins at the inboard attachment and outboard attachment of the main landing gear beam.

(j) Examine the shock strut of the main landing gear for damage or signs of excessive leakage, do this task: Main Landing Gear Inspection, TASK 32-11-00-200-801.

1) If excessive leakage is found, do this task: Main Landing Gear Shock Strut Servicing, Airplane on the Ground, TASK 12-15-31-610-802.

If the shock strut servicing was not correct, do the following steps:

a) Remove the inner cylinder and examine it for distortion or cracks.

b) Check the dimensions of the barrel of the inner cylinder and axles for distortion, bending and cracking.

c) Examine the interior components of the shock strut for damage.

(k) Examine the wheel well of the main landing gear for fuel or other fluid leaks.

(l) If the results of any of the above checks and inspections requires removal of the main landing gear, Inspect the fuse pins at the inboard attachment and outboard attachment of the main landing gear beam.

1) Remove the inboard fuse pin of the landing gear support beam, do this task: Landing Gear Support Beam Removal, TASK 57-15-00-000-801.

NOTE: Complete removal of the landing gear support beam is not required.

NOTE: External support of the landing gear support beam may be necessary to remove load on the beam.

2) Inspect the fuse pin, bolts, and bushings, do this task: Landing Gear Support Beam - Inspection, TASK 57-15-00-200-801.

3) Remove the outboard fuse pin of the landing gear support beam, do this task: Landing Gear Support Beam Removal, TASK 57-15-00-000-801.

NOTE: Complete removal of the landing gear support beam is not required.

NOTE: External support of the landing gear support beam may be necessary to remove load on the beam.

4) Inspect the fuse pin, bolts, and bushings, do this task: Landing Gear Support Beam - Inspection, TASK 57-15-00-200-801.

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E. Fuselage Areas

SUBTASK 05-51-68-040-001

> **WARNING** DO THE DEACTIVATION PROCEDURE FOR THE TRAILING-EDGE FLAP-ACTUATION SYSTEMS. DO NOT OPERATE THE FLAP ACTUATION SYSTEMS DURING THIS INSPECTION. IF YOU DO NOT OBEY THIS WARNING, IT CAN CAUSE INJURY TO PERSONS AND DAMAGE TO EQUIPMENT.

(1) Do this task: Trailing Edge Flap System Deactivation, TASK 27-51-00-040-801.

SUBTASK 05-51-68-040-002

> **WARNING** DO THE DEACTIVATION PROCEDURE FOR THE LEADING EDGE FLAPS AND SLAT ACTUATION SYSTEMS. DO NOT OPERATE FLAPS AND SLATS ACTUATION SYSTEMS DURING THIS INSPECTION. FAILURE TO OBEY THIS WARNING CAN CAUSE INJURY TO PERSONS AND DAMAGE TO EQUIPMENT.

(2) Do this task: Leading Edge Flaps and Slats Deactivation, TASK 27-81-00-040-801.

SUBTASK 05-51-68-210-006

(3) Examine the fuselage areas that follow:

NOTE: Continue the following inspection if any fuselage damage was found in the above Phase I inspection.

(a) Examine the lower fuselage structure.

NOTE: Make sure you examine the area below the body crease and from station 727 to 100 inches (254 cm) aft.

(b) Examine the wing-to-fuselage joints at stations 540 and 664.

(c) Examine the upper fuselage structure at station 540, 664 and 727.

(d) Examine the bulkheads at body stations 294.5 and 360 and the fuselage structure immediately outboard of the nose wheel well.

NOTE: You can examine the forward side if you use the access holes in the sidewalls of the nose wheel well. You can examine the aft side of the bulkhead at station 294.5 from the electronics compartment.

(e) Examine the keel beam chords, stiffeners, webs and splices at station 540 thru 727A.

(f) Examine the external surface of the fuselage for fuel or other fluid leaks.

(g) Remove the upper wing-to-body fairing forward of the aft fairing.

(h) Examine the trunnion support fitting at body station 706 for the main landing gear for cracks and bolt distortion.

(i) If you found wrinkles on the skin panels and you did not know they were there before, make an internal inspection.

NOTE: Permanent wrinkles frequently occur on the lower side of the fuselage skin aft of STA 727. If the wrinkles were there before, make a careful inspection of the wrinkles for cracks.

(j) Examine at BS 1016 the upper center web installation on the forward side of the pressure bulkhead for any damage.

NOTE: Gain access to inspect the upper center web installation by removing the galley and lavatories as necessary.

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F. Electrical Equipment Rack Inspection

SUBTASK 05-51-68-200-005

(1) Inspect for damage in the following areas (TASK 20-10-07-000-801):

NOTE: Repair all damage found per the standard SRM procedure.

(a) E1 electrical equipment rack stanchions and its attachments to structure, shelves, and trays.

(b) E2 electrical equipment rack stanchions and its attachments to structure, shelves, and trays.

(c) E3 electrical equipment rack stanchions and its attachments to structure, shelves, and trays.

(d) E4 electrical equipment rack stanchions and its attachments to structure, shelves, and trays.

(e) E5 electrical equipment rack stanchions and its attachments to structure, shelves, and trays.

(f) E8 electrical equipment rack stanchions and its attachments to structure, shelves, and trays.

G. Wing Areas

SUBTASK 05-51-68-210-007

(1) Do an inspection of the wing areas that follow:

NOTE: Continue the following inspection if any wing or flap damage was found in the above Phase I inspection.

WARNING	DO NOT GO INTO THE WING LEADING EDGE AND TRAILING EDGE AREAS BEFORE YOU INSTALL SAFETY LOCKS. IF YOU DO NOT OBEY, INJURY TO PERSONNEL FROM ACCIDENTAL FLAP/SLAT OPERATION CAN OCCUR.

(a) Install the leading edge flaps and slat locks.

1) Do this task: Leading Edge Flap and Slat Locks Installation, TASK 27-81-00-480-801.

(b) Examine the wings, nacelles, and upper and lower nacelle strut-to-wing fairing for fuel or other fluid leaks.

(c) Examine the wing ribs along the aft side of the rear spar, WBL 92.5 and 114.0 for cracks.

(d) Examine the upper and lower trailing edge panels and the airplane structure for damage.

NOTE: Make sure you examine the area near the main landing gear beam carefully.

(e) Examine the flap areas that follow for sheared rivets and structure damage:

1) The inboard and outboard trailing edge flaps, do these tasks:

a) Inboard Aft Flap Inspection, TASK 27-51-12-200-801

b) Outboard Aft Flap Inspection, TASK 27-51-22-200-801

c) Outboard Flap Outboard Carriage Inspection, TASK 27-51-23-200-801.

2) The flap tracks.

3) The drive screws.

4) The linkages and fairings.

(f) Examine the inboard and outboard spoilers for sheared rivets and structure damage.

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(g) Examine the flap track bolts on the outboard trailing edge flap for damage that can occur if the flaps touched the ground.

(h) Examine the flap track bolts on the inboard trailing edge flap for damage that can occur if the flaps touched the ground.

(i) Make sure the flight controls move freely and the cable tension is satisfactory.

H. Cabin Inspections

SUBTASK 05-51-68-210-008

(1) Continue the following inspection if any cabin damage was found in the above Cabin Inspection including the ceiling panels, central overhead bins, or the video monitors. If no damage was found, no further cabin inspection is required and it is not necessary to continue this Cabin Inspection.

(a) If ceiling panels without video monitors are found dislodged or damaged: Check for proper latching and installation. Repair as necessary.

(b) If central overhead stowage bins are found with impact damage or are loose, or if ceiling panels equipped with video monitors are found with broken latches: repair as necessary.

(c) Inspect all tie rods of affected zones for evidence of buckling or rupture. If any defect is found, replace as necessary.

(d) Examine lavatory tie rod attachments for damage consisting of breakage, cracks, and deformation. Inspect the tie rods for evidence of buckling or rupture.

(e) Examine the lavatory floor fittings for damage consisting of breakage, cracks, and deformation.

(f) Examine galley tie rod attachments for damage consisting of breakage, cracks, and deformation. Inspect the tie rods for evidence of buckling or rupture.

(g) Examine the galley floor fittings for damage consisting of breakage, cracks, and deformation.

(h) Examine, closet tie rod attachments for damage consisting of breakage, cracks, and deformation.

(i) Examine the passenger service units (PSU), do this task: Passenger Service Unit (PSU) - Removal, TASK 25-23-61-000-801 or Passenger Service Unit - Removal, TASK 25-23-61-000-804.

(j) Examine the closet floor fittings for damage consisting of breakage, cracks, and deformation.

I. Engine Areas

SUBTASK 05-51-68-210-009

(1) Do the steps that follow to examine the engine areas:

(a) Do an engine inspection after a hard landing.

1) Do this task: Inspection Of The Engine After A Hard Landing, TASK 71-00-00-200-803-F00.

(b) Examine the engine nacelle if it touched the ground.

J. Put the Airplane Back to Its Usual Condition

SUBTASK 05-51-68-410-002

(1) Install the components you removed if they are serviceable, or install replacement parts.

SUBTASK 05-51-68-080-002

(2) Remove the leading edge flaps and slat locks.

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(a) Do this task: Leading Edge Flap and Slat Locks Removal, TASK 27-81-00-080-801.

SUBTASK 05-51-68-440-003

(3) Do the activation procedure for the trailing edge flap system.

(a) Do this task: Trailing Edge Flap System Reactivation, TASK 27-51-00-440-801.

SUBTASK 05-51-68-440-004

(4) Do the activation procedure for the leading edge flap and slat system.

(a) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

END OF TASK

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CONDITIONED AIR PACK OUTLET DUCT SYSTEM FAILURE - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. General

A. This procedure contains the task to examine the applicable air check valves after an upstream duct failure.

(1) The conditioned air check valves can be damaged when there is an upstream duct failure of the pack outlet.

(a) When there is a duct failure, the applicable conditioned air check valve must be removed and inspected.

(b) There is one conditioned air check valve found downstream of each air cooling pack, near the forward bulkhead of the ECS bay.

(2) The trim air check valves can be damaged when there is an upstream duct failure of the pack outlet.

(a) When there is a duct failure, the applicable trim air check valve must be removed and inspected.

(b) There is one trim air check valve found in each of the air conditioning bays.

TASK 05-51-80-210-801

2. Conditioned Air Pack Outlet Conditional Inspection

A. References

Reference	Title
21-51-07-000-802-002	Conditioned Air Check Valve Removal (P/B 401)
21-51-07-400-802-002	Conditioned Air Check Valve Installation (P/B 401)
21-61-09-200-801	Trim Air Check Valve Inspection (P/B 601)

B. Location Zones

Zone	Area
120	Subzone - Body Station 396 to Body Station 540

C. Procedure

SUBTASK 05-51-80-000-001

(1) Examine the conditioned air check valve.

(a) Remove the applicable conditioned air check valve for inspection, do this task: Conditioned Air Check Valve Removal, TASK 21-51-07-000-802-002.

(b) Do a visual examination of the conditioned air check valve for the following conditions:

1) missing parts

2) cracks

3) corrosion

4) flapper deformation

5) restricted flapper movement.

(c) Install the conditioned air check valve, do this task: Conditioned Air Check Valve Installation, TASK 21-51-07-400-802-002.

SUBTASK 05-51-80-210-002

(2) Examine the trim air check valve.

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(a) Do this task: Trim Air Check Valve Inspection, TASK 21-61-09-200-801.

D. Put the Airplane Back to It's Usual Condition

SUBTASK 05-51-80-410-001

(1) Install the components you removed if they are serviceable, or install replacement parts.

——— END OF TASK ———

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CABIN DEPRESSURIZATION CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. General

A. This procedure contains the task to inspect the airplane after cabin depressurization condition.

TASK 05-51-81-210-801

2. Cabin Depressurization Conditional - Inspection

A. References

Reference	Title
21-31-03-000-801	Aft Outflow Valve Assembly Removal (P/B 401)
21-32-05-000-801	Ceiling Blowout Panel Removal (P/B 401)
21-32-05-400-801	Ceiling Blowout Panel Installation (P/B 401)
25-52-00-200-803	Forward Cargo Compartment Liner Inspection (P/B 601)

B. Location Zones

Zone	Area
100	Lower Half of Fuselage
121	Forward Cargo Compartment - Left
122	Forward Cargo Compartment - Right
141	Aft Cargo Compartment - Left
142	Aft Cargo Compartment - Right
190	Subzone - Wing-to-Body Fairing
835	Main Deck Cargo Door

C. Cabin Depressurization Conditional Inspection

SUBTASK 05-51-81-210-001

(1) If cabin depressurization condition occurs, do these steps:

(a) Before opening the forward cargo door, examine the door seals to see if they have flipped outward.

(b) Examine the decompression panels for movement.

1) Do this task: Ceiling Blowout Panel Removal, TASK 21-32-05-000-801.

2) Do this task: Ceiling Blowout Panel Installation, TASK 21-32-05-400-801.

(c) Examine the cargo compartment for the conditions that follow (TASK 25-52-00-200-803):

- sidewall panels that have moved
- insulation that has moved
- lining that has moved.

(d) Examine the aft outflow valve, do this task: Aft Outflow Valve Assembly Removal, TASK 21-31-03-000-801.

1) Examine the area around the aft outflow valve for damage.

SUBTASK 05-51-81-210-002

(2) Examine the equipment that follow for damage.

(a) All emergency equipment:

1) All lifevests (passenger, crew, infant, etc)

2) Survival packs

3) Halon extinguishers

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4) Water extinguishers
5) First aid kits
6) Eyewash kit
7) Megaphone Transmitter with battery
8) Defibrillators.

CAUTION DO NOT PUT THE OXYGEN MASK HOSE NEAR THE ADJACENT STRUCTURE TO PREVENT RUBS OR KINKS. RUBS OR KINKS CAN CAUSE DAMAGE.

(b) All pressure sensitive equipment for Oxygen System:
1) Crew Oxygen Cylinders
2) Crew Oxygen Regulator
3) Flight Deck Oxygen Masks
4) Disposable oxygen masks with pouch (leave connected to oxygen bottles)
5) Smoke Hoods (Protective Breathing Equipment)
6) All Portable Oxygen Bottles
7) All Chemical Oxygen Generators (located in PSUs throughout main cabin; including lavatories, crew rests, attendant stations, and galleys).

(c) ADM Systems:
1) All pitot and static lines.

D. Put the Airplane Back to Its Usual Condition

SUBTASK 05-51-81-410-001

(1) Install the components you removed if they are serviceable or install replacement parts.

END OF TASK

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IN-FLIGHT WINDMILLING - MAINTENANCE PRACTICES

1. General

A. This procedure has this task:

(1) In-Flight Windmilling Inspection.

TASK 05-51-90-200-801

2. In-Flight Windmilling Inspection

A. General

(1) This task gives the inspection of the engine after an in-flight windmilling condition.

B. References

Reference	Title
71-00-00-210-802-F00	Inspection of the Engine After In-Flight Windmilling (P/B 601)

C. Location Zones

Zone	Area
411	Engine 1 - Engine
421	Engine 2 - Engine

D. In-Flight Windmilling Inspection

SUBTASK 05-51-90-200-001

(1) Do this task: Inspection of the Engine After In-Flight Windmilling, TASK 71-00-00-210-802-F00.

END OF TASK

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EXCESSIVE CABIN PRESSURE LEAKAGE - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. General

A. This procedure gives steps to do a leakage test to the airplane fuselage.

NOTE: Any pressure over 4.5 psi differential needs to be coordinated with Boeing before the test is conducted.

TASK 05-51-91-790-801

2. Cabin Pressure Leak Test

(Figure 201, Figure 202)

A. General

(1) This test uses the airplane equipment to pressurize the airplane and monitor the procedure.

(2) This leakage test is used to make sure the fuselage pressurized areas are tight.

(3) Many small leakage areas can add to create an excessive fuselage leakage rate.

(a) It is recommended that all sources of leakage be repaired.

(4) If leakage is found during this inspection, go to the related maintenance manual section for the repair.

WARNING	OBEY ALL SAFETY STANDARDS FOR COMPRESSION AND DECOMPRESSION WHEN PERSONS ARE IN A PRESSURIZED AREA. SUDDEN PRESSURE CHANGES WILL CAUSE PAIN AND INJURY AND MUST NOT BE DONE. WHEN YOU DO NOT OBEY THE SAFETY PRECAUTIONS, INJURY TO PERSONS WILL OCCUR.

(5) When persons are in the airplane during this test, they must be in a good physical condition. When a person feels pain during a pressure change, you must lower the rate of change of pressure, or make the absolute pressure stable immediately. Do this to make sure the person can make the pressure equal in their ears. Also, do this to remove the person from the airplane.

(6) Pressurize the airplane with one of the steps that follow:

NOTE: A method to calculate absolute pressure is as follows:

Determine the field atmospheric pressure (in inches of mercury). Divide field atmospheric pressure by 2.036 and add the result to the gauge pressure or differential pressure inside the cabin to give the absolute pressure (PSIA). For example: If the field atmospheric pressure is 29.86 inHG and the cabin differential pressure is 4.0 psid, divide 29.86 by 2.036 which equals 14.67 psi. Add the cabin differential pressure (in psi) to the field pressure (4.0 psid + 14.67 psi = 18.67 psia) to obtain an absolute pressure of 18.67 psi.

(a) The primary air pressure source is the Auxiliary Power Unit (APU).

(b) You can use the engine bleed air for the pressure source.

(c) You can use an external ground source.

NOTE: The external ground source must supply 2000 cfm (56.6 M^3/minute) of air at 10 psig (69 kPa).

(d) The cabin differential pressure and the rates of pressurization and bleed-down are monitored in the control cabin.

1) They are monitored on the differential pressure indicator.

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(e) Figure 201 shows how to get a correction factor used in connection with some test data.

(f) Figure 202 shows the straight line curves for the permitted airplane leakage rates.

(7) Boeing has determined that all of the following listed equipment may be susceptible to damage anytime the cabin pressure exceeds 20 psia (138 kPa). This list is not meant to be all inclusive since there may be additional equipment sensitive to 20 psia (138 kPa).

(a) All emergency equipment:

1) All lifevests (passenger, crew, infant, etc)
2) Survival packs
3) Halon extinguishers
4) Water extinguishers
5) First aid kits
6) Eyewash kit
7) Megaphone Transmitter with battery
8) Defibrillators.

(b) All pressure sensitive equipment for Oxygen System:

1) Crew Oxygen Cylinders
2) Crew Oxygen Regulator
3) Flight Deck Oxygen Masks
4) Disposable oxygen masks with pouch (leave connected to oxygen bottles)
5) Smoke Hoods (Protective Breathing Equipment)
6) All Portable Oxygen Bottles
7) All Chemical Oxygen Generators (located in Passenger Service Unit (PSU)s throughout main cabin; including lavatories, crew rests, attendant stations, and galleys).

(c) Air Data Module (ADM) Systems:

1) All pitot and static lines.

B. References

Reference	Title
21-00-00-800-802	Remove Conditioned Air from the Airplane (P/B 201)
21-00-00-800-803	Supply Conditioned Air with a Cooling Pack (P/B 201)
35-12-85-000-802	Oxygen Mask/Regulator Removal (P/B 401)
35-12-85-400-802	Oxygen Mask/Regulator Installation (P/B 401)
49-11-00-860-801	APU Starting and Operation (P/B 201)
49-11-00-860-802	APU Usual Shutdown (P/B 201)
71-00-00-800-807-F00	Start the Engine Procedure (Selection) (P/B 201)

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-7626	Cup - Air Flow, Lo/Hi Blow Test Part #: G21007-1 Supplier: 81205

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(Continued)

Reference	Description
STD-836	Stopwatch

D. Prepare for the Cabin Pressure Leakage Test

SUBTASK 05-51-91-780-001

(1) Do the steps that follow to prepare the airplane for the leakage test:

(a) Put the L and R RECIRC FAN switches on the Air Conditioning Panel, P5 to the AUTO position.

NOTE: Equipment cooling fans work harder at cabin pressures more than 15.7 psia. Limit the operation of fans at high cabin pressure to less than 30 minutes.

(b) Remove the oxygen mask regulators from the oxygen system in the crew cabin, do this task: Oxygen Mask/Regulator Removal, TASK 35-12-85-000-802.

NOTE: The removal of the oxygen equipment is not necessary if the absolute pressure is not more than 20 psi (138 kPa) or if the differential pressure is not more than 7 psi (48 kPa).

NOTE: A method to calculate absolute pressure is as follows:

Determine the field atmospheric pressure (in inches of mercury). Divide field atmospheric pressure by 2.036 and add the result to the gauge pressure or differential pressure inside the cabin to give the absolute pressure (PSIA). For example: If the field atmospheric pressure is 29.86 inHG and the cabin differential pressure is 4.0 psid, divide 29.86 by 2.036 which equals 14.67 psi. Add the cabin differential pressure (in psi) to the field pressure (4.0 psid + 14.67 psi = 18.67 psia) to obtain an absolute pressure of 18.67 psi.

(c) Make sure the pitot-static system is fully installed and operational.

LOM 402, 406, 432

(d) Open this circuit breaker and install safety tag:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
E	19	C01462	GREY WATER DRAIN VALVE

LOM ALL

(e) Start the APU and use it as a pressure source, do this task: APU Starting and Operation, TASK 49-11-00-860-801.

(f) As an alternative, you can use one of the methods that follow:

1) You can use the engine bleed air for the pressure source, do this task: TASK 71-00-00-800-807-F00.

2) You can use the ground pneumatic cart as an air source.

NOTE: If you use a ground cart to supply pneumatic power, it must supply 2000 cfm (56.6 M^3/minute) of air at 10 psi (69 kPa).

(g) Operate an air cycle cooling pack, do this task: Supply Conditioned Air with a Cooling Pack, TASK 21-00-00-800-803.

NOTE: You can use the left or the right air cycle cooling pack.

1) Make sure that the pressurization mode selector on the P5 forward overhead panel is in AUTO position.

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2) Operate the pack in AUTO at approximately 70°F (21°C).

3) Make sure that the aft outflow valve position indicator show the valve is fully open.

E. Cabin Pressure Leakage Test

SUBTASK 05-51-91-790-001

(1) Do the cabin pressure leakage test:

(a) Make sure all of the airplane doors are properly closed and sealed.

(b) Put the pressurization mode selector on the P5 forward overhead panel to MAN position to turn off the auto control for the valve.

(c) Record the cabin temperature, external ambient pressure, and external ambient temperature.

(d) Start to close the aft outflow valve when the air condition system has become stable.

> **WARNING** DO NOT INCREASE THE PRESSURE MORE THAN 1000 FEET A MINUTE. WHEN YOU INCREASE THE PRESSURE MORE THAN 1000 FEET A MINUTE, DAMAGE TO THE AIRPLANE STRUCTURE OR INJURY TO PERSONS CAN OCCUR.

(e) Slowly increase the cabin pressure with the manual control toggle, at a rate of approximately 300 feet a minute.

NOTE: The rate of pressure can be more than 300 feet a minute but not more than 1000 feet a minute.

1) Adjust the outflow valve position to allow for a comfortable rate of change in cabin pressure.

NOTE: The increase in pressure can cause the lav or galley smoke detectors to sound an alarm when there is no smoke.

> **WARNING** THE INDICATION ON THE CABIN DIFFERENTIAL INDICATOR MUST NOT BE MORE THAN 4.0 PSI DURING A NORMAL TEST. WHEN YOU INCREASE THE PRESSURE MORE THAN 4.0 PSI, DAMAGE TO THE AIRPLANE STRUCTURE OR INJURY TO PERSONS CAN OCCUR.

(f) Increase the cabin pressure until the cabin differential indicator shows a differential pressure of 4.0 psid (27.6 kPa).

NOTE: Equipment cooling fans work harder at cabin pressures more than 15.7 psia (108.2 kPa). Limit the operation of fans at high cabin pressure to less than 30 minutes.

NOTE: If a fan overheats and stops during high cabin pressure operation, the equipment cooling OFF lights will illuminate. If this occurs, select ALTERNATE to restore the equipment cooling air flow. After a cool-down period, the internal thermostats in the overheat fan will automatically reset. The fan will become operational again.

(g) When you have a differential pressure of 4.0 psid (27.6 kPa), do the steps that follow:

1) Fully close the outflow valve.

a) Make sure that the valve position indicator shows that the valve is in the fully closed position.

2) Turn the air conditioning pack that is in operation to OFF, do this task: Remove Conditioned Air from the Airplane, TASK 21-00-00-800-802.

(h) Shutdown the APU (or other pressurization source):

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1) Turn the APU bleed switch to OFF on the P5-10 panel.

NOTE: The bleed switch on the P5-10 panel can be turned OFF as an alternative to completing the APU usual shutdown task.

2) If it is necessary, do this task: APU Usual Shutdown, TASK 49-11-00-860-802.

(i) In less than five minutes after you turn off the air conditioning packs, make a record of the data.

NOTE: If the aft outflow valve did not stay fully closed during the leakage test, the pressure/time data is not correct.

(j) Make a record of the pressure differential and the time during the cabin bleed down.

1) Start the test at 4.0 psi (27.6 kPa) differential (time zero).

2) Stop the test at 2.5 psi (17.2 kPa) differential.

(k) Make five to ten data sets of each of the items that follow:

1) The time on the stopwatch, STD-836.

2) The cabin differential pressure.

3) The cabin temperature

4) The external ambient pressure.

(l) If you will do the test again, make sure you do a cool down time of not less than 20 minutes.

1) Do the cool down time with the equipment cooling fans operating at zero differential pressure.

NOTE: This will make sure the fans will not overheat.

(m) If it is necessary, do this task: APU Usual Shutdown, TASK 49-11-00-860-802.

NOTE: The APU usual shutdown task must be completed when all the leak checks are completed.

F. Leakage Rate Analysis

SUBTASK 05-51-91-720-001

(1) Do the leakage rate analysis.

(a) Get the correction factor from (Figure 201) to correct the time data for each data point.

NOTE: You want to use the correction factors with the bleed down time data when the ambient pressure does not equal 14.7 psi (101.4 kPa) and/or the cabin temperature does not equal 70°F (21°C).

(b) Make a graph from the points that follow:

1) The differential pressure data on the vertical axis of (Figure 202).

2) The time on the horizontal axis of (Figure 202).

(c) Plot each time and pressure data point onto the chart shown in (Figure 202).

(d) Make a straight line through the two axis points (Figure 202).

1) If the plotted line is in the upper zone in Figure 202, the pressure leakage rate is satisfactory.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

G. Areas of Possible Leakage

SUBTASK 05-51-91-790-002

(1) Do a check of the areas that follow for excessive leakage:

NOTE: Do this while the airplane is pressurized between 3 psid (21 kPa) and 4 psid (28 kPa) and the test shows possible leaks.

NOTE: You can use an air flow blow cup, SPL-7626, or an equivalent substitute, to check for leakage.

NOTE: Listen for air leaks through the fuselage, especially from the pressure bulkheads and structure hidden by fairings.

(a) Make sure that the electronic cooling system automatic flow control valve is closed correctly.

NOTE: The valve should be fully closed at a differential pressure of 1.1 psi (7.6 kPa).

(b) Make sure the bilge drains which are found along the bottom center line of the airplane are correctly closed.

NOTE: The bilge drain valves close at approximately 2 psid (14 kPa).

(c) Make a check of all door and hatch seals for leakage.

(d) Make a check of all flight deck windows for leakage.

(e) Make a check of the aft outflow valve for leakage.

(f) Make a check of the aft outflow valve seal for leakage.

(g) Make a check of the cabin pressure safety relief valves for leakage.

(h) Make a check of the cabin pressure negative relief valve seal for leakage.

(i) Make a check of the water service panel seals for leakage.

(j) Make a check of all air conditioning and APU duct seals at the pressure bulkhead penetrations for leakage.

NOTE: These are found in the A/C bay, aft pressure dome, right wheel well, and forward pack bays.

(k) Make a check of the control cable seals in the pressure bulkhead penetrations for excessive leakage.

(l) Do a check of the areas which are difficult to access because they can also have leaks.

1) Structure hidden by the wing-to-body fairing and the APU bulkhead area should be checked for potential structure and seal leaks.

(m) Make a check of the ball valve drain located in the main landing gear wheel well.

(n) Make a check of the forward and aft nose wheel well access panels for leakage.

1) Check the side and top access panels for leakage.

H. Put the Airplane Back to its Usual Condition

SUBTASK 05-51-91-410-001

(1) Install the components that were removed if they are serviceable, or install replacement parts.

SUBTASK 05-51-91-860-001

(2) If the equipment cooling supply exhaust fans were selected from NORMAL to ALTERNATE, the switches must be returned to the NORMAL position.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-51-91-860-005

(3) Make sure that the L and R RECIRC FAN switches on the Air Conditioning Panel, P5 is in the AUTO position.

SUBTASK 05-51-91-360-001

(4) If you found leaks during the test, repair the leaks.

LOM 402, 406, 432

SUBTASK 05-51-91-860-007

(5) Remove the safety tag and close this circuit breaker:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
E	19	C01462	GREY WATER DRAIN VALVE

LOM ALL

SUBTASK 05-51-91-860-003

(6) Move the pressurization mode selector on the P5 forward overhead panel to AUTO when the cabin differential pressure decreases nearly to 0.

SUBTASK 05-51-91-420-001

(7) If the crew oxygen mask regulator was removed, then install and test the mask demand regulator. Do this task: Oxygen Mask/Regulator Installation, TASK 35-12-85-400-802.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

HOW TO USE CURVE:

EXAMPLE: ASSUME A DIFFERENTIAL PRESSURE OF 3.3 PSIG (22.75 kPa) IS MEASURED AFTER 50 SECONDS THE CABIN TEMPERATURE IS 80°F (26.669°C) AND THE AMBIENT PRESSURE IS 12.50 PSIA (86.18 kPa).

THE CORRECTED TIME, TO BE PLOTTED ON THE FIGURE 202 CURVE, IS EQUAL TO THE MEASURED TIME DIVIDED BY BOTH THE TEMPERATURE AND PRESSURE CORRECTION FACTORS. FROM CURVES BELOW: TEMPERATURE CORRECTION FACTOR IS 0.99 AND PRESSURE CORRECTION FACTOR IS 1.08. THE PRODUCT OF THE TWO FACTORS IS 1.07. THUS, TIME CORRECTED TO AN AMBIENT PRESSURE OF 14.7 PSIA (101.35 kPa) AND CABIN TEMPERATURE OF 70°F (21.111°C) IS EQUAL TO 50 DIVIDED BY 1.07=47 SECONDS.

NOTE: CORRECTION FACTOR TO BE APPLIED TO BLEED DOWN TIME WHEN AMBIENT PRESSURE DOES NOT EQUAL 14.7 PSIA (101.35 kPa) AND/OR CABIN TEMPERATURE DOES NOT EQUAL 70°F (21.111°C).

G23207 S0006557959_V2

Pressure Leakage Test Correction Factor
Figure 201/05-51-91-990-801

ECCN 9E991 BOEING PROPRIETARY - See title page for details

NOTE: 2.5 PSIG (17.23 kPa) IS THE RECOMMENDED MINIMUM TEST POINT.

G23214 S0006557960_V2

Pressure Leakage Rate Check Chart
Figure 202/05-51-91-990-802

ECCN 9E991 BOEING PROPRIETARY - See title page for details

COLD-SOAKED FUEL FROST – MAINTENANCE PRACTICES

1. General

A. This procedure has this task:

(1) Cold-soaked fuel frost maintenance:

NOTE: For non FAA operators, Boeing advises operators to contact their respective regulatory authority to obtain approval to use the Cold-Soaked Fuel Frost (CSFF) procedure.

(a) Conditional inspection for cold-soaked fuel frost on the upper wing surfaces when the fuel temperature as given on the flight deck is below 32.0°F (0.0°C).

1) If the fuel temperature indicator or probe does not work, begin the inspection for cold-soaked fuel frost.

(b) Removal of ice or frost from the upper wing surfaces if certain conditions are not met.

NOTE: Light coatings of frost due to cold-soaked fuel are allowed on the lower wing surfaces per Cold Weather Maintenance Procedure, TASK 12-33-01-600-802. Cold-soaked fuel frost is also allowed on the upper surface if it is identified by meeting the conditions given in this procedure.

(c) This task can be used as preflight condition inspection. Base on the weather condition and waiting line, the task may need to repeat several times.

TASK 05-51-92-660-801

2. Cold-Soaked Fuel Frost Maintenance

(Figure 201, Figure 202)

A. References

Reference	Title
12-33-01-600-802	Cold Weather Maintenance Procedure (P/B 301)
12-33-02-600-806	Return the Airplane to Service After Cold Weather Unattended Parking at Temperatures Below 32°F (0°C) (P/B 301)
12-33-02-600-810	Return the Airplane to Service After Cold Weather Attended Parking (P/B 301)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-2480	Platform - Mobile Elevating Work Platform SJ III Series Part #: SJIII 4726 Supplier: 3AF08 Part #: SJIII 4732 Supplier: 3AF08 Opt Part #: SJIII 4620 Supplier: 3AF08 Opt Part #: SJIII 4626 Supplier: 3AF08 Opt Part #: SJIII 4632 Supplier: 3AF08

C. Location Zones

Zone	Area
500	Left Wing
600	Right Wing

ECCN 9E991 BOEING PROPRIETARY - See title page for details

D. Inspection for Cold-Soaked Fuel Frost

SUBTASK 05-51-92-210-001

(1) If the temperature of the fuel in the main fuel tanks is greater than 32°F (0°C), no additional inspection for cold-soaked fuel frost is necessary.

(a) If the fuel temperature indicator or probe does not work, begin the inspection for cold-soaked fuel frost.

SUBTASK 05-51-92-210-002

(2) If the temperature of the fuel in the main fuel tanks is less than or equal to 32°F (0°C), do these steps:

(a) Inspect the wing lower surfaces for ice or frost. If ice or frost is present but is only inboard of the fuel measuring stick No. 4, no additional inspection of the upper surfaces is required (see warning below).

(b) If ice or frost is present on the wing lower surface outboard of fuel measuring stick No. 4, use a work platform, COM-2480, or equivalent hoist to inspect the upper wing surfaces for the presence of ice or frost.

NOTE: The distance that the frost extends outboard of fuel measuring stick No. 4 can be used as an indication of the extent of the frost on the upper wing surface.

(c) If no ice or frost is present on the wing upper surfaces, no additional inspection is required.

E. Procedure

SUBTASK 05-51-92-660-001

(1) When ice or frost is present on the top wing surface, do these steps:

(a) Determine if these conditions are met. If all of these conditions are met, the frost can be identified as permissible cold-soaked fuel frost and no further action is necessary. The airplane may be released for flight.

1) The outside air temperature is at or above 39.0°F (4°C).

2) The temperature of the fuel in the main fuel tanks is at or above 3°F (-16°C).

3) There is no precipitation or visible moisture (rain, snow, drizzle, fog with less than 1 mile visibility, etc.).

4) The frost is on or between the main black lines marking the wing fuel tanks.

5) There is no ice or frost anywhere on the upper surface of the wing, including the leading edges and the control surfaces, beyond the outer edge of the black lines defining the cold soaked fuel frost area.

(b) If any of the above conditions is not met, do this step:

1) Apply deicing/anti-icing fluids to the wings with the appropriate deicing/anti-icing equipment to remove all of the ice or frost present (Cold Weather Maintenance Procedure, TASK 12-33-01-600-802, Return the Airplane to Service After Cold Weather Attended Parking, TASK 12-33-02-600-810, Return the Airplane to Service After Cold Weather Unattended Parking at Temperatures Below 32°F (0°C), TASK 12-33-02-600-806).

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-51-92-660-002

WARNING REMOVE ALL ICE FROM ALL LEADING EDGE DEVICES, ALL CONTROL SURFACES, TAB SURFACES, AND BALANCE PANEL CAVITIES BEFORE TAKEOFF. ICE CAN CAUSE AN IN-FLIGHT SAFETY PROBLEM.

(2) Make sure that all ice and frost is removed from leading edge devices, control surfaces, tab surfaces, winglets (if installed), and balance panel cavities prior to takeoff.

SUBTASK 05-51-92-660-003

(3) If ice or frost re-forms on the wings prior to takeoff, do the step (1) of the above procedure to determine if the frost is acceptable for flight or to remove ice and frost from the wings.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

L13926 S0006557964_V3

Ice/Frost Examination Areas
Figure 201/05-51-92-990-801

ECCN 9E991 BOEING PROPRIETARY - See title page for details

LEFT WING SHOWN
(RIGHT WING OPPOSITE)
(TOP VIEW)

A

399536 S0000135661_V3

Allowable Cold-Soaked Fuel Frost - Upper Wing Surface
Figure 202/05-51-92-990-803 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

LEFT WING SHOWN
(RIGHT WING OPPOSITE)
(TOP VIEW)

A

2924620 S0000705808_V1

Allowable Cold-Soaked Fuel Frost - Upper Wing Surface
Figure 202/05-51-92-990-803 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

DRY CHEMICAL FIRE EXTINGUISHER USED - MAINTENANCE PRACTICES

1. General

A. This procedure contains one task to clean and inspect the aircraft after a dry chemical fire extinguisher has been used. This task is necessary any time a dry chemical fire extinguisher is discharged.

(1) If a chemical fire extinguisher was used to a extinguish a landing gear, inspect the landing gear, do this task: High Energy Stop, TASK 05-51-07-210-801.

B. Dry chemical extinguishers can cause extensive corrosion damage to airplane structure, electrical systems, carbon brakes, and electronic equipment. Dry chemical extinguisher residue is difficult to clean up. Dry chemical fire extinguishers should only be used for airplane fire-fighting if there are no other extinguishers available and there is imminent danger to property or personnel.

C. Disassembly of aluminum airplane structure may be necessary for cleanup and corrosion prevention after use of a dry chemical fire extinguisher. Electrical and electronic equipment may need to be scrapped after being contaminated with dry chemical extinguishing agent.

TASK 05-51-95-100-801

2. Cleaning After Dry Chemical Fire Extinguisher Used

A. General

(1) This task includes the steps to clean and inspect the airplane after a dry chemical fire extinguisher has been used.

(2) If a dry chemical fire extinguisher was used to extinguish a landing gear brake fire, refer to AMM 05-51 High Energy Stop to inspect the landing gear. All carbon brake assemblies that have visible dry chemical fire extinguisher residue need to be removed from the airplane, and dispositioned per the applicable instructions in the carbon brake supplier's Component Maintenance Manual (CMM).

(3) If a dry chemical fire extinguisher was used to extinguish an engine fire, refer to AMM 71-00 Power Plant for the cleaning of external areas of the engine (engine cowls open or closed). All engine parts that cannot be cleaned when attached will need to be removed and cleaned per the applicable instructions in the engine supplier's Component Maintenance Manual (CMM).

(4) If necessary, review the manufacturer's Material Safety Data Sheets (MSDS) for the particular fire extinguishing agents that were used for additional recommendations.

(5) If a dry chemical fire extinguisher was used to extinguish the engines fire, refer to AMM 71-00 or AMM 72-00 Inspection After an Engine Fire.

(6) If a dry chemical fire extinguisher was used to extinguish the APU fire, refer to AMM 49-11-00-6 Inspection After an APU Fire.

B. References

Reference	Title
SWPM 20-60-01	Cleaning of Electrical Connectors

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Reference	Description
COM-2618	Cleaner - Vacuum Part #: 106542 Supplier: 3LFF2 Part #: AVIATION VAC 106542 Supplier: 03FQ4 Part #: AVQ250-2 Supplier: U1761 Part #: AVQ350-2 Supplier: 03FQ4 Part #: RSAV130 Supplier: $1291 Part #: RSV150 Supplier: U1761 Opt Part #: 02146A Supplier: 0A5X2 Opt Part #: 44SPEC Supplier: 0Y8U0 Opt Part #: 655406-7M Supplier: 0Y8U0 Opt Part #: BP80 Supplier: $0373 Opt Part #: C-39485-41 Supplier: 16893 Opt Part #: C-39485-42 Supplier: 16893 Opt Part #: MORCLEAN 300/15D Supplier: $1316 Opt Part #: R80 Supplier: $0373 Opt Part #: RSV130 Supplier: $1291 Opt Part #: WD80 Supplier: $0373
STD-739	Respirator - Half-Mask, Air Purifying (with filters/cartridges)
STD-6087	Brush - Acid Resistant
STD-6935	Air Source - Regulated, Dry Filtered, Compressed 30 PSIG Maximum Pressure

D. Consumable Materials

Reference	Description	Specification
B00095	Compound - Sodium Bicarbonate	ASTM D928
G50138	Cloth - Soft Cotton	
G50305	Sheeting - Plastic, Polyethylene	
G50412	Paper - Litmus (Used to find the acidity or alkalinity of a liquid solution)	
G50933	Cloth - Cleaning, Low-Lint Cloth (General Use)	A-A-59323 Type II (Supersedes MIL-C-85043)

E. Prepare to Clean

CAUTION

DO NOT USE WATER ON DRY CHEMICAL FIRE EXTINGUISHING AGENTS. THESE AGENTS CAN MIX WITH WATER AND MAKE A FLUID COMPOUND THAT CAUSES CORROSION. THIS CAN CAUSE DAMAGE TO THE EQUIPMENT.

SUBTASK 05-51-95-110-001

(1) Use a half-mask respirator, STD-739, or equivalent respiratory protection.

SUBTASK 05-51-95-110-002

(2) Install plastic sheeting, G50305, as necessary to prevent the airborne dry chemical agent from further contaminating the surrounding area.

SUBTASK 05-51-95-010-001

(3) Get access to all areas where smoke and the fire extinguishing agent could have possibly contaminated to facilitate the cleaning process.

(a) Joints that cannot be cleaned in the assembled state must be disassembled for cleaning.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-51-95-110-009

(4) Prepare the neutralizing solution according to the type of fire extinguishing agent.

(a) Use a 2% vinegar and 98% hot water solution to clean a potassium bicarbonate (purple in color) or sodium bicarbonate (light blue in color) dry chemical extinguishing agent.

(b) Use a solution with compound, B00095 (baking soda) and hot water to clean monoammonium phosphate (yellow in color) dry chemical extinguishing agent.

NOTE: The extinguishing agents are potentially acidic when exposed to moisture.

F. Procedure

SUBTASK 05-51-95-140-001

(1) Do these steps to remove as much of the dry, loose agent as possible:

(a) Use a vacuum cleaner, COM-2618 with a HEPA filter to remove the unmelted, dry chemical from all accessible surfaces, including structure, tubing, wiring, and systems.

(b) Wipe down all surfaces with a soft cotton cloth, G50138 and continue to use the vacuum to clean the surfaces after they are wiped down.

(c) Any high strength steel parts exposed to the dry chemical agent must be cleaned first.

(d) It is acceptable to use a regulated air source, STD-6935 at 30 psi (207 kPa) or less to loosen the material.

SUBTASK 05-51-95-110-004

(2) Apply the solution and clean with an acid resistant brush, STD-6087, low-lint cleaning cloth, G50933 or sprayer nozzle.

(a) Make sure that the solution penetrates the unsealed faying surface joints.

(b) If there are unsealed faying surfaces, it is recommended to disassemble them and clean the individual components.

SUBTASK 05-51-95-110-005

(3) Apply the solution until the bubbles stop.

NOTE: When the bubbles stop, the acid has become neutral.

SUBTASK 05-51-95-110-006

(4) Allow the solution to remain for an additional 5 minutes after the bubbles stop.

SUBTASK 05-51-95-170-001

(5) Do these steps to remove the neutralized solution:

(a) Rinse the area with fresh water.

(b) Wipe up residual material with a low-lint cleaning cloth, G50933, or equivalent.

(c) Air dry the area immediately using a regulated air source, STD-6935.

SUBTASK 05-51-95-110-007

(6) Repeat the wash and rinse steps as many times as is necessary to pass litmus paper pH test below.

SUBTASK 05-51-95-110-008

(7) Do a test of the area with litmus paper, G50412. The pH factor must be between about 7 and 9.

(a) If the pH is less than 7 (acidic), repeat the cleaning procedure.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-51-95-420-001

(8) Replace the parts in areas where the fire has caused the dry chemical extinguishing agent to melt.

NOTE: Melted dry chemical extinguishing agent will deeply penetrate joints and cause corrosion issues. It can also compromise the heat treatment of parts.

(a) If you suspect that the structure has heat damage, review SRM 51-20–03 for the appropriate actions.

SUBTASK 05-51-95-020-001

(9) If there is evidence of dry chemical agent on electrical equipment, remove the equipment to clean, inspect, and test it.

(a) After you reinstall the equipment, perform the appropriate functional test.

SUBTASK 05-51-95-020-002

(10) Remove any equipment that has fire damage.

SUBTASK 05-51-95-140-002

(11) If control cables are affected, clean using only a dry cloth.

(a) Lubricate the cable as necessary.

SUBTASK 05-51-95-140-003

(12) Do these steps to clean affected electrical wire bundles and external connector surfaces:

WARNING	OBEY THE MANUFACTURER'S PROCEDURES WHEN YOU DO EZAP MAINTENANCE, OR MAINTENANCE THAT HAS AN EFFECT ON EWIS. IF YOU DO NOT OBEY THE PROCEDURES, IT CAN INCREASE THE RISK OF AN IGNITION SOURCE FOR FIRES. INJURIES TO PERSONS, AND DAMAGE TO EQUIPMENT CAN OCCUR.

(a) Follow the instructions in AMM 20-60 for EWIS Protection and Cleaning.

(b) Clean external surfaces prior to disconnecting connectors.

(c) Place protective covers over the ends of connectors immediately after disconnecting them.

(d) If necessary, remove bundle ties to vacuum up agent that may have entered in between the wiring.

SUBTASK 05-51-95-140-004

(13) Do these steps to clean open connectors:

(a) Use a vacuum to remove dry chemical agent from the area.

(b) Wipe down all surfaces.

(c) Follow the steps in SWPM 20-60-01.

SUBTASK 05-51-95-140-005

(14) Do these steps to clean aluminum hydraulic tubing:

(a) Remove the tubing clamps.

(b) Use the vacuuming and wiping method to remove the extinguishing agent from the tubing.

(c) Use the cleaning steps above to neutralize any remaining surface residue and perform the pH check.

(d) Remove the tubing clamp block components and apply same cleaning process as above.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(e) Replace any contaminated cushioned-type loop or saddle clamps with new clamps.

G. Put the Airplane Back to Its Usual Condition

SUBTASK 05-51-95-210-001

(1) It is recommended to review AMM 05-51 Volcanic Ash Conditional Inspection as a guide for inspection, if any other areas of the datum airplane such as landing gear or air conditioning equipment were exposed.

SUBTASK 05-51-95-620-001

(2) Reapply any corrosion prevention material that was removed during the cleaning process.

SUBTASK 05-51-95-210-002

(3) It is recommended to perform a one-time general visual inspection at 7 to 10 days for signs of corrosion or evidence of dry chemical extinguishing agent.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

RUNWAY/TAXIWAY EXCURSIONS - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. **General**

A. Runway/Taxiway Excursions

(1) A runway/taxiway excursion occurs if the airplane takes off or makes a landing with one or more of the conditions that follow:

(a) The airplane skids off or overruns the specified runway/taxiway onto an unprepared surface.

(b) The airplane lands short of the specified runway.

(c) The airplane rejects take off and departs from the specified runway.

(d) The airplane uses a runway/taxiway not specified for taking off or landing.

(e) The airplane loses directional control and skids on the runway such that damage is suspected.

NOTE: If the only inspection trigger was for two or more flat tires, then this does not count as “damage” and a Phase II inspection is not necessary. Also, if the Phase I inspection does not show more than flat tires and damaged wheels or brakes, then the aircraft can be returned to service after maintenance. In this condition it is not necessary to complete a Phase II inspection.

B. The Inspections

(1) This inspection is in two phases (Phase I and Phase II)

(a) The Phase I inspection is applicable when a runway/taxiway excursion occurs.

(b) The Phase II inspection must be done if Phase I shows that damage has occurred.

C. Inspections, Repairs and Replacements

(1) When the inspection procedure tells you to "examine" a component, look for the conditions that follow:

(a) Cracks

(b) Structures that are pulled out of their position

(c) Loose paint (paint flakes)

(d) Twisted parts (distortion)

(e) Bent parts

(f) Wrinkles or buckles in the airplane structure

(g) Fasteners that are loose or pulled out

(h) Fastener holes that became larger or longer.

(i) Delamination

(j) Discoloration (heat damage)

(k) Parts that do not align correctly

(l) Signs of impact damage

(2) Replace or repair the components that have one or more of the conditions given above.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-51-96-210-801

2. Phase I Inspection

A. General

(1) This task includes the procedure necessary to complete the Phase I inspection after a runway/taxiway excursion.

B. References

Reference	Title
05-51-01 P/B 201	HARD LANDING OR OVERWEIGHT/HARD LANDING OR HIGH DRAG/SIDE LOAD CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

C. Location Zones

Zone	Area
100	Lower Half of Fuselage
500	Left Wing
600	Right Wing
700	Landing Gear and Landing Gear Doors

D. Runway/Taxiway Excursions Phase I Inspection

SUBTASK 05-51-96-210-001

(1) Do this task: HARD LANDING OR OVERWEIGHT/HARD LANDING OR HIGH DRAG/SIDE LOAD CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION), PAGEBLOCK 05-51-01/201.

END OF TASK

TASK 05-51-96-210-802

3. Phase II Inspection

A. General

(1) This task includes the procedure necessary to complete the Phase II inspection after a runway/taxiway excursion.

B. References

Reference	Title
05-51-01-210-802	Phase II Inspection (P/B 201)

C. Location Zones

Zone	Area
100	Lower Half of Fuselage
200	Upper Half of Fuselage
500	Left Wing
600	Right Wing
700	Landing Gear and Landing Gear Doors

D. Runway/Taxiway Excursions Phase II Inspection

SUBTASK 05-51-96-210-002

(1) Do this task: Phase II Inspection, TASK 05-51-01-210-802.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

External Doors Bonding Jumper

1. General

A. This procedure provides guidance information for an aircraft with missing or degraded bonding jumpers.

TASK 05-51-97-200-801

2. Bonding Jumper - Inspection/Check

A. General

(1) The bonding jumpers identified in this procedure are installed to reduce P-Static interference only. They are not intended to provide any form of lightning protection. For lightning protection straps see HIRF/LIGHTNING - FLIGHT CONTROLS BOND STRAPS - INSPECTION/CHECK, PAGEBLOCK 05-55-08/601.

B. References

Reference	Title
05-55-08 P/B 601	HIRF/LIGHTNING - FLIGHT CONTROLS BOND STRAPS - INSPECTION/CHECK
SWPM 20-20-10	Replacement of Ground Studs and Bonding Jumper Installation

C. Tools/Equipment

Reference	Description
STD-1231	Multimeter - Standard

D. Location Zones

Zone	Area
110	Subzone - Body Station 130 to Station 396
114	Area Above and Outboard of Nose Landing Gear Wheel Well - Right
140	Subzone - Body Station 727.00 to Body Station 1016.00
711	Nose Landing Gear Door - Left
712	Nose Landing Gear Door - Right
820	Doors - Lower Half of Fuselage - Right Side

E. Access Panels

Number	Name/Location
114AR	External Power Receptacle Door
145AL	Waste Service Door
146AR	Water Service Door
621GB	Refuel Access Panel - Slat Station 143.27
711AL	Forward Nose Wheel Door
712AR	Forward Nose Wheel Door

F. Degraded Bond Jumpers Damage Limits

SUBTASK 05-51-97-210-001

(1) The following instructions pertain to these exterior doors.

External Doors

Number	Name/Location
114AR	External Power Receptacle Door
145AL	Waste Service Door

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

Number	Name/Location
146AR	Water Service Door
621GB	Refuel Access Panel - Slat Station 143.27
711AL	Forward Nose Wheel Door
712AR	Forward Nose Wheel Door

SUBTASK 05-51-97-210-002

(2) Do this check when the P-Static bonding jumpers are found to be broken, missing, or damaged.

(a) Inspect the door for multiple P-Static bonding jumpers.

1) When one or more bonding jumpers are found to be in good condition, it is acceptable to defer the repair of the broken, missing, or damaged bonding jumpers to the next maintenance interval.

(b) When there are no bonding jumpers in good condition, measure the resistance of the doors in the closed position using a multimeter, STD-1231.

NOTE: The Nose Landing Gear (NLG) doors measurements will be made in the open position (measure resistance from moveable hinge to primary structure).

1) If the door to structure resistance is less than 1 Mega Ohm, then it is acceptable to defer the repair or replacement of the bonding jumpers to the next maintenance interval.

2) If the door to structure resistance is more than 1 Mega Ohm, repair or replace the broken, missing, or damaged bonding jumpers (Refer to SWPM 20-20-10 for repair).

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

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P-Static Bonding Jumper Inspection
Figure 201/05-51-97-990-801 (Sheet 1 of 5)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

3011442 S0000785321_V1

P-Static Bonding Jumper Inspection
Figure 201/05-51-97-990-801 (Sheet 2 of 5)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

3011445 S0000785322_V1

P-Static Bonding Jumper Inspection
Figure 201/05-51-97-990-801 (Sheet 3 of 5)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

3011453 S0000785323_V1

P-Static Bonding Jumper Inspection
Figure 201/05-51-97-990-801 (Sheet 4 of 5)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

3011455 S0000785324_V1

P-Static Bonding Jumper Inspection
Figure 201/05-51-97-990-801 (Sheet 5 of 5)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

NITROGEN GENERATION SYSTEM (NGS) OXYGEN ENRICHED AIR (OEA) EXHAUST PORT FUEL LEAK CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. General

A. This procedure has this task:

(1) A fuel leak conditional inspection of the nitrogen generation system.

TASK 05-51-98-210-801

2. Nitrogen Generation System (NGS) Fuel Leak Conditional Inspection

(Figure 201, Figure 202, and Figure 203)

A. General

(1) This task includes the steps to inspect the airplane after fuel is found leaking from the Nitrogen Generation System (NGS) Air Separation Module (ASM) Oxygen Enriched Air (OEA) exhaust port.

B. References

Reference	Title
28-11-31-400-801	Center Tank Access Door - Installation (P/B 401)
47-00-00-790-801	Leak Check of the Nitrogen Generation System (P/B 601)
47-00-00-800-801	Ground Operation of the Nitrogen Generation System (P/B 201)
47-11-01-000-801	Air Separation Module (ASM) - Removal (P/B 401)
47-11-01-420-801	Air Separation Module (ASM) - Installation (P/B 401)
47-11-02-000-801	High Flow Valve Removal (P/B 401)
47-11-02-420-801	High Flow Valve Installation (P/B 401)
47-11-04-000-801	Overtemperature Shutoff Valve Removal (P/B 401)
47-11-04-400-801	Overtemperature Shutoff Valve Installation (P/B 401)
47-21-04-000-801	Primary Backflow Prevention Check Valve Removal (P/B 401)
47-21-04-000-803	Secondary Backflow Prevention Check Valve Removal (P/B 401)
47-21-04-400-801	Primary Backflow Prevention Check Valve Installation (P/B 401)
47-21-04-400-803	Secondary Backflow Prevention Check Valve Installation (P/B 401)
47-32-01-000-801	NGS Shutoff Valve Removal (P/B 401)
47-32-01-400-801	NGS Shutoff Valve Installation (P/B 401)
47-32-02-000-801	Ozone Converter - Removal (P/B 401)
47-32-02-400-801	Ozone Converter - Installation (P/B 401)
47-32-03-000-801	Heat Exchanger Removal (P/B 401)
47-32-03-400-801	Heat Exchanger Installation (P/B 401)
47-32-04-000-801	NGS Filter Assembly - Removal (P/B 401)
47-32-04-000-802	NGS Filter Element - Removal (P/B 401)
47-32-04-400-801	NGS Filter Assembly - Installation (P/B 401)
47-32-04-400-802	NGS Filter Element - Installation (P/B 401)
47-42-02-020-801	High Flow Valve Differential Pressure Sensor Removal (P/B 401)
47-42-02-400-801	High Flow Valve Differential Pressure Sensor Installation (P/B 401)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

Reference	Title
47-42-03-020-801	NGS Oxygen Sensor - Removal (P/B 401)
47-42-03-420-801	NGS Oxygen Sensor - Installation (P/B 401)
47-43-01-000-801	Filter Differential Pressure Switch Removal (P/B 401)
47-43-01-400-801	Filter Differential Pressure Switch Installation (P/B 401)
47-43-02-000-801	Thermal Switch Removal (P/B 401)
47-43-02-400-801	Thermal Switch Installation (P/B 401)
47-43-03-000-801	Temperature Sensor Removal (P/B 401)
47-43-03-400-801	Temperature Sensor Installation (P/B 401)
47-43-04-000-801	NGS Pressure Sensor Removal (P/B 401)
47-43-04-400-801	NGS Pressure Sensor Installation (P/B 401)
SOPM 20-30-03	General Cleaning Procedures

C. Location Zones

Zone	Area
131	Center Section Wing Box, Body Station 540.00 to Body Station 663.75 - Left
133	Main Landing Gear Wheel Well, Body Station 663.75 to Body Station 727.00 - Left
212	Flight Compartment - Right

D. Access Panels

Number	Name/Location
192BL	ECS Ram Air Inlet Mixing Duct Panel - Forward
192CL	ECS Access Door
192CR	ECS Access Door
531AB	Center Tank Access Door - Wing Station 168

E. Nitrogen Generation System (NGS) Fuel Leak Conditional Inspection

SUBTASK 05-51-98-860-002

(1) Open these circuit breakers and install safety tags:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
LOM 406, 407, 412, 415; LOM 402, 404, 411, 416, 420 POST SB 737-47-1003			
D	17	C01657	NITROGEN GEN CONT
LOM 422-434, 437-447, 450-999			
D	17	C01657	NITROGEN GENERATION CONTROL
LOM 406, 407, 412, 415, 422-434, 437-447, 450-999; LOM 402, 404, 411, 416, 420 POST SB 737-47-1003			
E	15	C01680	NGS ALT PWR

SUBTASK 05-51-98-210-001

(2) If there is fuel leakage at the NGS ASM OEA exhaust port, do these steps:

NOTE: It is not necessary to do the installation/operational test after each component installation, as this will be done at the end of this task.

(a) Examine all NGS ducting and tubing downstream of the for fuel contamination (smell or visual).

1) Clean and dry all contaminated ducting and tubing downstream of the ASM [1] (with insulation blankets removed): SOPM 20-30-03, Immersion Cleaning.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(b) Remove and install a new backflow prevention primary check valve [11] (TASK 47-21-04-000-801 and TASK 47-21-04-400-801).

(c) Remove and install a new backflow prevention secondary check valve [10] (TASK 47-21-04-000-803 and TASK 47-21-04-400-803).

(d) Examine these Line Replaceable Unit (LRU)s for fuel contamination (smell or visual).

1) If there is contamination, do these steps:

a) Remove and install a new high flow valve differential pressure sensor [2] (TASK 47-42-02-020-801 and TASK 47-42-02-400-801).

b) Remove and install a new NGS oxygen sensor [3] (TASK 47-42-03-020-801 and TASK 47-42-03-420-801).

NOTE: It is not necessary to do drain cap fuel leak check, when you install the new NGS oxygen sensor.

(e) Remove and install a new ASM [1] (TASK 47-11-01-000-801 and TASK 47-11-01-420-801).

(f) Remove and install a new high flow valve (TASK 47-11-02-000-801 and TASK 47-11-02-420-801).

SUBTASK 05-51-98-210-002

(3) If ducting/tubing/LRUs upstream of the ASM [1] are contaminated, do these steps:

(a) Clean and dry all contaminated ducting and tubing between the heat exchanger [9] and ASM [1] (with insulation blankets removed): SOPM 20-30-03, Immersion Cleaning.

(b) Examine these LRUs for fuel contamination (smell or visual).

1) If there is contamination, do these steps:

NOTE: It is not necessary to do the installation/operational test after each component installation, as this will be done at the end of this task.

a) Remove and install a new overtemperature shutoff valve [4] (TASK 47-11-04-000-801 and TASK 47-11-04-400-801).

b) Remove and install a new thermal switch [5] (TASK 47-43-02-000-801 and TASK 47-43-02-400-801).

c) Remove and install a new temperature sensor [6] (TASK 47-43-03-000-801 and TASK 47-43-03-400-801).

d) Remove and install a new filter differenial pressure switch [7] (TASK 47-43-01-000-801 and TASK 47-43-01-400-801).

e) Do the following steps for the NGS filter assembly [8]:

<1> Do these tasks: NGS Filter Assembly - Removal, TASK 47-32-04-000-801 and NGS Filter Element - Removal, TASK 47-32-04-000-802.

<2> Clean and dry the filter housing per SOPM 20-30-03, Immersion Cleaning.

<3> Install a new NGS filter element (TASK 47-32-04-400-802).

<4> Do this task: NGS Filter Assembly - Installation, TASK 47-32-04-400-801.

f) Do the following steps for the heat exchanger [9]:

<1> Do this task: Heat Exchanger Removal, TASK 47-32-03-000-801.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

<2> Clean the heat exchanger [9]: SOPM 20-30-03, Immersion Cleaning.

<3> Examine the upstream of the heat exchanger [9] for fuel contamination (smell or visual).

<a> If there is contamination in the upstream of the heat exchanger [9], do this task: Heat Exchanger Installation, TASK 47-32-03-400-801 and continue to the steps below related to contamination upstream of the heat exchanger [9].

<b> If there is no contamination in the upstream of the heat exchanger [9], do this task: Heat Exchanger Installation, TASK 47-32-03-400-801 and continue to the step below that closes the Circuit Breakers.

SUBTASK 05-51-98-210-003

(4) If ducting/tubing/LRUs upstream of the heat exchanger [9] are contaminated, do these steps:

(a) Clean and dry all contaminated ducting and tubing upstream of the heat exchanger [9] (with insulation blankets removed): SOPM 20-30-03, Immersion Cleaning.

(b) Examine these LRUs for fuel contamination (smell or visual).

1) If there is contamination, do these steps:

NOTE: It is not necessary to do the installation/operational test after each component installation, as this will be done at the end of this task.

a) Remove and install a new ozone converter [12] (TASK 47-32-02-000-801 and TASK 47-32-02-400-801).

b) Remove and install a new NGS shutoff valve [13] (TASK 47-32-01-000-801 and TASK 47-32-01-400-801).

c) Remove and install a new NGS pressure sensor [14] (TASK 47-43-04-000-801 and TASK 47-43-04-400-801).

SUBTASK 05-51-98-860-001

(5) Remove the safety tags and close these circuit breakers:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
LOM 406, 407, 412, 415; LOM 402, 404, 411, 416, 420 POST SB 737-47-1003			
D	17	C01657	NITROGEN GEN CONT
LOM 422-434, 437-447, 450-999			
D	17	C01657	NITROGEN GENERATION CONTROL
LOM 406, 407, 412, 415, 422-434, 437-447, 450-999; LOM 402, 404, 411, 416, 420 POST SB 737-47-1003			
E	15	C01680	NGS ALT PWR

SUBTASK 05-51-98-790-001

(6) Do this task: Leak Check of the Nitrogen Generation System, TASK 47-00-00-790-801.

(a) Repair the leaks that you find.

(b) Make sure that there are no BITE messages.

SUBTASK 05-51-98-710-001

(7) Do this task: Ground Operation of the Nitrogen Generation System, TASK 47-00-00-800-801.

(a) Make sure that the electrical test is good.

(b) Make sure that the oxygen sensor operates correctly.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

F. Put the Airplane Back to Its Usual Condition

SUBTASK 05-51-98-410-001

(1) Close these access panels, if applicable:

Number	Name/Location
192BL	ECS Ram Air Inlet Mixing Duct Panel - Forward
192CL	ECS Access Door
192CR	ECS Access Door

SUBTASK 05-51-98-410-002

(2) Close the center tank access door, if applicable (TASK 28-11-31-400-801).

(a) Close this access panel:

Number	Name/Location
531AB	Center Tank Access Door - Wing Station 168

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Nitrogen Generation System Fuel Leak Conditional Inspection
Figure 201/05-51-98-990-801 (Sheet 1 of 10)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

ASM AND OVERTEMPERATURE SHUTOFF VALVE (EXAMPLE)

2984015 S0000761586_V5

Nitrogen Generation System Fuel Leak Conditional Inspection
Figure 201/05-51-98-990-801 (Sheet 2 of 10)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

DIFFERENTIAL PRESSURE SENSOR (EXAMPLE)

C

NOTE:

INSULATION NOT SHOWN FOR CLARITY

2998228 S0000774394_V1

Nitrogen Generation System Fuel Leak Conditional Inspection
Figure 201/05-51-98-990-801 (Sheet 3 of 10)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

OXYGEN SENSOR ASSEMBLY
(EXAMPLE)
(VIEW IN THE INBOARD DIRECTION)

D

2998230 S0000774435_V1

Nitrogen Generation System Fuel Leak Conditional Inspection
Figure 201/05-51-98-990-801 (Sheet 4 of 10)

EFFECTIVITY
LOM 406, 407, 412, 415, 422-434, 437-447, 450-999;
LOM 402, 404, 411, 416, 420 POST SB 737-47-1003

ECCN 9E991 BOEING PROPRIETARY - See title page for details

2998290 S0000774507_V1

Nitrogen Generation System Fuel Leak Conditional Inspection
Figure 201/05-51-98-990-801 (Sheet 5 of 10)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TEMPERATURE SENSOR (EXAMPLE)

G

2998292 S0000774514_V2

Nitrogen Generation System Fuel Leak Conditional Inspection
Figure 201/05-51-98-990-801 (Sheet 6 of 10)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FILTER DIFFERENTIAL PRESSURE SWITCH (EXAMPLE)

H

2998295 S0000774516_V1

Nitrogen Generation System Fuel Leak Conditional Inspection
Figure 201/05-51-98-990-801 (Sheet 7 of 10)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

NGS FILTER ASSEMBLY
(EXAMPLE)

I

2998300 S0000774521_V1

Nitrogen Generation System Fuel Leak Conditional Inspection
Figure 201/05-51-98-990-801 (Sheet 8 of 10)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

HEAT EXCHANGER
(EXAMPLE)
(VIEW IN THE INBOARD DIRECTION)

J

2998302 S0000774522_V2

Nitrogen Generation System Fuel Leak Conditional Inspection
Figure 201/05-51-98-990-801 (Sheet 9 of 10)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SECONDARY CHECK VALVE

K

3001542 S0000777396_V1

Nitrogen Generation System Fuel Leak Conditional Inspection
Figure 201/05-51-98-990-801 (Sheet 10 of 10)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

CHECK VALVE
(EXAMPLE)
A

2998305 S0000774523_V2

Nitrogen Generation System Fuel Leak Conditional Inspection - Primary Check Valve
Figure 202/05-51-98-990-802

ECCN 9E991 BOEING PROPRIETARY - See title page for details

3001549 S0000777406_V1

Nitrogen Generation System Fuel Leak Conditional Inspection - Ozone Converter and Pressure Sensor
Figure 203/05-51-98-990-803 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

3001550 S0000777407_V1

Nitrogen Generation System Fuel Leak Conditional Inspection - Ozone Converter and Pressure Sensor
Figure 203/05-51-98-990-803 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

HIRF/LIGHTNING - FLIGHT CONTROLS BOND STRAPS - INSPECTION/CHECK

1. **General**
   A. This procedure contains scheduled maintenance task data.
   B. This procedure has eight tasks:
      (1) General Visual inspection of the bond strap between the rudder and the vertical stabilizer.
      (2) General Visual inspection of the bond straps between the aileron and the wing.
      (3) General Visual inspection of the bond straps between the leading edge flap and the wing.
      (4) General Visual inspection of the bond straps between the spoiler and the wing.
      (5) General Visual inspection of the bond straps between the elevator and the horizontal stabilizer.
      (6) General Visual inspection of the bond straps between the strut and the wing.
      (7) General Visual inspection of the bond straps between the air conditioning pack compartment door and the airplane structure.
      (8) General Visual inspection of the bond straps between the main landing gear door and the airplane structure.

TASK 05-55-08-200-801

2. **Rudder Bonding Strap HIRF/Lightning Inspection**
   (Figure 601)

   NOTE: This procedure is a scheduled maintenance task.

   A. General
      (1) Do not remove sealant when you do this task.
      (2) Do not remove system Line Replaceable Unit (LRU)s when you do this task.

   B. References

Reference	Title
27-21-00-800-802	Pressure from the Rudder Hydraulic Systems A, B, and Standby - Deactivation (P/B 201)
27-21-00-840-802	Pressure to the Rudder Systems A, B, and Standby - Activation (P/B 201)
SWPM 20-20-00	ELECTRICAL BONDING PROCESSES

   C. Location Zones

Zone	Area
324	Vertical Fin - Rear Spar To Trailing Edge
325	Vertical Fin - Rudder

   D. Access Panels

Number	Name/Location
324AAL	Panel Assy - Trailing Edge, Beam Seal, Vert Fin
324ABL	Panel Assy - Trailing Edge, Beam Seal, Vertical Fin

ECCN 9E991 BOEING PROPRIETARY - See title page for details

E. Prepare for the Procedure

SUBTASK 05-55-08-040-001

> **WARNING** DO THIS SPECIFIED TASK BEFORE ATTEMPTING TO GAIN ACCESS TO THE BOND STRAP: REMOVE PRESSURE FROM THE RUDDER HYDRAULIC SYSTEMS A, B AND STANDBY. IF YOU DO NOT OBEY THE ABOVE SEQUENCE, INJURY TO PERSONS AND DAMAGE TO EQUIPMENT CAN OCCUR.

(1) Do this task: Pressure from the Rudder Hydraulic Systems A, B, and Standby - Deactivation, TASK 27-21-00-800-802.

SUBTASK 05-55-08-010-001

(2) Remove the following panels to gain visual access to the bond strap on the rudder:

(a) Open these access panels:

Number	Name/Location
324AAL	Panel Assy - Trailing Edge, Beam Seal, Vert Fin
324ABL	Panel Assy - Trailing Edge, Beam Seal, Vertical Fin

F. Procedure

SUBTASK 05-55-08-210-001

(1) Do a visual inspection of the bond strap shown in the illustration, (Figure 601).

(a) Inspect the bond strap in accordance with criteria specified in (SWPM 20-20-00).

NOTE: If you notice any damage along the length of the bond strap, make a note and do any repairs which are necessary after you complete this task.

SUBTASK 05-55-08-410-001

(2) Return the airplane to normal.

(a) Close these access panels:

Number	Name/Location
324AAL	Panel Assy - Trailing Edge, Beam Seal, Vert Fin
324ABL	Panel Assy - Trailing Edge, Beam Seal, Vertical Fin

(b) Install the panels removed above.

SUBTASK 05-55-08-440-001

(3) Do this task: Pressure to the Rudder Systems A, B, and Standby - Activation, TASK 27-21-00-840-802.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K31201 S0006557969_V3

High Intensity Radiated Fields (HIRF) Inspection (Rudder Bonding Straps)
Figure 601/05-55-08-990-816

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-08-200-802

3. **Aileron Bonding Straps HIRF/Lightning Inspection**
(Figure 602)

NOTE: This procedure is a scheduled maintenance task.

A. **General**

(1) Do not remove sealant when you do this task.

(2) Do not remove system LRUs when you do this task.

B. **References**

Reference	Title
27-11-00-860-801	Pressure from the Aileron Hydraulic Systems A and B - Deactivation (P/B 201)
27-11-00-860-802	Pressure to the Aileron Hydraulic Systems A and B - Activation (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

C. **Location Zones**

Zone	Area
572	Left Wing - Aileron
672	Right Wing - Aileron

D. **Access Panels**

Number	Name/Location
571BB	Lower Outboard Fixed Trailing Edge Access Panel
571DB	Lower Outboard Fixed Trailing Edge Access Panel
671BB	Lower Outboard Fixed Trailing Edge Access Panel
671DB	Lower Outboard Fixed Trailing Edge Access Panel

E. **Prepare for the Procedure**

SUBTASK 05-55-08-040-002

WARNING DO THESE SPECIFIED TASKS BEFORE ATTEMPTING TO GAIN ACCESS TO THE BOND STRAPS: REMOVE PRESSURE FROM THE AILERON HYDRAULIC SYSTEMS A AND B. IF YOU DO NOT OBEY THE ABOVE SEQUENCE, INJURY TO PERSONS AND DAMAGE TO EQUIPMENT CAN OCCUR.

(1) Do this task: Pressure from the Aileron Hydraulic Systems A and B - Deactivation, TASK 27-11-00-860-801.

SUBTASK 05-55-08-010-002

(2) Remove the following panels to gain visual access to the bond straps on the aileron:

(a) On the left wing, open these access panels:

Number	Name/Location
571BB	Lower Outboard Fixed Trailing Edge Access Panel
571DB	Lower Outboard Fixed Trailing Edge Access Panel

1) Hinge covers

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(b) On the right wing, open these access panels:

Number	Name/Location
671BB	Lower Outboard Fixed Trailing Edge Access Panel
671DB	Lower Outboard Fixed Trailing Edge Access Panel

1) Hinge covers

F. Procedure

SUBTASK 05-55-08-210-002

(1) Do a visual inspection of the bond straps shown in the illustration, (Figure 602).

(a) Inspect the bond strap in accordance with criteria specified in (SWPM Chapter 20).

NOTE: If you notice any damage along the length of the bond strap, make a note and do any repairs which are necessary after you complete this task.

SUBTASK 05-55-08-410-002

(2) Return the airplane to normal.

SUBTASK 05-55-08-410-003

(3) Install the following panels:

(a) On the left wing, install these access panels:

Number	Name/Location
571BB	Lower Outboard Fixed Trailing Edge Access Panel
571DB	Lower Outboard Fixed Trailing Edge Access Panel

1) Hinge covers

(b) On the right wing, install these access panels:

Number	Name/Location
671BB	Lower Outboard Fixed Trailing Edge Access Panel
671DB	Lower Outboard Fixed Trailing Edge Access Panel

1) Hinge covers

SUBTASK 05-55-08-440-002

(4) Do this task: Pressure to the Aileron Hydraulic Systems A and B - Activation, TASK 27-11-00-860-802.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K31204 S0006557971_V3

High Intensity Radiated Fields (HIRF) Inspection (Aileron Bonding Straps)
Figure 602/05-55-08-990-815 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

B

C

K31214 S0006557972_V3

High Intensity Radiated Fields (HIRF) Inspection (Aileron Bonding Straps)
Figure 602/05-55-08-990-815 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-08-200-803

4. Leading Edge Flap Bonding Straps HIRF/Lightning Inspection

(Figure 603)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) Do not remove sealant when you do this task.

(2) Do not remove system LRUs when you do this task.

B. References

Reference	Title
27-81-00-080-801	Leading Edge Flap and Slat Locks Removal (P/B 201)
27-81-00-480-801	Leading Edge Flap and Slat Locks Installation (P/B 201)
29-11-00-860-801	Hydraulic System A or B Pressurization (P/B 201)
29-11-00-860-805	Hydraulic System A or B Power Removal (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1734	Lockout Set - Leading Edge Slats and Krueger Flaps Actuators Part #: C27051-29 Supplier: 81205 Opt Part #: C27051-1 Supplier: 81205

D. Location Zones

Zone	Area
512	Left Wing - Krueger Flap No. 2
513	Left Wing - Krueger Flap No. 1
612	Right Wing - Krueger Flap No. 3
613	Right Wing - Krueger Flap No. 4

E. Prepare for the Procedure

SUBTASK 05-55-08-860-001

> **WARNING**
> MAKE SURE ALL PERSONS AND EQUIPMENT ARE CLEAR OF THE FLIGHT CONTROL SURFACES, THE THRUST REVERSERS, AND THE LANDING GEAR. THESE COMPONENTS CAN MOVE SUDDENLY WHEN YOU SUPPLY HYDRAULIC POWER. THIS CAN CAUSE INJURY TO PERSONS AND DAMAGE TO EQUIPMENT.

(1) To pressurize hydraulic system B, do this task: Hydraulic System A or B Pressurization, TASK 29-11-00-860-801.

SUBTASK 05-55-08-860-002

> **WARNING**
> MAKE SURE PERSONS AND EQUIPMENT ARE CLEAR OF THE LEADING EDGE FLAPS AND SLATS AND THE TRAILING EDGE FLAPS. THE FLAPS AND SLATS WILL EXTEND. THIS CAN CAUSE INJURY TO PERSONS AND DAMAGE TO EQUIPMENT.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(WARNING PRECEDES)

> **CAUTION**
> MAKE SURE THE INBOARD FAN DUCT COWL AND THE INBOARD AND OUTBOARD THRUST REVERSERS ARE CLOSED OR REMOVED BEFORE YOU EXTEND THE LEADING EDGE FLAPS AND SLATS. THERE IS NOT SUFFICIENT CLEARANCE FOR THE FLAPS AND SLATS TO EXTEND IF THE INBOARD FAN DUCT COWL AND THE INBOARD AND OUTBOARD THRUST REVERSERS ARE IN THE OPEN POSITION. THIS CAN CAUSE DAMAGE TO EQUIPMENT.

(2) Move the flap control lever to the 1-unit detent to extend the leading edge flaps.

SUBTASK 05-55-08-860-003

(3) To remove power from hydraulic system B, do this task: Hydraulic System A or B Power Removal, TASK 29-11-00-860-805.

SUBTASK 05-55-08-480-001

> **WARNING**
> CAREFULLY INSTALL THE LEADING EDGE FLAP ACTUATOR LOCK TO PREVENT ACCIDENTAL OPERATION OF THE LEADING EDGE FLAPS. THE LEADING EDGE FLAPS CAN MOVE QUICKLY. THIS CAN CAUSE INJURY TO PERSONS AND DAMAGE TO EQUIPMENT.

(4) Install the lockout set, SPL-1734 on the actuator of the adjacent leading edge flap. To do this, do this task: Leading Edge Flap and Slat Locks Installation, TASK 27-81-00-480-801.

F. Procedure

SUBTASK 05-55-08-210-003

(1) Do a visual inspection of the bond straps shown in the illustration, (Figure 603).

(a) Inspect the bond strap in accordance with criteria specified in (SWPM Chapter 20).

NOTE: If you notice any damage along the length of the bond strap, make a note and do any repairs which are necessary after you complete this task.

SUBTASK 05-55-08-410-004

(2) Return the airplane to normal.

SUBTASK 05-55-08-080-001

> **WARNING**
> CAREFULLY REMOVE THE LEADING EDGE FLAP ACTUATOR LOCK TO PREVENT ACCIDENTAL OPERATION OF THE LEADING EDGE FLAPS. THE LEADING EDGE FLAPS CAN MOVE QUICKLY. THIS CAN CAUSE INJURY TO PERSONS AND DAMAGE TO EQUIPMENT.

(3) Remove the lockout set, SPL-1734 from the actuator of the leading edge flap. To do this, do this task: Leading Edge Flap and Slat Locks Removal, TASK 27-81-00-080-801.

SUBTASK 05-55-08-860-004

> **WARNING**
> MAKE SURE ALL PERSONS AND EQUIPMENT ARE CLEAR OF THE FLIGHT CONTROL SURFACES, THE THRUST REVERSERS, AND THE LANDING GEAR. THESE COMPONENTS CAN MOVE SUDDENLY WHEN YOU SUPPLY HYDRAULIC POWER. THIS CAN CAUSE INJURY TO PERSONS AND DAMAGE TO EQUIPMENT.

(4) To pressurize hydraulic system B, do this task: Hydraulic System A or B Pressurization, TASK 29-11-00-860-801.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-55-08-860-005

WARNING	MAKE SURE PERSONS AND EQUIPMENT ARE CLEAR OF THE LEADING EDGE FLAPS AND SLATS AND THE TRAILING EDGE FLAPS. THE LEADING EDGE FLAPS AND SLATS AND THE TRAILING EDGE FLAPS CAN MOVE QUICKLY. THIS CAN CAUSE INJURY TO PERSONS AND DAMAGE TO EQUIPMENT.

(5) Move the flap control lever to the UP detent to retract the leading edge flaps.

SUBTASK 05-55-08-860-006

(6) To remove power from hydraulic system B, do this task: Hydraulic System A or B Power Removal, TASK 29-11-00-860-805.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K31226 S0006557974_V3

High Intensity Radiated Fields (HIRF) Inspection (Leading Edge Flap Bonding Straps)
Figure 603/05-55-08-990-814 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

LEFT LEADING EDGE FLAP 2
(RIGHT LEADING EDGE FLAP 3 IS OPPOSITE)

B

K31235 S0006557975_V3

High Intensity Radiated Fields (HIRF) Inspection (Leading Edge Flap Bonding Straps)
Figure 603/05-55-08-990-814 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-08-200-804

5. Spoiler Bonding Straps HIRF/Lightning Inspection

(Figure 604)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) Do not remove sealant when you do this task.

(2) Do not remove system Line Replaceable Unit (LRU)s when you do this task.

B. References

Reference	Title
27-51-00-860-803	Extend the Trailing Edge Flaps (P/B 201)
27-51-00-860-804	Retract the Trailing Edge Flaps (P/B 201)
27-61-00-800-801	Spoiler Hydraulic Systems A and B Pressurization (P/B 201)
27-61-00-840-801	Put the Spoiler Hydraulic systems A and B Back to the Condition Before the Pressurization (P/B 201)
27-62-00-800-801	Speed Brake Hydraulic Systems A and B Pressurization (P/B 201)
27-62-00-800-802	Speed Brake Hydraulic Systems A and B - Pressure Removal (P/B 201)
27-62-00-840-802	Put the Speed Brake Systems A and B Back to the Condition Before the Pressure Removal (P/B 201)
SWPM 20-20-00	ELECTRICAL BONDING PROCESSES
SWPM 20-20-10	Replacement of Ground Studs and Bonding Jumper Installation

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1745	Set - Lock, Flight Spoiler Actuator (Contains 8 Lock Assys)(737NG before L/N 2040) Part #: C27047-41 Supplier: 81205 Opt Part #: C27047-19 Supplier: 81205
SPL-5586	Set - Lock, Flight Spoiler Actuator, 737 SFP (Short Field Performance) (Contains 8 Lock Assemblies) Part #: C27047-43 Supplier: 81205
SPL-14240	Set - Lock, Flight Spoiler Actuator (Contains 8 Lock Assemblies)(737NG after L/N 2040) Part #: C27047-41 Supplier: 81205

D. Location Zones

Zone	Area
562	Left Wing - Spoiler No. 5
563	Left Wing - Spoiler No. 4
564	Left Wing - Spoiler No. 3
565	Left Wing - Spoiler No. 2
662	Right Wing - Spoiler No. 8

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

Zone	Area
663	Right Wing - Spoiler No. 9
664	Right Wing - Spoiler No. 10
665	Right Wing - Spoiler No. 11

E. Prepare for the Inspection

SUBTASK 05-55-08-860-008

> **WARNING** MAKE SURE THAT PERSONS AND EQUIPMENT ARE CLEAR OF ALL CONTROL SURFACES BEFORE YOU SUPPLY HYDRAULIC POWER. AILERONS, RUDDERS, ELEVATORS, FLAPS, SLATS, SPOILERS, LANDING GEAR, AND THRUST REVERSERS CAN MOVE QUICKLY WHEN YOU SUPPLY HYDRAULIC POWER. THIS CAN CAUSE INJURY TO PERSONS AND DAMAGE TO EQUIPMENT.

(1) Do this task: Speed Brake Hydraulic Systems A and B Pressurization, TASK 27-62-00-800-801.

SUBTASK 05-55-08-860-009

(2) Do this task: Extend the Trailing Edge Flaps, TASK 27-51-00-860-803.

SUBTASK 05-55-08-860-010

(3) Put the speed brake lever in the UP position to lift the spoilers.

LOM 402, 404, 406, 407, 412, 415, 416, 420, 423, 424, 426, 432, 437-439, 441, 443-447, 455, 456, 458-463

SUBTASK 05-55-08-480-002

(4) Install the set, SPL-1745, or set, SPL-14240, on the actuator for the applicable flight spoiler.

LOM 411, 422, 425, 427-431, 433, 434, 440, 442, 450-454, 457, 464-999

SUBTASK 05-55-08-480-005

(5) Install the lock set, SPL-5586, on the actuator for the applicable flight spoiler.

LOM ALL

SUBTASK 05-55-08-860-011

(6) Do this task: Speed Brake Hydraulic Systems A and B - Pressure Removal, TASK 27-62-00-800-802.

F. Spoiler Bonding Straps HIRF/Lightning Inspection

SUBTASK 05-55-08-210-004

(1) Do a visual inspection of the bond straps.

(a) Inspect the bond strap (SWPM 20-20-00, SWPM 20-20-10).

NOTE: If you notice any damage along the length of the bond strap, make a note and do any repairs which are necessary after you complete this task.

G. Put the Airplane Back to Its Usual Condition

LOM 402, 404, 406, 407, 412, 415, 416, 420, 423, 424, 426, 432, 437-439, 441, 443-447, 455, 456, 458-463

SUBTASK 05-55-08-080-003

(1) Remove the set, SPL-1745, or set, SPL-14240.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

LOM 411, 422, 425, 427-431, 433, 434, 440, 442, 450-454, 457, 464-999

SUBTASK 05-55-08-080-004

(2) Remove the lock set, SPL-5586.

LOM ALL

SUBTASK 05-55-08-860-019

(3) Do this task: Put the Speed Brake Systems A and B Back to the Condition Before the Pressure Removal, TASK 27-62-00-840-802.

SUBTASK 05-55-08-860-020

WARNING	MAKE SURE THAT PERSONS AND EQUIPMENT ARE CLEAR OF ALL CONTROL SURFACES BEFORE YOU SUPPLY HYDRAULIC POWER. AILERONS, RUDDERS, ELEVATORS, FLAPS, SLATS, SPOILERS, LANDING GEAR, AND THRUST REVERSERS CAN MOVE QUICKLY WHEN YOU SUPPLY HYDRAULIC POWER. THIS CAN CAUSE INJURY TO PERSONS AND DAMAGE TO EQUIPMENT.

(4) Do this task: Spoiler Hydraulic Systems A and B Pressurization, TASK 27-61-00-800-801.

SUBTASK 05-55-08-860-021

(5) Move the speed brake lever to the DOWN position to lower the spoilers.

SUBTASK 05-55-08-860-022

(6) Do this task: Retract the Trailing Edge Flaps, TASK 27-51-00-860-804.

SUBTASK 05-55-08-860-023

(7) Do this task: Put the Spoiler Hydraulic systems A and B Back to the Condition Before the Pressurization, TASK 27-61-00-840-801.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

High Intensity Radiated Fields (HIRF) Inspection (Spoiler Bonding Straps)
Figure 604/05-55-08-990-813 (Sheet 1 of 5)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SPOILER NO. 2

B

K31244 S0006557978_V3

High Intensity Radiated Fields (HIRF) Inspection (Spoiler Bonding Straps)
Figure 604/05-55-08-990-813 (Sheet 2 of 5)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K31247 S0006557979_V3

High Intensity Radiated Fields (HIRF) Inspection (Spoiler Bonding Straps)
Figure 604/05-55-08-990-813 (Sheet 3 of 5)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SPOILER NO. 3
(SPOILER NO. 4 AND 5 ARE EQUIVALENT)

E

K31251 S0006557980_V3

High Intensity Radiated Fields (HIRF) Inspection (Spoiler Bonding Straps)
Figure 604/05-55-08-990-813 (Sheet 4 of 5)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

High Intensity Radiated Fields (HIRF) Inspection (Spoiler Bonding Straps)
Figure 604/05-55-08-990-813 (Sheet 5 of 5)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-08-200-805

6. Elevator Bonding Straps HIRF/Lightning Inspection

(Figure 605)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) Do not remove sealant when you do this task.

(2) Do not remove system LRUs when you do this task.

B. References

Reference	Title
27-31-00-800-802	Remove Pressure from the Elevator Hydraulic Systems A and B (P/B 201)
27-31-00-840-802	Put the Elevator Systems A and B Back to the Condition Before the Pressure Removal (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

C. Location Zones

Zone	Area
334	Left Horizontal Stabilizer - Elevator
344	Right Horizontal Stabilizer - Elevator

D. Access Panels

Number	Name/Location
334GB	Horizontal Stabilizer, Elevator Hinge Cover
334MB	Horizontal Stabilizer, Elevator Hinge Cover
344GB	Horizontal Stabilizer, Hinge Cover, Elevator Station 24.09
344MB	Horizontal Stabilizer, Elevator Hinge Cover, Elevator Sta 250.04

E. Prepare for the Procedure

SUBTASK 05-55-08-860-017

(1) Make sure that pressure is removed from the elevator hydraulic systems A and B. To remove it, do this task: Remove Pressure from the Elevator Hydraulic Systems A and B, TASK 27-31-00-800-802.

SUBTASK 05-55-08-010-003

(2) For the left elevator, open these access panels:

Number	Name/Location
334GB	Horizontal Stabilizer, Elevator Hinge Cover
334MB	Horizontal Stabilizer, Elevator Hinge Cover

SUBTASK 05-55-08-010-004

(3) For the right elevator, open these access panels:

Number	Name/Location
344GB	Horizontal Stabilizer, Hinge Cover, Elevator Station 24.09
344MB	Horizontal Stabilizer, Elevator Hinge Cover, Elevator Sta 250.04

F. Procedure

SUBTASK 05-55-08-210-005

(1) Do a visual inspection of the bond straps shown in the illustration, (Figure 605).

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(a) Inspect the bond strap in accordance with criteria specified in (SWPM Chapter 20).

NOTE: If you notice any damage along the length of the bond strap, make a note and do any repairs which are necessary after you complete this task.

SUBTASK 05-55-08-410-006

(2) Return the airplane to normal.

SUBTASK 05-55-08-410-007

(3) For the left elevator, install these access panels:

Number	Name/Location
334GB	Horizontal Stabilizer, Elevator Hinge Cover
334MB	Horizontal Stabilizer, Elevator Hinge Cover

SUBTASK 05-55-08-410-008

(4) For the right elevator, install these access panels:

Number	Name/Location
344GB	Horizontal Stabilizer, Hinge Cover, Elevator Station 24.09
344MB	Horizontal Stabilizer, Elevator Hinge Cover, Elevator Sta 250.04

SUBTASK 05-55-08-860-018

(5) Do this task: Put the Elevator Systems A and B Back to the Condition Before the Pressure Removal, TASK 27-31-00-840-802.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K31254 S0006557983_V4

High Intensity Radiated Fields (HIRF) Inspection (Elevator Bonding Straps)
Figure 605/05-55-08-990-812

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-08-200-806

7. Strut Bonding Straps HIRF/Lightning Inspection

(Figure 606)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) Do not remove sealant when you do this task.

(2) Do not remove system LRUs when you do this task.

B. References

Reference	Title
SWPM Chapter 20	Standard Wiring Practices Manual

C. Location Zones

Zone	Area
431	Engine 1 - Forward Strut Fairing
441	Engine 2 - Forward Strut Fairing

D. Access Panels

Number	Name/Location
431CL	Forward Strut Fairing, Left Overwing Fairing, Strut 1
441CR	Forward Strut Fairing, Right Overwing Fairing, Strut 2

E. Prepare for the Procedure

SUBTASK 05-55-08-010-005

(1) For the left strut, open this access panel:

Number	Name/Location
431CL	Forward Strut Fairing, Left Overwing Fairing, Strut 1

SUBTASK 05-55-08-010-006

(2) For the right strut, open this access panel:

Number	Name/Location
441CR	Forward Strut Fairing, Right Overwing Fairing, Strut 2

F. Procedure

SUBTASK 05-55-08-210-006

(1) Do a general visual inspection of the bond straps shown in the illustration, (Figure 606).

(a) Inspect the bond strap in accordance with criteria specified in (SWPM Chapter 20).

NOTE: If you notice any damage along the length of the bond strap, make a note and do any repairs which are necessary after you complete this task.

SUBTASK 05-55-08-410-009

(2) Return the airplane to normal.

SUBTASK 05-55-08-410-010

(3) For the left strut, install this access panel:

Number	Name/Location
431CL	Forward Strut Fairing, Left Overwing Fairing, Strut 1

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-55-08-410-011

(4) For the right strut, install this access panel:

Number	Name/Location
441CR	Forward Strut Fairing, Right Overwing Fairing, Strut 2

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K31264 S0006557985_V3

High Intensity Radiated Fields (HIRF) Inspection (Strut Bonding Straps)
Figure 606/05-55-08-990-811 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K31389 S0006557986_V3

High Intensity Radiated Fields (HIRF) Inspection (Strut Bonding Straps)
Figure 606/05-55-08-990-811 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-08-200-807

8. Air Conditioning Pack Compartment Door Bonding Straps HIRF/Lightning Inspection
(Figure 607)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) Do not remove sealant when you do this task.

(2) Do not remove system LRUs when you do this task.

B. References

Reference	Title
06-41-00-800-801	Finding an Access Door or Panel on the Lower Half of the Fuselage (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

C. Location Zones

Zone	Area
190	Subzone - Wing-to-Body Fairing

D. Access Panels

Number	Name/Location
192CL	ECS Access Door
192CR	ECS Access Door
192DR	ECS High Pressure Access Door

E. Prepare for the Inspection

SUBTASK 05-55-08-010-007

(1) Open this access panel:

Number	Name/Location
192CL	ECS Access Door

SUBTASK 05-55-08-010-008

CAUTION	DO NOT OPEN THE ECS ACCESS DOOR 192CR, UNTIL YOU OPEN THE ECS HIGH PRESSURE ACCESS DOOR 192DR. IF YOU DO NOT OBEY, DAMAGE TO THE ECS HIGH PRESSURE ACCESS DOOR 192DR, ITS LATCHES AND HINGES CAN OCCUR.

(2) Do these steps (TASK 06-41-00-800-801):

(a) Open this access panel:

Number	Name/Location
192DR	ECS High Pressure Access Door

(b) Open this access panel:

Number	Name/Location
192CR	ECS Access Door

F. Air Conditioning Pack Compartment Door Bonding Straps HIRF/Lightning Inspection

SUBTASK 05-55-08-210-007

(1) Do a visual inspection of the bond straps (Figure 607).

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(a) Inspect the bond strap (SWPM Chapter 20).

NOTE: If you notice any damage along the length of the bond strap, make a note and do any repairs which are necessary after you complete this task.

G. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-08-410-015

(1) Do these steps (TASK 06-41-00-800-801):

(a) Close this access panel:

Number	Name/Location
192CR	ECS Access Door

(b) Close this access panel:

Number	Name/Location
192DR	ECS High Pressure Access Door

NOTE: The ECS high pressure access door, 192DR, will not latch in its position if the ECS access door, 192CR, is not closed.

SUBTASK 05-55-08-410-016

(2) Install this access panel:

Number	Name/Location
192CL	ECS Access Door

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K31566 S0006557988_V5

High Intensity Radiated Fields (HIRF) Inspection (Air Conditioning Pack Compartment Door Bonding Straps)
Figure 607/05-55-08-990-810 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

3069887 S0000830815_V1

High Intensity Radiated Fields (HIRF) Inspection (Air Conditioning Pack Compartment Door Bonding Straps)
Figure 607/05-55-08-990-810 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-08-200-808

9. Main Landing Gear Door Bonding Straps HIRF/Lightning Inspection

(Figure 608)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) Do not remove sealant when you do this task.

(2) Do not remove system LRUs when you do this task.

B. References

Reference	Title
10-11-05 P/B 201	CHOCK INSTALLATION
32-00-01-480-801	Landing Gear Downlock Pins Installation (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

C. Location Zones

Zone	Area
133	Main Landing Gear Wheel Well, Body Station 663.75 to Body Station 727.00 - Left
134	Main Landing Gear Wheel Well, Body Station 663.75 to Body Station 727.00 - Right
731	Left Main Landing Gear - Outboard Door
732	Left Main Landing Gear - Center Door
733	Left Main Landing Gear - Inboard Door
734	Left Main Landing Gear
741	Right Main Landing Gear - Outboard Door
742	Right Main Landing Gear - Center Door
743	Right Main Landing Gear - Inboard Door
744	Right Main Landing Gear

D. Prepare for the Procedure

SUBTASK 05-55-08-480-003

WARNING

MAKE SURE THE DOWNLOCK PINS ARE INSTALLED ON ALL THE LANDING GEAR. WITHOUT THE DOWNLOCK PINS, THE LANDING GEAR COULD RETRACT AND CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(1) If the downlock pins are not installed on all the landing gear, do this task: Landing Gear Downlock Pins Installation, TASK 32-00-01-480-801.

SUBTASK 05-55-08-480-004

(2) Put chocks around the tires of all the landing gear (CHOCK INSTALLATION, PAGEBLOCK 10-11-05/201).

E. Procedure

SUBTASK 05-55-08-210-008

(1) Do a visual inspection of the bond straps shown in the illustration, (Figure 608).

(a) Inspect the bond strap in accordance with criteria specified in (SWPM Chapter 20).

NOTE: If you notice any damage along the length of the bond strap, make a note and do any repairs which are necessary after you complete this task.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-55-08-410-014

(2) Return the airplane to normal.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K31576 S0006557990_V3

High Intensity Radiated Fields (HIRF) Inspection (Main Landing Gear Door Bonding Straps)
Figure 608/05-55-08-990-809 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K31578 S0006557991_V3

High Intensity Radiated Fields (HIRF) Inspection (Main Landing Gear Door Bonding Straps)
Figure 608/05-55-08-990-809 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

HIRF/LIGHTNING - ENGINE WIRING HARNESSES - INSPECTION/CHECK

1. General

A. This procedure contains the following tasks:

(1) General Visual inspection of the engine wiring harnesses, with the cowls open

(2) Detailed Visual inspection of the engine wiring harnesses, with the cowls open

(3) HIRF/Lightning Detailed Visual Inspection of the connectors in the Thrust Reverser for the Left Engine

(4) HIRF/Lightning Detailed Visual Inspection of the connectors in the Thrust Reverser for the Right Engine.

TASK 05-55-10-200-801

2. Engine Wiring Harness HIRF/Lightning - General Visual Inspection

(Figure 601, Figure 602, Figure 603, Figure 604, Figure 605, Figure 606, Figure 607, Figure 608, Figure 609, Figure 610, Figure 611, Figure 612)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) Do not remove sealant when you do this task.

(2) Do not disassemble connectors when you do this task.

(3) Do not remove system Line Replaceable Unit (LRU)s when you do this task.

B. References

Reference	Title
27-81-00-040-801	Leading Edge Flaps and Slats Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
27-81-00-860-804	Leading Edge Flaps and Slats Retraction (P/B 201)
71-51-03-000-801-F00	Nacelle Wiring Harnesses Removal (P/B 401)
71-51-03-400-801-F00	Nacelle Wiring Harnesses Installation (P/B 401)
73-21-06-000-801-F00	Fan Wiring Harness Removal (P/B 401)
73-21-06-000-802-F00	3 O'clock Strut Harness Removal (P/B 401)
73-21-06-300-801-F00	Repair of Worn CJ9 and CJ10 Wiring Harnesses (P/B 801)
73-21-06-400-801-F00	Fan Wiring Harness Installation (P/B 401)
73-21-06-400-802-F00	3 O'clock Strut Harness Installation (P/B 401)
78-31-00-010-801-F00	Open the Thrust Reverser (Selection) (P/B 201)
78-31-00-010-804-F00	Close the Thrust Reverser (Selection) (P/B 201)

C. Location Zones

Zone	Area
413	Engine 1 - Fan Cowl, Left
414	Engine 1 - Fan Cowl, Right
415	Engine 1 - Thrust Reverser, Left
416	Engine 1 - Thrust Reverser, Right
423	Engine 2 - Fan Cowl, Left
424	Engine 2 - Fan Cowl, Right
425	Engine 2 - Thrust Reverser, Left
426	Engine 2 - Thrust Reverser, Right

ECCN 9E991 BOEING PROPRIETARY - See title page for details

D. Prepare for the Inspection

SUBTASK 05-55-10-040-005

> **WARNING** DO THESE SPECIFIED TASKS IN THE CORRECT SEQUENCE BEFORE YOU OPEN THE THRUST REVERSER: RETRACT THE LEADING EDGE, DO THE DEACTIVATION OF THE LEADING EDGE AND THE THRUST REVERSER (FOR GROUND MAINTENANCE), AND OPEN THE FAN COWL PANELS. IF YOU DO NOT OBEY THE ABOVE SEQUENCE, INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT CAN OCCUR.

(1) Do this task: Leading Edge Flaps and Slats Retraction, TASK 27-81-00-860-804.

SUBTASK 05-55-10-040-006

(2) Do this task: Leading Edge Flaps and Slats Deactivation, TASK 27-81-00-040-801.

SUBTASK 05-55-10-040-008

(3) Do this task: Open the Thrust Reverser (Selection), TASK 78-31-00-010-801-F00.

E. Engine Wiring Harness HIRF/Lightning General Visual Inspection

SUBTASK 05-55-10-210-001

(1) Do a general visual inspection of the wire harnesses and cables shown in Table 601 for the applicable engine.

(a) Make sure that the connectors are tight.

NOTE: Do not loosen or disconnect the connectors.

1) Make sure that the back shells are hand tight.

2) Make sure that the coupling rings are engaged at their detent.

a) If there is lockwire on the coupling ring, make sure it is not loose.

3) If locking tabs are used, make sure that they are not broken or loose.

(b) Make sure that there is no damage at the connector.

NOTE: If you notice any damage along the length of the wire bundle, make a note and do any repairs which are necessary after you complete this task.

(c) Make sure that there is no corrosion at the connector.

(d) Make sure that the shielding at the connector has not degraded due to obvious damage, failure or irregularity.

NOTE: If you notice any damage associated with the Engine/Airplane Interface cables, make a note and do any necessary repairs after you complete this task. With the exception of the wire bundles indicated in the table below, the Engine Harnesses are considered LRUs and should not be repaired.

Table 601/05-55-10-993-816

CABLE NUMBER	FIGURE	FUNCTION	BUNDLE REPAIR REFERENCE	INTERCONNECTS
MW0301	Figure 601	ENGINE/AIRPLANE INTERFACE	TASK 71-51-03-000-801-F00 and TASK 71-51-03-400-801-F00	EEC-J1, IGNITION EXCITER N1 SPEED SENSOR
MW0302	Figure 602	ENGINE/AIRPLANE INTERFACE	TASK 71-51-03-000-801-F00 and TASK 71-51-03-400-801-F00	EEC-J2, IGNITION EXCITER

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 601/05-55-10-993-816 (Continued)

CABLE NUMBER	FIGURE	FUNCTION	BUNDLE REPAIR REFERENCE	INTERCONNECTS
MW0303	Figure 603	ENGINE/AIRPLANE INTERFACE	TASK 71-51-03-000-801-F00 and TASK 71-51-03-400-801-F00	EEC-J3
MW0304	Figure 604	ENGINE/AIRPLANE INTERFACE	TASK 71-51-03-000-801-F00 and TASK 71-51-03-400-801-F00	EEC-J4
J5 HARNESS	Figure 605	ENGINE HARNESS	TASK 73-21-06-000-801-F00 and TASK 73-21-06-400-801-F00	EEC-J5, HMU, FUEL FLOWMETER, N2 SPEED SENSOR
J6 HARNESS	Figure 606	ENGINE HARNESS	TASK 73-21-06-000-801-F00 and TASK 73-21-06-400-801-F00	EEC-J6, HMU, OIL TEMP SENSOR, N2 SPEED SENSOR
J7 HARNESS	Figure 607	ENGINE HARNESS	TASK 73-21-06-000-801-F00 and TASK 73-21-06-400-801-F00	EEC-J7, N1 SPEED SENSOR, EEC ALTER-NATOR, OIL DIFF PRESS SWITCH, T12 SENSOR, OIL PRESS SENSOR
J8 HARNESS	Figure 608	ENGINE HARNESS	TASK 73-21-06-000-801-F00 and TASK 73-21-06-400-801-F00	EEC-J8, N1 SPEED SENSOR, EEC ALTER-NATOR, FUEL DIFF PRESS SWITCH, T12 SENSOR, OIL PRESSURE SENSOR, ELEC CHIP DETECTOR HARNESS (OPTIONAL)
LOM ALL PRE SB CFM56-7B 73-044 OR PRE SB 737-CFM56-7B-73-058				
J9 HARNESS	Figure 609	ENGINE HARNESS	TASK 73-21-06-000-802-F00 and TASK 73-21-06-400-802-F00	EEC-J9, CJ9 HARNESS, VSV ACTUATOR, HPTACC VALVE, LPTACC VALVE, T3 SENSOR, BURNER STAGING VALVE, TRANSIENT BLEED VALVE, VARIABLE BLEED VALVE ACTUATOR, PT25 SENSOR
LOM ALL POST SB 737-CFM56-7B-73-058 OR POST SB CFM56-7B 73-044				
J9 HARNESS	Figure 609	ENGINE HARNESS	TASK 73-21-06-000-802-F00 and TASK 73-21-06-400-802-F00	EEC-J9, CJ9 HARNESS, VSV ACTUATOR, HPTACC VALVE, LPTACC VALVE, T3 SENSOR, TRANSIENT BLEED VALVE, VARIABLE BLEED VALVE ACTUATOR, PT25 SENSOR
LOM ALL				
CJ9 HARNESS	Figure 610	ENGINE HARNESS	TASK 73-21-06-300-801-F00	J9 HARNESS, EGT HARNESSES (SEC 1&2), TCC SENSOR, T5 SENSOR (OPTIONAL)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 601/05-55-10-993-816 (Continued)

CABLE NUMBER	FIGURE	FUNCTION	BUNDLE REPAIR REFERENCE	INTERCONNECTS
LOM ALL PRE SB CFM56-7B 73-044 OR PRE SB 737-CFM56-7B-73-058				
J10 HARNESS	Figure 611	ENGINE HARNESS	TASK 73-21-06-000-802-F00 and TASK 73-21-06-400-802-F00	EEC-J10, CJ10 HARNESS, VSV ACTUATOR, HPTACC VALVE, LPTACC VALVE, T3 SENSOR, BURNER STAGING VALVE, TRANSIENT BLEED VALVE, VARIABLE BLEED VALVE ACTUATOR, PT25 SENSOR
LOM ALL POST SB 737-CFM56-7B-73-058 OR POST SB CFM56-7B 73-044				
J10 HARNESS	Figure 611	ENGINE HARNESS	TASK 73-21-06-000-802-F00 and TASK 73-21-06-400-802-F00	EEC-J10, CJ10 HARNESS, VSV ACTUATOR, HPTACC VALVE, LPTACC VALVE, T3 SENSOR, TRANSIENT BLEED VALVE, VARIABLE BLEED VALVE ACTUATOR, PT25 SENSOR
LOM ALL				
CJ10 HARNESS	Figure 612	ENGINE HARNESS	TASK 73-21-06-300-801-F00	J10 HARNESS, EGT HARNESSES (SEC 3&4)

F. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-10-840-003

(1) Do this task: Close the Thrust Reverser (Selection), TASK 78-31-00-010-804-F00.

SUBTASK 05-55-10-840-005

(2) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

——— END OF TASK ———

TASK 05-55-10-220-801

3. Engine Wiring Harness HIRF/Lightning - Detailed Visual Inspection

(Figure 601, Figure 602, Figure 603, Figure 604, Figure 605, Figure 606, Figure 607, Figure 608, Figure 609, Figure 610, Figure 611, Figure 612)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) A detailed visual inspection is an intensive visual check of specified details associated with assemblies or installations.

(a) You will search for evidence of wiring and connector irregularities using adequate lighting.

(b) You may need inspection aids such as mirrors, and wiping rags for surface cleaning.

(c) Do not remove sealant when you do this task.

(d) Do not disassemble connectors when you do this task.

(e) Do not remove system Line Replaceable Unit (LRU)s when you do this task.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

B. References

Reference	Title
27-81-00-040-801	Leading Edge Flaps and Slats Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
27-81-00-860-804	Leading Edge Flaps and Slats Retraction (P/B 201)
78-31-00-010-801-F00	Open the Thrust Reverser (Selection) (P/B 201)
78-31-00-010-804-F00	Close the Thrust Reverser (Selection) (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

C. Location Zones

Zone	Area
413	Engine 1 - Fan Cowl, Left
414	Engine 1 - Fan Cowl, Right
415	Engine 1 - Thrust Reverser, Left
416	Engine 1 - Thrust Reverser, Right
423	Engine 2 - Fan Cowl, Left
424	Engine 2 - Fan Cowl, Right
425	Engine 2 - Thrust Reverser, Left
426	Engine 2 - Thrust Reverser, Right

D. Prepare for the Inspection

SUBTASK 05-55-10-040-001

WARNING DO THESE SPECIFIED TASKS IN THE CORRECT SEQUENCE BEFORE YOU OPEN THE THRUST REVERSER: RETRACT THE LEADING EDGE, DO THE DEACTIVATION OF THE LEADING EDGE AND THE THRUST REVERSER (FOR GROUND MAINTENANCE), AND OPEN THE FAN COWL PANELS. IF YOU DO NOT OBEY THE ABOVE SEQUENCE, INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT CAN OCCUR.

(1) Do this task: Leading Edge Flaps and Slats Retraction, TASK 27-81-00-860-804.

SUBTASK 05-55-10-040-002

(2) Do this task: Leading Edge Flaps and Slats Deactivation, TASK 27-81-00-040-801.

SUBTASK 05-55-10-040-004

(3) Do this task: Open the Thrust Reverser (Selection), TASK 78-31-00-010-801-F00.

E. Engine Wiring Harness HIRF/Lightning Detailed Visual Inspection

SUBTASK 05-55-10-210-002

(1) Do a detailed visual inspection of the connectors shown in Table 602 for the applicable engine.

(a) Do a check of the electrical connectors.

1) Make sure that the all of the connectors at the LRUs are hand-tight.

2) Make sure that the connector coupling nut is installed to give a satisfactory connection between the mating pins and sockets.

3) Make sure that the back shell is not loose or damaged.

a) Make sure that the strain relief at the end of the back shell is tight.

b) Make sure that the shield pigtails are tight.

c) Make sure that the shield grounding band is tight.

(b) Do a check of the wire bundle cables.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

1) Make sure that the wire bundle cables are not chafed, cut or worn.

(c) Replace or repair any damaged components or wiring found during this inspection (SWPM Chapter 20).

Table 602/05-55-10-993-817

CABLE NUMBER	FIGURE	FUNCTION	INTERCONNECTS
MW0301	Figure 601	ENGINE/AIRPLANE INTERFACE	EEC-J1, IGNITION EXCITER N1 SPEED SENSOR
MW0302	Figure 602	ENGINE/AIRPLANE INTERFACE	EEC-J2, IGNITION EXCITER
MW0303	Figure 603	ENGINE/AIRPLANE INTERFACE	EEC-J3
MW0304	Figure 604	ENGINE/AIRPLANE INTERFACE	EEC-J4
J5 HARNESS	Figure 605	ENGINE HARNESS	EEC-J5, HMU, FUEL FLOWMETER, N2 SPEED SENSOR
J6 HARNESS	Figure 606	ENGINE HARNESS	EEC-J6, HMU, OIL TEMP SENSOR, N2 SPEED SENSOR
J7 HARNESS	Figure 607	ENGINE HARNESS	EEC-J7, N1 SPEED SENSOR, EEC ALTERNATOR, OIL DIFF PRESS SWITCH, T12 SENSOR, OIL PRESS SENSOR
J8 HARNESS	Figure 608	ENGINE HARNESS	EEC-J8, N1 SPEED SENSOR, EEC ALTERNATOR, FUEL DIFF PRESS SWITCH, T12 SENSOR, OIL PRESSURE SENSOR, ELEC CHIP DETECTOR HARNESS (OPTIONAL)
LOM ALL PRE SB CFM56-7B 73-044 OR PRE SB 737-CFM56-7B-73-058			
J9 HARNESS	Figure 609	ENGINE HARNESS	EEC-J9, CJ9 HARNESS, VSV ACTUATOR, HPTACC VALVE, LPTACC VALVE, T3 SENSOR, BURNER STAGING VALVE, TRANSIENT BLEED VALVE, VARIABLE BLEED VALVE ACTUATOR, PT25 SENSOR
LOM ALL POST SB 737-CFM56-7B-73-058 OR POST SB CFM56-7B 73-044			
J9 HARNESS	Figure 609	ENGINE HARNESS	EEC-J9, CJ9 HARNESS, VSV ACTUATOR, HPTACC VALVE, LPTACC VALVE, T3 SENSOR, TRANSIENT BLEED VALVE, VARIABLE BLEED VALVE ACTUATOR, PT25 SENSOR
LOM ALL			
CJ9 HARNESS	Figure 610	ENGINE HARNESS	J9 HARNESS, EGT HARNESSES (SEC 1&2), TCC SENSOR, T5 SENSOR (OPTIONAL)
LOM ALL PRE SB CFM56-7B 73-044 OR PRE SB 737-CFM56-7B-73-058			
J10 HARNESS	Figure 611	ENGINE HARNESS	EEC-J10, CJ10 HARNESS, VSV ACTUATOR, HPTACC VALVE, LPTACC VALVE, T3 SENSOR, BURNER STAGING VALVE, TRANSIENT BLEED VALVE, VARIABLE BLEED VALVE ACTUATOR, PT25 SENSOR

ECCN 9E991 BOEING PROPRIETARY - See title page for details

LOM ALL PRE SB CFM56-7B 73-044 OR PRE SB 737-CFM56-7B-73-058 (Continued)

Table 602/05-55-10-993-817 (Continued)

CABLE NUMBER	FIGURE	FUNCTION	INTERCONNECTS
LOM ALL POST SB 737-CFM56-7B-73-058 OR POST SB CFM56-7B 73-044			
J10 HARNESS	Figure 611	ENGINE HARNESS	EEC-J10, CJ10 HARNESS, VSV ACTUATOR, HPTACC VALVE, LPTACC VALVE, T3 SENSOR, TRANSIENT BLEED VALVE, VARIABLE BLEED VALVE ACTUATOR, PT25 SENSOR
LOM ALL			
CJ10 HARNESS	Figure 612	ENGINE HARNESS	J10 HARNESS, EGT HARNESSES (SEC 3&4)

F. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-10-840-007

(1) Do this task: Close the Thrust Reverser (Selection), TASK 78-31-00-010-804-F00.

SUBTASK 05-55-10-840-008

(2) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

High Intensity Radiated Fields (HIRF) Inspection (MW0301 Nacelle Wiring Harness)
Figure 601/05-55-10-990-801

ECCN 9E991 BOEING PROPRIETARY - See title page for details

High Intensity Radiated Fields (HIRF) Inspection (MW0302 Nacelle Wiring Harness)
Figure 602/05-55-10-990-802

ECCN 9E991 BOEING PROPRIETARY - See title page for details

H01645 S0006558001_V6

High Intensity Radiated Fields (HIRF) Inspection (MW0303 Nacelle Wiring Harness)
Figure 603/05-55-10-990-803

ECCN 9E991 BOEING PROPRIETARY - See title page for details

High Intensity Radiated Fields (HIRF) Inspection (MW0304 Nacelle Wiring Harness)
Figure 604/05-55-10-990-804

ECCN 9E991 BOEING PROPRIETARY - See title page for details

H01651 S0006558003_V3

High Intensity Radiated Fields (HIRF) Inspection (J5 Harness)
Figure 605/05-55-10-990-805 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

H01660 S0006558004_V3

High Intensity Radiated Fields (HIRF) Inspection (J5 Harness)
Figure 605/05-55-10-990-805 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

H01663 S0006558005_V3

High Intensity Radiated Fields (HIRF) Inspection (J6 Harness)
Figure 606/05-55-10-990-806 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

H01668 S0006558006_V3

High Intensity Radiated Fields (HIRF) Inspection (J6 Harness)
Figure 606/05-55-10-990-806 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

H01670 S0006558007_V3

High Intensity Radiated Fields (HIRF) Inspection (J6 Harness)
Figure 606/05-55-10-990-806 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

S-M56-MM-03430-00-B

H01683 S0006558008_V3

High Intensity Radiated Fields (HIRF) Inspection (J7 Harness)
Figure 607/05-55-10-990-807 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

H01684 S0006558009_V3

High Intensity Radiated Fields (HIRF) Inspection (J7 Harness)
Figure 607/05-55-10-990-807 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

H01685 S0006558010_V3

High Intensity Radiated Fields (HIRF) Inspection (J7 Harness)
Figure 607/05-55-10-990-807 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

H01692 S0006558011_V3

High Intensity Radiated Fields (HIRF) Inspection (J8 Harness)
Figure 608/05-55-10-990-808 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

High Intensity Radiated Fields (HIRF) Inspection (J8 Harness)
Figure 608/05-55-10-990-808 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

H01695 S0006558013_V3

High Intensity Radiated Fields (HIRF) Inspection (J8 Harness)
Figure 608/05-55-10-990-808 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

S-M56-MM-03440-00-B
H01698 S0006558014_V5

High Intensity Radiated Fields (HIRF) Inspection (J9 Harness)
Figure 609/05-55-10-990-809 (Sheet 1 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

S-M56-MM-03441-00-B

H01727 S0006558015_V5

High Intensity Radiated Fields (HIRF) Inspection (J9 Harness)
Figure 609/05-55-10-990-809 (Sheet 2 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

S-M56-MM-03441-00-B

2977545 S0000756077_V1

High Intensity Radiated Fields (HIRF) Inspection (J9 Harness)
Figure 609/05-55-10-990-809 (Sheet 3 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

S-M56-MM-03442-00-B

H01732 S0006558016_V3

High Intensity Radiated Fields (HIRF) Inspection (J9 Harness)
Figure 609/05-55-10-990-809 (Sheet 4 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

H01733 S0006558017_V3

High Intensity Radiated Fields (HIRF) Inspection (CJ9 Harness)
Figure 610/05-55-10-990-810

ECCN 9E991 BOEING PROPRIETARY - See title page for details

High Intensity Radiated Fields (HIRF) Inspection (J10 Harness)
Figure 611/05-55-10-990-811 (Sheet 1 of 5)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

H01736 S0006558019_V3

High Intensity Radiated Fields (HIRF) Inspection (J10 Harness)
Figure 611/05-55-10-990-811 (Sheet 2 of 5)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

2977546 S0000756096_V1

High Intensity Radiated Fields (HIRF) Inspection (J10 Harness)
Figure 611/05-55-10-990-811 (Sheet 3 of 5)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

H01739 S0006558020_V3

High Intensity Radiated Fields (HIRF) Inspection (J10 Harness)
Figure 611/05-55-10-990-811 (Sheet 4 of 5)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

H01742 S0006558021_V3

High Intensity Radiated Fields (HIRF) Inspection (J10 Harness)
Figure 611/05-55-10-990-811 (Sheet 5 of 5)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

S-M56-MM-03450-00-B

H01747 S0006558022_V3

High Intensity Radiated Fields (HIRF) Inspection (CJ10 Harness)
Figure 612/05-55-10-990-812 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

H01752 S0006558023_V3

High Intensity Radiated Fields (HIRF) Inspection (CJ10 Harness)
Figure 612/05-55-10-990-812 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-10-200-802

4. Connector Inspection - Thrust Reverser - Left Engine

(Figure 613)

A. General

(1) A detailed visual inspection is an intensive visual check of specified details associated with assemblies or installations.

(a) You will search for evidence of connector irregularities using adequate lighting.

(b) You may need inspection aids such as mirrors, and wiping rags for surface cleaning.

(c) Do not remove sealant when you do this task.

(d) Do not disassemble connectors when you do this task.

(e) Do not remove system LRUs when you do this task.

B. References

Reference	Title
27-81-00-040-801	Leading Edge Flaps and Slats Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
27-81-00-860-804	Leading Edge Flaps and Slats Retraction (P/B 201)
78-31-00-040-802-F00	Thrust Reverser Deactivation For Ground Maintenance (P/B 201)
78-31-00-440-803-F00	Thrust Reverser Activation After Ground Maintenance (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

C. Location Zones

Zone	Area
415	Engine 1 - Thrust Reverser, Left
416	Engine 1 - Thrust Reverser, Right

D. Access Panels

Number	Name/Location
415AL	Left Forward Thrust Reverser Hinge Fairing, Engine 1
416AR	Right Forward Thrust Reverser Hinge Fairing, Engine 1
431BL	Forward Strut Fairing, Left Mid Strut Fairing, Strut 1
431BR	Forward Strut Fairing, Right Mid Strut Fairing, Strut 1

E. Prepare for the Inspection

SUBTASK 05-55-10-220-001

WARNING

DO THESE SPECIFIED TASKS IN THE CORRECT SEQUENCE BEFORE YOU OPEN THE THRUST REVERSER: RETRACT THE LEADING EDGE, DO THE DEACTIVATION OF THE LEADING EDGE AND THE THRUST REVERSER (FOR GROUND MAINTENANCE), AND OPEN THE FAN COWL PANELS. IF YOU DO NOT OBEY THE ABOVE SEQUENCE, INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT CAN OCCUR.

(1) Do this task: Leading Edge Flaps and Slats Retraction, TASK 27-81-00-860-804.

SUBTASK 05-55-10-220-002

(2) Do this task: Leading Edge Flaps and Slats Deactivation, TASK 27-81-00-040-801.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-55-10-220-003

(3) Do this task: Thrust Reverser Deactivation For Ground Maintenance, TASK 78-31-00-040-802-F00.

SUBTASK 05-55-10-020-001

(4) Remove the following access panels:

Number	Name/Location
415AL	Left Forward Thrust Reverser Hinge Fairing, Engine 1
416AR	Right Forward Thrust Reverser Hinge Fairing, Engine 1
431BL	Forward Strut Fairing, Left Mid Strut Fairing, Strut 1
431BR	Forward Strut Fairing, Right Mid Strut Fairing, Strut 1

F. Visual Check of the Left Engine Thrust Reverser Connectors

SUBTASK 05-55-10-220-004

(1) Do a detailed visual inspection of the connectors shown in Table 603 and Figure 613.

(a) Do a check of the electrical connectors.

1) Make sure that the all of the connectors at the LRUs are hand-tight.

2) Make sure that the connector coupling nut is installed to give a satisfactory connection between the mating pins and sockets.

3) Make sure that the back shell is not loose or damaged.

a) Make sure that the strain relief at the end of the backshell is tight.

b) Make sure that the shield pigtails are tight.

c) Make sure that the shield grounding band is tight.

(b) Replace or repair any damaged components found during this inspection (SWPM Chapter 20).

Table 603/05-55-10-993-820

WIRE BUNDLE	CONNECTOR	FIGURE	PNL OR MODULE
W1080	D30002	Figure 613	AS2 T/R LVDT EEC
W1080	D30072	Figure 613	EEC-T/R LVDT (T396)
W1082	D30008	Figure 613	AS2 T/R Firewall
W1082	D30076	Figure 613	EEC-T/R LVDT (T396)

G. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-10-020-002

(1) Install the following:

Number	Name/Location
415AL	Left Forward Thrust Reverser Hinge Fairing, Engine 1
416AR	Right Forward Thrust Reverser Hinge Fairing, Engine 1
431BL	Forward Strut Fairing, Left Mid Strut Fairing, Strut 1
431BR	Forward Strut Fairing, Right Mid Strut Fairing, Strut 1

SUBTASK 05-55-10-220-005

(2) Do this task: Thrust Reverser Activation After Ground Maintenance, TASK 78-31-00-440-803-F00.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-55-10-220-006

(3) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K15688 S0006558024_V3

High Intensity Radiated Fields (HIRF) Inspection (Left Engine Thrust Reverser)
Figure 613/05-55-10-990-815

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-10-200-803

5. Connector Inspection - Thrust Reverser - Right Engine

(Figure 614)

A. General

(1) A detailed visual inspection is an intensive visual check of specified details associated with assemblies or installations.

(a) You will search for evidence of connector irregularities using adequate lighting.

(b) You may need inspection aids such as mirrors, and wiping rags for surface cleaning.

(c) Do not remove sealant when you do this task.

(d) Do not disassemble connectors when you do this task.

(e) Do not remove system LRUs when you do this task.

B. References

Reference	Title
27-81-00-040-801	Leading Edge Flaps and Slats Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
27-81-00-860-804	Leading Edge Flaps and Slats Retraction (P/B 201)
78-31-00-040-802-F00	Thrust Reverser Deactivation For Ground Maintenance (P/B 201)
78-31-00-440-803-F00	Thrust Reverser Activation After Ground Maintenance (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

C. Location Zones

Zone	Area
425	Engine 2 - Thrust Reverser, Left
426	Engine 2 - Thrust Reverser, Right

D. Access Panels

Number	Name/Location
425AL	Left Forward Thrust Reverser Hinge Fairing, Engine 2
425CL	Left Bump Fairing For Thrust Reverser Hinge Fairing, Engine 2
426AR	Right Forward Thrust Reverser Hinge Fairing, Engine 2
441BL	Forward Strut Fairing, Left Mid Strut Fairing, Strut 2
441BR	Forward Strut Fairing, Right Mid Strut Fairing, Strut 2

E. Prepare for the Inspection

SUBTASK 05-55-10-220-007

WARNING

DO THESE SPECIFIED TASKS IN THE CORRECT SEQUENCE BEFORE YOU OPEN THE THRUST REVERSER: RETRACT THE LEADING EDGE, DO THE DEACTIVATION OF THE LEADING EDGE AND THE THRUST REVERSER (FOR GROUND MAINTENANCE), AND OPEN THE FAN COWL PANELS. IF YOU DO NOT OBEY THE ABOVE SEQUENCE, INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT CAN OCCUR.

(1) Do this task: Leading Edge Flaps and Slats Retraction, TASK 27-81-00-860-804.

SUBTASK 05-55-10-220-008

(2) Do this task: Leading Edge Flaps and Slats Deactivation, TASK 27-81-00-040-801.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-55-10-220-009

(3) Do this task: Thrust Reverser Deactivation For Ground Maintenance, TASK 78-31-00-040-802-F00.

SUBTASK 05-55-10-020-003

(4) Remove the following access panels:

Number	Name/Location
425AL	Left Forward Thrust Reverser Hinge Fairing, Engine 2
425CL	Left Bump Fairing For Thrust Reverser Hinge Fairing, Engine 2
426AR	Right Forward Thrust Reverser Hinge Fairing, Engine 2
441BL	Forward Strut Fairing, Left Mid Strut Fairing, Strut 2
441BR	Forward Strut Fairing, Right Mid Strut Fairing, Strut 2

F. Visual Check of the Right Engine Thrust Reverser Connectors

SUBTASK 05-55-10-220-010

(1) Do a detailed visual inspection of the connectors shown in Table 604 and Figure 614.

(a) Do a check of the electrical connectors.

1) Make sure that the all of the connectors at the LRUs are hand-tight.

2) Make sure that the connector coupling nut is installed to give a satisfactory connection between the mating pins and sockets.

3) Make sure that the back shell is not loose or damaged.

a) Make sure that the strain relief at the end of the backshell is tight.

b) Make sure that the shield pigtails are tight.

c) Make sure that the shield grounding band is tight.

(b) Replace or repair any damaged components found during this inspection (SWPM Chapter 20).

Table 604/05-55-10-993-821

WIRE BUNDLE	CONNECTOR	FIGURE	PNL OR MODULE
W1084	D30010	Figure 614	AS3 T/R LVDT EEC
W1084	D30078	Figure 614	EEC - T/R LVDT (T397)
W1086	D30006	Figure 614	AS3 T/R Firewall
W1086	D30074	Figure 614	EEC - T/R LVDT (T397)

G. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-10-020-004

(1) Install these access panels:

Number	Name/Location
425AL	Left Forward Thrust Reverser Hinge Fairing, Engine 2
425CL	Left Bump Fairing For Thrust Reverser Hinge Fairing, Engine 2
426AR	Right Forward Thrust Reverser Hinge Fairing, Engine 2
441BL	Forward Strut Fairing, Left Mid Strut Fairing, Strut 2
441BR	Forward Strut Fairing, Right Mid Strut Fairing, Strut 2

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SUBTASK 05-55-10-210-003

(2) Do this task: Thrust Reverser Activation After Ground Maintenance, TASK 78-31-00-440-803-F00.

SUBTASK 05-55-10-220-011

(3) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K15687 S0006558027_V3

High Intensity Radiated Fields (HIRF) Inspection (Right Engine Thrust Reverser)
Figure 614/05-55-10-990-816

ECCN 9E991 BOEING PROPRIETARY - See title page for details

HIRF/LIGHTNING - ENGINE BOND STRAPS - INSPECTION/CHECK

1. **General**
   A. This procedure contains scheduled maintenance task data.
   B. This procedure has this task:
      (1) General Visual inspection of the bond straps between the engine and strut.

TASK 05-55-11-200-801

2. **Engine Bonding Straps HIRF/Lightning Inspection**
(Figure 601)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) Do not remove system LRUs when you do this task.

B. References

Reference	Title
27-81-00-040-801	Leading Edge Flaps and Slats Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
27-81-00-860-804	Leading Edge Flaps and Slats Retraction (P/B 201)
78-31-00-040-802-F00	Thrust Reverser Deactivation For Ground Maintenance (P/B 201)
78-31-00-440-803-F00	Thrust Reverser Activation After Ground Maintenance (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

C. Location Zones

Zone	Area
415	Engine 1 - Thrust Reverser, Left
416	Engine 1 - Thrust Reverser, Right
425	Engine 2 - Thrust Reverser, Left
426	Engine 2 - Thrust Reverser, Right

D. Access Panels

Number	Name/Location
415AL	Left Forward Thrust Reverser Hinge Fairing, Engine 1
416AR	Right Forward Thrust Reverser Hinge Fairing, Engine 1
416CR	Right Bump Fairing For Thrust Reverser Hinge Fairing, Engine 1
425AL	Left Forward Thrust Reverser Hinge Fairing, Engine 2
425CL	Left Bump Fairing For Thrust Reverser Hinge Fairing, Engine 2
426AR	Right Forward Thrust Reverser Hinge Fairing, Engine 2
431BL	Forward Strut Fairing, Left Mid Strut Fairing, Strut 1
431BR	Forward Strut Fairing, Right Mid Strut Fairing, Strut 1
441BL	Forward Strut Fairing, Left Mid Strut Fairing, Strut 2
441BR	Forward Strut Fairing, Right Mid Strut Fairing, Strut 2

E. Procedure

SUBTASK 05-55-11-210-001

(1) Do the following steps to inspect the engine bond straps.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

WARNING DO THESE SPECIFIED TASKS BEFORE ATTEMPTING TO GAIN ACCESS TO THE BOND STRAPS: RETRACT THE LEADING EDGE, DO THE DEACTIVATION PROCEDURE FOR THE LEADING EDGE AND DEACTIVATE THE THRUST REVERSERS. IF YOU DO NOT OBEY THE ABOVE SEQUENCE, INJURY TO PERSONS AND DAMAGE TO EQUIPMENT CAN OCCUR.

(a) Do this task: Leading Edge Flaps and Slats Retraction, TASK 27-81-00-860-804.

(b) Do this task: Leading Edge Flaps and Slats Deactivation, TASK 27-81-00-040-801.

(c) Do this task: Thrust Reverser Deactivation For Ground Maintenance, TASK 78-31-00-040-802-F00.

(d) Remove the following panels to gain visual access to the bond straps on both sides of both engines:

NOTE: Boeing recommends removal of the Forward Strut Fairing/Left and Right Mid Strut Fairing panels to avoid possible interference damage when removing the T/R Hinge Fairings below.

1) For Engine 1, remove the following panels:

Number	Name/Location
415AL	Left Forward Thrust Reverser Hinge Fairing, Engine 1
416AR	Right Forward Thrust Reverser Hinge Fairing, Engine 1
416CR	Right Bump Fairing For Thrust Reverser Hinge Fairing, Engine 1
431BL	Forward Strut Fairing, Left Mid Strut Fairing, Strut 1
431BR	Forward Strut Fairing, Right Mid Strut Fairing, Strut 1

2) For Engine 2, remove the following panels:

Number	Name/Location
425AL	Left Forward Thrust Reverser Hinge Fairing, Engine 2
425CL	Left Bump Fairing For Thrust Reverser Hinge Fairing, Engine 2
426AR	Right Forward Thrust Reverser Hinge Fairing, Engine 2
441BL	Forward Strut Fairing, Left Mid Strut Fairing, Strut 2
441BR	Forward Strut Fairing, Right Mid Strut Fairing, Strut 2

(e) Do a visual inspection of the bond straps shown in the illustration, (Figure 601).

1) Inspect the bond strap in accordance with criteria contained in (SWPM Chapter 20).

NOTE: If you notice any damage along the length of the bond strap, make a note and do any repairs which are necessary after you complete this task

(f) Return the airplane to normal.

1) Install these access panels that follow for Engine 1:

Number	Name/Location
415AL	Left Forward Thrust Reverser Hinge Fairing, Engine 1
416AR	Right Forward Thrust Reverser Hinge Fairing, Engine 1
416CR	Right Bump Fairing For Thrust Reverser Hinge Fairing, Engine 1
431BL	Forward Strut Fairing, Left Mid Strut Fairing, Strut 1
431BR	Forward Strut Fairing, Right Mid Strut Fairing, Strut 1

2) Install the access panels that follow for Engine 2:

Number	Name/Location
425AL	Left Forward Thrust Reverser Hinge Fairing, Engine 2

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

Number	Name/Location
425CL	Left Bump Fairing For Thrust Reverser Hinge Fairing, Engine 2
426AR	Right Forward Thrust Reverser Hinge Fairing, Engine 2
441BL	Forward Strut Fairing, Left Mid Strut Fairing, Strut 2
441BR	Forward Strut Fairing, Right Mid Strut Fairing, Strut 2

(g) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801

(h) Do this task: Thrust Reverser Activation After Ground Maintenance, TASK 78-31-00-440-803-F00

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

H00115 S0006558033_V4

High Intensity Radiated Fields (HIRF) Inspection (Engine Bond Straps)
Figure 601/05-55-11-990-801

ECCN 9E991 BOEING PROPRIETARY - See title page for details

HIRF/LIGHTNING - INSIDE THE PRESSURE VESSEL - INSPECTION

1. General

A. This procedure contains scheduled maintenance task data.

B. This procedure has these tasks:

(1) Detailed Visual Inspections of the HIRF/Lightning protection of critical connectors inside the pressure vessel.

(2) Detailed Visual Inspections of the HIRF/Lightning protection of critical shield pigtails inside the pressure vessel.

(3) General Visual Inspections of the HIRF/Lightning protection of critical wire bundles inside the pressure vessel.

TASK 05-55-15-200-804

2. Detailed Visual Inspection - Connectors Inside the Pressure Vessel

(Figure 601, Figure 602, Figure 603, Figure 604, Figure 605, Figure 606, Figure 607)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) A Detailed Visual Inspection is an intensive visual check of specified details associated with assemblies or installations.

(a) You will search for evidence of connector irregularities using adequate lighting.

(b) You may need inspection aids such as mirrors.

(c) Do not remove sealant when you do this task.

(d) Do not disassemble connectors when you do this task.

(e) Do not remove system Line Replaceable Unit (LRU)'s when you do this task.

B. References

Reference	Title
21-25-01-000-801	Recirculation Air Filter - Removal (P/B 401)
21-25-01-400-801	Recirculation Air Filter - Installation (P/B 401)
25-21-45-000-801	Ceiling Panel - Removal (P/B 401)
25-21-45-000-803-001	Main Ceiling Panel - Removal (P/B 401)
25-24-31-000-801-001	Overhead Stowage Bin - Removal (P/B 401)
25-24-31-000-802-001	Overhead Stowage Bin Module - Removal (P/B 401)
25-24-31-000-804-001	Overhead Stowage Bin - Removal (P/B 401)
25-24-31-020-801	Overhead Stowage Bin - Removal (P/B 401)
25-24-31-400-801	Overhead Stowage Bin - Installation (P/B 401)
25-24-31-400-803-001	Overhead Stowage Bin - Installation (P/B 401)
25-24-31-400-804-001	Overhead Stowage Bin Module - Installation (P/B 401)
25-24-31-400-806-001	Overhead Stowage Bin - Installation (P/B 401)
32-00-01-480-801	Landing Gear Downlock Pins Installation (P/B 201)
53-14-01-020-801	Nose Wheel Well Access Panels - Removal (P/B 401)
53-14-01-420-801	Nose Wheel Well Access Panels - Installation (P/B 401)
SWPM Chapter 20	Standard Wiring Practices Manual

ECCN 9E991 BOEING PROPRIETARY - See title page for details

C. Location Zones

Zone	Area
112	Area Forward of Nose Landing Gear Wheel Well
113	Area Above and Outboard of Nose Landing Gear Wheel Well - Left
117	Electrical and Electronics Compartment - Left
118	Electrical and Electronics Compartment - Right
121	Forward Cargo Compartment - Left
122	Forward Cargo Compartment - Right
211	Flight Compartment - Left
212	Flight Compartment - Right
230	Subzone - Passenger Compartment - Body Station 360.00 to 663.75

D. Access Panels

Number	Name/Location
112A	Forward Access Door
113BW	Forward Nose Wheel Well Panel
117A	Electronic Equipment Access Door
121EW	Panel Assy - Fwd Cargo Compartment Aft Bulkhead
121JW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD
121KW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FILTER COVER
122GW	Panel Assy - FWD Cargo Compartment Aft Bulkhead
122HW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FAN COVER

E. Prepare for the Inspection

SUBTASK 05-55-15-040-001

(1) Do this task: Landing Gear Downlock Pins Installation, TASK 32-00-01-480-801.

SUBTASK 05-55-15-020-004

(2) Do this task: Recirculation Air Filter - Removal, TASK 21-25-01-000-801.

SUBTASK 05-55-15-020-005

(3) Remove recirculation air filter supports as necessary to access the connector/wire bundle.

SUBTASK 05-55-15-010-001

(4) Open these access panels:

Number	Name/Location
112A	Forward Access Door
117A	Electronic Equipment Access Door
121EW	Panel Assy - Fwd Cargo Compartment Aft Bulkhead
122GW	Panel Assy - FWD Cargo Compartment Aft Bulkhead

SUBTASK 05-55-15-010-020

(5) Open this access panel:

Number	Name/Location
113BW	Forward Nose Wheel Well Panel

(a) Do this task: Nose Wheel Well Access Panels - Removal, TASK 53-14-01-020-801.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-55-15-010-002

(6) Open these access panels:

Number	Name/Location
121JW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD
121KW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FILTER COVER
122HW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FAN COVER

SUBTASK 05-55-15-010-003

(7) Gain access to the connectors behind the Mode Control Panel (MCP).

(a) Loosen the fasteners on MCP and slide it out to access the connectors.

SUBTASK 05-55-15-010-004

(8) Gain access to the connectors behind the AutoBrake/AntiSkid/Engine Control Panel:

(a) Loosen the four quarter turn fasteners and lift the AutoBrake/AntiSkid/Engine Control Panel assembly out of the center main panel.

(b) Carefully hang the panel assembly by the connecting wire bundles.

SUBTASK 05-55-15-010-005

(9) Gain access to the disconnect panels above the passenger compartment ceiling.

(a) Remove the ceiling panels at Station 410 and 424 (TASK 25-21-45-000-801 or TASK 25-21-45-000-803-001).

(b) If necessary, remove the overhead stowage bin (TASK 25-24-31-020-801 or TASK 25-24-31-000-801-001 or TASK 25-24-31-000-802-001 or TASK 25-24-31-000-804-001).

F. Detailed Visual Inspection

SUBTASK 05-55-15-211-001

(1) Procedure to do the Detailed Visual Inspection of all connectors listed in Table below:

(a) Make sure that all of the connectors are hand-tight.

(b) Make sure that the connector coupling nut is installed to give a satisfactory connection between the mating pins and sockets.

(c) Make sure that the back shell is not loose or damaged.

1) Make sure that the strain relief at the end of the backshell is tight.

2) Make sure that the shield grounding band is tight.

(d) Replace or repair any damaged components found during this inspection (SWPM Chapter 20).

SUBTASK 05-55-15-200-030

(2) Connectors in the Forward Access Area:

Table 601/05-55-15-993-807

WIRE BUNDLE	CONNECTOR	PNL OR MODULE	WDM
W6570	D11306	M1827	28-41-11

SUBTASK 05-55-15-200-031

(3) Connectors in the Nose Wheel Well:

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 602/05-55-15-993-808

WIRE BUNDLE	CONNECTOR	PNL OR MODULE	WDM
W0088	D48116J	J48A Pos 13	28-41-11
W5158	D48116P	J48A Pos 13	28-41-11
LOM 402, 404, 406, 407, 411, 412, 415, 416, 420, 422-434, 437-447, 450-456			
W0088	D48128J	J48A Pos 24	28-41-11
LOM 457-999			
W0088	D47600J	J48A Pos 24	28-41-11
LOM 402, 404, 406, 407, 411, 412, 415, 416, 420, 422-434, 437-447, 450-456			
W6570	D48128P	J48A Pos 24	28-41-11
LOM 457-999			
W5558	D47600P	J48A Pos 24	28-41-11
LOM ALL			

SUBTASK 05-55-15-200-032

(4) Connectors in the E/E Bay Main Equipment Center:

Table 603/05-55-15-993-809

WIRE BUNDLE	CONNECTOR	PNL OR MODULE	WDM
W2363	D04069P	E1-1 Pos 29	22-11-11
W2465	D08019J	E1-4 Pos 1	22-11-11
W5367	D04073P	E1-1 Pos 27	22-11-31
W5375	D04077J	E1-4 Pos 15	22-11-31

SUBTASK 05-55-15-200-033

(5) Connectors in the Forward Cargo Compartment, Forward:

Table 604/05-55-15-993-810

WIRE BUNDLE	CONNECTOR	PNL OR MODULE	WDM
W0220	D40130J	E2-2 Pos 25	73-31-11
W0220	D40136J	E2-2 Pos 7	80-11-11
W0220	D40450J	E2-2 Pos 24	73-31-11
W0410	D40156J	E4-1 Pos 50	73-21-21
W0410	D40158J	E4-1 Pos 42	76-21-21
W0410	D40390J	E4-1 Pos 52	73-21-31
W0422	D40164J	E4-2 Pos 15	28-41-11
W0422	D40388J	E4-2 Pos 24	27-62-11
W0422	D40618J	E4-2 Pos 35	24-33-11
W3170	D49994P	E3-1 Pos 14	79-33-11
W4170	D40732P	E3-1 Pos 36	77-12-11

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 604/05-55-15-993-810 (Continued)

WIRE BUNDLE	CONNECTOR	PNL OR MODULE	WDM
W5158	D40618P	E4-2 Pos 35	24-33-11
W5162	D40130P	E2-2 Pos 25	73-31-11
W5310	D40448P	E3-1 Pos 11	73-24-11
W5310	D40450P	E2-2 Pos 24	73-31-11
W5375	D42053P	E3-2 Pos 47	27-18-11
W5564	D40136P	E2-2 Pos 7	80-11-11
W6162	D40156P	E4-1 Pos 50	73-21-21
W6412	D40388P	E4-2 Pos 24	27-62-11
W6412	D40390P	E4 -1 Pos 52	73-21-31
W6412	D40394P	E3-1 Pos 34	36-11-11
W6564	D40158P	E4-1 Pos 42	76-21-21
W6586	D40164P	E4-2 Pos 15	28-41-11

SUBTASK 05-55-15-200-034

(6) Connectors in the Forward Cargo Compartment, Aft:

Table 605/05-55-15-993-811

WIRE BUNDLE	CONNECTOR	PNL OR MODULE	WDM
W5162	D39921	AC0520 DM11	73-21-21
W5170	D39925	AC0520 DM13	79-31-11
W5172	D39917	AC0520 DM09	73-21-21
W5564	D39909	AC0520 DM05	76-21-11
W6162	D39922	AD0520 DM12	73-21-21
W6170	D39926	AD0520 DM14	30-21-21
W6172	D39918	AD0520 DM10	73-21-21
W6564	D39910	AD0520 DM06	76-21-21
W6586	D39906	AD0520 DM04	28-41-11

SUBTASK 05-55-15-200-035

(7) Connectors in the Flight Compartment:

Table 606/05-55-15-993-812

WIRE BUNDLE	CONNECTOR	PNL OR MODULE	WDM
W2363	D00299	Mode Control Panel	22-11-11
W2363	D00301	Mode Control Panel	22-11-11
W2363	GD977	Shield Gnd	22-11-11
W2363	GD981	Shield Gnd	22-11-11
W2465	D01815	Mode Control Panel	22-11-11

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 606/05-55-15-993-812 (Continued)

WIRE BUNDLE	CONNECTOR	PNL OR MODULE	WDM
W2465	GD980	Shield Gnd	22-11-11
W2465	GD985	Shield Gnd	22-11-11

SUBTASK 05-55-15-200-036

(8) Connectors in the Passenger Cabin, Forward:

Table 607/05-55-15-993-813

WIRE BUNDLE	CONNECTOR	PNL OR MODULE	WDM
W3170/W5172	D40736P to D40736J	AB0420A Pos 2	79-31-11
W3170/W5170	D40734P to D40734J	AB0420A Pos 1	79-31-11
W4170/W6170	D40728P to D40728J	AB0405B Pos 1	77-12-11

G. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-15-410-001

(1) Close these access panels:

Number	Name/Location
121JW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD
121KW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FILTER COVER
122HW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FAN COVER

SUBTASK 05-55-15-410-002

(2) Reinstall the AutoBrake/AntiSkid/Engine Control Panel assembly and tighten the fasteners.

SUBTASK 05-55-15-410-003

(3) Reinstall the MCP and tighten the fasteners.

SUBTASK 05-55-15-410-004

(4) To install the ceiling panels, do these steps:

(a) Install the ceiling panels at Station 410 and 424.

(b) If removed, install the overhead stowage bins (TASK 25-24-31-400-801 or TASK 25-24-31-400-803-001 or TASK 25-24-31-400-804-001 or TASK 25-24-31-400-806-001).

SUBTASK 05-55-15-420-001

(5) If removed, install recirculation air filter supports to access the connector/wire bundle.

SUBTASK 05-55-15-420-002

(6) Do this task: Recirculation Air Filter - Installation, TASK 21-25-01-400-801.

SUBTASK 05-55-15-410-005

(7) Close these access panels:

Number	Name/Location
112A	Forward Access Door
117A	Electronic Equipment Access Door
121EW	Panel Assy - Fwd Cargo Compartment Aft Bulkhead

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

Number	Name/Location
122GW	Panel Assy - FWD Cargo Compartment Aft Bulkhead

SUBTASK 05-55-15-410-019

(8) Close this access panel:

Number	Name/Location
113BW	Forward Nose Wheel Well Panel

(a) Do this task: Nose Wheel Well Access Panels - Installation, TASK 53-14-01-420-801.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

428181 S0000138908_V2

HIRF/LIGHTNING PROTECTION - CONNECTORS IN THE FORWARD ACCESS AREA - INSPECTION
Figure 601/05-55-15-990-832

ECCN 9E991 BOEING PROPRIETARY - See title page for details

NOSE WHEEL WELL

A

400707 S0000135328_V2

HIRF/LIGHTNING PROTECTION - CONNECTORS IN THE NOSE WHEEL WELL - INSPECTION
Figure 602/05-55-15-990-833 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

JUNCTION BOX, J48

B

400708 S0000135331_V2

HIRF/LIGHTNING PROTECTION - CONNECTORS IN THE NOSE WHEEL WELL - INSPECTION
Figure 602/05-55-15-990-833 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

2921327 S0000703577_V1

HIRF/LIGHTNING PROTECTION - CONNECTORS IN THE NOSE WHEEL WELL - INSPECTION
Figure 602/05-55-15-990-833 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

ELECTRONIC EQUIPMENT RACKS

A

400733 S0000135456_V3

HIRF/LIGHTNING PROTECTION - CONNECTORS IN THE E/E BAY MAIN EQUIPMENT CENTER - INSPECTION
Figure 603/05-55-15-990-834 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

400736 S0000135458_V2

HIRF/LIGHTNING PROTECTION - CONNECTORS IN THE E/E BAY MAIN EQUIPMENT CENTER - INSPECTION
Figure 603/05-55-15-990-834 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

DISCONNECT PANEL, AE0104A

C

400740 S0000135459_V3

HIRF/LIGHTNING PROTECTION - CONNECTORS IN THE E/E BAY MAIN EQUIPMENT CENTER - INSPECTION
Figure 603/05-55-15-990-834 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FORWARD CARGO COMPARTMENT

A

400751 S0000135618_V2

HIRF/LIGHTNING PROTECTION - CONNECTORS IN THE FORWARD CARGO COMPARTMENT, FORWARD - INSPECTION
Figure 604/05-55-15-990-835 (Sheet 1 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

E2-2 SHELF

B

400752 S0000135716_V2

HIRF/LIGHTNING PROTECTION - CONNECTORS IN THE FORWARD CARGO COMPARTMENT, FORWARD - INSPECTION
Figure 604/05-55-15-990-835 (Sheet 2 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

E3-1, -2 SHELVES

C

400753 S0000135717_V2

HIRF/LIGHTNING PROTECTION - CONNECTORS IN THE FORWARD CARGO COMPARTMENT, FORWARD - INSPECTION
Figure 604/05-55-15-990-835 (Sheet 3 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

E4-1, -2 SHELVES

D

400754 S0000135718_V3

HIRF/LIGHTNING PROTECTION - CONNECTORS IN THE FORWARD CARGO COMPARTMENT, FORWARD - INSPECTION
Figure 604/05-55-15-990-835 (Sheet 4 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

400769 S0000135754_V2

HIRF/LIGHTNING PROTECTION - CONNECTORS IN THE FORWARD CARGO COMPARTMENT, AFT - INSPECTION
Figure 605/05-55-15-990-836 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

DISCONNECT PANEL, AC0520

B

400771 S0000135756_V2

HIRF/LIGHTNING PROTECTION - CONNECTORS IN THE FORWARD CARGO COMPARTMENT, AFT - INSPECTION
Figure 605/05-55-15-990-836 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

DISCONNECT PANEL, AD0520

C

NOTE:

MIX BAY AIR DISTRIBUTION SYSTEM NOT SHOWN FOR CLARITY.

400773 S0000135757_V2

HIRF/LIGHTNING PROTECTION - CONNECTORS IN THE FORWARD CARGO COMPARTMENT, AFT - INSPECTION
Figure 605/05-55-15-990-836 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FLIGHT COMPARTMENT

400782 S0000135812_V6

HIRF/LIGHTNING PROTECTION - CONNECTORS IN THE FLIGHT COMPARTMENT - INSPECTION
Figure 606/05-55-15-990-837 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

B

418363 S0000137020_V2

HIRF/LIGHTNING PROTECTION - CONNECTORS IN THE FLIGHT COMPARTMENT - INSPECTION
Figure 606/05-55-15-990-837 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

400788 S0000135856_V2

HIRF/LIGHTNING PROTECTION - CONNECTORS IN THE PASSENGER CABIN, FORWARD - INSPECTION
Figure 607/05-55-15-990-838 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

400790 S0000135857_V2

HIRF/LIGHTNING PROTECTION - CONNECTORS IN THE PASSENGER CABIN, FORWARD - INSPECTION
Figure 607/05-55-15-990-838 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-15-200-805

3. **Detailed Visual Inspection - Connector Pigtails Inside the Pressure Vessel**
(Figure 608, Figure 609, Figure 610, Figure 611, Figure 612, Figure 613, Figure 614)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) A Detailed Visual Inspection is an intensive visual check of specified details associated with assemblies or installations.

(a) You will search for evidence of connector pigtail irregularities using adequate lighting.

(b) You may need inspection aids such as mirrors.

(c) Do not remove sealant when you do this task.

(d) Do not disassemble connectors when you do this task.

(e) Do not remove system Line Replaceable Unit (LRU)s when you do this task.

B. References

Reference	Title
21-25-01-000-801	Recirculation Air Filter - Removal (P/B 401)
21-25-01-400-801	Recirculation Air Filter - Installation (P/B 401)
25-21-45-000-801	Ceiling Panel - Removal (P/B 401)
25-21-45-000-803-001	Main Ceiling Panel - Removal (P/B 401)
25-21-45-400-801	Ceiling Panel - Installation (P/B 401)
25-21-45-400-803-001	Main Ceiling Panel - Installation (P/B 401)
25-24-31-000-801-001	Overhead Stowage Bin - Removal (P/B 401)
25-24-31-000-802-001	Overhead Stowage Bin Module - Removal (P/B 401)
25-24-31-000-804-001	Overhead Stowage Bin - Removal (P/B 401)
25-24-31-020-801	Overhead Stowage Bin - Removal (P/B 401)
25-24-31-400-801	Overhead Stowage Bin - Installation (P/B 401)
25-24-31-400-803-001	Overhead Stowage Bin - Installation (P/B 401)
25-24-31-400-804-001	Overhead Stowage Bin Module - Installation (P/B 401)
25-24-31-400-806-001	Overhead Stowage Bin - Installation (P/B 401)
32-00-01-480-801	Landing Gear Downlock Pins Installation (P/B 201)
53-14-01-020-801	Nose Wheel Well Access Panels - Removal (P/B 401)
53-14-01-420-801	Nose Wheel Well Access Panels - Installation (P/B 401)
SWPM Chapter 20	Standard Wiring Practices Manual

C. Location Zones

Zone	Area
112	Area Forward of Nose Landing Gear Wheel Well
113	Area Above and Outboard of Nose Landing Gear Wheel Well - Left
117	Electrical and Electronics Compartment - Left
118	Electrical and Electronics Compartment - Right
121	Forward Cargo Compartment - Left
122	Forward Cargo Compartment - Right
211	Flight Compartment - Left
212	Flight Compartment - Right
230	Subzone - Passenger Compartment - Body Station 360.00 to 663.75

ECCN 9E991 BOEING PROPRIETARY - See title page for details

D. Access Panels

Number	Name/Location
112A	Forward Access Door
113BW	Forward Nose Wheel Well Panel
117A	Electronic Equipment Access Door
121EW	Panel Assy - Fwd Cargo Compartment Aft Bulkhead
121JW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD
121KW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FILTER COVER
122GW	Panel Assy - FWD Cargo Compartment Aft Bulkhead
122HW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FAN COVER

E. Prepare for the Inspection

SUBTASK 05-55-15-040-002

(1) Do this task: Landing Gear Downlock Pins Installation, TASK 32-00-01-480-801.

SUBTASK 05-55-15-020-001

(2) Do this task: Recirculation Air Filter - Removal, TASK 21-25-01-000-801.

SUBTASK 05-55-15-020-002

(3) Remove recirculation air filter supports as necessary to access the connector/wire bundle.

SUBTASK 05-55-15-010-012

(4) Open these access panels:

Number	Name/Location
112A	Forward Access Door
117A	Electronic Equipment Access Door
121EW	Panel Assy - Fwd Cargo Compartment Aft Bulkhead
122GW	Panel Assy - FWD Cargo Compartment Aft Bulkhead

SUBTASK 05-55-15-010-021

(5) Open this access panel:

Number	Name/Location
113BW	Forward Nose Wheel Well Panel

(a) Do this task: Nose Wheel Well Access Panels - Removal, TASK 53-14-01-020-801.

SUBTASK 05-55-15-010-028

(6) Open these access panels:

Number	Name/Location
121JW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD
121KW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FILTER COVER
122HW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FAN COVER

SUBTASK 05-55-15-010-014

(7) Gain access to the connectors behind the Mode Control Panel (MCP).

(a) Loosen the fasteners on MCP and slide it out to access the connectors.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-55-15-010-015

(8) Gain access to the connectors behind the AutoBrake/AntiSkid/Engine Control Panel:

(a) Loosen the four quarter turn fasteners and lift the AutoBrake/AntiSkid/Engine Control Panel assembly out of the center main panel.

(b) Carefully hang the panel assembly by the connecting wire bundles.

SUBTASK 05-55-15-010-023

(9) Gain access to the disconnect panels above the passenger compartment ceiling.

(a) Remove the ceiling panels at Station 410 and 424 (TASK 25-21-45-000-801 or TASK 25-21-45-000-803-001).

(b) If necessary, remove the overhead stowage bin (TASK 25-24-31-020-801 or TASK 25-24-31-000-801-001 or TASK 25-24-31-000-802-001 or TASK 25-24-31-000-804-001)

F. Detailed Visual Inspection

SUBTASK 05-55-15-211-002

(1) Procedure to do the Detailed Visual Inspection of all pigtails associated with connectors listed in Table below:

(a) Make sure that the terminals do not have any sign of crack or corrosion.

(b) Make sure that there is no crack or chafed on the ground wire.

(c) Make sure that the connection between terminal and airplane structure is not loose.

(d) Replace or repair any damaged components found during this inspection (SWPM Chapter 20).

SUBTASK 05-55-15-200-009

(2) Connectors in the Forward Access Area:

Table 608/05-55-15-993-821

WIRE BUNDLE	CONNECTOR	PNL OR MODULE	WDM
W6570	D11306	M1827	28-41-11

SUBTASK 05-55-15-200-010

(3) Connectors in the Nose Wheel Well:

Table 609/05-55-15-993-822

WIRE BUNDLE	CONNECTOR	PNL OR MODULE	WDM
W0088	D48116J	J48A Pos 13	28-41-11
W5158	D48116P	J48A Pos 13	28-41-11
LOM 402, 404, 406, 407, 411, 412, 415, 416, 420, 422-434, 437-447, 450-456			
W0088	D48128J	J48A Pos 24	28-41-11
LOM 457-999			
W0088	D47600J	J48A Pos 24	28-41-11
LOM 402, 404, 406, 407, 411, 412, 415, 416, 420, 422-434, 437-447, 450-456			
W6570	D48128P	J48A Pos 24	28-41-11

ECCN 9E991 BOEING PROPRIETARY - See title page for details

LOM 402, 404, 406, 407, 411, 412, 415, 416, 420, 422-434, 437-447, 450-456 (Continued)

Table 609/05-55-15-993-822 (Continued)

WIRE BUNDLE	CONNECTOR	PNL OR MODULE	WDM
LOM 457-999			
W5558	D47600P	J48A Pos 24	28-41-11
LOM ALL			

SUBTASK 05-55-15-200-011

(4) Connectors in the Electrical / Electronic (E/E) Bay Main Equipment Center:

Table 610/05-55-15-993-823

WIRE BUNDLE	CONNECTOR	PNL OR MODULE	WDM
W2363	D04069P	E1-1 Pos 29	22-11-11
W2465	D08019J	E1-4 Pos 1	22-11-11
W5367	D04073P	E1-1 Pos 27	22-11-31
W5375	D04077J	E1-4 Pos 15	22-11-31

SUBTASK 05-55-15-200-012

(5) Connectors in the Forward Cargo Compartment, Forward:

Table 611/05-55-15-993-824

WIRE BUNDLE	CONNECTOR	PNL OR MODULE	WDM
W0220	D40130J	E2-2 Pos 25	73-31-11
W0220	D40136J	E2-2 Pos 7	80-11-11
W0220	D40450J	E2-2 Pos 24	73-31-11
W0410	D40156J	E4-1 Pos 50	73-21-21
W0410	D40158J	E4-1 Pos 42	76-21-21
W0410	D40390J	E4-1 Pos 52	73-21-31
W0422	D40164J	E4-2 Pos 15	28-41-11
W0422	D40388J	E4-2 Pos 24	27-62-11
W0422	D40618J	E4-2 Pos 35	24-33-11
W3170	D49994P	E3-1 Pos 14	79-33-11
W4170	D40732P	E3-1 Pos 36	77-12-11
W5158	D40618P	E4-2 Pos 35	24-33-11
W5162	D40130P	E2-2 Pos 25	73-31-11
W5310	D40448P	E3-1 Pos 11	73-24-11
W5310	D40450P	E2-2 Pos 24	73-31-11
W5375	D42053P	E3-2 Pos 47	27-18-11
W5564	D40136P	E2-2 Pos 7	80-11-11
W6162	D40156P	E4-1 Pos 50	73-21-21

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 611/05-55-15-993-824 (Continued)

WIRE BUNDLE	CONNECTOR	PNL OR MODULE	WDM
W6412	D40388P	E4-2 Pos 24	27-62-11
W6412	D40390P	E4 -1 Pos 52	73-21-31
W6412	D40394P	E3-1 Pos 34	36-11-11
W6564	D40158P	E4-1 Pos 42	76-21-21
W6586	D40164P	E4-2 Pos 15	28-41-11

SUBTASK 05-55-15-200-013

(6) Connectors in the Forward Cargo Compartment, Aft:

Table 612/05-55-15-993-825

WIRE BUNDLE	CONNECTOR	PNL OR MODULE	WDM
W5162	D39921	AC0520 DM11	73-21-21
W5170	D39925	AC0520 DM13	79-31-11
W5172	D39917	AC0520 DM09	73-21-21
W5564	D39909	AC0520 DM05	76-21-11
W6162	D39922	AD0520 DM12	73-21-21
W6170	D39926	AD0520 DM14	30-21-21
W6172	D39918	AD0520 DM10	73-21-21
W6564	D39910	AD0520 DM06	76-21-21
W6586	D39906	AD0520 DM04	28-41-11

SUBTASK 05-55-15-200-014

(7) Connectors in the Flight Compartment:

Table 613/05-55-15-993-826

WIRE BUNDLE	CONNECTOR	PNL OR MODULE	WDM
W2363	D00299	Mode Control Panel	22-11-11
W2363	D00301	Mode Control Panel	22-11-11
W2363	GD977	Shield Gnd	22-11-11
W2363	GD981	Shield Gnd	22-11-11
W2465	D01815	Mode Control Panel	22-11-11
W2465	GD980	Shield Gnd	22-11-11
W2465	GD985	Shield Gnd	22-11-11

SUBTASK 05-55-15-200-015

(8) Connectors in the Passenger Cabin, Forward:

Table 614/05-55-15-993-827

WIRE BUNDLE	CONNECTOR	PNL OR MODULE	WDM
W3170/W5172	D40736P to D40736J	AB0420A Pos 2	79-31-11

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 614/05-55-15-993-827 (Continued)

WIRE BUNDLE	CONNECTOR	PNL OR MODULE	WDM
W3170/W5170	D40734P to D40734J	AB0420A Pos 1	79-31-11
W4170/W6170	D40728P to D40728J	AB0405B Pos 1	77-12-11

G. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-15-410-025

(1) Close these access panels:

Number	Name/Location
121JW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD
121KW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FILTER COVER
122HW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FAN COVER

SUBTASK 05-55-15-410-012

(2) Reinstall the AutoBrake/AntiSkid/Engine Control Panel assembly and tighten the fasteners.

SUBTASK 05-55-15-410-013

(3) Reinstall the MCP and tighten the fasteners.

SUBTASK 05-55-15-010-024

(4) To install the ceiling panels, do these steps:

(a) Install the ceiling panels at Station 410 and 424 (TASK 25-21-45-400-801 or TASK 25-21-45-400-803-001).

(b) If removed, install the overhead stowage bins (TASK 25-24-31-400-801 or TASK 25-24-31-400-803-001 or TASK 25-24-31-400-804-001 or TASK 25-24-31-400-806-001)

SUBTASK 05-55-15-410-024

(5) If removed, install recirculation air filter supports to access the connector/wire bundle.

SUBTASK 05-55-15-410-026

(6) Do this task: Recirculation Air Filter - Installation, TASK 21-25-01-400-801.

SUBTASK 05-55-15-410-015

(7) Close these access panels:

Number	Name/Location
112A	Forward Access Door
117A	Electronic Equipment Access Door
121EW	Panel Assy - Fwd Cargo Compartment Aft Bulkhead
122GW	Panel Assy - FWD Cargo Compartment Aft Bulkhead

SUBTASK 05-55-15-410-020

(8) Close this access panel:

Number	Name/Location
113BW	Forward Nose Wheel Well Panel

(a) Do this task: Nose Wheel Well Access Panels - Installation, TASK 53-14-01-420-801.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

428181 S0000138908_V2

HIRF/LIGHTNING PROTECTION - PIGTAILS IN THE FORWARD ACCESS AREA - INSPECTION
Figure 608/05-55-15-990-811

ECCN 9E991 BOEING PROPRIETARY - See title page for details

NOSE WHEEL WELL

A

400707 S0000135328_V2

HIRF/LIGHTNING PROTECTION - PIGTAILS IN THE NOSE WHEEL WELL - INSPECTION
Figure 609/05-55-15-990-812 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

JUNCTION BOX, J48

B

400708 S0000135331_V2

HIRF/LIGHTNING PROTECTION - PIGTAILS IN THE NOSE WHEEL WELL - INSPECTION
Figure 609/05-55-15-990-812 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

2921327 S0000703577_V1

HIRF/LIGHTNING PROTECTION - PIGTAILS IN THE NOSE WHEEL WELL - INSPECTION
Figure 609/05-55-15-990-812 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

ELECTRONIC EQUIPMENT RACKS

A

400733 S0000135456_V3

HIRF/LIGHTNING PROTECTION - PIGTAILS IN THE E/E BAY MAIN EQUIPMENT CENTER - INSPECTION
Figure 610/05-55-15-990-813 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

400736 S0000135458_V2

HIRF/LIGHTNING PROTECTION - PIGTAILS IN THE E/E BAY MAIN EQUIPMENT CENTER - INSPECTION
Figure 610/05-55-15-990-813 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

DISCONNECT PANEL, AE0104A

C

400740 S0000135459_V3

HIRF/LIGHTNING PROTECTION - PIGTAILS IN THE E/E BAY MAIN EQUIPMENT CENTER - INSPECTION
Figure 610/05-55-15-990-813 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FORWARD CARGO COMPARTMENT

A

400751 S0000135618_V2

HIRF/LIGHTNING PROTECTION - PIGTAILS IN THE FORWARD CARGO COMPARTMENT, FORWARD - INSPECTION
Figure 611/05-55-15-990-814 (Sheet 1 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

E2-2 SHELF

B

400752 S0000135716_V2

HIRF/LIGHTNING PROTECTION - PIGTAILS IN THE FORWARD CARGO COMPARTMENT, FORWARD - INSPECTION
Figure 611/05-55-15-990-814 (Sheet 2 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

E3-1, -2 SHELVES

C

400753 S0000135717_V2

HIRF/LIGHTNING PROTECTION - PIGTAILS IN THE FORWARD CARGO COMPARTMENT, FORWARD - INSPECTION
Figure 611/05-55-15-990-814 (Sheet 3 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

E4-1, -2 SHELVES

D

400754 S0000135718_V3

HIRF/LIGHTNING PROTECTION - PIGTAILS IN THE FORWARD CARGO COMPARTMENT, FORWARD - INSPECTION
Figure 611/05-55-15-990-814 (Sheet 4 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

400769 S0000135754_V2

HIRF/LIGHTNING PROTECTION - PIGTAILS IN THE FORWARD CARGO COMPARTMENT, AFT - INSPECTION
Figure 612/05-55-15-990-815 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

DISCONNECT PANEL, AC0520

B

400771 S0000135756_V2

HIRF/LIGHTNING PROTECTION - PIGTAILS IN THE FORWARD CARGO COMPARTMENT, AFT - INSPECTION
Figure 612/05-55-15-990-815 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

DISCONNECT PANEL, AD0520

C

NOTE:

MIX BAY AIR DISTRIBUTION SYSTEM NOT SHOWN FOR CLARITY.

400773 S0000135757_V2

HIRF/LIGHTNING PROTECTION - PIGTAILS IN THE FORWARD CARGO COMPARTMENT, AFT - INSPECTION
Figure 612/05-55-15-990-815 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FLIGHT COMPARTMENT

400782 S0000135812_V6

HIRF/LIGHTNING PROTECTION - PIGTAILS IN THE FLIGHT COMPARTMENT - INSPECTION
Figure 613/05-55-15-990-816 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

B

418363 S0000137020_V2

HIRF/LIGHTNING PROTECTION - PIGTAILS IN THE FLIGHT COMPARTMENT - INSPECTION
Figure 613/05-55-15-990-816 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

400788 S0000135856_V2

HIRF/LIGHTNING PROTECTION - PIGTAILS IN THE PASSENGER CABIN, FORWARD - INSPECTION
Figure 614/05-55-15-990-817 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

HIRF/LIGHTNING PROTECTION - PIGTAILS IN THE PASSENGER CABIN, FORWARD - INSPECTION
Figure 614/05-55-15-990-817 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-15-200-806

4. General Visual Inspection - Wiring at Connectors Inside the Pressure Vessel

(Figure 615, Figure 616, Figure 617, Figure 618, Figure 619, Figure 620, Figure 621)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) A General Visual Inspection is a visual check for obvious damage associated with assemblies or installations.

(a) You will search for evidence of wiring irregularities near connectors, using normally available lighting.

(b) Do not remove sealant when you do this task.

(c) Do not disassemble connectors when you do this task.

(d) Do not remove system Line Replaceable Unit (LRU)s when you do this task.

B. References

Reference	Title
21-25-01-000-801	Recirculation Air Filter - Removal (P/B 401)
21-25-01-400-801	Recirculation Air Filter - Installation (P/B 401)
25-21-45-000-801	Ceiling Panel - Removal (P/B 401)
25-21-45-000-803-001	Main Ceiling Panel - Removal (P/B 401)
25-21-45-400-801	Ceiling Panel - Installation (P/B 401)
25-21-45-400-803-001	Main Ceiling Panel - Installation (P/B 401)
25-24-31-000-801-001	Overhead Stowage Bin - Removal (P/B 401)
25-24-31-000-802-001	Overhead Stowage Bin Module - Removal (P/B 401)
25-24-31-000-804-001	Overhead Stowage Bin - Removal (P/B 401)
25-24-31-020-801	Overhead Stowage Bin - Removal (P/B 401)
25-24-31-400-801	Overhead Stowage Bin - Installation (P/B 401)
25-24-31-400-803-001	Overhead Stowage Bin - Installation (P/B 401)
25-24-31-400-804-001	Overhead Stowage Bin Module - Installation (P/B 401)
25-24-31-400-806-001	Overhead Stowage Bin - Installation (P/B 401)
25-24-40-000-801	Center Overhead Stowage Box Removal (P/B 401)
25-24-40-400-801	Center Overhead Stowage Box Installation (P/B 401)
32-00-01-480-801	Landing Gear Downlock Pins Installation (P/B 201)
53-14-01-020-801	Nose Wheel Well Access Panels - Removal (P/B 401)
53-14-01-420-801	Nose Wheel Well Access Panels - Installation (P/B 401)
SWPM Chapter 20	Standard Wiring Practices Manual

C. Location Zones

Zone	Area
112	Area Forward of Nose Landing Gear Wheel Well
113	Area Above and Outboard of Nose Landing Gear Wheel Well - Left
117	Electrical and Electronics Compartment - Left
118	Electrical and Electronics Compartment - Right
121	Forward Cargo Compartment - Left
122	Forward Cargo Compartment - Right
211	Flight Compartment - Left

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

Zone	Area
212	Flight Compartment - Right
230	Subzone - Passenger Compartment - Body Station 360.00 to 663.75

D. Access Panels

Number	Name/Location
112A	Forward Access Door
113BW	Forward Nose Wheel Well Panel
117A	Electronic Equipment Access Door
121EW	Panel Assy - Fwd Cargo Compartment Aft Bulkhead
121JW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD
121KW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FILTER COVER
122GW	Panel Assy - FWD Cargo Compartment Aft Bulkhead
122HW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FAN COVER

E. Prepare for the Inspection

SUBTASK 05-55-15-010-006

(1) Do this task: Landing Gear Downlock Pins Installation, TASK 32-00-01-480-801.

SUBTASK 05-55-15-010-029

(2) Open these access panels:

Number	Name/Location
121EW	Panel Assy - Fwd Cargo Compartment Aft Bulkhead
122GW	Panel Assy - FWD Cargo Compartment Aft Bulkhead

SUBTASK 05-55-15-010-025

(3) Do this task: Recirculation Air Filter - Removal, TASK 21-25-01-000-801.

SUBTASK 05-55-15-020-003

(4) Remove recirculation air filter supports as necessary to access the connector/wire bundle.

SUBTASK 05-55-15-010-007

(5) Open these access panels:

Number	Name/Location
112A	Forward Access Door
117A	Electronic Equipment Access Door

SUBTASK 05-55-15-010-022

(6) Open this access panel:

Number	Name/Location
113BW	Forward Nose Wheel Well Panel

(a) Do this task: Nose Wheel Well Access Panels - Removal, TASK 53-14-01-020-801.

SUBTASK 05-55-15-010-026

(7) Open these access panels:

Number	Name/Location
121JW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

Number	Name/Location
121KW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FILTER COVER
122HW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FAN COVER

SUBTASK 05-55-15-010-009

(8) Gain access to the connectors behind the Mode Control Panel (MCP).

(a) Loosen the fasteners on MCP and slide it out to access the connectors.

SUBTASK 05-55-15-010-010

(9) Gain access to the connectors behind the AutoBrake/AntiSkid/Engine Control Panel:

(a) Loosen the four quarter turn fasteners and lift the AutoBrake/AntiSkid/Engine Control Panel assembly out of the center main panel.

(b) Carefully hang the panel assembly by the connecting wire bundles.

SUBTASK 05-55-15-010-027

(10) Gain access to the disconnect panels above the passenger compartment ceiling.

(a) Remove the ceiling panels at Station 410 and 424 (TASK 25-21-45-000-801 or TASK 25-21-45-000-803-001).

(b) If necessary, remove the overhead stowage bin (TASK 25-24-31-020-801 or TASK 25-24-31-000-801-001 or TASK 25-24-31-000-802-001 or TASK 25-24-31-000-804-001)

LOM 402, 404, 406, 416, 422, 425-434, 437-445, 450-454, 461-464, 466-999

(c) If it is necessary, remove the center overhead stowage box (TASK 25-24-40-000-801).

LOM ALL

F. General Visual Inspection

SUBTASK 05-55-15-210-018

(1) Procedure to do the General Visual Inspection of the wire bundle cables listed in Table below:

NOTE: Do this procedure only for the exposed part of the wire bundle.

(a) Make sure that the wire bundle cables are not chafed, cut, or worn.

(b) Replace or repair any damaged wiring found during this inspection (SWPM Chapter 20).

SUBTASK 05-55-15-200-016

(2) Connectors in the Forward Access Area:

Table 615/05-55-15-993-814

WIRE BUNDLE	CONNECTOR	PNL OR MODULE	WDM
W6570	D11306	M1827	28-41-11

SUBTASK 05-55-15-200-017

(3) Connectors in the Nose Wheel Well:

Table 616/05-55-15-993-815

WIRE BUNDLE	CONNECTOR	PNL OR MODULE	WDM
W0088	D48116J	J48A Pos 13	28-41-11

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 616/05-55-15-993-815 (Continued)

WIRE BUNDLE	CONNECTOR	PNL OR MODULE	WDM
W5158	D48116P	J48A Pos 13	28-41-11
LOM 402, 404, 406, 407, 411, 412, 415, 416, 420, 422-434, 437-447, 450-456			
W0088	D48128J	J48A Pos 24	28-41-11
LOM 457-999			
W0088	D47600J	J48A Pos 24	28-41-11
LOM 402, 404, 406, 407, 411, 412, 415, 416, 420, 422-434, 437-447, 450-456			
W6570	D48128P	J48A Pos 24	28-41-11
LOM 457-999			
W5558	D47600P	J48A Pos 24	28-41-11
LOM ALL			

SUBTASK 05-55-15-200-018

(4) Connectors in the E/E Bay Main Equipment Center:

Table 617/05-55-15-993-816

WIRE BUNDLE	CONNECTOR	PNL OR MODULE	WDM
W2363	D04069P	E1-1 Pos 29	22-11-11
W2465	D08019J	E1-4 Pos 1	22-11-11
W5367	D04073P	E1-1 Pos 27	22-11-31
W5375	D04077J	E1-4 Pos 15	22-11-31

SUBTASK 05-55-15-200-019

(5) Connectors in the Forward Cargo Compartment, Forward:

Table 618/05-55-15-993-817

WIRE BUNDLE	CONNECTOR	PNL OR MODULE	WDM
W0220	D40130J	E2-2 Pos 25	73-31-11
W0220	D40136J	E2-2 Pos 7	80-11-11
W0220	D40450J	E2-2 Pos 24	73-31-11
W0410	D40156J	E4-1 Pos 50	73-21-21
W0410	D40158J	E4-1 Pos 42	76-21-21
W0410	D40390J	E4-1 Pos 52	73-21-31
W0422	D40164J	E4-2 Pos 15	28-41-11
W0422	D40388J	E4-2 Pos 24	27-62-11
W0422	D40618J	E4-2 Pos 35	24-33-11
W3170	D49994P	E3-1 Pos 14	79-33-11
W4170	D40732P	E3-1 Pos 36	77-12-11
W5158	D40618P	E4-2 Pos 35	24-33-11

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 618/05-55-15-993-817 (Continued)

WIRE BUNDLE	CONNECTOR	PNL OR MODULE	WDM
W5162	D40130P	E2-2 Pos 25	73-31-11
W5310	D40448P	E3-1 Pos 11	73-24-11
W5310	D40450P	E2-2 Pos 24	73-31-11
W5375	D42053P	E3-2 Pos 47	27-18-11
W5564	D40136P	E2-2 Pos 7	80-11-11
W6162	D40156P	E4-1 Pos 50	73-21-21
W6412	D40388P	E4-2 Pos 24	27-62-11
W6412	D40390P	E4 -1 Pos 52	73-21-31
W6412	D40394P	E3-1 Pos 34	36-11-11
W6564	D40158P	E4-1 Pos 42	76-21-21
W6586	D40164P	E4-2 Pos 15	28-41-11

SUBTASK 05-55-15-200-020

(6) Connectors in the Forward Cargo Compartment, Aft:

Table 619/05-55-15-993-818

WIRE BUNDLE	CONNECTOR	PNL OR MODULE	WDM
W5162	D39921	AC0520 DM11	73-21-21
W5170	D39925	AC0520 DM13	79-31-11
W5172	D39917	AC0520 DM09	73-21-21
W5564	D39909	AC0520 DM05	76-21-11
W6162	D39922	AD0520 DM12	73-21-21
W6170	D39926	AD0520 DM14	30-21-21
W6172	D39918	AD0520 DM10	73-21-21
W6564	D39910	AD0520 DM06	76-21-21
W6586	D39906	AD0520 DM04	28-41-11

SUBTASK 05-55-15-200-021

(7) Connectors in the Flight Compartment:

Table 620/05-55-15-993-819

WIRE BUNDLE	CONNECTOR	PNL OR MODULE	WDM
W2363	D00299	Mode Control Panel	22-11-11
W2363	D00301	Mode Control Panel	22-11-11
W2363	GD977	Shield Gnd	22-11-11
W2363	GD981	Shield Gnd	22-11-11
W2465	D01815	Mode Control Panel	22-11-11
W2465	GD980	Shield Gnd	22-11-11

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 620/05-55-15-993-819 (Continued)

WIRE BUNDLE	CONNECTOR	PNL OR MODULE	WDM
W2465	GD985	Shield Gnd	22-11-11

SUBTASK 05-55-15-200-022

(8) Connectors in the Passenger Cabin, Forward:

Table 621/05-55-15-993-820

WIRE BUNDLE	CONNECTOR	PNL OR MODULE	WDM
W3170/W5172	D40736P to D40736J	AB0420A Pos 2	79-31-11
W3170/W5170	D40734P to D40734J	AB0420A Pos 1	79-31-11
W4170/W6170	D40728P to D40728J	AB0405B Pos 1	77-12-11

G. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-15-410-028

(1) Close these access panels:

Number	Name/Location
121JW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD
121KW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FILTER COVER
122HW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FAN COVER

SUBTASK 05-55-15-410-007

(2) Reinstall the AutoBrake/AntiSkid/Engine Control Panel assembly and tighten the fasteners.

SUBTASK 05-55-15-410-008

(3) Reinstall the MCP and tighten the fasteners.

SUBTASK 05-55-15-410-027

(4) To install the ceiling panels, do these steps:

(a) Install the ceiling panels at Station 410 and 424 (TASK 25-21-45-400-801 or TASK 25-21-45-400-803-001)

(b) If removed, install the overhead stowage bins (TASK 25-24-31-400-801 or TASK 25-24-31-400-803-001 or TASK 25-24-31-400-804-001 or TASK 25-24-31-400-806-001)

LOM 402, 404, 406, 416, 422, 425-434, 437-445, 450-454, 461-464, 466-999

(c) If removed, install the center overhead stowage box (TASK 25-24-40-400-801).

LOM ALL

SUBTASK 05-55-15-410-023

(5) If removed, install recirculation air filter supports to access the connector/wire bundle.

SUBTASK 05-55-15-410-029

(6) Do this task: Recirculation Air Filter - Installation, TASK 21-25-01-400-801.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-55-15-410-030

(7) Close these access panels:

Number	Name/Location
121EW	Panel Assy - Fwd Cargo Compartment Aft Bulkhead
122GW	Panel Assy - FWD Cargo Compartment Aft Bulkhead

SUBTASK 05-55-15-410-010

(8) Close these access panels:

Number	Name/Location
112A	Forward Access Door
117A	Electronic Equipment Access Door

SUBTASK 05-55-15-410-021

(9) Close this access panel:

Number	Name/Location
113BW	Forward Nose Wheel Well Panel

(a) Do this task: Nose Wheel Well Access Panels - Installation, TASK 53-14-01-420-801.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

428181 S0000138908_V2

HIRF/LIGHTNING PROTECTION - WIRING IN THE FORWARD ACCESS AREA - INSPECTION
Figure 615/05-55-15-990-818

ECCN 9E991 BOEING PROPRIETARY - See title page for details

NOSE WHEEL WELL

A

400707 S0000135328_V2

HIRF/LIGHTNING PROTECTION - WIRING IN THE NOSE WHEEL WELL - INSPECTION
Figure 616/05-55-15-990-819 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

JUNCTION BOX, J48

B

400708 S0000135331_V2

HIRF/LIGHTNING PROTECTION - WIRING IN THE NOSE WHEEL WELL - INSPECTION
Figure 616/05-55-15-990-819 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

2921327 S0000703577_V1

HIRF/LIGHTNING PROTECTION - WIRING IN THE NOSE WHEEL WELL - INSPECTION
Figure 616/05-55-15-990-819 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

ELECTRONIC EQUIPMENT RACKS

A

400733 S0000135456_V3

HIRF/LIGHTNING PROTECTION - WIRING IN THE E/E BAY MAIN EQUIPMENT CENTER - INSPECTION
Figure 617/05-55-15-990-820 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

400736 S0000135458_V2

HIRF/LIGHTNING PROTECTION - WIRING IN THE E/E BAY MAIN EQUIPMENT CENTER - INSPECTION
Figure 617/05-55-15-990-820 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

400740 S0000135459_V3

HIRF/LIGHTNING PROTECTION - WIRING IN THE E/E BAY MAIN EQUIPMENT CENTER - INSPECTION
Figure 617/05-55-15-990-820 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FORWARD CARGO COMPARTMENT

A

400751 S0000135618_V2

HIRF/LIGHTNING PROTECTION - WIRING IN THE FORWARD CARGO COMPARTMENT, FORWARD - INSPECTION
Figure 618/05-55-15-990-821 (Sheet 1 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

E2-2 SHELF

B

400752 S0000135716_V2

HIRF/LIGHTNING PROTECTION - WIRING IN THE FORWARD CARGO COMPARTMENT, FORWARD - INSPECTION
Figure 618/05-55-15-990-821 (Sheet 2 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

E3-1, -2 SHELVES

C

400753 S0000135717_V2

HIRF/LIGHTNING PROTECTION - WIRING IN THE FORWARD CARGO COMPARTMENT, FORWARD - INSPECTION
Figure 618/05-55-15-990-821 (Sheet 3 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

E4-1, -2 SHELVES

D

400754 S0000135718_V3

HIRF/LIGHTNING PROTECTION - WIRING IN THE FORWARD CARGO COMPARTMENT, FORWARD - INSPECTION
Figure 618/05-55-15-990-821 (Sheet 4 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

400769 S0000135754_V2

HIRF/LIGHTNING PROTECTION - WIRING IN THE FORWARD CARGO COMPARTMENT, AFT - INSPECTION
Figure 619/05-55-15-990-822 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

DISCONNECT PANEL, AC0520

B

400771 S0000135756_V2

HIRF/LIGHTNING PROTECTION - WIRING IN THE FORWARD CARGO COMPARTMENT, AFT - INSPECTION
Figure 619/05-55-15-990-822 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

DISCONNECT PANEL, AD0520

C

NOTE:

MIX BAY AIR DISTRIBUTION SYSTEM NOT SHOWN FOR CLARITY.

400773 S0000135757_V2

HIRF/LIGHTNING PROTECTION - WIRING IN THE FORWARD CARGO COMPARTMENT, AFT - INSPECTION
Figure 619/05-55-15-990-822 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FLIGHT COMPARTMENT

400782 S0000135812_V6

HIRF/LIGHTNING PROTECTION - WIRING IN THE FLIGHT COMPARTMENT - INSPECTION
Figure 620/05-55-15-990-823 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

B

418363 S0000137020_V2

HIRF/LIGHTNING PROTECTION - WIRING IN THE FLIGHT COMPARTMENT - INSPECTION
Figure 620/05-55-15-990-823 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

400788 S0000135856_V2

HIRF/LIGHTNING PROTECTION - WIRING IN THE PASSENGER CABIN, FORWARD - INSPECTION
Figure 621/05-55-15-990-824 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

400790 S0000135857_V2

HIRF/LIGHTNING PROTECTION - WIRING IN THE PASSENGER CABIN, FORWARD - INSPECTION
Figure 621/05-55-15-990-824 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

HIRF/LIGHTNING CONNECTORS ON LEFT SIDE OF THE AIRPLANE - DETAILED VISUAL INSPECTION/ CHECK

1. **General**
   A. This procedure contains scheduled maintenance task data.
   B. This procedure has these tasks:
      (1) HIRF/Lightning Detailed Visual Inspection of selected connectors and pigtails in the Left Wheel Well.
      (2) HIRF/Lightning Detailed Visual Inspection of selected connectors and pigtails in the Left Wing To Body Fairing area.
      (3) HIRF/Lightning Detailed Visual Inspection of selected connectors and pigtails routed along the Left Wing Trailing Edge.
      (4) HIRF/Lightning Detailed Visual Inspection of selected connectors and pigtails routed along the Left Wing Leading Edge.
      (5) HIRF/Lightning Detailed Visual Inspection of the connectors and pigtails at the Strut Disconnect panel on the Left Engine.

TASK 05-55-23-200-802

2. **Detailed Visual Inspection - L/HIRF Protection Components - Left Wheel Well**
   (Figure 601)

   NOTE: This procedure is a scheduled maintenance task.

   A. References

Reference	Title
32-00-01-080-801	Landing Gear Downlock Pins Removal (P/B 201)
32-00-01-480-801	Landing Gear Downlock Pins Installation (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

   B. Location Zones

Zone	Area
133	Main Landing Gear Wheel Well, Body Station 663.75 to Body Station 727.00 - Left

   C. Prepare for the procedure

   SUBTASK 05-55-23-010-002

   (1) Do this task: Landing Gear Downlock Pins Installation, TASK 32-00-01-480-801.

   D. Procedure

   SUBTASK 05-55-23-211-001

   (1) Procedure to do the Detailed Visual Inspection of all connectors listed in Table below:
      (a) Make sure that all of the connectors are hand-tight.
      (b) Make sure that the connector coupling nut is installed to give a satisfactory connection between the mating pins and sockets.
      (c) Make sure that the back shell is not loose or damaged.
         1) Make sure that the strain relief at the end of the backshell is tight.
         2) Make sure that the shield grounding band is tight.
      (d) Replace or repair any damaged components found during this inspection (SWPM Chapter 20).

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-55-23-211-011

(2) Procedure to do the Detailed Visual Inspection of all pigtails associated with connectors listed in Table below:

(a) Make sure that the terminals do not have any sign of crack or corrosion.

(b) Make sure that there is no crack or chafed on the ground wire.

(c) Make sure that the connection between terminal and airplane structure is not loose.

(d) Replace or repair any damaged components found during this inspection (SWPM Chapter 20).

SUBTASK 05-55-23-211-002

(3) Connectors listed in this Table are used for the task above.

Table 601/05-55-23-993-815 Left Wheel Well Connectors

WIRE BUNDLE	CONNECTOR	WDM	PNL OR MODULE
W1022	D42100P	22-11-31, 27-18-11, 27-32-21, 27-62-14	AL720A or AL0720A POS 3 - Spoiler, FCC
W1022	D42102P	22-11-31, 27-18-11, 27-32-21, 27-62-14	AL720A or AL0720A POS 2 - Spoiler, FCC

E. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-23-940-001

(1) Do this task: Landing Gear Downlock Pins Removal, TASK 32-00-01-080-801.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

LEFT WHEEL WELL
A

U68847 S0000213532_V2

Detailed Visual Inspection - L/HIRF Protection Components - Left Wheel Well
Figure 601/05-55-23-990-808 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

DISCONNECT PANEL, AL0720A

B

NOTE:

COVER PLATE REMOVED.

U68864 S0000213533_V2

Detailed Visual Inspection - L/HIRF Protection Components - Left Wheel Well
Figure 601/05-55-23-990-808 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-23-200-803

3. Detailed Visual Inspection - L/HIRF Protection Components - Left Wing To Body Fairing

(Figure 602)

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
27-81-00-040-801	Leading Edge Flaps and Slats Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

B. Location Zones

Zone	Area
191	Lower Wing-To-Body Fairing - Forward of Wing Box

C. Access Panels

Number	Name/Location
191FL	Forward Wing To Body Fairing Panel - Mid Fairing, Above Ram Air Inlet

D. Prepare for the procedure

SUBTASK 05-55-23-040-005

(1) Do this task: Leading Edge Flaps and Slats Deactivation, TASK 27-81-00-040-801

SUBTASK 05-55-23-220-003

(2) Open this access panel:

Number	Name/Location
191FL	Forward Wing To Body Fairing Panel - Mid Fairing, Above Ram Air Inlet

E. Procedure

SUBTASK 05-55-23-211-003

(1) Procedure to do the Detailed Visual Inspection of all connectors listed in Table below:

(a) Make sure that all of the connectors are hand-tight.

(b) Make sure that the connector coupling nut is installed to give a satisfactory connection between the mating pins and sockets.

(c) Make sure that the back shell is not loose or damaged.

1) Make sure that the strain relief at the end of the backshell is tight.

2) Make sure that the shield grounding band is tight.

(d) Replace or repair any damaged components found during this inspection (SWPM Chapter 20).

SUBTASK 05-55-23-211-012

(2) Procedure to do the Detailed Visual Inspection of all pigtails associated with connectors listed in Table below:

(a) Make sure that the terminals do not have any sign of crack or corrosion.

(b) Make sure that there is no crack or chafed on the ground wire.

(c) Make sure that the connection between terminal and airplane structure is not loose.

(d) Replace or repair any damaged components found during this inspection (SWPM Chapter 20).

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-55-23-211-004

(3) Connectors listed in this Table are used for the task above.

Table 602/05-55-23-993-816

WIRE BUNDLE	CONNECTOR	WDM	PNL OR MODULE
W1182	D39931	26-11-11, 73-22-11, 74-11-11	AC520, Alt Pwr - EEC
W1184	D39911	76-21-11, 77-12-21, 80-11-11	AC520, CDS - M2 Speed

F. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-23-210-001

(1) Close this access panel:

Number	Name/Location
191FL	Forward Wing To Body Fairing Panel - Mid Fairing, Above Ram Air Inlet

SUBTASK 05-55-23-440-002

(2) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

U68923 S0000213575_V4

Detailed Visual Inspection - L/HIRF Protection Components - Left Wing To Body Fairing
Figure 602/05-55-23-990-803

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-23-200-804

4. Detailed Visual Inspection - L/HIRF Protection Components - Left Wing Trailing Edge

(Figure 603)

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
27-51-00-040-801	Trailing Edge Flap System Deactivation (P/B 201)
27-51-00-440-801	Trailing Edge Flap System Reactivation (P/B 201)
27-51-00-860-803	Extend the Trailing Edge Flaps (P/B 201)
27-51-00-860-804	Retract the Trailing Edge Flaps (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

B. Location Zones

Zone	Area
550	Subzone - Left Wing: Trailing Edge, Aft of Rear Spar, Inbd of Outboard Trailing Edge Flap
560	Subzone - Left Wing: Trailing Edge , Aft of Rear Spar, Outboard of Inbd Trailing Edge Flap, Inbd of Fixed Trailing Edge

C. Prepare for the procedure

SUBTASK 05-55-23-220-005

(1) Do this task: Extend the Trailing Edge Flaps, TASK 27-51-00-860-803.

SUBTASK 05-55-23-220-012

(2) Do this task: Trailing Edge Flap System Deactivation, TASK 27-51-00-040-801.

D. Procedure

SUBTASK 05-55-23-211-005

(1) Procedure to do the Detailed Visual Inspection of all connectors listed in Table below:

(a) Make sure that all of the connectors are hand-tight.

(b) Make sure that the connector coupling nut is installed to give a satisfactory connection between the mating pins and sockets.

(c) Make sure that the back shell is not loose or damaged.

1) Make sure that the strain relief at the end of the backshell is tight.

2) Make sure that the shield grounding band is tight.

(d) Replace or repair any damaged components found during this inspection (SWPM Chapter 20).

SUBTASK 05-55-23-211-013

(2) Procedure to do the Detailed Visual Inspection of all pigtails associated with connectors listed in Table below:

(a) Make sure that the terminals do not have any sign of crack or corrosion.

(b) Make sure that there is no crack or chafed on the ground wire.

(c) Make sure that the connection between terminal and airplane structure is not loose.

(d) Replace or repair any damaged components found during this inspection (SWPM Chapter 20).

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-55-23-211-006

(3) Connectors listed in this Table are used for the task above.

Table 603/05-55-23-993-817

WIRE BUNDLE	CONNECTOR	WDM	PNL OR MODULE
W1024	D275 or D00275	22-11-11, 22-12-31, 27-32-21, 27-52-11	T427-Flap Posn Sensor
W1024	D1695	22-11-31	Spoiler 4, FCC (POS 1)
W1024	D1699	22-11-31	Spoiler 4, FCC (POS 2)

E. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-23-440-003

(1) Do this task Trailing Edge Flap System Reactivation, TASK 27-51-00-440-801

SUBTASK 05-55-23-210-002

(2) Do this task: Retract the Trailing Edge Flaps, TASK 27-51-00-860-804.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

U68939 S0000213582_V3

Detailed Visual Inspection - L/HIRF Protection Components - Left Wing Trailing Edge
Figure 603/05-55-23-990-804 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

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Detailed Visual Inspection - L/HIRF Protection Components - Left Wing Trailing Edge
Figure 603/05-55-23-990-804 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-23-200-805

5. Detailed Visual Inspection - L/HIRF Protection Components - Left Wing Leading Edge

Figure 604

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
27-81-00-040-801	Leading Edge Flaps and Slats Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
27-81-00-860-803	Leading Edge Flaps and Slats Extension (P/B 201)
27-81-00-860-804	Leading Edge Flaps and Slats Retraction (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

B. Location Zones

Zone	Area
510	Subzone - Left Wing: Leading Edge, Fwd of Front Spar, Inbd of Strut and Nacelle Gap Cover Area
520	Subzone - Left Wing: Leading Edge, Fwd of Front Spar, Outboard of Strut and Nacelle Gap Cover Area

C. Access Panels

Number	Name/Location
431CR	Forward Strut Fairing, Right Overwing Fairing, Strut 1
511AB	Inboard Leading Edge, Lower Removable Panel

D. Prepare for the procedure

SUBTASK 05-55-23-220-007

(1) Do this task: Leading Edge Flaps and Slats Extension, TASK 27-81-00-860-803.

SUBTASK 05-55-23-220-008

(2) Do this task: Leading Edge Flaps and Slats Deactivation, TASK 27-81-00-040-801.

SUBTASK 05-55-23-210-003

(3) Open these access panels:

Number	Name/Location
431CR	Forward Strut Fairing, Right Overwing Fairing, Strut 1
511AB	Inboard Leading Edge, Lower Removable Panel

E. Procedure

SUBTASK 05-55-23-211-007

(1) Procedure to do the Detailed Visual Inspection of all connectors listed in Table below:

(a) Make sure that all of the connectors are hand-tight.

(b) Make sure that the connector coupling nut is installed to give a satisfactory connection between the mating pins and sockets.

(c) Make sure that the back shell is not loose or damaged.

1) Make sure that the strain relief at the end of the backshell is tight.

2) Make sure that the shield grounding band is tight.

(d) Replace or repair any damaged components found during this inspection (SWPM Chapter 20).

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-55-23-211-014

(2) Procedure to do the Detailed Visual Inspection of all pigtails associated with connectors listed in Table below:

(a) Make sure that the terminals do not have any sign of crack or corrosion.

(b) Make sure that there is no crack or chafed on the ground wire.

(c) Make sure that the connection between terminal and airplane structure is not loose.

(d) Replace or repair any damaged components found during this inspection (SWPM Chapter 20).

SUBTASK 05-55-23-211-008

(3) Connectors listed in this Table are used for the task above.

Table 604/05-55-23-993-818

WIRE BUNDLE	CONNECTOR	WDM	PNL OR MODULE
W1164	D30016	24-11-11, 24-21-11, 24-24-11, 29-11-11, 76-21-11, 77-12-21, 80-11-11	AW258L, M2 speed - CDS
W1168	D30084	30-11-11, 36-11-11, 73-21-11, 73-21-12, 73-21-21, 73-24-11, 73-24-12, 77-31-11, 78-35-11, 78-26-11	AW258L, EEC, CDS
W1172	D30042	73-21-11, 73-21-12, 73-21-21, 73-24-11, 73-24-12, 74-31-11, 78-32-51, 78-35-11, 78-36-11	AW258L, EEC - P8
W1178	D8056	26-11-11, 30-21-11, 31-62-14, 73-22-11, 74-11-11, 77-12-11, 77-31-11, 79-31-11	AW258L, Alt pwr - EEC

F. Put the Airplane Back to Its Usual Condition.

SUBTASK 05-55-23-440-001

(1) Close these access panels:

Number	Name/Location
431CR	Forward Strut Fairing, Right Overwing Fairing, Strut 1
511AB	Inboard Leading Edge, Lower Removable Panel

SUBTASK 05-55-23-220-010

(2) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

SUBTASK 05-55-23-220-011

(3) Do this task: Leading Edge Flaps and Slats Retraction, TASK 27-81-00-860-804.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Detailed Visual Inspection - L/HIRF Protection Components - Left Wing Leading Edge
Figure 604/05-55-23-990-805 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

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Detailed Visual Inspection - L/HIRF Protection Components - Left Wing Leading Edge
Figure 604/05-55-23-990-805 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-23-200-806

6. Detailed Visual Inspection - L/HIRF Protection Components - Strut Disconnect - Left Engine
(Figure 605)

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
27-81-00-040-801	Leading Edge Flaps and Slats Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
27-81-00-860-803	Leading Edge Flaps and Slats Extension (P/B 201)
27-81-00-860-804	Leading Edge Flaps and Slats Retraction (P/B 201)
78-31-00-040-802-F00	Thrust Reverser Deactivation For Ground Maintenance (P/B 201)
78-31-00-440-803-F00	Thrust Reverser Activation After Ground Maintenance (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

B. Consumable Materials

Reference	Description	Specification
D00633	Grease - Aircraft General Purpose	BMS3-33

C. Location Zones

Zone	Area
431	Engine 1 - Forward Strut Fairing

D. Access Panels

Number	Name/Location
431AL	Forward Strut Fairing, Left Thrust Reverser Disconnect, Strut 1
431AR	Forward Strut Fairing, Right Thrust Reverser Disconnect, Strut 1
431AT	Forward Strut Fairing, Thumbnail Fairing, Strut 1

E. Prepare for the Inspection

SUBTASK 05-55-23-020-001

(1) Do this task: Leading Edge Flaps and Slats Extension, TASK 27-81-00-860-803.

SUBTASK 05-55-23-040-001

(2) Do this task: Leading Edge Flaps and Slats Deactivation, TASK 27-81-00-040-801.

SUBTASK 05-55-23-040-002

(3) Do this task: Thrust Reverser Deactivation For Ground Maintenance, TASK 78-31-00-040-802-F00.

SUBTASK 05-55-23-020-002

(4) Open these access panels:

Number	Name/Location
431AL	Forward Strut Fairing, Left Thrust Reverser Disconnect, Strut 1
431AR	Forward Strut Fairing, Right Thrust Reverser Disconnect, Strut 1
431AT	Forward Strut Fairing, Thumbnail Fairing, Strut 1

F. Detailed Visual Inspection - L/HIRF Protection Components

SUBTASK 05-55-23-211-009

(1) Procedure to do the Detailed Visual Inspection of all connectors listed in Table below:

(a) Make sure that all of the connectors are hand-tight.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(b) Make sure that the connector coupling nut is installed to give a satisfactory connection between the mating pins and sockets.

(c) Make sure that the back shell is not loose or damaged.

1) Make sure that the strain relief at the end of the backshell is tight.

2) Make sure that the shield grounding band is tight.

(d) Replace or repair any damaged components found during this inspection (SWPM Chapter 20).

SUBTASK 05-55-23-211-015

(2) Procedure to do the Detailed Visual Inspection of all pigtails associated with connectors listed in Table below:

(a) Make sure that the terminals do not have any sign of crack or corrosion.

(b) Make sure that there is no crack or chafed on the ground wire.

(c) Make sure that the connection between terminal and airplane structure is not loose.

(d) Replace or repair any damaged components found during this inspection (SWPM Chapter 20).

SUBTASK 05-55-23-211-010

(3) Connectors listed in Tables are used for the task above.

Table 605/05-55-23-993-819

WIRE BUNDLE	CONNECTOR	WDM	PNL OR MODULE
W1168	D30208	78-35-11, 78-36-11	AS2L, T/R LVDT- EEC
W1168	D30210	78-35-11, 78-36-11	AS2l
W1172	D30202	78-32-51, 78-35-11, 78-36-11	T/R LVDT, EEC - P8
W1172	D30206	78-32-51, 78-35-11, 78-36-11	T/R LVDT, EEC - P8

Table 606/05-55-23-993-820

WIRE BUNDLE	CONNECTOR	WDM	PNL OR MODULE
W1164	D30234	24-11-11, 24-21-11, 24-24-11, 29-11-11, 76-21-11, 77-12-21, 80-11-11	AS1L, M2 speed - CDS
W1166	D30256	73-22-11, 74-11-11	AS1L, Pwr relay-alt pwr EEC
W1168	D30260	73-21-11, 73-21-12, 73-21-21, 73-24-11, 73-24-12, 74-31-11, 78-35-11	AS1L
W1170	D30212	73-22-11, 74-11-11, 77-12-11	AS1L, EEC-eng start
W1170	D30228	30-21-11, 31-62-14, 77-31-11, 79-31-11	AS1L

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Table 606/05-55-23-993-820 (Continued)

WIRE BUNDLE	CONNECTOR	WDM	PNL OR MODULE
W1172	D30224	73-21-11, 73-21-12, 73-21-21, 73-24-11, 73-24-12, 74-31-11, 78-35-11	AS1L, EEC - P8

G. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-23-210-004

(1) Close this access panel:

Number	Name/Location
431AT	Forward Strut Fairing, Thumbnail Fairing, Strut 1

SUBTASK 05-55-23-410-001

(2) Do these steps to close the applicable access panels:

(a) Close these access panels:

Number	Name/Location
431AL	Forward Strut Fairing, Left Thrust Reverser Disconnect, Strut 1
431AR	Forward Strut Fairing, Right Thrust Reverser Disconnect, Strut 1

(b) Install the bolts with grease, D00633, on the access panels.

1) Install the two lower bolts and tighten sufficiently to compress the seal before torque.

NOTE: The access panel and seal under panel are installed as one assembly.

a) Make sure that the seal does not have interference with the seal on the thumbnail fairing.

2) Install the four upper bolts.

3) Tighten the bolts to 65 ±15 in-lb (7 ±2 N·m).

SUBTASK 05-55-23-040-003

(3) Do this task: Thrust Reverser Activation After Ground Maintenance, TASK 78-31-00-440-803-F00.

SUBTASK 05-55-23-040-004

(4) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

SUBTASK 05-55-23-020-003

(5) Do this task: Leading Edge Flaps and Slats Retraction, TASK 27-81-00-860-804.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

NOTE:

PANELS 431AT, 431AL AND 431AR HAVE BEEN REMOVED.

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Detailed Visual Inspection - L/HIRF Protection Components - Strut Disconnect - Left Engine
Figure 605/05-55-23-990-807

ECCN 9E991 BOEING PROPRIETARY - See title page for details

HIRF/LIGHTNING CONNECTORS ON RIGHT SIDE OF THE AIRPLANE - DETAILED VISUAL INSPECTION/ CHECK

1. **General**
   A. This procedure contains scheduled maintenance task data.
   B. This procedure has these tasks:
      (1) HIRF/Lightning Detailed Visual Inspection of selected connectors and pigtails in the Right Wheel Well.
      (2) HIRF/Lightning Detailed Visual Inspection of selected connectors and pigtails in the Right Wing To Body Fairing area.
      (3) HIRF/Lightning Detailed Visual Inspection of selected connectors and pigtails routed along the Right Wing Trailing Edge.
      (4) HIRF/Lightning Detailed Visual Inspection of selected connectors and pigtails routed along the Right Wing Leading Edge.
      (5) HIRF/Lightning Detailed Visual Inspection of the connectors and pigtails at the Strut Disconnect panel on the Right Engine.

TASK 05-55-24-200-802

2. **Detailed Visual Inspection - L/HIRF Protection Components - Right Wheel Well**
   (Figure 601)

   NOTE: This procedure is a scheduled maintenance task.

   A. References

Reference	Title
32-00-01-080-801	Landing Gear Downlock Pins Removal (P/B 201)
32-00-01-480-801	Landing Gear Downlock Pins Installation (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

   B. Location Zones

Zone	Area
134	Main Landing Gear Wheel Well, Body Station 663.75 to Body Station 727.00 - Right

   C. Prepare for the procedure

   SUBTASK 05-55-24-010-002

   (1) Do this task: Landing Gear Downlock Pins Installation, TASK 32-00-01-480-801.

   D. Procedure

   SUBTASK 05-55-24-211-001

   (1) Procedure to do the Detailed Visual Inspection of all connectors listed in Table below:
      (a) Make sure that all of the connectors are hand-tight.
      (b) Make sure that the connector coupling nut is installed to give a satisfactory connection between the mating pins and sockets.
      (c) Make sure that the back shell is not loose or damaged.
         1) Make sure that the strain relief at the end of the backshell is tight.
         2) Make sure that the shield grounding band is tight.
      (d) Replace or repair any damaged components found during this inspection (SWPM Chapter 20).

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-55-24-211-012

(2) Procedure to do the Detailed Visual Inspection of all pigtails associated with connectors listed in Table below:

(a) Make sure that the terminals do not have any sign of crack or corrosion.

(b) Make sure that there is no crack or chafed on the ground wire.

(c) Make sure that the connection between terminal and airplane structure is not loose.

(d) Replace or repair any damaged components found during this inspection (SWPM Chapter 20).

SUBTASK 05-55-24-211-002

(3) Connectors listed in this Table are used for the task above.

Table 601/05-55-24-993-814

WIRE BUNDLE	CONNECTOR	WDM	PNL OR MODULE
W1032	D43100P	22-11-31, 27-18-11, 27-32-11, 27-62-14	AL720C or AL0720C POS 1 - Spoiler, DFCS
W1032	D43102P	22-11-11, 22-11-31, 22-12-41	AL720D or AL0720D POS 2 - Spoiler, DFCS

E. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-24-940-001

(1) Do this task: Landing Gear Downlock Pins Removal, TASK 32-00-01-080-801.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Detailed Visual Inspection - L/HIRF Protection Components - Right Wheel Well
Figure 601/05-55-24-990-809 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

DISCONNECT PANELS, AL0720C AND AL0720D

B

NOTE:
COVER PLATE REMOVED.

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Detailed Visual Inspection - L/HIRF Protection Components - Right Wheel Well
Figure 601/05-55-24-990-809 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-24-200-803

3. Detailed Visual Inspection - L/HIRF Protection Components - Right Wing To Body Fairing
(Figure 602)

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
27-81-00-040-801	Leading Edge Flaps and Slats Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

B. Location Zones

Zone	Area
191	Lower Wing-To-Body Fairing - Forward of Wing Box

C. Access Panels

Number	Name/Location
191FR	Forward Wing To Body Fairing Panel - Mid Fairing, Above Ram Air Inlet

D. Prepare for the procedure

SUBTASK 05-55-24-040-005

(1) Deactivate the Leading Edge Slats:

(a) Do This task:Leading Edge Flaps and Slats Deactivation, TASK 27-81-00-040-801

SUBTASK 05-55-24-220-003

(2) Open this access panel:

Number	Name/Location
191FR	Forward Wing To Body Fairing Panel - Mid Fairing, Above Ram Air Inlet

E. Procedure

SUBTASK 05-55-24-211-003

(1) Procedure to do the Detailed Visual Inspection of all connectors listed in Table below:

(a) Make sure that all of the connectors are hand-tight.

(b) Make sure that the connector coupling nut is installed to give a satisfactory connection between the mating pins and sockets.

(c) Make sure that the back shell is not loose or damaged.

1) Make sure that the strain relief at the end of the backshell is tight.

2) Make sure that the shield grounding band is tight.

(d) Replace or repair any damaged components found during this inspection (SWPM Chapter 20).

SUBTASK 05-55-24-211-013

(2) Procedure to do the Detailed Visual Inspection of all pigtails associated with connectors listed in Table below:

(a) Make sure that the terminals do not have any sign of crack or corrosion.

(b) Make sure that there is no crack or chafed on the ground wire.

(c) Make sure that the connection between terminal and airplane structure is not loose.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(d) Replace or repair any damaged components found during this inspection (SWPM Chapter 20).

SUBTASK 05-55-24-211-004

(3) Connectors listed in this Table are used for the task above.

Table 602/05-55-24-993-815

WIRE BUNDLE	CONNECTOR	WDM	PNL OR MODULE
W1282	D39932	26-11-21, 73-22-11, 74-11-11	AC520, Alt pwr - Relay
W1284	D39912	76-21-21, 77-12-21, 80-11-11	AC520, EEC - Starter valve

F. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-24-210-001

(1) Close this access panel:

Number	Name/Location
191FR	Forward Wing To Body Fairing Panel - Mid Fairing, Above Ram Air Inlet

SUBTASK 05-55-24-440-002

(2) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Detailed Visual Inspection - L/HIRF Protection Components - Right Wing To Body Fairing
Figure 602/05-55-24-990-803

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-24-200-804

4. Detailed Visual Inspection - L/HIRF Protection Components - Right Wing Trailing Edge

(Figure 603)

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
27-51-00-040-801	Trailing Edge Flap System Deactivation (P/B 201)
27-51-00-440-801	Trailing Edge Flap System Reactivation (P/B 201)
27-51-00-860-803	Extend the Trailing Edge Flaps (P/B 201)
27-51-00-860-804	Retract the Trailing Edge Flaps (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

B. Location Zones

Zone	Area
650	Subzone - Right Wing: Trailing Edge, Aft of Rear Spar, Inboard of Outboard Trailing Edge Flap
660	Subzone - Right Wing: Trailing Edge, Aft of Rear Spar, Outboard of Inboard Trailing Edge Flap, Inboard of Fixed Trailing Edge

C. Prepare for the procedure

SUBTASK 05-55-24-220-005

(1) Do this task: Extend the Trailing Edge Flaps, TASK 27-51-00-860-803.

SUBTASK 05-55-24-220-012

(2) Do this task: Trailing Edge Flap System Deactivation, TASK 27-51-00-040-801.

D. Procedure

SUBTASK 05-55-24-211-005

(1) Procedure to do the Detailed Visual Inspection of all connectors listed in Table below:

(a) Make sure that all of the connectors are hand-tight.

(b) Make sure that the connector coupling nut is installed to give a satisfactory connection between the mating pins and sockets.

(c) Make sure that the back shell is not loose or damaged.

1) Make sure that the strain relief at the end of the backshell is tight.

2) Make sure that the shield grounding band is tight.

(d) Replace or repair any damaged components found during this inspection (SWPM Chapter 20).

SUBTASK 05-55-24-211-014

(2) Procedure to do the Detailed Visual Inspection of all pigtails associated with connectors listed in Table below:

(a) Make sure that the terminals do not have any sign of crack or corrosion.

(b) Make sure that there is no crack or chafed on the ground wire.

(c) Make sure that the connection between terminal and airplane structure is not loose.

(d) Replace or repair any damaged components found during this inspection (SWPM Chapter 20).

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-55-24-211-006

(3) Connectors listed in this Table are used for the task above.

Table 603/05-55-24-993-816

WIRE BUNDLE	CONNECTOR	WDM	PNL OR MODULE
W1034	D00229	22-11-11, 22-12-41, 27-32-11, 27-52-11	T428-Flap Posn Sensor
W1034	D1697	22-11-31	Spoiler 9, sensor, FCC (a)
W1034	D1701	22-11-31	Spoiler 9, sensor, FCC (b)

E. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-24-440-003

(1) Do this task:Trailing Edge Flap System Reactivation, TASK 27-51-00-440-801

SUBTASK 05-55-24-210-002

(2) Do this task: Retract the Trailing Edge Flaps, TASK 27-51-00-860-804.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

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Detailed Visual Inspection - L/HIRF Protection Components - Right Wing Trailing Edge
Figure 603/05-55-24-990-804 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

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Detailed Visual Inspection - L/HIRF Protection Components - Right Wing Trailing Edge
Figure 603/05-55-24-990-804 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-24-200-805

5. Detailed Visual Inspection - L/HIRF Protection Components - Right Wing Leading Edge
(Figure 604)

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
27-81-00-040-801	Leading Edge Flaps and Slats Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
27-81-00-860-803	Leading Edge Flaps and Slats Extension (P/B 201)
27-81-00-860-804	Leading Edge Flaps and Slats Retraction (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

B. Location Zones

Zone	Area
610	Subzone - Right Wing: Leading Edge, Forward of Front Spar, Inboard of Nacelle Strut, Including Gap Cover Area
620	Subzone - Right Wing: Leading Edge, Forward of Front Spar, Outboard of Nacelle Strut

C. Access Panels

Number	Name/Location
441CL	Forward Strut Fairing, Left Overwing Fairing, Strut 2
611AB	Inboard Leading Edge, Lower Removable Access Panel
621GB	Refuel Access Panel - Slat Station 143.27

D. Prepare for the procedure

SUBTASK 05-55-24-210-007

(1) Do this task: Leading Edge Flaps and Slats Extension, TASK 27-81-00-860-803

SUBTASK 05-55-24-220-007

(2) Do this task: Leading Edge Flaps and Slats Deactivation, TASK 27-81-00-040-801.

SUBTASK 05-55-24-220-008

(3) Remove the following access panels:

Number	Name/Location
441CL	Forward Strut Fairing, Left Overwing Fairing, Strut 2
611AB	Inboard Leading Edge, Lower Removable Access Panel
621GB	Refuel Access Panel - Slat Station 143.27

E. Procedure

SUBTASK 05-55-24-211-009

(1) Procedure to do the Detailed Visual Inspection of all connectors listed in Table below:

(a) Make sure that all of the connectors are hand-tight.

(b) Make sure that the connector coupling nut is installed to give a satisfactory connection between the mating pins and sockets.

(c) Make sure that the back shell is not loose or damaged.

1) Make sure that the strain relief at the end of the backshell is tight.

2) Make sure that the shield grounding band is tight.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(d) Replace or repair any damaged components found during this inspection (SWPM Chapter 20).

SUBTASK 05-55-24-211-015

(2) Procedure to do the Detailed Visual Inspection of all pigtails associated with connectors listed in Table below:

(a) Make sure that the terminals do not have any sign of crack or corrosion.

(b) Make sure that there is no crack or chafed on the ground wire.

(c) Make sure that the connection between terminal and airplane structure is not loose.

(d) Replace or repair any damaged components found during this inspection (SWPM Chapter 20).

SUBTASK 05-55-24-211-010

(3) Connectors listed in this Table are used for the task above.

Table 604/05-55-24-993-819

WIRE BUNDLE	CONNECTOR	WDM	PNL OR MODULE
W1264	D30116	24-11-21, 24-21-21, 24-24-21, 29-11-11, 76-21-21, 77-12-21, 80-11-11	AW258R, M2 speed - CDS
W1268	D30184	30-11-11, 36-11-11, 73-21-11, 73-21-12, 73-21-21, 73-24-12, 73-24-21, 77-31-21, 78-35-21, 78-36-21	AW258R, EEC, CDS
W1272	D30142	73-21-11, 73-21-12, 73-21-21, 73-24-12, 73-24-21, 74-31-11, 78-32-61, 78-35-21, 78-36-21	AW258R, EEC - P8
W1278	D8156J	26-11-21, 30-21-21, 31-62-24, 73-22-11, 74-11-11, 77-12-11, 77-31-21, 79-31-11	AW258R, Alt pwr - EEC
W1664	D4578J	28-41-11, 28-44-11	AD520, Wing Refuel Panel

F. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-24-220-010

(1) Install the following access panels:

Number	Name/Location
441CL	Forward Strut Fairing, Left Overwing Fairing, Strut 2
611AB	Inboard Leading Edge, Lower Removable Access Panel
621GB	Refuel Access Panel - Slat Station 143.27

SUBTASK 05-55-24-210-004

(2) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

SUBTASK 05-55-24-211-011

(3) Do this task: Leading Edge Flaps and Slats Retraction, TASK 27-81-00-860-804.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Detailed Visual Inspection - L/HIRF Protection Components - Right Wing Leading Edge
Figure 604/05-55-24-990-805 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Detailed Visual Inspection - L/HIRF Protection Components - Right Wing Leading Edge
Figure 604/05-55-24-990-805 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-24-200-806

6. Detailed Visual Inspection - L/HIRF Protection Components - Strut Disconnect - Right Engine
(Figure 605)

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
27-81-00-040-801	Leading Edge Flaps and Slats Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
27-81-00-860-803	Leading Edge Flaps and Slats Extension (P/B 201)
27-81-00-860-804	Leading Edge Flaps and Slats Retraction (P/B 201)
78-31-00-040-802-F00	Thrust Reverser Deactivation For Ground Maintenance (P/B 201)
78-31-00-440-803-F00	Thrust Reverser Activation After Ground Maintenance (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

B. Consumable Materials

Reference	Description	Specification
D00633	Grease - Aircraft General Purpose	BMS3-33

C. Location Zones

Zone	Area
441	Engine 2 - Forward Strut Fairing

D. Access Panels

Number	Name/Location
441AL	Forward Strut Fairing, Left Thrust Reverser Disconnect, Strut 2
441AR	Forward Strut Fairing, Right Thrust Reverser Disconnect, Strut 2
441AT	Forward Strut Fairing, Thumbnail Fairing, Strut 2

E. Prepare for the Detailed Visual Inspection

SUBTASK 05-55-24-040-001

(1) Do this task: Leading Edge Flaps and Slats Extension, TASK 27-81-00-860-803.

SUBTASK 05-55-24-040-002

(2) Do this task: Leading Edge Flaps and Slats Deactivation, TASK 27-81-00-040-801.

SUBTASK 05-55-24-040-003

(3) Do this task: Thrust Reverser Deactivation For Ground Maintenance, TASK 78-31-00-040-802-F00.

SUBTASK 05-55-24-220-011

(4) Remove the following access panels:

Number	Name/Location
441AL	Forward Strut Fairing, Left Thrust Reverser Disconnect, Strut 2
441AR	Forward Strut Fairing, Right Thrust Reverser Disconnect, Strut 2
441AT	Forward Strut Fairing, Thumbnail Fairing, Strut 2

F. Detailed Visual Inspection of L/HIRF Protection Components

SUBTASK 05-55-24-211-017

(1) Do the detailed visual inspection of all connectors listed in Table 605 and Table 606:

(a) Make sure that all of the connectors are hand-tight.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(b) Make sure that the connector coupling nut is installed to give a satisfactory connection between the mating pins and sockets.

(c) Make sure that the back shell is not loose or damaged.

1) Make sure that the strain relief at the end of the back shell is tight.

2) Make sure that the shield grounding band is tight.

(d) Replace or repair any damaged components (SWPM Chapter 20).

SUBTASK 05-55-24-211-018

(2) Do the detailed visual inspection of all pigtails associated with connectors listed in Table 605 and Table 606:

(a) Make sure that the terminals do not have any sign of crack or corrosion.

(b) Make sure that there is no crack or chafed on the ground wire.

(c) Make sure that the connection between terminal and airplane structure is not loose.

(d) Replace or repair any damaged components (SWPM Chapter 20).

SUBTASK 05-55-24-211-008

(3) Connectors listed in Table 605 and Table 606 are used for the steps above.

Table 605/05-55-24-993-817

WIRE BUNDLE	CONNECTOR	WDM	PNL OR MODULE
W1268	D30408	78-35-21, 78-36-21	AS2R, T/R LVDT - EEC
W1268	D30410	78-35-21, 78-36-21	AS3R, EEC - T/R LVDT
W1272	D30402	78-32-61, 78-35-21, 78-36-21	AS2R, EEC - T/R LVDT
W1272	D30406	78-32-61, 78-35-21, 78-36-21	AS3R, EEC - T/R LVDT

Table 606/05-55-24-993-818

WIRE BUNDLE	CONNECTOR	WDM	PNL OR MODULE
W1264	D30434	24-11-21, 24-21-21, 24-24-21, 29-11-11, 76-21-21, 77-12-21, 80-11-11	AS1R, M2 speed - CDS
W1266	D30456	73-22-11, 74-11-11	AS1R, Pwr relay-alt pwr EEC
W1268	D30460	73-21-11, 73-21-12, 73-21-21, 73-24-12, 73-24-21, 78-35-21	AS1R, EEC - T/R LVDT
W1270	D30428	30-21-21, 31-62-24, 77-31-21, 79-31-11	AS1R
W1272	D30424	73-21-11, 73-21-12, 73-21-21, 73-24-12, 73-24-21, 74-31-11, 78-35-21	AS1R, EEC - T/R LVDT

ECCN 9E991 BOEING PROPRIETARY - See title page for details

G. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-24-210-005

(1) Install the following access panel:

Number	Name/Location
441AT	Forward Strut Fairing, Thumbnail Fairing, Strut 2

SUBTASK 05-55-24-410-001

(2) Do these steps to close the applicable access panels:

(a) Close these access panels:

Number	Name/Location
441AL	Forward Strut Fairing, Left Thrust Reverser Disconnect, Strut 2
441AR	Forward Strut Fairing, Right Thrust Reverser Disconnect, Strut 2

(b) Install the bolts with grease, D00633, on the access panels.

1) Install the two lower bolts and tighten sufficiently to compress the seal before torque.

NOTE: The access panel and seal under panel are installed as one assembly.

a) Make sure that the seal does not have interference with the seal on the thumbnail fairing.

2) Install the four upper bolts.

3) Tighten the bolts to 65 ±15 in-lb (7 ±2 N·m).

SUBTASK 05-55-24-040-004

(3) Do this task: Thrust Reverser Activation After Ground Maintenance, TASK 78-31-00-440-803-F00.

SUBTASK 05-55-24-440-001

(4) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

SUBTASK 05-55-24-440-004

(5) Do this task: Leading Edge Flaps and Slats Retraction, TASK 27-81-00-860-804.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

NOTE:
PANELS 441AT, 441AL AND 441AR HAVE BEEN REMOVED.

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Detailed Visual Inspection - L/HIRF Protection Components - Strut Disconnect - Right Engine
Figure 605/05-55-24-990-807

ECCN 9E991 BOEING PROPRIETARY - See title page for details

HIRF/LIGHTNING WIRE BUNDLES ON LEFT SIDE OF THE AIRPLANE - GENERAL VISUAL INSPECTION/ CHECK

1. **General**
   A. This procedure contains scheduled maintenance task data.
   B. A General Visual Inspection is a visual check of specified details associated with assemblies or installations.
      (1) You will search for evidence of wiring irregularities using adequate lighting.
      (2) Do not remove sealant when you do this task.
      (3) Do not disassemble connectors when you do this task.
      (4) Do not remove system LRUs when you do this task.
   C. This procedure has these tasks:
      (1) HIRF/Lightning General Visual Inspection of selected wire bundle cables in the Left Wheel Well.
      (2) HIRF/Lightning General Visual Inspection of selected wire bundle cables in the Left Wing To Body Fairing area.
      (3) HIRF/Lightning General Visual Inspection of selected wire bundle cables routed along the Left Wing Trailing Edge.
      (4) HIRF/Lightning General Visual Inspection of selected wire bundle cables routed along the Left Wing Leading Edge.
      (5) HIRF/Lightning General Visual Inspection of the wire bundle cables at the Strut Disconnect panel on the Left Engine.

TASK 05-55-25-200-802

2. **Wire Bundle Inspection Left Wheel Well**
   (Figure 601)

   NOTE: This procedure is a scheduled maintenance task.

   A. References

Reference	Title
32-00-01-080-801	Landing Gear Downlock Pins Removal (P/B 201)
32-00-01-480-801	Landing Gear Downlock Pins Installation (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

   B. Location Zones

Zone	Area
133	Main Landing Gear Wheel Well, Body Station 663.75 to Body Station 727.00 - Left

   C. Prepare for the procedure

SUBTASK 05-55-25-010-002

   (1) Do this task: Landing Gear Downlock Pins Installation, TASK 32-00-01-480-801.

   D. Procedure

SUBTASK 05-55-25-210-005

   (1) Procedure to do the General Visual Inspection of the wire bundle cables listed in Table below:

   NOTE: Do this procedure only for the exposed part of the wire bundle.

   (a) Make sure that the wire bundle cables are not chafed, cut, or worn.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(b) Replace or repair any damaged wiring found during this inspection (SWPM Chapter 20).

SUBTASK 05-55-25-210-006

(2) Connectors listed in this Table are used for the task above.

Table 601/05-55-25-993-814 Left Wheel Well Connectors

WIRE BUNDLE	CONNECTOR	WDM	PNL OR MODULE
W1022	D42100P	22-11-31, 27-18-11, 27-32-21, 27-62-14	AL720A or AL0720A POS 3 - Spoiler, FCC
W1022	D42102P	22-11-31, 27-18-11, 27-32-21, 27-62-14	AL720A or AL0720A POS 2 - Spoiler, FCC

E. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-25-940-001

(1) Do this task: Landing Gear Downlock Pins Removal, TASK 32-00-01-080-801.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

High Intensity Radiated Fields (HIRF) Inspection (Left Main Landing Gear Wheel Well)
Figure 601/05-55-25-990-802 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

DISCONNECT PANEL, AL0720A

B

NOTE:

COVER PLATE REMOVED.

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High Intensity Radiated Fields (HIRF) Inspection (Left Main Landing Gear Wheel Well)
Figure 601/05-55-25-990-802 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-25-200-803

3. Wire Bundle Inspection - Left Wing To Body Fairing

(Figure 602)

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
27-81-00-040-801	Leading Edge Flaps and Slats Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

B. Location Zones

Zone	Area
191	Lower Wing-To-Body Fairing - Forward of Wing Box

C. Access Panels

Number	Name/Location
191FL	Forward Wing To Body Fairing Panel - Mid Fairing, Above Ram Air Inlet

D. Prepare for the procedure

SUBTASK 05-55-25-040-005

(1) Do this task: Leading Edge Flaps and Slats Deactivation, TASK 27-81-00-040-801

SUBTASK 05-55-25-220-003

(2) Open this access panel:

Number	Name/Location
191FL	Forward Wing To Body Fairing Panel - Mid Fairing, Above Ram Air Inlet

E. Procedure

SUBTASK 05-55-25-210-013

(1) Procedure to do the General Visual Inspection of the wire bundle cables listed in Table below:

NOTE: Do this procedure only for the exposed part of the wire bundle.

(a) Make sure that the wire bundle cables are not chafed, cut, or worn.

(b) Replace or repair any damaged wiring found during this inspection (SWPM Chapter 20).

SUBTASK 05-55-25-210-014

(2) Connectors listed in this Table are used for the task above.

Table 602/05-55-25-993-819

WIRE BUNDLE	CONNECTOR	WDM	PNL OR MODULE
W1182	D39931	26-11-11, 73-22-11, 74-11-11	AC520, Alt Pwr - EEC
W1184	D39911	76-21-11, 77-12-21, 80-11-11	AC520, CDS - M2 Speed

ECCN 9E991 BOEING PROPRIETARY - See title page for details

F. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-25-210-001

(1) Close this access panel:

Number	Name/Location
191FL	Forward Wing To Body Fairing Panel - Mid Fairing, Above Ram Air Inlet

SUBTASK 05-55-25-440-002

(2) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

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High Intensity Radiated Fields (HIRF) Inspection (Left Wing-to-Body Fairing Disconnect)
Figure 602/05-55-25-990-803

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-25-200-804

4. Wire Bundle Inspection - Left Wing Trailing Edge

(Figure 603)

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
27-51-00-040-801	Trailing Edge Flap System Deactivation (P/B 201)
27-51-00-440-801	Trailing Edge Flap System Reactivation (P/B 201)
27-51-00-860-803	Extend the Trailing Edge Flaps (P/B 201)
27-51-00-860-804	Retract the Trailing Edge Flaps (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

B. Location Zones

Zone	Area
550	Subzone - Left Wing: Trailing Edge, Aft of Rear Spar, Inbd of Outboard Trailing Edge Flap
560	Subzone - Left Wing: Trailing Edge , Aft of Rear Spar, Outboard of Inbd Trailing Edge Flap, Inbd of Fixed Trailing Edge

C. Prepare for the procedure

SUBTASK 05-55-25-220-005

(1) Do this task: Extend the Trailing Edge Flaps, TASK 27-51-00-860-803.

SUBTASK 05-55-25-220-012

(2) Do this task: Trailing Edge Flap System Deactivation, TASK 27-51-00-040-801.

D. Procedure

SUBTASK 05-55-25-210-007

(1) Procedure to do the General Visual Inspection of the wire bundle cables listed in Table below:

NOTE: Do this procedure only for the exposed part of the wire bundle.

(a) Make sure that the wire bundle cables are not chafed, cut, or worn.

(b) Replace or repair any damaged wiring found during this inspection (SWPM Chapter 20).

SUBTASK 05-55-25-210-008

(2) Connectors listed in this Table are used for the task above.

Table 603/05-55-25-993-815

WIRE BUNDLE	CONNECTOR	WDM	PNL OR MODULE
W1024	D275 or D00275	22-11-11, 22-12-31, 27-32-21, 27-52-11	T427-Flap Posn Sensor
W1024	D1695	22-11-31	Spoiler 4, FCC (POS 1)
W1024	D1699	22-11-31	Spoiler 4, FCC (POS 2)

E. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-25-440-003

(1) Do this task: Trailing Edge Flap System Reactivation, TASK 27-51-00-440-801

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-55-25-210-002

(2) Do this task: Retract the Trailing Edge Flaps, TASK 27-51-00-860-804.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

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High Intensity Radiated Fields (HIRF) Inspection (Left Wing Trailing Edge)
Figure 603/05-55-25-990-804 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

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High Intensity Radiated Fields (HIRF) Inspection (Left Wing Trailing Edge)
Figure 603/05-55-25-990-804 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-25-200-805

5. Wire Bundle Inspection - Left Wing Leading Edge

(Figure 604)

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
27-81-00-040-801	Leading Edge Flaps and Slats Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
27-81-00-860-803	Leading Edge Flaps and Slats Extension (P/B 201)
27-81-00-860-804	Leading Edge Flaps and Slats Retraction (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

B. Location Zones

Zone	Area
510	Subzone - Left Wing: Leading Edge, Fwd of Front Spar, Inbd of Strut and Nacelle Gap Cover Area
520	Subzone - Left Wing: Leading Edge, Fwd of Front Spar, Outboard of Strut and Nacelle Gap Cover Area

C. Access Panels

Number	Name/Location
431CR	Forward Strut Fairing, Right Overwing Fairing, Strut 1
511AB	Inboard Leading Edge, Lower Removable Panel

D. Prepare for the procedure

SUBTASK 05-55-25-220-007

(1) Do this task: Leading Edge Flaps and Slats Extension, TASK 27-81-00-860-803.

SUBTASK 05-55-25-220-008

(2) Do this task: Leading Edge Flaps and Slats Deactivation, TASK 27-81-00-040-801.

SUBTASK 05-55-25-210-003

(3) Open these access panels:

Number	Name/Location
431CR	Forward Strut Fairing, Right Overwing Fairing, Strut 1
511AB	Inboard Leading Edge, Lower Removable Panel

E. Procedure

SUBTASK 05-55-25-210-009

(1) Procedure to do the General Visual Inspection of the wire bundle cables listed in Table below:

NOTE: Do this procedure only for the exposed part of the wire bundle.

(a) Make sure that the wire bundle cables are not chafed, cut, or worn.

(b) Replace or repair any damaged wiring found during this inspection (SWPM Chapter 20).

SUBTASK 05-55-25-210-010

(2) Connectors listed in this Table are used for the task above.

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Table 604/05-55-25-993-816

WIRE BUNDLE	CONNECTOR	WDM	PNL OR MODULE
W1164	D30016	24-11-11, 24-21-11, 24-24-11, 29-11-11, 76-21-11, 77-12-21, 80-11-11	AW258L, M2 speed - CDS
W1168	D30084	30-11-11, 36-11-11, 73-21-11, 73-21-12, 73-21-21, 73-24-11, 73-24-12, 77-31-11, 78-35-11, 78-26-11	AW258L, EEC, CDS
W1172	D30042	73-21-11, 73-21-12, 73-21-21, 73-24-11, 73-24-12, 74-31-11, 78-32-51, 78-35-11, 78-36-11	AW258L, EEC - P8
W1178	D8056	26-11-11, 30-21-11, 31-62-14, 73-22-11, 74-11-11, 77-12-11, 77-31-11, 79-31-11	AW258L, Alt pwr - EEC

F. Put the Airplane Back to Its Usual Condition.

SUBTASK 05-55-25-440-001

(1) Close these access panels:

Number	Name/Location
431CR	Forward Strut Fairing, Right Overwing Fairing, Strut 1
511AB	Inboard Leading Edge, Lower Removable Panel

SUBTASK 05-55-25-220-010

(2) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

SUBTASK 05-55-25-220-011

(3) Do this task: Leading Edge Flaps and Slats Retraction, TASK 27-81-00-860-804.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

High Intensity Radiated Fields (HIRF) Inspection (Left Wing Leading Edge, Inboard of Engine)
Figure 604/05-55-25-990-805 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

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High Intensity Radiated Fields (HIRF) Inspection (Left Wing Leading Edge, Inboard of Engine)
Figure 604/05-55-25-990-805 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-25-200-806

6. Wire Bundle Inspection - Strut Disconnect - Left Engine

(Figure 605)

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
27-81-00-040-801	Leading Edge Flaps and Slats Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
27-81-00-860-803	Leading Edge Flaps and Slats Extension (P/B 201)
27-81-00-860-804	Leading Edge Flaps and Slats Retraction (P/B 201)
78-31-00-040-802-F00	Thrust Reverser Deactivation For Ground Maintenance (P/B 201)
78-31-00-440-803-F00	Thrust Reverser Activation After Ground Maintenance (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

B. Consumable Materials

Reference	Description	Specification
D00633	Grease - Aircraft General Purpose	BMS3-33

C. Location Zones

Zone	Area
431	Engine 1 - Forward Strut Fairing

D. Access Panels

Number	Name/Location
431AL	Forward Strut Fairing, Left Thrust Reverser Disconnect, Strut 1
431AR	Forward Strut Fairing, Right Thrust Reverser Disconnect, Strut 1
431AT	Forward Strut Fairing, Thumbnail Fairing, Strut 1

E. Prepare for the Inspection

SUBTASK 05-55-25-020-001

(1) Do this task: Leading Edge Flaps and Slats Extension, TASK 27-81-00-860-803.

SUBTASK 05-55-25-040-001

(2) Do this task: Leading Edge Flaps and Slats Deactivation, TASK 27-81-00-040-801.

SUBTASK 05-55-25-040-002

(3) Do this task: Thrust Reverser Deactivation For Ground Maintenance, TASK 78-31-00-040-802-F00.

SUBTASK 05-55-25-020-002

(4) Open these access panels:

Number	Name/Location
431AL	Forward Strut Fairing, Left Thrust Reverser Disconnect, Strut 1
431AR	Forward Strut Fairing, Right Thrust Reverser Disconnect, Strut 1
431AT	Forward Strut Fairing, Thumbnail Fairing, Strut 1

F. Wire Bundle Inspection - Strut Disconnect

SUBTASK 05-55-25-210-011

(1) Procedure to do the General Visual Inspection of the wire bundle cables listed in Table below:

NOTE: Do this procedure only for the exposed part of the wire bundle.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(a) Make sure that the wire bundle cables are not chafed, cut, or worn.

(b) Replace or repair any damaged wiring found during this inspection (SWPM Chapter 20).

SUBTASK 05-55-25-210-012

(2) Connectors listed in Tables are used for the task above.

Table 605/05-55-25-993-817

WIRE BUNDLE	CONNECTOR	WDM	PNL OR MODULE
W1168	D30208	78-35-11, 78-36-11	AS2L, T/R LVDT- EEC
W1168	D30210	78-35-11, 78-36-11	AS2l
W1172	D30202	78-32-51, 78-35-11, 78-36-11	T/R LVDT, EEC - P8
W1172	D30206	78-32-51, 78-35-11, 78-36-11	T/R LVDT, EEC - P8

Table 606/05-55-25-993-818

WIRE BUNDLE	CONNECTOR	WDM	PNL OR MODULE
W1164	D30234	24-11-11, 24-21-11, 24-24-11, 29-11-11, 76-21-11, 77-12-21, 80-11-11	AS1L, M2 speed - CDS
W1166	D30256	73-22-11, 74-11-11	AS1L, Pwr relay-alt pwr EEC
W1168	D30260	73-21-11, 73-21-12, 73-21-21, 73-24-11, 73-24-12, 74-31-11, 78-35-11	AS1L
W1170	D30212	73-22-11, 74-11-11, 77-12-11	AS1L, EEC-eng start
W1170	D30228	30-21-11, 31-62-14, 77-31-11, 79-31-11	AS1L
W1172	D30224	73-21-11, 73-21-12, 73-21-21, 73-24-11, 73-24-12, 74-31-11, 78-35-11	AS1L, EEC - P8

G. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-25-210-004

(1) Close this access panel:

Number	Name/Location
431AT	Forward Strut Fairing, Thumbnail Fairing, Strut 1

SUBTASK 05-55-25-410-001

(2) Do these steps to close the applicable access panels:

(a) Close these access panels:

Number	Name/Location
431AL	Forward Strut Fairing, Left Thrust Reverser Disconnect, Strut 1

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

Number	Name/Location
431AR	Forward Strut Fairing, Right Thrust Reverser Disconnect, Strut 1

(b) Install the bolts with grease, D00633, on the access panels.

1) Install the two lower bolts and tighten sufficiently to compress the seal before torque.

NOTE: The access panel and seal under panel are installed as one assembly.

a) Make sure that the seal does not have interference with the seal on the thumbnail fairing.

2) Install the four upper bolts.

3) Tighten the bolts to 65 ±15 in-lb (7 ±2 N·m).

SUBTASK 05-55-25-040-003

(3) Do this task: Thrust Reverser Activation After Ground Maintenance, TASK 78-31-00-440-803-F00.

SUBTASK 05-55-25-040-004

(4) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

SUBTASK 05-55-25-020-003

(5) Do this task: Leading Edge Flaps and Slats Retraction, TASK 27-81-00-860-804.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

NOTE:

PANELS 431AT, 431AL AND 431AR HAVE BEEN REMOVED.

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High Intensity Radiated Fields (HIRF) Inspection (Left Engine Strut)
Figure 605/05-55-25-990-807

ECCN 9E991 BOEING PROPRIETARY - See title page for details

HIRF/LIGHTNING WIRE BUNDLES ON RIGHT SIDE OF THE AIRPLANE - GENERAL VISUAL INSPECTION/CHECK

1. **General**
   A. This procedure contains scheduled maintenance task data.
   B. A General Visual Inspection is a visual check of specified details associated with assemblies or installations.
      (1) You will search for evidence of wiring irregularities using adequate lighting.
      (2) Do not remove sealant when you do this task.
      (3) Do not disassemble connectors when you do this task.
      (4) Do not remove system LRUs when you do this task.
   C. This procedure has these tasks:
      (1) HIRF/Lightning General Visual Inspection of selected wire bundle cables in the Right Wheel Well.
      (2) HIRF/Lightning General Visual Inspection of selected wire bundle cables in the Right Wing To Body Fairing area.
      (3) HIRF/Lightning Gereral Visual Inspection of selected wire bundle cables routed along the Right Wing Trailing Edge.
      (4) HIRF/Lightning General Visual Inspection of selected wire bundle cables routed along the Right Wing Leading Edge.
      (5) HIRF/Lightning General Visual Inspection of the wire bundle cables at the Strut Disconnect panel on the Right Engine.

TASK 05-55-26-200-802

2. **Wire Bundle Inspection - Right Wheel Well**
   (Figure 601)

   NOTE: This procedure is a scheduled maintenance task.

   A. References

Reference	Title
32-00-01-080-801	Landing Gear Downlock Pins Removal (P/B 201)
32-00-01-480-801	Landing Gear Downlock Pins Installation (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

   B. Location Zones

Zone	Area
134	Main Landing Gear Wheel Well, Body Station 663.75 to Body Station 727.00 - Right

   C. Prepare for the procedure

   SUBTASK 05-55-26-010-002

   (1) Do this task: Landing Gear Downlock Pins Installation, TASK 32-00-01-480-801.

   D. Procedure

   SUBTASK 05-55-26-210-006

   (1) Procedure to do the General Visual Inspection of the wire bundle cables listed in Table below:

   NOTE: Do this procedure only for the exposed part of the wire bundle.

   (a) Make sure that the wire bundle cables are not chafed, cut, or worn.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(b) Replace or repair any damaged wiring found during this inspection (SWPM Chapter 20).

SUBTASK 05-55-26-210-007

(2) Connectors listed in this Table are used for the task above.

Table 601/05-55-26-993-814

WIRE BUNDLE	CONNECTOR	WDM	PNL OR MODULE
W1032	D43100P	22-11-31, 27-18-11, 27-32-11, 27-62-14	AL720C or AL0720C POS 1 - Spoiler, DFCS
W1032	D43102P	22-11-11, 22-11-31, 22-12-41	AL720D or AL0720D POS 2 - Spoiler, DFCS

E. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-26-940-001

(1) Do this task: Landing Gear Downlock Pins Removal, TASK 32-00-01-080-801.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

High Intensity Radiated Fields (HIRF) Inspection (Right Main Landing Gear Wheel Well)
Figure 601/05-55-26-990-802 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

DISCONNECT PANELS, AL0720C AND AL0720D

B

NOTE:
COVER PLATE REMOVED.

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High Intensity Radiated Fields (HIRF) Inspection (Right Main Landing Gear Wheel Well)
Figure 601/05-55-26-990-802 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-26-200-803

3. Wire Bundle Inspection - Right Wing To Body Fairing

(Figure 602)

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
27-81-00-040-801	Leading Edge Flaps and Slats Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

B. Location Zones

Zone	Area
191	Lower Wing-To-Body Fairing - Forward of Wing Box

C. Access Panels

Number	Name/Location
191FR	Forward Wing To Body Fairing Panel - Mid Fairing, Above Ram Air Inlet

D. Prepare for the procedure

SUBTASK 05-55-26-040-005

(1) Deactivate the Leading edge Slats:

(a) Do this task:Leading Edge Flaps and Slats Deactivation, TASK 27-81-00-040-801

SUBTASK 05-55-26-220-003

(2) Open this access panel:

Number	Name/Location
191FR	Forward Wing To Body Fairing Panel - Mid Fairing, Above Ram Air Inlet

E. Procedure

SUBTASK 05-55-26-210-008

(1) Procedure to do the General Visual Inspection of the wire bundle cables listed in Table below:

NOTE: Do this procedure only for the exposed part of the wire bundle.

(a) Make sure that the wire bundle cables are not chafed, cut, or worn.

(b) Replace or repair any damaged wiring found during this inspection (SWPM Chapter 20).

SUBTASK 05-55-26-210-009

(2) Connectors listed in this Table are used for the task above.

Table 602/05-55-26-993-815

WIRE BUNDLE	CONNECTOR	WDM	PNL OR MODULE
W1282	D39932	26-11-21, 73-22-11, 74-11-11	AC520, Alt pwr - Relay
W1284	D39912	76-21-21, 77-12-21, 80-11-11	AC520, EEC - Starter valve

ECCN 9E991 BOEING PROPRIETARY - See title page for details

F. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-26-210-001

(1) Install the following access panel:

Number	Name/Location
191FR	Forward Wing To Body Fairing Panel - Mid Fairing, Above Ram Air Inlet

SUBTASK 05-55-26-440-002

(2) Re-Activate the Leading Edge slats if necessary:

(a) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

High Intensity Radiated Fields (HIRF) Inspection (Right Wing-to-Body Fairing Disconnect)
Figure 602/05-55-26-990-803

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-26-200-804

4. **Wire Bundle Inspection - Right Wing Trailing Edge**
(Figure 603)

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
27-51-00-040-801	Trailing Edge Flap System Deactivation (P/B 201)
27-51-00-440-801	Trailing Edge Flap System Reactivation (P/B 201)
27-51-00-860-803	Extend the Trailing Edge Flaps (P/B 201)
27-51-00-860-804	Retract the Trailing Edge Flaps (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

B. Location Zones

Zone	Area
650	Subzone - Right Wing: Trailing Edge, Aft of Rear Spar, Inboard of Outboard Trailing Edge Flap
660	Subzone - Right Wing: Trailing Edge, Aft of Rear Spar, Outboard of Inboard Trailing Edge Flap, Inboard of Fixed Trailing Edge

C. Prepare for the procedure

SUBTASK 05-55-26-220-012

(1) Do this task: Extend the Trailing Edge Flaps, TASK 27-51-00-860-803.

SUBTASK 05-55-26-220-013

(2) Do this task: Trailing Edge Flap System Deactivation, TASK 27-51-00-040-801.

D. Procedure

SUBTASK 05-55-26-210-010

(1) Procedure to do the General Visual Inspection of the wire bundle cables listed in Table below:

NOTE: Do this procedure only for the exposed part of the wire bundle.

(a) Make sure that the wire bundle cables are not chafed, cut, or worn.

(b) Replace or repair any damaged wiring found during this inspection (SWPM Chapter 20).

SUBTASK 05-55-26-210-011

(2) Connectors listed in this Table are used for the task above.

Table 603/05-55-26-993-816

WIRE BUNDLE	CONNECTOR	WDM	PNL OR MODULE
W1034	D00229	22-11-11, 22-12-41, 27-32-11, 27-52-11	T428-Flap Posn Sensor
W1034	D1697	22-11-31	Spoiler 9, sensor, FCC (a)
W1034	D1701	22-11-31	Spoiler 9, sensor, FCC (b)

E. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-26-440-003

(1) Do this task:Trailing Edge Flap System Reactivation, TASK 27-51-00-440-801

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-55-26-210-002

(2) Do this task: Retract the Trailing Edge Flaps, TASK 27-51-00-860-804.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

High Intensity Radiated Fields (HIRF) Inspection (Right Wing Trailing Edge)
Figure 603/05-55-26-990-804 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

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High Intensity Radiated Fields (HIRF) Inspection (Right Wing Trailing Edge)
Figure 603/05-55-26-990-804 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-26-200-805

5. **Wire Bundle Inspection - Right Wing Leading Edge**

(Figure 604)

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
27-81-00-040-801	Leading Edge Flaps and Slats Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
27-81-00-860-803	Leading Edge Flaps and Slats Extension (P/B 201)
27-81-00-860-804	Leading Edge Flaps and Slats Retraction (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

B. Location Zones

Zone	Area
610	Subzone - Right Wing: Leading Edge, Forward of Front Spar, Inboard of Nacelle Strut, Including Gap Cover Area
620	Subzone - Right Wing: Leading Edge, Forward of Front Spar, Outboard of Nacelle Strut

C. Access Panels

Number	Name/Location
441CL	Forward Strut Fairing, Left Overwing Fairing, Strut 2
611AB	Inboard Leading Edge, Lower Removable Access Panel
621GB	Refuel Access Panel - Slat Station 143.27

D. Prepare for the procedure

SUBTASK 05-55-26-210-003

(1) Do this task: Leading Edge Flaps and Slats Extension, TASK 27-81-00-860-803.

SUBTASK 05-55-26-220-007

(2) Do this task: Leading Edge Flaps and Slats Deactivation, TASK 27-81-00-040-801.

SUBTASK 05-55-26-220-008

(3) Open these access panels:

Number	Name/Location
441CL	Forward Strut Fairing, Left Overwing Fairing, Strut 2
611AB	Inboard Leading Edge, Lower Removable Access Panel
621GB	Refuel Access Panel - Slat Station 143.27

E. Procedure

SUBTASK 05-55-26-210-012

(1) Procedure to do the General Visual Inspection of the wire bundle cables listed in Table below:

NOTE: Do this procedure only for the exposed part of the wire bundle.

(a) Make sure that the wire bundle cables are not chafed, cut, or worn.

(b) Replace or repair any damaged wiring found during this inspection (SWPM Chapter 20).

SUBTASK 05-55-26-210-013

(2) Connectors listed in this Table are used for the task above.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 604/05-55-26-993-817

WIRE BUNDLE	CONNECTOR	WDM	PNL OR MODULE
W1264	D30116	24-11-21, 24-21-21, 24-24-21, 29-11-11, 76-21-21, 77-12-21, 80-11-11	AW258R, M2 speed - CDS
W1268	D30184	30-11-11, 36-11-11, 73-21-11, 73-21-12, 73-21-21, 73-24-12, 73-24-21, 77-31-21, 78-35-21, 78-36-21	AW258R, EEC, CDS
W1272	D30142	73-21-11, 73-21-12, 73-21-21, 73-24-12, 73-24-21, 74-31-11, 78-32-61, 78-35-21, 78-36-21	AW258R, EEC - P8
W1278	D8156J	26-11-21, 30-21-21, 31-62-24, 73-22-11, 74-11-11, 77-12-11, 77-31-21, 79-31-11	AW258R, Alt pwr - EEC
W1664	D4578J	28-41-11, 28-44-11	AD520, Wing Refuel Panel

F. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-26-220-010

(1) Close these access panels:

Number	Name/Location
441CL	Forward Strut Fairing, Left Overwing Fairing, Strut 2
611AB	Inboard Leading Edge, Lower Removable Access Panel
621GB	Refuel Access Panel - Slat Station 143.27

SUBTASK 05-55-26-210-004

(2) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

SUBTASK 05-55-26-440-004

(3) Do this task: Leading Edge Flaps and Slats Retraction, TASK 27-81-00-860-804.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

HIRF/Lightning Protection - Right Wing Leading Edge
Figure 604/05-55-26-990-805 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

HIRF/Lightning Protection - Right Wing Leading Edge
Figure 604/05-55-26-990-805 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-26-200-806

6. Wire Bundle Inspection - Strut Disconnect - Right Engine

(Figure 605)

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
27-81-00-040-801	Leading Edge Flaps and Slats Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
27-81-00-860-803	Leading Edge Flaps and Slats Extension (P/B 201)
27-81-00-860-804	Leading Edge Flaps and Slats Retraction (P/B 201)
78-31-00-040-802-F00	Thrust Reverser Deactivation For Ground Maintenance (P/B 201)
78-31-00-440-803-F00	Thrust Reverser Activation After Ground Maintenance (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

B. Consumable Materials

Reference	Description	Specification
D00633	Grease - Aircraft General Purpose	BMS3-33

C. Location Zones

Zone	Area
441	Engine 2 - Forward Strut Fairing

D. Access Panels

Number	Name/Location
441AL	Forward Strut Fairing, Left Thrust Reverser Disconnect, Strut 2
441AR	Forward Strut Fairing, Right Thrust Reverser Disconnect, Strut 2
441AT	Forward Strut Fairing, Thumbnail Fairing, Strut 2

E. Prepare for the Wire Bundle Inspection

SUBTASK 05-55-26-040-001

(1) Do this task: Leading Edge Flaps and Slats Extension, TASK 27-81-00-860-803.

SUBTASK 05-55-26-040-002

(2) Do this task: Leading Edge Flaps and Slats Deactivation, TASK 27-81-00-040-801.

SUBTASK 05-55-26-040-003

(3) Do this task: Thrust Reverser Deactivation For Ground Maintenance, TASK 78-31-00-040-802-F00.

SUBTASK 05-55-26-220-011

(4) Open these access panels:

Number	Name/Location
441AL	Forward Strut Fairing, Left Thrust Reverser Disconnect, Strut 2
441AR	Forward Strut Fairing, Right Thrust Reverser Disconnect, Strut 2
441AT	Forward Strut Fairing, Thumbnail Fairing, Strut 2

F. Wire Bundle Inspection

SUBTASK 05-55-26-210-016

(1) Do the General Visual Inspection of the wire bundle cables listed in Table 605 and Table 606:

NOTE: It is necessary to do the inspection only for the exposed part of the wire bundle.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(a) Make sure that the wire bundle cables are not chafed, cut or worn.

(b) Replace or repair any damaged wiring (SWPM Chapter 20).

SUBTASK 05-55-26-210-015

(2) Connectors listed in Table 605 and Table 606 are used for the steps above.

Table 605/05-55-26-993-818

WIRE BUNDLE	CONNECTOR	WDM	PNL OR MODULE
W1268	D30408	78-35-21, 78-36-21	AS2R, T/R LVDT - EEC
W1268	D30410	78-35-21, 78-36-21	AS3R, EEC - T/R LVDT
W1272	D30402	78-32-61, 78-35-21, 78-36-21	AS2R, EEC - T/R LVDT
W1272	D30406	78-32-61, 78-35-21, 78-36-21	AS3R, EEC - T/R LVDT

Table 606/05-55-26-993-819

WIRE BUNDLE	CONNECTOR	WDM	PNL OR MODULE
W1264	D30434	24-11-21, 24-21-21, 24-24-21, 29-11-11, 76-21-21, 77-12-21, 80-11-11	AS1R, M2 speed - CDS
W1266	D30456	73-22-11, 74-11-11	AS1R, Pwr relay-alt pwr EEC
W1268	D30460	73-21-11, 73-21-12, 73-21-21, 73-24-12, 73-24-21, 78-35-21	AS1R, EEC - T/R LVDT
W1270	D30428	30-21-21, 31-62-24, 77-31-21, 79-31-11	AS1R
W1272	D30424	73-21-11, 73-21-12, 73-21-21, 73-24-12, 73-24-21, 74-31-11, 78-35-21	AS1R, EEC - T/R LVDT

G. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-26-210-005

(1) Close this access panel:

Number	Name/Location
441AT	Forward Strut Fairing, Thumbnail Fairing, Strut 2

SUBTASK 05-55-26-410-001

(2) Do these steps to close the applicable access panels:

(a) Close these access panels:

Number	Name/Location
441AL	Forward Strut Fairing, Left Thrust Reverser Disconnect, Strut 2
441AR	Forward Strut Fairing, Right Thrust Reverser Disconnect, Strut 2

(b) Install the bolts with grease, D00633, on the access panels.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

1) Install the two lower bolts and tighten sufficiently to compress the seal before torque.

   NOTE: The access panel and seal under panel are installed as one assembly.

   a) Make sure that the seal does not have interference with the seal on the thumbnail fairing.

2) Install the four upper bolts.

3) Tighten the bolts to 65 ±15 in-lb (7 ±2 N·m).

SUBTASK 05-55-26-040-004

(3) Do this task: Thrust Reverser Activation After Ground Maintenance, TASK 78-31-00-440-803-F00.

SUBTASK 05-55-26-440-001

(4) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

SUBTASK 05-55-26-440-005

(5) Do this task: Leading Edge Flaps and Slats Retraction, TASK 27-81-00-860-804.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

NOTE:
PANELS 441AT, 441AL AND 441AR HAVE BEEN REMOVED.

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High Intensity Radiated Fields (HIRF) Inspection (Right Engine Strut)
Figure 605/05-55-26-990-807

ECCN 9E991 BOEING PROPRIETARY - See title page for details

HIRF/LIGHTNING CONNECTORS - APU/RUDDER CONTROL - INSPECTION

1. General

A. This procedure has these tasks:

(1) HIRF/Lightning Detailed Visual Inspection of selected connectors in the Stabilizer Trim Compartment.

(2) HIRF/Lightning Detailed Visual Inspection of selected connectors in the APU Compartment.

(3) HIRF/Lightning Detailed Visual Inspection of selected connectors in the Tailcone Access Compartment.

(4) HIRF/Lightning Detailed Visual Inspection of selected connectors in the Vertical Stabilizer.

TASK 05-55-30-200-801

2. Connector Inspection - (Stabilizer Trim Compartment)

(Figure 601)

A. General

(1) A detailed visual inspection is an intensive visual check of specified details associated with assemblies or installations.

(a) You will search for evidence of wiring and connector irregularities using adequate lighting.

(b) You may need inspection aids such as mirrors, and wiping rags for surface cleaning.

(c) Do not remove sealant when you do this task.

(d) Do not disassemble connectors when you do this task.

(e) Do not remove system Line Replaceable Unit (LRU)s when you do this task.

B. Location Zones

Zone	Area
310	Fuselage - Body Station 1016.00 to Body Station 1217.00

C. Access Panels

Number	Name/Location
311BL	Stabilizer Trim Access Door

D. Prepare for the Inspection

SUBTASK 05-55-30-010-002

(1) Open this access panel:

Number	Name/Location
311BL	Stabilizer Trim Access Door

E. Connectors Visual Inspection

SUBTASK 05-55-30-220-002

(1) Do a detailed visual inspection of the connectors (Table 601).

(a) Make sure that the electrical connectors are not loose (Figure 601).

1) Check that all the connectors at the LRUs are hand-tight.

2) Make sure that the connector coupling nut is installed to give a satisfactory connection between the mating pins and sockets.

3) Make sure that the back shell is not loose or damaged.

a) Check that the strain relief at the end of the back shell is also tight.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

b) Check that shield pigtails are tight and that the shield grounding band is tight.

(b) Check that the cables to those connectors are not chafed, cut or worn.

(c) Replace or repair any damaged components or wiring found during this inspection.

Table 601/05-55-30-993-802

WIRE BUNDLE	CONNECTOR	Disconnect Bracket	FIGURE	PNL OR MODULE
W3397	D43397J	AB1050L	Figure 601	SMYD/FCC
W3399	D43399J	AB1050R	Figure 601	SMYD
W4724	D10434	AB1088	Figure 601	APU ECU
W4724	D10436	AB1088	Figure 601	APU ECU
W4726	D10912	AB1088	Figure 601	APU ECU
LOM 427-431, 450, 465-999				
W7381	D45501P	AB1050L	Figure 601	FCC-DFCS Rudder Control
W7383	D45503P	AB1050R	Figure 601	FCC-DFCS Rudder Control
LOM ALL				

F. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-30-410-002

(1) Close this access panel:

Number	Name/Location
311BL	Stabilizer Trim Access Door

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

HIRF/LIGHTNING - APU/RUDDER CONTROL
Figure 601/05-55-30-990-801 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

STABILIZER TRIM COMPARTMENT
(VIEW IN THE UP DIRECTION)

B

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HIRF/LIGHTNING - APU/RUDDER CONTROL
Figure 601/05-55-30-990-801 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

STABILIZER TRIM COMPARTMENT
(VIEW IN THE UP DIRECTION)

B

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HIRF/LIGHTNING - APU/RUDDER CONTROL
Figure 601/05-55-30-990-801 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-30-200-802

3. Connector Inspection - (APU Compartment)

Figure 602

A. General

(1) A Detailed Visual Inspection is an intensive visual check of specified details associated with assemblies or installations.

(a) You will search for evidence of wiring and connector irregularities using adequate lighting.

(b) You may need inspection aids such as mirrors, and wiping rags for surface cleaning.

(c) Do not remove sealant when you do this task.

(d) Do not disassemble connectors when you do this task.

(e) Do not remove system LRUs when you do this task.

B. Location Zones

Zone	Area
310	Fuselage - Body Station 1016.00 to Body Station 1217.00

C. Access Panels

Number	Name/Location
315A	APU Cowl Door

D. Procedure

SUBTASK 05-55-30-010-001

(1) Remove the following access panel:

Number	Name/Location
315A	APU Cowl Door

E. Visual Check of the connectors

SUBTASK 05-55-30-220-004

(1) Do a Detailed Visual Inspection of the connectors shown in (Table 601).

(a) Make sure the electrical connectors are not loose.

NOTE: Connector locations are shown on (Figure 601).

1) Check that all the connectors at the LRUs are hand-tight.

2) Make sure the connector coupling nut is installed to give a satisfactory connection between the mating pins and sockets.

3) Make sure the back shell is not loose or damaged.

a) Check that the strain relief at the end of the backshell is also tight.

b) Check that shield pigtails are tight and that the shield grounding band is tight.

(b) Check that the cables to those connectors are not chafed, cut or worn.

(c) Replace or repair any damaged components or wiring found during this inspection.

Table 602/05-55-30-993-803

WIRE BUNDLE	CONNECTOR	FIGURE	PNL OR MODULE
W-APU	P1	Figure 602	APU ECU
W-APU	P2	Figure 602	APU ECU

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 602/05-55-30-993-803 (Continued)

WIRE BUNDLE	CONNECTOR	FIGURE	PNL OR MODULE
W-APU	P3	Figure 602	APU ECU
W-APU	P9	Figure 602	APU ECU
W-APU	P10	Figure 602	APU ECU
W-APU	P11	Figure 602	APU ECU
W-APU	P12	Figure 602	APU ECU
W-APU	P13	Figure 602	APU ECU
W-APU	P15	Figure 602	APU ECU
W-APU	P17	Figure 602	APU ECU
W-APU	P18	Figure 602	APU ECU
W-APU	P19	Figure 602	APU ECU
W-APU	P20	Figure 602	APU ECU
W-APU	P21	Figure 602	APU ECU
W-APU	P22	Figure 602	APU ECU
W-APU	P23	Figure 602	APU ECU
W-APU	P4	Figure 602	APU Start Converter Unit
W-APU	P5	Figure 602	APU Start Converter Unit

F. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-30-410-001

(1) Close the panel opened above.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

W77015 S0000130105_V2

HIRF/LIGHTNING - APU/RUDDER CONTROL (APU Access Compartment)
Figure 602/05-55-30-990-802 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

W77016 S0000130104_V3

HIRF/LIGHTNING - APU/RUDDER CONTROL (APU Access Compartment)
Figure 602/05-55-30-990-802 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-30-200-803

4. Connector Inspection - Tailcone Access Compartment

Figure 603

A. References

Reference	Title
SWPM Chapter 20	Standard Wiring Practices Manual

B. Location Zones

Zone	Area
310	Fuselage - Body Station 1016.00 to Body Station 1217.00

C. Access Panels

Number	Name/Location
318BR	Tailcone Access Door

D. Prepare for the procedure

SUBTASK 05-55-30-010-003

(1) Open this access panel:

Number	Name/Location
318BR	Tailcone Access Door

E. Procedure

SUBTASK 05-55-30-211-003

(1) Procedure to do the Detailed Visual Inspection of all connectors listed in Table below:

(a) Make sure that all of the connectors are hand-tight.

(b) Make sure that the connector coupling nut is installed to give a satisfactory connection between the mating pins and sockets.

(c) Make sure that the back shell is not loose or damaged.

1) Make sure that the strain relief at the end of the backshell is tight.

2) Make sure that the shield grounding band is tight.

(d) Replace or repair any damaged components found during this inspection (SWPM Chapter 20).

SUBTASK 05-55-30-211-004

(2) Connectors listed in this Table are used for the task above.

Table 603/05-55-30-993-807

WIRE BUNDLE	CONNECTOR	WDM	PNL OR MODULE
W3399	D01857	22-11-12	FCC-DFS, Rudder Control
W3397	GD949-DC	22-14-11	FCC-DFS, Rudder Control
W3397	GD973-ST	22-14-11, 22-14-12, 22-14-21	FCC-DFS, Rudder Control
W3399	GD973-ST	22-14-11, 22-14-12, 22-14-21	FCC-DFS, Rudder Control
W3399	GD4811-ST	22-12-41	FCC-DFS, Rudder Control

ECCN 9E991 BOEING PROPRIETARY - See title page for details

F. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-30-410-003

(1) Close this access panel:

Number	Name/Location
318BR	Tailcone Access Door

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Connector Inspection - Tailcone Access Compartment
Figure 603/05-55-30-990-803 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Connector Inspection - Tailcone Access Compartment
Figure 603/05-55-30-990-803 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-30-200-804

5. Connector Inspection - (Vertical Stabilizer)

A. References

Reference	Title
SWPM Chapter 20	Standard Wiring Practices Manual

B. Location Zones

Zone	Area
310	Fuselage - Body Station 1016.00 to Body Station 1217.00

C. Access Panels

Number	Name/Location
324JL	Vertical Fin, Access

D. Prepare for the procedure

SUBTASK 05-55-30-010-004

(1) Open this access panel:

Number	Name/Location
324JL	Vertical Fin, Access

E. Visual Check of the connectors

SUBTASK 05-55-30-211-001

(1) Procedure to do the Detailed Visual Inspection of all connectors listed in Table below:

(a) Make sure that all of the connectors are hand-tight.

(b) Make sure that the connector coupling nut is installed to give a satisfactory connection between the mating pins and sockets.

(c) Make sure that the back shell is not loose or damaged.

1) Make sure that the strain relief at the end of the backshell is tight.

2) Make sure that the shield grounding band is tight.

(d) Replace or repair any damaged components found during this inspection (SWPM Chapter 20).

SUBTASK 05-55-30-211-002

(2) Connectors listed in this Table are used for the task above.

Table 604/05-55-30-993-806

WIRE BUNDLE	CONNECTOR	WDM	PNL OR MODULE
W7381	D11613	22-11-81	FCC-DFCS Rudder Control
W7381	D11617	22-11-81	FCC-DFCS Rudder Control
W7383	D11615	22-11-81	FCC-DFCS Rudder Control
W7383	D11619	22-11-81	FCC-DFCS Rudder Control

F. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-30-410-004

(1) Close this access panel:

Number	Name/Location
324JL	Vertical Fin, Access

ECCN 9E991 BOEING PROPRIETARY - See title page for details

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

U69607 S0000213932_V4

HIRF/LIGHTNING - APU/RUDDER CONTROL
Figure 604/05-55-30-990-804

ECCN 9E991 BOEING PROPRIETARY - See title page for details

HIRF/LIGHTNING PROTECTION - LEFT SIDE CONNECTORS - INSPECTION

1. General

A. This procedure has these tasks:

(1) HIRF/Lightning Functional Inspection of selected connectors in the Left Wheel Well.

(2) HIRF/Lightning Functional Inspection of selected connectors in the Left Wing To Body Fairing area.

(3) HIRF/Lightning Functional Inspection of selected connectors routed along the Left Wing Trailing Edge.

(4) HIRF/Lightning Functional Inspection of selected connectors routed along the Left Wing Leading Edge.

(5) HIRF/Lightning Functional Inspection of the connectors at the Strut Disconnect panel on the Left Engine.

(6) HIRF/Lightning Troubleshooting of the Left Side Connectors.

B. This Functional Inspection is a check of the quality of the electrical bond resistance between selected connectors and airplane structure. It consists of measuring and recording the bond resistance for those connectors and repairing any faulty connections if they are found.

TASK 05-55-40-200-802

2. Bond Resistance Test of Connector - Left Wheel Well

(Figure 601)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) As part of the AMM validation program, this procedure has been validated at a customer site for the June 15, 2012 revision.

B. References

Reference	Title
05-56-01-760-801	Joint Resistance Measurement (P/B 201)
22-11-27-710-801	Spoiler Position Sensor Test (P/B 501)
31-31-31-700-801	Aileron Position Transmitter Installation Test (P/B 401)
32-00-01-080-801	Landing Gear Downlock Pins Removal (P/B 201)
32-00-01-480-801	Landing Gear Downlock Pins Installation (P/B 201)

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-1550	Bonding Meter - Approved, Intrinsically Safe (Approved for use in Class I, Divisions I & II hazardous (classified) locations. Outside these hazardous locations, COM-614 can be used in lieu of COM-1550). Part #: 620LK Supplier: 1CRL2 Part #: M1 Supplier: 3AD17 Part #: M1B Supplier: 3AD17 Part #: T477W (C15292) Supplier: 06659

ECCN 9E991 BOEING PROPRIETARY - See title page for details

D. Location Zones

Zone	Area
133	Main Landing Gear Wheel Well, Body Station 663.75 to Body Station 727.00 - Left

E. Prepare for the procedure

SUBTASK 05-55-40-010-002

(1) Do this task: Landing Gear Downlock Pins Installation, TASK 32-00-01-480-801.

SUBTASK 05-55-40-200-008

(2) Make a copy of the data sheet (Table 601) to record data during the task.

Table 601/05-55-40-993-819 Bond Resistance Test of Connector - Left Wheel Well - Data Sheet

PLANE:					
DATE:					
TECHNICIAN:					
BUNDLE NUMBER	**CONNECTOR NUMBER**	**MEASURED BOND VALUE (mΩ)**	**MIN/MAX VALUE (mΩ)**	**PASS FAIL**	**RETEST MEASURED VALUE/COMMENTS**
W1022	D42100P		11/49.0		
	D42102P		27/70.0		

SUBTASK 05-55-40-200-023

(3) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail: "The Boeing Company, Attention: Manager, Lightning / HIRF Maintenance Programs Engineering, P.O. Box 3707, MC 2J-10, Seattle, WA 98124-2207, USA".

ECCN 9E991 BOEING PROPRIETARY - See title page for details

3) By Fax: 425-717-1960.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

F. Procedure

SUBTASK 05-55-40-200-013

(1) Do this task: Joint Resistance Measurement, TASK 05-56-01-760-801 to measure the bond resistance for all connector listed in Table using the (intrinsically safe approved bonding meter, COM-1550):

(a) Follow the “INSPECTION NOTES” column in the Table for instructions.

(b) Record resistance value on the data sheet.

(c) Make sure that the measured resistance value is within the MIN/MAX value range indicated on the data sheet.

1) If the measured resistance value is not within the MIN/MAX value range indicated on the data sheet, do this task: Left Side Connectors - Troubleshooting, TASK 05-55-40-810-801.

(d) Re-connect the connector if it was disconnected during the test.

(e) Repeat these steps on the next connector(s) in the table. This task is complete when all connectors listed in the table were tested and passed.

SUBTASK 05-55-40-200-014

(2) If the connector has been disconnected and re-connected, do the task listed in the RESTORATION NOTES column.

SUBTASK 05-55-40-200-004

(3) Connector listed in this Table is used for the task above.

Table 602/05-55-40-993-817

WIRE BUNDLE	CONNECTOR	PNL OR MODULE	INSPECTION NOTES	RESTORATION NOTES
W1022	D42100P	AL720A POS 3 - Spoiler, FCC	Disconnect the plug, measure between plug and receptacle	Aileron Position Transmitter Installation Test, TASK 31-31-31-700-801
W1022	D42102P	AL720A POS 2 - Spoiler, FCC	Disconnect the plug, measure between plug and receptacle	Spoiler Position Sensor Test, TASK 22-11-27-710-801

G. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-40-940-001

(1) Do this task: Landing Gear Downlock Pins Removal, TASK 32-00-01-080-801.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

LEFT WHEEL WELL
A

U68847 S0000213532_V2

Bond Resistance Test of Connector - Left Wheel Well - Connector Location
Figure 601/05-55-40-990-809 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

DISCONNECT PANEL, AL0720A

B

NOTE:

COVER PLATE REMOVED.

U68864 S0000213533_V2

Bond Resistance Test of Connector - Left Wheel Well - Connector Location
Figure 601/05-55-40-990-809 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-40-200-803

3. Bond Resistance Test of Connector - Left Wing To Body Fairing

(Figure 602)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) As part of the AMM validation program, this procedure has been validated at a customer site for the June 15, 2012 revision.

B. References

Reference	Title
05-56-01-760-801	Joint Resistance Measurement (P/B 201)
27-81-00-040-801	Leading Edge Flaps and Slats Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
73-21-00-740-803-F00	EEC BITE TEST - RECENT FAULTS (P/B 501)

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-1550	Bonding Meter - Approved, Intrinsically Safe (Approved for use in Class I, Divisions I & II hazardous (classified) locations. Outside these hazardous locations, COM-614 can be used in lieu of COM-1550). Part #: 620LK Supplier: 1CRL2 Part #: M1 Supplier: 3AD17 Part #: M1B Supplier: 3AD17 Part #: T477W (C15292) Supplier: 06659

D. Location Zones

Zone	Area
191	Lower Wing-To-Body Fairing - Forward of Wing Box

E. Access Panels

Number	Name/Location
191FL	Forward Wing To Body Fairing Panel - Mid Fairing, Above Ram Air Inlet

F. Prepare for the procedure

SUBTASK 05-55-40-040-005

(1) Do this task:Leading Edge Flaps and Slats Deactivation, TASK 27-81-00-040-801.

SUBTASK 05-55-40-200-009

(2) Make a copy of the data sheet (Table 603) to record data during the task.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 603/05-55-40-993-820 Bond Resistance Test of Connector - Left Wing To Body Fairing - Data Sheet

PLANE:					
DATE:					
TECHNICIAN:					
BUNDLE NUMBER	**CONNECTOR NUMBER**	**MEASURED BOND VALUE (mΩ)**	**MIN/MAX VALUE (mΩ)**	**PASS FAIL**	**RETEST MEASURED VALUE/COMMENTS**
W1178	D39927		6/32.0		

SUBTASK 05-55-40-200-024

(3) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail: "The Boeing Company, Attention: Manager, Lightning / HIRF Maintenance Programs Engineering, P.O. Box 3707, MC 2J-10, Seattle, WA 98124-2207, USA".

3) By Fax: 425-717-1960.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-40-220-003

(4) Open this access panel:

Number	Name/Location
191FL	Forward Wing To Body Fairing Panel - Mid Fairing, Above Ram Air Inlet

ECCN 9E991 BOEING PROPRIETARY - See title page for details

G. Procedure

SUBTASK 05-55-40-200-015

(1) Do this task: Joint Resistance Measurement, TASK 05-56-01-760-801 to measure the bond resistance for all connector listed in Table using the (intrinsically safe approved bonding meter, COM-1550):

(a) Follow the “INSPECTION NOTES” column in the Table for instructions.

(b) Record resistance value on the data sheet.

(c) Make sure that the measured resistance value is within the MIN/MAX value range indicated on the data sheet.

1) If the measured resistance value is not within the MIN/MAX value range indicated on the data sheet, do this task: Left Side Connectors - Troubleshooting, TASK 05-55-40-810-801.

(d) Re-connect the connector if it was disconnected during the test.

(e) Repeat these steps on the next connector(s) in the table. This task is complete when all connectors listed in the table were tested and passed.

SUBTASK 05-55-40-200-016

(2) If the connector has been disconnected and re-connected, do the task listed in the RESTORATION NOTES column.

SUBTASK 05-55-40-200-003

(3) Connector listed in this Table is used for the task above.

Table 604/05-55-40-993-816

WIRE BUNDLE	CONNECTOR	PNL OR MODULE	INSPECTION NOTES	RESTORATION NOTES
W1178	D39927	AC520, EEC	Disconnect the plug-measure between plug and receptacle	EEC BITE TEST - RECENT FAULTS, TASK 73-21-00-740-803-F00

H. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-40-210-001

(1) Close this access panel:

Number	Name/Location
191FL	Forward Wing To Body Fairing Panel - Mid Fairing, Above Ram Air Inlet

SUBTASK 05-55-40-440-002

(2) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

L08133 S0006558164_V3

Bond Resistance Test of Connector - Left Wing To Body Fairing - Connector Location
Figure 602/05-55-40-990-810

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-40-200-804

4. Bond Resistance Test of Connector - Left Wing Trailing Edge

(Figure 603)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) As part of the AMM validation program, this task has been validated at a customer site for the June 15, 2012 revision.

B. References

Reference	Title
05-56-01-760-801	Joint Resistance Measurement (P/B 201)
27-51-00-040-801	Trailing Edge Flap System Deactivation (P/B 201)
27-51-00-440-801	Trailing Edge Flap System Reactivation (P/B 201)
27-51-00-710-801	Trailing Edge Flap System Operational Test (P/B 501)
27-51-00-860-803	Extend the Trailing Edge Flaps (P/B 201)
27-51-00-860-804	Retract the Trailing Edge Flaps (P/B 201)

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-1550	Bonding Meter - Approved, Intrinsically Safe (Approved for use in Class I, Divisions I & II hazardous (classified) locations. Outside these hazardous locations, COM-614 can be used in lieu of COM-1550). Part #: 620LK Supplier: 1CRL2 Part #: M1 Supplier: 3AD17 Part #: M1B Supplier: 3AD17 Part #: T477W (C15292) Supplier: 06659

D. Location Zones

Zone	Area
550	Subzone - Left Wing: Trailing Edge, Aft of Rear Spar, Inbd of Outboard Trailing Edge Flap
560	Subzone - Left Wing: Trailing Edge , Aft of Rear Spar, Outboard of Inbd Trailing Edge Flap, Inbd of Fixed Trailing Edge

E. Prepare for the Bond Resistance Connector Test

SUBTASK 05-55-40-220-005

(1) Do this task: Extend the Trailing Edge Flaps, TASK 27-51-00-860-803.

SUBTASK 05-55-40-220-012

(2) Do this task: Trailing Edge Flap System Deactivation, TASK 27-51-00-040-801.

SUBTASK 05-55-40-200-010

(3) Make a copy of the data sheet to record data during the task (Table 605).

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 605/05-55-40-993-822 Bond Resistance Test of Connector - Left Wing Trailing Edge- Data Sheet

PLANE:					
DATE:					
TECHNICIAN:					
BUNDLE NUMBER	**CONNECTOR NUMBER**	**MEASURED BOND VALUE (mΩ)**	**MIN/MAX VALUE (mΩ)**	**PASS FAIL**	**RETEST MEASURED VALUE/COMMENTS**
W1024	D00275		24/36.0		
	D01695		0/6.0		
	D01699		0/6.0		

SUBTASK 05-55-40-200-025

(4) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail: "The Boeing Company, Attention: Manager, Lightning / HIRF Maintenance Programs Engineering, P.O. Box 3707, MC 2J-10, Seattle, WA 98124-2207, USA".

3) By Fax: 425-717-1960.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

F. Bond Resistance Connector Test

SUBTASK 05-55-40-200-017

(1) Do this task: Joint Resistance Measurement, TASK 05-56-01-760-801 to measure the bond resistance for all connector listed in Table using the (intrinsically safe approved bonding meter, COM-1550):

(a) Follow the “INSPECTION NOTES” column in the Table for instructions.

(b) Record resistance value on the data sheet.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(c) Make sure that the measured resistance value is within the MIN/MAX value range indicated on the data sheet.

1) If the measured resistance value is not within the MIN/MAX value range indicated on the data sheet, do this task: Left Side Connectors - Troubleshooting, TASK 05-55-40-810-801.

(d) Re-connect the connector if it was disconnected during the test.

(e) Repeat these steps on the next connector(s) in the table. This task is complete when all connectors listed in the table were tested and passed.

SUBTASK 05-55-40-200-018

(2) If the connector has been disconnected and re-connected, do the task listed in the RESTORATION NOTES column.

SUBTASK 05-55-40-200-005

(3) Connector listed in the table below is used for the task above (Table 606).

Table 606/05-55-40-993-818

WIRE BUNDLE	CONNECTOR	PNL OR MODULE	INSPECTION NOTES	RESTORATION NOTES
W1024	D00275	T427-Flap Posn Sensor	Disconnect the plug- measure between plug and receptacle. For this measurement , two connectors D40024J/P must be hooked up.	Trailing Edge Flap System Operational Test, TASK 27-51-00-710-801
W1024	D1695	Spoiler 4, FCC (POS 1)	Standard measurement backshell to structure.	N/A
W1024	D1699	Spoiler 4, FCC (POS 2)	Standard measurement backshell to structure.	N/A

G. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-40-440-003

(1) Do this task: Trailing Edge Flap System Reactivation, TASK 27-51-00-440-801.

SUBTASK 05-55-40-210-002

(2) Do this task: Retract the Trailing Edge Flaps, TASK 27-51-00-860-804.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

U68939 S0000213582_V3

Bond Resistance Test of Connector - Left Wing Trailing Edge - Connector Location
Figure 603/05-55-40-990-811 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

U68957 S0000213583_V2

Bond Resistance Test of Connector - Left Wing Trailing Edge - Connector Location
Figure 603/05-55-40-990-811 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-40-200-805

5. Bond Resistance Test of Connector - Left Wing Leading Edge

(Figure 604)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) As part of the AMM validation program, this procedure has been validated at a customer site for the June 15, 2012 revision.

B. References

Reference	Title
05-56-01-760-801	Joint Resistance Measurement (P/B 201)
24-21-00-700-803	Operational Test for the AC Generation and Control System (P/B 501)
26-11-00-710-801	Engine Fire Detection - Operational Test (P/B 501)
27-81-00-040-801	Leading Edge Flaps and Slats Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
27-81-00-860-803	Leading Edge Flaps and Slats Extension (P/B 201)
27-81-00-860-804	Leading Edge Flaps and Slats Retraction (P/B 201)
30-11-12-400-801	Ground Wing Thermal Anti-Icing Solenoid Valve Installation (P/B 401)
74-00-00-750-801-F00	Ignition System Audible Test (P/B 501)
78-31-00-700-801-F00	Thrust Reverser Normal Operation Test (P/B 501)
80-11-00-730-801-F00	Start Switch Test (P/B 501)

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-1550	Bonding Meter - Approved, Intrinsically Safe (Approved for use in Class I, Divisions I & II hazardous (classified) locations. Outside these hazardous locations, COM-614 can be used in lieu of COM-1550). Part #: 620LK Supplier: 1CRL2 Part #: M1 Supplier: 3AD17 Part #: M1B Supplier: 3AD17 Part #: T477W (C15292) Supplier: 06659

D. Location Zones

Zone	Area
510	Subzone - Left Wing: Leading Edge, Fwd of Front Spar, Inbd of Strut and Nacelle Gap Cover Area
520	Subzone - Left Wing: Leading Edge, Fwd of Front Spar, Outboard of Strut and Nacelle Gap Cover Area

E. Access Panels

Number	Name/Location
431CR	Forward Strut Fairing, Right Overwing Fairing, Strut 1
511AB	Inboard Leading Edge, Lower Removable Panel

ECCN 9E991 BOEING PROPRIETARY - See title page for details

F. Prepare for the procedure

SUBTASK 05-55-40-220-007

(1) Do this task: Leading Edge Flaps and Slats Extension, TASK 27-81-00-860-803.

SUBTASK 05-55-40-220-008

(2) Do this task: Leading Edge Flaps and Slats Deactivation, TASK 27-81-00-040-801.

SUBTASK 05-55-40-200-011

(3) Make a copy of the data sheet (Table 607) to record data during the task.

Table 607/05-55-40-993-821 Bond Resistance Test of Connector - Left Wing Leading Edge- Data Sheet

PLANE:					
DATE:					
TECHNICIAN:					
BUNDLE NUMBER	**CONNECTOR NUMBER**	**MEASURED BOND VALUE (mΩ)**	**MIN/MAX VALUE (mΩ)**	**PASS FAIL**	**RETEST MEASURED VALUE/COMMENTS**
W1164	D30016		7/30.0		
W1166	D30064		10/30.0		
W1168	D30084		3/19.0		
W1170	D8056P		6/27.0		
W1172	D30042		3/20.0		
W1182	D30062		12/45.0		
W1184	D30014		7/29.0		

SUBTASK 05-55-40-200-026

(4) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

ECCN 9E991 BOEING PROPRIETARY - See title page for details

2) By Mail: "The Boeing Company, Attention: Manager, Lightning / HIRF Maintenance Programs Engineering, P.O. Box 3707, MC 2J-10, Seattle, WA 98124-2207, USA".

3) By Fax: 425-717-1960.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-40-210-003

(5) Open these access panels:

Number	Name/Location
431CR	Forward Strut Fairing, Right Overwing Fairing, Strut 1
511AB	Inboard Leading Edge, Lower Removable Panel

G. Procedure

SUBTASK 05-55-40-200-019

(1) Do this task: Joint Resistance Measurement, TASK 05-56-01-760-801 to measure the bond resistance for all connector listed in Table using the (intrinsically safe approved bonding meter, COM-1550):

(a) Follow the “INSPECTION NOTES” column in the Table for instructions.

(b) Record resistance value on the data sheet.

(c) Make sure that the measured resistance value is within the MIN/MAX value range indicated on the data sheet.

1) If the measured resistance value is not within the MIN/MAX value range indicated on the data sheet, do this task: Left Side Connectors - Troubleshooting, TASK 05-55-40-810-801.

(d) Re-connect the connector if it was disconnected during the test.

(e) Repeat these steps on the next connector(s) in the table. This task is complete when all connectors listed in the table were tested and passed.

SUBTASK 05-55-40-200-020

(2) If the connector has been disconnected and re-connected, do the task listed in the RESTORATION NOTES column.

SUBTASK 05-55-40-220-009

(3) Connector listed in this Table is used for the task above.

Table 608/05-55-40-993-812

WIRE BUNDLE	CONNECTOR	PNL OR MODULE	INSPECTION NOTES	RESTORATION NOTES
W1164	D30016	AW258L, M2 speed - CDS	Disconnect the plug- measure between plug and receptacle	Operational Test for the AC Generation and Control System, TASK 24-21-00-700-803
W1166	D30064	AW258L, Pwr relay-alt pwr EEC	Disconnect the plug- measure between plug and receptacle	Engine Fire Detection - Operational Test, TASK 26-11-00-710-801

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Table 608/05-55-40-993-812 (Continued)

WIRE BUNDLE	CONNECTOR	PNL OR MODULE	INSPECTION NOTES	RESTORATION NOTES
W1168	D30084	AW258L, EEC, CDS	Disconnect the plug- measure between plug and receptacle	Thrust Reverser Normal Operation Test, TASK 78-31-00-700-801-F00 and Ground Wing Thermal Anti-Icing Solenoid Valve Installation, TASK 30-11-12-400-801
W1170	D8056P	AW258L	Disconnect the plug- measure between plug and receptacle	Ignition System Audible Test, TASK 74-00-00-750-801-F00
W1172	D30042	AW258L, EEC - P8	Disconnect the plug- measure between plug and receptacle	Thrust Reverser Normal Operation Test, TASK 78-31-00-700-801-F00 and Ground Wing Thermal Anti-Icing Solenoid Valve Installation, TASK 30-11-12-400-801
W1182	D30062	AW258L, Alt pwr EEC	Disconnect the plug- measure between plug and receptacle	Engine Fire Detection - Operational Test, TASK 26-11-00-710-801
W1184	D30014	AW258L, CDS - M2 Speed	Disconnect the plug- measure between plug and receptacle	Start Switch Test, TASK 80-11-00-730-801-F00

H. Put the Airplane Back to Its Usual Condition.

SUBTASK 05-55-40-440-001

(1) Close these access panels:

Number	Name/Location
431CR	Forward Strut Fairing, Right Overwing Fairing, Strut 1
511AB	Inboard Leading Edge, Lower Removable Panel

SUBTASK 05-55-40-220-010

(2) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

SUBTASK 05-55-40-220-011

(3) Do this task: Leading Edge Flaps and Slats Retraction, TASK 27-81-00-860-804.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Bond Resistance Test of Connector - Left Wing Leading Edge - Connector Location
Figure 604/05-55-40-990-812 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

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Bond Resistance Test of Connector - Left Wing Leading Edge - Connector Location
Figure 604/05-55-40-990-812 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-40-200-806

6. Bond Resistance Test of Connector - Strut Disconnect - Left Engine

(Figure 605)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) As part of the AMM validation program, this procedure has been validated at a customer site for the June 15, 2012 revision.

B. References

Reference	Title
05-56-01-760-801	Joint Resistance Measurement (P/B 201)
27-81-00-040-801	Leading Edge Flaps and Slats Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
27-81-00-860-803	Leading Edge Flaps and Slats Extension (P/B 201)
27-81-00-860-804	Leading Edge Flaps and Slats Retraction (P/B 201)
78-31-00-040-802-F00	Thrust Reverser Deactivation For Ground Maintenance (P/B 201)
78-31-00-440-803-F00	Thrust Reverser Activation After Ground Maintenance (P/B 201)

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-1550	Bonding Meter - Approved, Intrinsically Safe (Approved for use in Class I, Divisions I & II hazardous (classified) locations. Outside these hazardous locations, COM-614 can be used in lieu of COM-1550). Part #: 620LK Supplier: 1CRL2 Part #: M1 Supplier: 3AD17 Part #: M1B Supplier: 3AD17 Part #: T477W (C15292) Supplier: 06659

D. Location Zones

Zone	Area
431	Engine 1 - Forward Strut Fairing

E. Access Panels

Number	Name/Location
431AL	Forward Strut Fairing, Left Thrust Reverser Disconnect, Strut 1
431AR	Forward Strut Fairing, Right Thrust Reverser Disconnect, Strut 1
431AT	Forward Strut Fairing, Thumbnail Fairing, Strut 1

F. Prepare for the Test

SUBTASK 05-55-40-020-001

(1) Do this task: Leading Edge Flaps and Slats Extension, TASK 27-81-00-860-803.

SUBTASK 05-55-40-040-001

(2) Do this task: Leading Edge Flaps and Slats Deactivation, TASK 27-81-00-040-801.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-55-40-040-002

(3) Do this task: Thrust Reverser Deactivation For Ground Maintenance, TASK 78-31-00-040-802-F00.

SUBTASK 05-55-40-200-012

(4) Make a copy of the data sheet (Table 609) to record data during the task.

Table 609/05-55-40-993-823 Bond Resistance Test of Connector - Strut Disconnect - Left Engine- Data Sheet

PLANE:					
DATE:					
TECHNICIAN:					
BUNDLE NUMBER	**CONNECTOR NUMBER**	**MEASURED BOND VALUE (mΩ)**	**MIN/MAX VALUE (mΩ)**	**PASS FAIL**	**RETEST MEASURED VALUE/COMMENTS**
W1164	D30234		0/11.0		
W1166	D30256		0/11.0		
W1168	D30208		0/11.0		
	D30210		0/11.0		
	D30260		0/11.0		
W1170	D30212		0/11.0		
	D30228		0/11.0		
W1172	D30224		0/11.0		
	D30202		0/11.0		
	D30206		0/11.0		

SUBTASK 05-55-40-200-027

(5) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail: "The Boeing Company, Attention: Manager, Lightning / HIRF Maintenance Programs Engineering, P.O. Box 3707, MC 2J-10, Seattle, WA 98124-2207, USA".

3) By Fax: 425-717-1960.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-40-020-002

(6) Open these access panels:

Number	**Name/Location**
431AL	Forward Strut Fairing, Left Thrust Reverser Disconnect, Strut 1
431AR	Forward Strut Fairing, Right Thrust Reverser Disconnect, Strut 1
431AT	Forward Strut Fairing, Thumbnail Fairing, Strut 1

ECCN 9E991 BOEING PROPRIETARY - See title page for details

G. Bond Resistance Test of Connector - Strut Disconnect - Left Engine

SUBTASK 05-55-40-200-021

(1) Do this task: Joint Resistance Measurement, TASK 05-56-01-760-801 to measure the bond resistance for all connector listed in Table using the (intrinsically safe approved bonding meter, COM-1550):

(a) Follow the “INSPECTION NOTES” column in the Table for instructions.

(b) Record resistance value on the data sheet.

(c) Make sure that the measured resistance value is within the MIN/MAX value range indicated on the data sheet.

1) If the measured resistance value is not within the MIN/MAX value range indicated on the data sheet, do this task: Left Side Connectors - Troubleshooting, TASK 05-55-40-810-801.

(d) Re-connect the connector if it was disconnected during the test.

(e) Repeat these steps on the next connector(s) in the table. This task is complete when all connectors listed in the table were tested and passed.

SUBTASK 05-55-40-200-022

(2) If the connector has been disconnected and re-connected, do the task listed in the RESTORATION NOTES column.

SUBTASK 05-55-40-200-001

(3) Connector listed in this Table is used for the task above.

Table 610/05-55-40-993-814

WIRE BUNDLE	CONNECTOR	PNL OR MODULE	INSPECTION NOTES	RESTORATION NOTES
W1164	D30234	AS1L, M2 speed - CDS	Standard measurement backshell to structure	
W1166	D30256	AS1L, Pwr relay-alt pwr EEC	Standard measurement backshell to structure	
W1168	D30208	AS2L, T/R LVDT-EEC	Standard measurement backshell to structure	
W1168	D30210	AS2l	Standard measurement backshell to structure	
W1168	D30260	AS1L	Standard measurement backshell to structure	
W1170	D30212	AS1L, EEC-eng start	Standard measurement backshell to structure	
W1170	D30228	AS1L	Standard measurement backshell to structure	
W1172	D30224	AS1L, EEC - P8	Standard measurement backshell to structure	
W1172	D30202	T/R LVDT, EEC - P8	Standard measurement backshell to structure	
W1172	D30206	T/R LVDT, EEC - P8	Standard measurement backshell to structure	

ECCN 9E991 BOEING PROPRIETARY - See title page for details

H. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-40-210-004

(1) Close these access panels:

Number	Name/Location
431AL	Forward Strut Fairing, Left Thrust Reverser Disconnect, Strut 1
431AR	Forward Strut Fairing, Right Thrust Reverser Disconnect, Strut 1
431AT	Forward Strut Fairing, Thumbnail Fairing, Strut 1

SUBTASK 05-55-40-040-003

(2) Do this task: Thrust Reverser Activation After Ground Maintenance, TASK 78-31-00-440-803-F00.

SUBTASK 05-55-40-040-004

(3) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

SUBTASK 05-55-40-020-003

(4) Do this task: Leading Edge Flaps and Slats Retraction, TASK 27-81-00-860-804.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Bond Resistance Test of Connector - Strut Disconnect - Left Engine - Connector Location
Figure 605/05-55-40-990-813

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-40-810-801

7. Left Side Connectors - Troubleshooting

A. References

Reference	Title
05-56-01-760-801	Joint Resistance Measurement (P/B 201)
05-56-01-993-802	Table: TYPE OF JOINTMAXIMUM RESISTANCE (ALUMINUM CONNECTORS) (MILLIOHMS)MAXIMUM RESISTANCE (STAINLESS CONNECTORS) (MILLIOHMS) BACKSHELL-TO-RECEPTACLE2.55.0 BACKSHELL-TO-PLUG BODY2.55.0 PLUG-TO-RECEPTACLE5.01 (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-1550	Bonding Meter - Approved, Intrinsically Safe (Approved for use in Class I, Divisions I & II hazardous (classified) locations. Outside these hazardous locations, COM-614 can be used in lieu of COM-1550). Part #: 620LK Supplier: 1CRL2 Part #: M1 Supplier: 3AD17 Part #: M1B Supplier: 3AD17 Part #: T477W (C15292) Supplier: 06659

C. Procedure

SUBTASK 05-55-40-810-002

(1) Do this task: Joint Resistance Measurement, TASK 05-56-01-760-801 on the failed connector.

(a) Record measured data on the data sheet.

(b) If the measured joint resistance value is greater than the MAXIMUM RESISTANCE in (Table 05-56-01-993-802), repair this connector or wire bundle according to the (SWPM Chapter 20).

(c) If the measured joint resistance value is less than the MAXIMUM RESISTANCE in (Table 05-56-01-993-802), do the task below:

NOTE: The incorrect test set up will sometimes cause the low joint resistance value.

SUBTASK 05-55-40-810-001

(2) If the failed connector is listed in (Table 612) under FAILED CONNECTOR column, do this task: Joint Resistance Measurement, TASK 05-56-01-760-801 on the associated connector listed under TROUBLESHOOTING CONNECTOR column using (intrinsically safe approved bonding meter, COM-1550).

NOTE: Refer to INSPECTION NOTES in the Table for joint resistance measurement.

(a) Record measured data on the data sheet.

1) If the measured joint resistance value is greater than the MAXIMUM RESISTANCE in the data sheet (Table 611), repair this connector or wire bundle according to the (SWPM Chapter 20).

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 611/05-55-40-993-825 Bond Resistance Test of Connector - Left Wing Trailing Edge- Data Sheet

PLANE:						
DATE:						
TECHNICIAN:						
BUNDLE NUMBER	FAILED CONNECTOR NUMBER	TROUBLE-SHOOTING CONNECTOR NUMBER	MEASURED (mΩ)	MIN/MAX VALUE (mΩ)	PASS FAIL	RETEST MEASURED VALUE/COMMENTS
W1022	D42100P or D42102P	D40024P		0/11		
W1024	D1695, D1699, or D00275	D40024J		0/6		
W1178	D39927	D8056J		0/6		
W1182	D30062	D39931		0/10		
W1184	D30014	D39911		0/10		

Table 612/05-55-40-993-815

WIRE BUNDLE	FAILED CONNECTOR	TROUBLESHOOTING CONNECTOR	PNL OR MODULE	INSPECTION NOTES
W1022	D42100P or D42102P	D40024P	AW254L-Spoiler 4 Position, FCC	Standard Measurement, backshell to structure.
W1024	D1695, D1699, or D00275	D40024J	AW254L-Spoiler Position Sensor, FCC	Standard measurement backshell to structure.
W1178	D39927	D8056J	AW258L, Alt pwr - EEC	Standard measurement backshell to structure.
W1182	D30062	D39931	AC520, Alt Pwr - EEC	Standard Measurement, backshell to structure with connector D30062 disconnected.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 612/05-55-40-993-815 (Continued)

WIRE BUNDLE	FAILED CONNECTOR	TROUBLESHOOTING CONNECTOR	PNL OR MODULE	INSPECTION NOTES
W1184	D30014	D39911	AC520, CDS - M2 Speed	Standard Measurement, backshell to structure with connector D30014 disconnected.

SUBTASK 05-55-40-970-001

(3) If the failed connector is not listed in (Table 612) under FAILED CONNECTOR column, do this task: Joint Resistance Measurement, TASK 05-56-01-760-801 on the connector at the other end of wire bundle using (intrinsically safe approved bonding meter, COM-1550).

NOTE: Refer to the wiring diagram to locate the connector at the other end of wire bundle.

(a) Record measured data on the data sheet.

1) If the measured joint resistance value is greater than the MAXIMUM RESISTANCE in (Table 05-56-01-993-802), repair this connector or wire bundle according to the (SWPM Chapter 20).

SUBTASK 05-55-40-900-001

(4) If the measured joint resistance value above is less than the MAXIMUM RESISTANCE, replace the wire bundle according to the (SWPM Chapter 20).

NOTE: The incorrect test set up will sometimes cause the low joint resistance value.

SUBTASK 05-55-40-200-006

(5) After completing the above task, make sure the tested connector is hand tight.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

HIRF/LIGHTNING PROTECTION - RIGHT SIDE CONNECTORS - INSPECTION

1. General

A. This procedure has these tasks:

(1) HIRF/Lightning Functional Inspection of selected connectors in the Right Wheel Well.

(2) HIRF/Lightning Functional Inspection of selected connectors in the Right Wing To Body Fairing area.

(3) HIRF/Lightning Functional Inspection of selected connectors routed along the Right Wing Trailing Edge.

(4) HIRF/Lightning Functional Inspection of selected connectors routed along the Right Wing Leading Edge.

(5) HIRF/Lightning Functional Inspection of the connectors at the Strut Disconnect panel on the Right Engine.

(6) HIRF/Lightning Right Side Connectors - Troubleshooting.

B. This Functional Inspection is a check of the quality of the electrical bond resistance between selected connectors and airplane structure. It consists of measuring and recording the bond resistance for those connectors and repairing any faulty connections if they are found.

TASK 05-55-41-200-802

2. Bond Resistance Test of Connector - Right Wheel Well

(Figure 601)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) As part of the AMM validation program, this procedure has been validated at a customer site for the June 15, 2012 revision.

B. References

Reference	Title
05-56-01-760-801	Joint Resistance Measurement (P/B 201)
22-11-27-710-801	Spoiler Position Sensor Test (P/B 501)
31-31-31-700-801	Aileron Position Transmitter Installation Test (P/B 401)
32-00-01-080-801	Landing Gear Downlock Pins Removal (P/B 201)
32-00-01-480-801	Landing Gear Downlock Pins Installation (P/B 201)

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-1550	Bonding Meter - Approved, Intrinsically Safe (Approved for use in Class I, Divisions I & II hazardous (classified) locations. Outside these hazardous locations, COM-614 can be used in lieu of COM-1550). Part #: 620LK Supplier: 1CRL2 Part #: M1 Supplier: 3AD17 Part #: M1B Supplier: 3AD17 Part #: T477W (C15292) Supplier: 06659

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D. Location Zones

Zone	Area
134	Main Landing Gear Wheel Well, Body Station 663.75 to Body Station 727.00 - Right

E. Prepare for the procedure

SUBTASK 05-55-41-010-002

(1) Do this task: Landing Gear Downlock Pins Installation, TASK 32-00-01-480-801.

SUBTASK 05-55-41-200-002

(2) Make a copy of the data sheet (Table 601) to record data during the task.

Table 601/05-55-41-993-823 Bond Resistance Test of Connector - Right Wheel Well - Data Sheet

PLANE:					
DATE:					
TECHNICIAN:					
BUNDLE NUMBER	**CONNECTOR NUMBER**	**MEASURED BOND VALUE (mΩ)**	**MIN/MAX VALUE (mΩ)**	**PASS FAIL**	**RETEST MEASURED VALUE/COMMENTS**
W1032	D43100P		11/49.0		
	D43102P		29/70.0		

SUBTASK 05-55-41-200-020

(3) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail: "The Boeing Company, Attention: Manager, Lightning / HIRF Maintenance Programs Engineering, P.O. Box 3707, MC 2J-10, Seattle, WA 98124-2207, USA".

ECCN 9E991 BOEING PROPRIETARY - See title page for details

3) By Fax: 425-717-1960.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

F. Procedure

SUBTASK 05-55-41-200-010

(1) Do this task: Joint Resistance Measurement, TASK 05-56-01-760-801 to measure the bond resistance for all connector listed in Table using the (intrinsically safe approved bonding meter, COM-1550):

(a) Follow the “INSPECTION NOTES” column in the Table for instructions.

(b) Record resistance value on the data sheet.

(c) Make sure the measured resistance value is within the MIN/MAX value range indicated on the data sheet.

NOTE: If the data sheet shows only MAX VALUE, the MIN VALUE is zero.

1) If the measured resistance value is not within the MIN/MAX value range indicated on the data sheet, do this task: Right Side Connectors - Troubleshooting, TASK 05-55-41-810-801.

(d) Re-connect the connector if it was disconnected during the test.

(e) Repeat these steps on the next connector in the Table. This taks is complete when all connectors listed in the Table were tested and passed.

SUBTASK 05-55-41-200-011

(2) If the connector has been disconnected and re-connected, do the task listed in the RESTORATION NOTES column.

SUBTASK 05-55-41-220-002

(3) Connector listed in this Table is used for the task above.

Table 602/05-55-41-993-809

WIRE BUNDLE	CONNECTOR	PNL OR MODULE	INSPECTION NOTES	RESTORATION NOTES
W1032	D43100P	AL720C POS 1 - Spoiler, DFCS	Disconnect the plug-measure between plug and receptacle	Aileron Position Transmitter Installation Test, TASK 31-31-31-700-801
W1032	D43102P	AL720D POS 2 - Spoiler, DFCS	Disconnect the plug-measure between plug and receptacle	Spoiler Position Sensor Test, TASK 22-11-27-710-801

G. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-41-940-001

(1) Do this task: Landing Gear Downlock Pins Removal, TASK 32-00-01-080-801.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Bond Resistance Test of Connector - Right Wheel Well - Connector Location
Figure 601/05-55-41-990-809 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

DISCONNECT PANELS, AL0720C AND AL0720D

B

NOTE: COVER PLATE REMOVED

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Bond Resistance Test of Connector - Right Wheel Well - Connector Location
Figure 601/05-55-41-990-809 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-41-200-803

3. Bond Resistance Test of Connector - Right Wing To Body Fairing

(Figure 602)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) As part of the AMM validation program, this procedure has been validated at a customer site for the June 15, 2012 revision.

B. References

Reference	Title
05-56-01-760-801	Joint Resistance Measurement (P/B 201)
27-81-00-040-801	Leading Edge Flaps and Slats Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
28-41-00-710-801	Operational Test - Fuel Quantity Indicating System (P/B 501)
73-21-00-740-803-F00	EEC BITE TEST - RECENT FAULTS (P/B 501)

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-1550	Bonding Meter - Approved, Intrinsically Safe (Approved for use in Class I, Divisions I & II hazardous (classified) locations. Outside these hazardous locations, COM-614 can be used in lieu of COM-1550). Part #: 620LK Supplier: 1CRL2 Part #: M1 Supplier: 3AD17 Part #: M1B Supplier: 3AD17 Part #: T477W (C15292) Supplier: 06659

D. Location Zones

Zone	Area
191	Lower Wing-To-Body Fairing - Forward of Wing Box

E. Access Panels

Number	Name/Location
191FR	Forward Wing To Body Fairing Panel - Mid Fairing, Above Ram Air Inlet

F. Prepare for the procedure

SUBTASK 05-55-41-040-005

(1) Do this task: Leading Edge Flaps and Slats Deactivation, TASK 27-81-00-040-801.

SUBTASK 05-55-41-200-003

(2) Make a copy of the data sheet (Table 603) to record data during the task.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 603/05-55-41-993-817 Bond Resistance Test of Connector -Right Wing To Body Fairing - Data Sheet

PLANE:					
DATE:					
TECHNICIAN:					
BUNDLE NUMBER	**CONNECTOR NUMBER**	**MEASURED BOND VALUE (mΩ)**	**MIN/MAX VALUE (mΩ)**	**PASS FAIL**	**RETEST MEASURED VALUE/COMMENTS**
W1278	D39928		5/32.0		
W1664	D39908		7/32.0		

SUBTASK 05-55-41-200-021

(3) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail: "The Boeing Company, Attention: Manager, Lightning / HIRF Maintenance Programs Engineering, P.O. Box 3707, MC 2J-10, Seattle, WA 98124-2207, USA".

3) By Fax: 425-717-1960.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-41-220-003

(4) Open this access panel:

Number	Name/Location
191FR	Forward Wing To Body Fairing Panel - Mid Fairing, Above Ram Air Inlet

ECCN 9E991 BOEING PROPRIETARY - See title page for details

G. Procedure

SUBTASK 05-55-41-200-012

(1) Do this task: Joint Resistance Measurement, TASK 05-56-01-760-801 to measure the bond resistance for all connector listed in Table using the (intrinsically safe approved bonding meter, COM-1550):

(a) Follow the “INSPECTION NOTES” column in the Table for instructions.

(b) Record resistance value on the data sheet.

(c) Make sure the measured resistance value is within the MIN/MAX value range indicated on the data sheet.

NOTE: If the data sheet shows only MAX VALUE, the MIN VALUE is zero.

1) If the measured resistance value is not within the MIN/MAX value range indicated on the data sheet, do this task: Right Side Connectors - Troubleshooting, TASK 05-55-41-810-801.

(d) Re-connect the connector if it was disconnected during the test.

(e) Repeat these steps on the next connector in the Table. This taks is complete when all connectors listed in the Table were tested and passed.

SUBTASK 05-55-41-200-013

(2) If the connector has been disconnected and re-connected, do the task listed in the RESTORATION NOTES column.

SUBTASK 05-55-41-220-004

(3) Connector listed in this Table is used for the task above.

Table 604/05-55-41-993-810

WIRE BUNDLE	CONNECTOR	PNL OR MODULE	INSPECTION NOTES	RESTORATION NOTES
W1278	D39928	AC520, Alt pwr - EEC	Disconnect the plug-measure between plug and receptacle	EEC BITE TEST - RECENT FAULTS, TASK 73-21-00-740-803-F00
W1664	D39908	AD520, Refuel DEU	Disconnect the plug-measure between plug and receptacle	Operational Test - Fuel Quantity Indicating System, TASK 28-41-00-710-801

H. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-41-210-001

(1) Close this access panel:

Number	Name/Location
191FR	Forward Wing To Body Fairing Panel - Mid Fairing, Above Ram Air Inlet

SUBTASK 05-55-41-440-002

(2) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

L08145 S0006558196_V3

Bond Resistance Test of Connector - Right Wing To Body Fairing - Connector Location
Figure 602/05-55-41-990-810

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-41-200-804

4. Bond Resistance Test of Connector - Right Wing Trailing Edge

(Figure 603)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) As part of the AMM validation program, this procedure has been validated at a customer site for the June 15, 2012 revision.

B. References

Reference	Title
05-56-01-760-801	Joint Resistance Measurement (P/B 201)
27-51-00-040-801	Trailing Edge Flap System Deactivation (P/B 201)
27-51-00-440-801	Trailing Edge Flap System Reactivation (P/B 201)
27-51-00-710-801	Trailing Edge Flap System Operational Test (P/B 501)
27-51-00-860-803	Extend the Trailing Edge Flaps (P/B 201)
27-51-00-860-804	Retract the Trailing Edge Flaps (P/B 201)

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-1550	Bonding Meter - Approved, Intrinsically Safe (Approved for use in Class I, Divisions I & II hazardous (classified) locations. Outside these hazardous locations, COM-614 can be used in lieu of COM-1550). Part #: 620LK Supplier: 1CRL2 Part #: M1 Supplier: 3AD17 Part #: M1B Supplier: 3AD17 Part #: T477W (C15292) Supplier: 06659

D. Location Zones

Zone	Area
650	Subzone - Right Wing: Trailing Edge, Aft of Rear Spar, Inboard of Outboard Trailing Edge Flap
660	Subzone - Right Wing: Trailing Edge, Aft of Rear Spar, Outboard of Inboard Trailing Edge Flap, Inboard of Fixed Trailing Edge

E. Prepare for the procedure

SUBTASK 05-55-41-220-005

(1) Do this task: Extend the Trailing Edge Flaps, TASK 27-51-00-860-803.

SUBTASK 05-55-41-220-012

(2) Do this task: Trailing Edge Flap System Deactivation, TASK 27-51-00-040-801.

SUBTASK 05-55-41-200-004

(3) Make a copy of the data sheet (Table 605) to record data during the task.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 605/05-55-41-993-818 Bond Resistance Test of Connector - Right Wing Trailing Edge - Data Sheet

PLANE:					
DATE:					
TECHNICIAN:					
BUNDLE NUMBER	**CONNECTOR NUMBER**	**MEASURED BOND VALUE (mΩ)**	**MIN/MAX VALUE (mΩ)**	**PASS FAIL**	**RETEST MEASURED VALUE/COMMENTS**
W1034	D00229		24/36.0		
	D1697		0/6.0		
	D1701		0/6.0		

SUBTASK 05-55-41-200-022

(4) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail: "The Boeing Company, Attention: Manager, Lightning / HIRF Maintenance Programs Engineering, P.O. Box 3707, MC 2J-10, Seattle, WA 98124-2207, USA".

3) By Fax: 425-717-1960.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

F. Procedure

SUBTASK 05-55-41-200-014

(1) Do this task: Joint Resistance Measurement, TASK 05-56-01-760-801 to measure the bond resistance for all connector listed in Table using the (intrinsically safe approved bonding meter, COM-1550):

(a) Follow the “INSPECTION NOTES” column in the Table for instructions.

(b) Record resistance value on the data sheet.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(c) Make sure the measured resistance value is within the MIN/MAX value range indicated on the data sheet.

NOTE: If the data sheet shows only MAX VALUE, the MIN VALUE is zero.

1) If the measured resistance value is not within the MIN/MAX value range indicated on the data sheet, do this task: Right Side Connectors - Troubleshooting, TASK 05-55-41-810-801.

(d) Re-connect the connector if it was disconnected during the test.

(e) Repeat these steps on the next connector in the Table. This taks is complete when all connectors listed in the Table were tested and passed.

SUBTASK 05-55-41-200-015

(2) If the connector has been disconnected and re-connected, do the task listed in the RESTORATION NOTES column.

SUBTASK 05-55-41-220-006

(3) Connector listed in this Table is used for the task above.

Table 606/05-55-41-993-811

WIRE BUNDLE	CONNECTOR	PNL OR MODULE	INSPECTION NOTES	RESTORATION NOTES
W1034	D00229	T428-Flap Posn Sensor	Disconnect the plug- measure between plug and receptacle. For this measurement D40034J/P must be hooked up.	Trailing Edge Flap System Operational Test, TASK 27-51-00-710-801
W1034	D1697	Spoiler 9, sensor, FCC (a)	Standard measurement backshell to structure	N/A
W1034	D1701	Spoiler 9, sensor, FCC (b)	Standard measurement backshell to structure	N/A

G. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-41-440-003

(1) Do this task: Trailing Edge Flap System Reactivation, TASK 27-51-00-440-801

SUBTASK 05-55-41-210-002

(2) Do this task: Retract the Trailing Edge Flaps, TASK 27-51-00-860-804.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

U69086 S0000213709_V4

Bond Resistance Test of Connector - Right Wing Trailing Edge - Connector Location
Figure 603/05-55-41-990-811 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

U69089 S0000213710_V2

Bond Resistance Test of Connector - Right Wing Trailing Edge - Connector Location
Figure 603/05-55-41-990-811 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-41-200-805

5. Bond Resistance Test of Connector - Right Wing Leading Edge

(Figure 604, Figure 605).

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) As part of the AMM validation program, this procedure has been validated at a customer site for the June 15, 2012 revision.

B. References

Reference	Title
05-56-01-760-801	Joint Resistance Measurement (P/B 201)
24-21-00-700-803	Operational Test for the AC Generation and Control System (P/B 501)
26-11-00-710-801	Engine Fire Detection - Operational Test (P/B 501)
27-81-00-040-801	Leading Edge Flaps and Slats Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
27-81-00-860-803	Leading Edge Flaps and Slats Extension (P/B 201)
30-11-12-400-801	Ground Wing Thermal Anti-Icing Solenoid Valve Installation (P/B 401)
78-31-00-700-801-F00	Thrust Reverser Normal Operation Test (P/B 501)
80-11-00-730-801-F00	Start Switch Test (P/B 501)

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-1550	Bonding Meter - Approved, Intrinsically Safe (Approved for use in Class I, Divisions I & II hazardous (classified) locations. Outside these hazardous locations, COM-614 can be used in lieu of COM-1550). Part #: 620LK Supplier: 1CRL2 Part #: M1 Supplier: 3AD17 Part #: M1B Supplier: 3AD17 Part #: T477W (C15292) Supplier: 06659

D. Location Zones

Zone	Area
441	Engine 2 - Forward Strut Fairing
611	Right Wing - Leading Edge to Front Spar
621	Right Wing - Leading Edge to Front Spar

E. Access Panels

Number	Name/Location
441CL	Forward Strut Fairing, Left Overwing Fairing, Strut 2
611AB	Inboard Leading Edge, Lower Removable Access Panel
621GB	Refuel Access Panel - Slat Station 143.27

ECCN 9E991 BOEING PROPRIETARY - See title page for details

F. Prepare for the procedure

SUBTASK 05-55-41-210-003

(1) Do this task: Leading Edge Flaps and Slats Extension, TASK 27-81-00-860-803.

SUBTASK 05-55-41-220-007

(2) Do this task: Leading Edge Flaps and Slats Deactivation, TASK 27-81-00-040-801.

SUBTASK 05-55-41-200-005

(3) Make a copy of the data sheet (Table 607, Table 608) to record data during the task.

Table 607/05-55-41-993-819 Bond Resistance Test of Connector - Right Wing Leading Edge - Data Sheet

PLANE:					
DATE:					
TECHNICIAN:					
BUNDLE NUMBER	**CONNECTOR NUMBER**	**MEASURED BOND VALUE (mΩ)**	**MIN/MAX VALUE (mΩ)**	**PASS FAIL**	**RETEST MEASURED VALUE/COMMENTS**
W1264	D30116		9/33.0		
W1266	D30164		11/34.0		
W1268	D30184		3/20.0		
W1270	D8156P		7/29.0		
W1272	D30142		4/21.0		
W1282	D30162		12/45.0		
W1284	D30114		6/27.0		

Table 608/05-55-41-993-822 Bond Resistance Test of Connector - Right Wing Leading Edge - Data Sheet

PLANE:					
DATE:					
TECHNICIAN:					
BUNDLE NUMBER	**CONNECTOR NUMBER**	**MEASURED BOND VALUE (mΩ)**	**MAX VALUE (mΩ)**	**PASS FAIL**	**RETEST MEASURED VALUE/COMMENTS**
W1664	D4578J		5		

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 608/05-55-41-993-822 Bond Resistance Test of Connector - Right Wing Leading Edge - Data Sheet (Continued)

PLANE:					
DATE:					
TECHNICIAN:					
BUNDLE NUMBER	CONNECTOR NUMBER	MEASURED BOND VALUE (mΩ)	MAX VALUE (mΩ)	PASS FAIL	RETEST MEASURED VALUE/COMMENTS

SUBTASK 05-55-41-200-023

(4) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail: "The Boeing Company, Attention: Manager, Lightning / HIRF Maintenance Programs Engineering, P.O. Box 3707, MC 2J-10, Seattle, WA 98124-2207, USA".

3) By Fax: 425-717-1960.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-41-220-008

(5) Open these access panels:

Number	Name/Location
441CL	Forward Strut Fairing, Left Overwing Fairing, Strut 2
611AB	Inboard Leading Edge, Lower Removable Access Panel
621GB	Refuel Access Panel - Slat Station 143.27

G. Procedure

SUBTASK 05-55-41-200-016

(1) Do this task: Joint Resistance Measurement, TASK 05-56-01-760-801 to measure the bond resistance for all connector listed in Table using the (intrinsically safe approved bonding meter, COM-1550):

(a) Follow the “INSPECTION NOTES” column in the Table for instructions.

(b) Record resistance value on the data sheet.

(c) Make sure the measured resistance value is within the MIN/MAX value range indicated on the data sheet.

NOTE: If the data sheet shows only MAX VALUE, the MIN VALUE is zero.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

1) If the measured resistance value is not within the MIN/MAX value range indicated on the data sheet, do this task: Right Side Connectors - Troubleshooting, TASK 05-55-41-810-801.

(d) Re-connect the connector if it was disconnected during the test.

(e) Repeat these steps on the next connector in the Table. This taks is complete when all connectors listed in the Table were tested and passed.

SUBTASK 05-55-41-200-017

(2) If the connector has been disconnected and re-connected, do the task listed in the RESTORATION NOTES column.

SUBTASK 05-55-41-220-009

(3) Connector listed in these Tables are used for the task above.

Table 609/05-55-41-993-812

WIRE BUNDLE	CONNECTOR	PNL OR MODULE	INSPECTION NOTES	RESTORATION NOTES
W1264	D30116	AW258R, M2 speed - CDS	Disconnect the plug - measure between plug and receptacle	Start Switch Test, TASK 80-11-00-730-801-F00
W1266	D30164	AW258R, Pwr relay-alt pwr EEC	Disconnect the plug - measure between plug and receptacle	Engine Fire Detection - Operational Test, TASK 26-11-00-710-801
W1268	D30184	AW258R, EEC, CDS	Disconnect the plug - measure between plug and receptacle	Thrust Reverser Normal Operation Test, TASK 78-31-00-700-801-F00 and Ground Wing Thermal Anti-Icing Solenoid Valve Installation, TASK 30-11-12-400-801
W1270	D8156P	AW258R, Alt pwr EEC - J24	Disconnect the plug - measure between plug and receptacle	Operational Test for the AC Generation and Control System, TASK 24-21-00-700-803
W1272	D30142	AW258R, EEC - P8	Disconnect the plug - measure between plug and receptacle	Thrust Reverser Normal Operation Test, TASK 78-31-00-700-801-F00 and Ground Wing Thermal Anti-Icing Solenoid Valve Installation, TASK 30-11-12-400-801
W1664	D4578J	AD520, Wing Refuel Panel	Standard measurement backshell to structure	

Table 610/05-55-41-993-813

WIRE BUNDLE	CONNECTOR	PNL OR MODULE	INSPECTION NOTES	RESTORATION NOTES
W1282	D30162	AW258R, Alt pwr - EEC	Disconnect the plug - measure between plug and receptacle	Engine Fire Detection - Operational Test, TASK 26-11-00-710-801

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 610/05-55-41-993-813 (Continued)

WIRE BUNDLE	CONNECTOR	PNL OR MODULE	INSPECTION NOTES	RESTORATION NOTES
W1284	D30114	AW258R, CDS - M2 Speed	Disconnect the plug - measure between plug and receptacle	Start Switch Test, TASK 80-11-00-730-801-F00

H. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-41-220-010

(1) Close these access panels:

Number	Name/Location
441CL	Forward Strut Fairing, Left Overwing Fairing, Strut 2
611AB	Inboard Leading Edge, Lower Removable Access Panel
621GB	Refuel Access Panel - Slat Station 143.27

SUBTASK 05-55-41-210-004

(2) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

K15195 S0006558089_V4

Bond Resistance Test of Connector - Right Wing Leading Edge, Inboard of Engine - Connector Location
Figure 604/05-55-41-990-805 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Bond Resistance Test of Connector - Right Wing Leading Edge, Inboard of Engine - Connector Location
Figure 604/05-55-41-990-805 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Bond Resistance Test of Connector - Right Wing Leading Edge, Outboard of Engine - Connector Location
Figure 605/05-55-41-990-806

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-41-200-806

6. Bond Resistance Test of Connector - Strut Disconnect - Right Engine

(Figure 606)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) As part of the AMM validation program, this task has been validated at a customer site for the June 15, 2012 revision.

B. References

Reference	Title
05-56-01-760-801	Joint Resistance Measurement (P/B 201)
27-81-00-040-801	Leading Edge Flaps and Slats Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
27-81-00-860-803	Leading Edge Flaps and Slats Extension (P/B 201)
27-81-00-860-804	Leading Edge Flaps and Slats Retraction (P/B 201)
78-31-00-040-802-F00	Thrust Reverser Deactivation For Ground Maintenance (P/B 201)
78-31-00-440-803-F00	Thrust Reverser Activation After Ground Maintenance (P/B 201)

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-1550	Bonding Meter - Approved, Intrinsically Safe (Approved for use in Class I, Divisions I & II hazardous (classified) locations. Outside these hazardous locations, COM-614 can be used in lieu of COM-1550). Part #: 620LK Supplier: 1CRL2 Part #: M1 Supplier: 3AD17 Part #: M1B Supplier: 3AD17 Part #: T477W (C15292) Supplier: 06659

D. Consumable Materials

Reference	Description	Specification
D00633	Grease - Aircraft General Purpose	BMS3-33

E. Location Zones

Zone	Area
441	Engine 2 - Forward Strut Fairing

F. Access Panels

Number	Name/Location
441AL	Forward Strut Fairing, Left Thrust Reverser Disconnect, Strut 2
441AR	Forward Strut Fairing, Right Thrust Reverser Disconnect, Strut 2
441AT	Forward Strut Fairing, Thumbnail Fairing, Strut 2

G. Prepare for the Bond Resistance Test of Connector

SUBTASK 05-55-41-040-001

(1) Do this task: Leading Edge Flaps and Slats Extension, TASK 27-81-00-860-803.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-55-41-040-002

(2) Do this task: Leading Edge Flaps and Slats Deactivation, TASK 27-81-00-040-801.

SUBTASK 05-55-41-200-006

(3) Make a copy of the data sheet (Table 611) to record data during the task.

Table 611/05-55-41-993-820 Bond Resistance Test of Connector - Strut Disconnect - Right Engine

PLANE:					
DATE:					
TECHNICIAN:					
BUNDLE NUMBER	**CONNECTOR NUMBER**	**MEASURED BOND VALUE (mΩ)**	**MIN/MAX VALUE (mΩ)**	**PASS FAIL**	**RETEST MEASURED VALUE/COMMENTS**
W1264	D30434		0/11.0		
W1266	D30456		0/11.0		
W1268	D30408		0/11.0		
	D30410		0/11.0		
	D30460		0/11.0		
W1270	D30412		0/11.0		
	D30428		0/11.0		
W1272	D30424		0/11.0		
	D30402		0/11.0		
	D30406		0/11.0		

SUBTASK 05-55-41-200-024

(4) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail: "The Boeing Company, Attention: Manager, Lightning / HIRF Maintenance Programs Engineering, P.O. Box 3707, MC 2J-10, Seattle, WA 98124-2207, USA".

3) By Fax: 425-717-1960.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-41-040-003

(5) Do this task: Thrust Reverser Deactivation For Ground Maintenance, TASK 78-31-00-040-802-F00.

SUBTASK 05-55-41-220-011

(6) Open these access panels:

Number	Name/Location
441AL	Forward Strut Fairing, Left Thrust Reverser Disconnect, Strut 2
441AR	Forward Strut Fairing, Right Thrust Reverser Disconnect, Strut 2

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

Number	Name/Location
441AT	Forward Strut Fairing, Thumbnail Fairing, Strut 2

H. Bond Resistance Test of Connector

SUBTASK 05-55-41-200-027

(1) Measure the bond resistance for all connector listed in Table 612 with the intrinsically safe approved bonding meter, COM-1550, do this task: Joint Resistance Measurement, TASK 05-56-01-760-801.

(a) Follow the “INSPECTION NOTES” column in the Table 612 for instructions.

(b) Record resistance value on the data sheet Table 611.

(c) Make sure that the measured resistance value is within the MIN/MAX value range indicated on the data sheet Table 611.

1) If the measured resistance value is not within the MIN/MAX value range indicated on the data sheet Table 611, do this task: Right Side Connectors - Troubleshooting, TASK 05-55-41-810-801.

(d) Re-connect the connector if it was disconnected during the test.

(e) Repeat these steps on the next connector in the Table 612.

(f) This task is complete when all connectors listed in the Table 612 were tested and passed.

SUBTASK 05-55-41-200-019

(2) If the connector has been disconnected and re-connected, do the task listed in the RESTORATION NOTES column.

SUBTASK 05-55-41-200-001

(3) Connector listed in this Table 612 is used for the task above.

Table 612/05-55-41-993-814

WIRE BUNDLE	CONNECTOR	PNL OR MODULE	INSPECTION NOTES	RESTORATION NOTES
W1264	D30434	AS1R, M2 speed - CDS	Standard Measurement, backshell to structure.	N/A
W1266	D30456	AS1R, Pwr relay-alt pwr EEC	Standard Measurement, backshell to structure.	N/A
W1268	D30408	AS2R, T/R LVDT - EEC	Standard Measurement, backshell to structure.	N/A
W1268	D30410	AS3R, EEC - T/R LVDT	Standard Measurement, backshell to structure.	N/A
W1268	D30460	AS1R, EEC - T/R LVDT	Standard Measurement, backshell to structure.	N/A
W1270	D30412	AS1R, Alt Power EEC - J24	Standard Measurement, backshell to structure.	N/A
W1270	D30428	AS1R	Standard Measurement, backshell to structure.	N/A
W1272	D30424	AS1R, EEC - T/R LVDT	Standard Measurement, backshell to structure.	N/A

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 612/05-55-41-993-814 (Continued)

WIRE BUNDLE	CONNECTOR	PNL OR MODULE	INSPECTION NOTES	RESTORATION NOTES
W1272	D30402	AS2R, EEC - T/R LVDT	Standard Measurement, backshell to structure.	N/A
W1272	D30406	AS3R, EEC - T/R LVDT	Standard Measurement, backshell to structure.	N/A

I. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-41-210-005

(1) Close this access panel:

Number	Name/Location
441AT	Forward Strut Fairing, Thumbnail Fairing, Strut 2

SUBTASK 05-55-41-410-001

(2) Do these steps to close the applicable access panels:

(a) Close these access panels:

Number	Name/Location
441AL	Forward Strut Fairing, Left Thrust Reverser Disconnect, Strut 2
441AR	Forward Strut Fairing, Right Thrust Reverser Disconnect, Strut 2

(b) Install the bolts with grease, D00633, on the access panels.

1) Install the two lower bolts and tighten sufficiently to compress the seal before torque.

NOTE: The access panel and seal under panel are installed as one assembly.

a) Make sure that the seal does not have interference with the seal on the thumbnail fairing.

2) Install the four upper bolts.

3) Tighten the bolts to 65 ±15 in-lb (7 ±2 N·m).

SUBTASK 05-55-41-040-004

(3) Do this task: Thrust Reverser Activation After Ground Maintenance, TASK 78-31-00-440-803-F00.

SUBTASK 05-55-41-440-001

(4) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

SUBTASK 05-55-41-440-004

(5) Do this task: Leading Edge Flaps and Slats Retraction, TASK 27-81-00-860-804.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Bond Resistance Test of Connector - Strut Disconnect - Right Engine - Connector Location
Figure 606/05-55-41-990-813

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-41-810-801

7. Right Side Connectors - Troubleshooting

A. References

Reference	Title
05-56-01-760-801	Joint Resistance Measurement (P/B 201)
05-56-01-993-802	Table: TYPE OF JOINTMAXIMUM RESISTANCE (ALUMINUM CONNECTORS) (MILLIOHMS)MAXIMUM RESISTANCE (STAINLESS CONNECTORS) (MILLIOHMS) BACKSHELL-TO-RECEPTACLE2.55.0 BACKSHELL-TO-PLUG BODY2.55.0 PLUG-TO-RECEPTACLE5.01 (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-1550	Bonding Meter - Approved, Intrinsically Safe (Approved for use in Class I, Divisions I & II hazardous (classified) locations. Outside these hazardous locations, COM-614 can be used in lieu of COM-1550). Part #: 620LK Supplier: 1CRL2 Part #: M1 Supplier: 3AD17 Part #: M1B Supplier: 3AD17 Part #: T477W (C15292) Supplier: 06659

C. Procedure

SUBTASK 05-55-41-810-002

(1) Do this task: Joint Resistance Measurement, TASK 05-56-01-760-801 on the failed connector.

(a) Record measured data on the data sheet.

(b) If the measured joint resistance value is greater than the MAXIMUM RESISTANCE in (Table 05-56-01-993-802), repair this connector or wire bundle according to the (SWPM Chapter 20).

(c) If the measured joint resistance value is less than the MAXIMUM RESISTANCE in (Table 05-56-01-993-802), do the task below:

NOTE: The incorrect test set up will sometimes cause the low joint resistance value.

SUBTASK 05-55-41-810-001

(2) If the failed connector is listed in (Table 614) under FAILED CONNECTOR column, do this task:Joint Resistance Measurement, TASK 05-56-01-760-801 on the associated connector listed under TROUBLESHOOTING CONNECTOR column using (intrinsically safe approved bonding meter, COM-1550).

NOTE: Refer to INSPECTION NOTES in the Table for joint resistance measurement.

(a) Record measured data on the data sheet.

1) If the measured joint resistance value is greater than the MAXIMUM RESISTANCE in the data sheet (Table 613), repair this connector or wire bundle according to the (SWPM Chapter 20).

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 613/05-55-41-993-824 HIRF/Lightning Protection Right Side Connectors Inspection- Data Sheet

PLANE:						
DATE:						
TECHNICIAN:						
BUNDLE NUMBER	**FAILED CONNECTOR NUMBER**	**TROUBLE-SHOOTING CONNECTOR NUMBER**	**MEASURED VALUE (mΩ)**	**MIN/MAX VALUE (mΩ)**	**PASS FAIL**	**RETEST MEASURED VALUE/COMMENTS**
W1282	D30162	D39932		0/10		
W1284	D30114	D39912		0/10		
W1032	D43100P or D43102P	D40034P/J		0/11		
W1034	D1697, D1701 or D00229	D40034J		0/6		

Table 614/05-55-41-993-815

WIRE BUNDLE	FAILED CONNECTOR	TROUBLESHOOTING CONNECTOR	PNL OR MODULE	INSPECTION NOTES
W1282	D30162	D39932	AC520, Alt pwr - Relay	Standard measurement backshell to structure with connector D30162 disconnected.
W1284	D30114	D39912	AC520, EEC - Starter valve	Standard measurement backshell to structure with connector D30114 disconnected.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 614/05-55-41-993-815 (Continued)

WIRE BUNDLE	FAILED CONNECTOR	TROUBLESHOOTING CONNECTOR	PNL OR MODULE	INSPECTION NOTES
W1032	D43100P or D43102P	D40034P	AW254R - DFCS	Standard measurement backshell to structure
W1034	D1697, D1701, or D00229	D40034J	AW254R - FCC	Standard measurement backshell to structure

SUBTASK 05-55-41-200-025

(3) If the failed connector is not listed in (Table 614) under FAILED CONNECTOR column, do this task: Joint Resistance Measurement, TASK 05-56-01-760-801 on the connector at the other end of wire bundle using (intrinsically safe approved bonding meter, COM-1550).

NOTE: Refer to the wiring diagram to locate the connector at the other end of wire bundle.

(a) Record measured data on the data sheet.

1) If the measured joint resistance value is greater than the MAXIMUM RESISTANCE in (Table 05-56-01-993-802), repair this connector or wire bundle according to the (SWPM Chapter 20).

SUBTASK 05-55-41-200-026

(4) If the measured joint resistance value above is less than the MAXIMUM RESISTANCE, replace the wire bundle according to the (SWPM Chapter 20).

NOTE: The incorrect test set up will sometimes cause the low joint resistance value.

SUBTASK 05-55-41-200-007

(5) After completing the above task, make sure the tested connector is hand tight.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

HIRF/LIGHTNING CONNECTORS - EMPENNAGE - FUNCTIONAL CHECK

1. General

A. This procedure contains scheduled maintenance task data.

B. This procedure has these tasks:

(1) HIRF/Lightning Functional Check of selected connectors in the Stabilizer Trim Compartment.

(2) HIRF/Lightning Functional Check of selected connectors in the Tailcone Access Compartment.

LOM 428-431, 450, 465-999; LOM 427 PRE SB 737-22-1306; AIRPLANES WITH ROLLOUT CONTROL

(3) HIRF/Lightning Functional Check of selected connectors in the Vertical Stabilizer.

LOM ALL

(4) HIRF/Lightning Empennage - Troubleshooting.

C. This Functional Inspection is a check of the quality of the electrical bond resistance between selected connectors and airplane structure. It consists of measuring and recording the bond resistance for those connectors and repairing any faulty connections if they are found.

TASK 05-55-42-200-804

2. Bond Resistance Test of Connector - Stabilizer Trim Compartment

(Figure 601)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) As part of the AMM validation program, this procedure has been validated at a customer site for the June 15, 2012 revision.

B. References

Reference	Title
05-56-01-760-801	Joint Resistance Measurement (P/B 201)

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-1550	Bonding Meter - Approved, Intrinsically Safe (Approved for use in Class I, Divisions I & II hazardous (classified) locations. Outside these hazardous locations, COM-614 can be used in lieu of COM-1550). Part #: 620LK Supplier: 1CRL2 Part #: M1 Supplier: 3AD17 Part #: M1B Supplier: 3AD17 Part #: T477W (C15292) Supplier: 06659

D. Location Zones

Zone	Area
311	Area Aft of Pressure Bulkhead - Left

E. Access Panels

Number	Name/Location
311BL	Stabilizer Trim Access Door

ECCN 9E991 BOEING PROPRIETARY - See title page for details

F. Prepare for the Bond Resistance Test of Connector - Stabilizer Trim Compartment

SUBTASK 05-55-42-970-005

(1) Make a copy of the data sheet to record data during the task (Table 601).

Table 601/05-55-42-993-807 Bond Resistance Test of Connector - Stabilizer Trim Compartment- Data Sheet

PLANE:					
DATE:					
TECHNICIAN:					
BUNDLE NUMBER	**CONNECTOR NUMBER**	**MEASURED RESISTANCE VALUE (mΩ)**	**MIN/MAX VALUE (mΩ)**	**PASS/ FAIL**	**RETEST MEASURED VALUE/COMMENTS**
W4724	D10434		0/11.0		
	D10436		0/11.0		
W4726	D10912		0/11.0		

SUBTASK 05-55-42-970-003

(2) Make a copy of the data sheet to record data during the task (Table 602).

Table 602/05-55-42-993-815 Bond Resistance Test of Connector - Stabilizer Trim Compartment- Data Sheet

PLANE:					
DATE:					
TECHNICIAN:					
BUNDLE NUMBER	**CONNECTOR NUMBER**	**MEASURED RESISTANCE VALUE (mΩ)**	**MIN/MAX VALUE (mΩ)**	**PASS/ FAIL**	**RETEST MEASURED VALUE/COMMENTS**
W3397	D43397J		0/6.0		
W3399	D43399J		0/6.0		

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 602/05-55-42-993-815 Bond Resistance Test of Connector - Stabilizer Trim Compartment- Data Sheet (Continued)

PLANE:					
DATE:					
TECHNICIAN:					
BUNDLE NUMBER	CONNECTOR NUMBER	MEASURED RESISTANCE VALUE (mΩ)	MIN/MAX VALUE (mΩ)	PASS/ FAIL	RETEST MEASURED VALUE/COMMENTS

LOM 427-431, 450, 465-999

SUBTASK 05-55-42-970-001

(3) Make a copy of the data sheet to record data during the task (Table 603).

Table 603/05-55-42-993-817 Bond Resistance Test of Connector - Stabilizer Trim Compartment- Data Sheet

PLANE:					
DATE:					
TECHNICIAN:					
BUNDLE NUMBER	CONNECTOR NUMBER	MEASURED RESISTANCE VALUE (mΩ)	MIN/MAX VALUE (mΩ)	PASS/ FAIL	RETEST MEASURED VALUE/COMMENTS
W7381	D45501P		0/11.0		
W7383	D45503P		0/11.0		

ECCN 9E991 BOEING PROPRIETARY - See title page for details

LOM 427-431, 450, 465-999 (Continued)

Table 603/05-55-42-993-817 Bond Resistance Test of Connector - Stabilizer Trim Compartment- Data Sheet (Continued)

PLANE:					
DATE:					
TECHNICIAN:					
BUNDLE NUMBER	**CONNECTOR NUMBER**	**MEASURED RESISTANCE VALUE (mΩ)**	**MIN/MAX VALUE (mΩ)**	**PASS/ FAIL**	**RETEST MEASURED VALUE/COMMENTS**

LOM ALL

SUBTASK 05-55-42-200-014

(4) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail: "The Boeing Company, Attention: Manager, Lightning / HIRF Maintenance Programs Engineering, P.O. Box 3707, MC 2J-10, Seattle, WA 98124-2207, USA".

3) By Fax: 425-717-1960.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-42-010-001

(5) Open this access panel:

Number	**Name/Location**
311BL	Stabilizer Trim Access Door

G. Bond Resistance Test of Connector - Stabilizer Trim Compartment

SUBTASK 05-55-42-200-008

(1) Do this task: Joint Resistance Measurement, TASK 05-56-01-760-801 to measure the bond resistance for all connector listed in Table using the (intrinsically safe approved bonding meter, COM-1550):

(a) Follow the “INSPECTION NOTES” column in the Table for instructions.

(b) Record resistance value on the data sheet.

(c) Make sure the measured resistance value is within the MIN/MAX value range indicated on the data sheet.

NOTE: If the data sheet shows only MAX VALUE, the MIN VALUE is zero.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

1) If the measured resistance value is not within the MIN/MAX value range indicated on the data sheet, do this task: Empennage - Troubleshooting, TASK 05-55-42-810-801.

(d) Re-connect the connector if it was disconnected during the test.

SUBTASK 05-55-42-200-009

(2) If the connector has been disconnected and re-connected, do the task listed in the RESTORATION NOTES column.

SUBTASK 05-55-42-220-001

(3) Connector listed in this Table is used for the task above.

Table 604/05-55-42-993-801

WIRE BUNDLE	CONNECTOR	Disconnect Bracket	PNL OR MODULE	INSPECTION NOTES	RESTORATION NOTES
W3397	D43397J	AB1050L	SMYD/FCC	Standard Measurement, backshell to structure	N/A
W3399	D43399J	AB1050R	SMYD	Standard Measurement, backshell to structure	N/A
W4724	D10434	AB1088	APU ECU	Standard Measurement, backshell to structure	N/A
W4724	D10436	AB1088	APU ECU	Standard Measurement, backshell to structure	N/A
W4726	D10912	AB1088	APU ECU	Standard Measurement, backshell to structure	N/A
LOM 427-431, 450, 465-999					
W7381	D45501P	AB1050L	FCC-DFCS Rudder Control	Standard Measurement, backshell to structure	N/A
W7383	D45503P	AB1050R	FCC-DFCS Rudder Control	Standard Measurement, backshell to structure	N/A
LOM ALL					

H. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-42-410-001

(1) Close this access panel:

Number	Name/Location
311BL	Stabilizer Trim Access Door

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Bond Resistance Test of Connector - Stabilizer Trim Compartment - Connector Location
Figure 601/05-55-42-990-801 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

STABILIZER TRIM COMPARTMENT
(VIEW IN THE UP DIRECTION)

B

481254 S0000143852_V5

Bond Resistance Test of Connector - Stabilizer Trim Compartment - Connector Location
Figure 601/05-55-42-990-801 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

STABILIZER TRIM COMPARTMENT
(VIEW IN THE UP DIRECTION)

B

1965404 S0000377973_V3

Bond Resistance Test of Connector - Stabilizer Trim Compartment - Connector Location
Figure 601/05-55-42-990-801 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-42-200-802

3. **Bond Resistance Test of Connector - Tailcone Access Compartment**
(Figure 602)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) As part of the AMM validation program, this procedure has been validated at a customer site for the June 15, 2012 revision.

B. References

Reference	Title
05-56-01-760-801	Joint Resistance Measurement (P/B 201)
22-11-40-400-801	Hydraulic Pressure Switch - Installation (P/B 401)

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-1550	Bonding Meter - Approved, Intrinsically Safe (Approved for use in Class I, Divisions I & II hazardous (classified) locations. Outside these hazardous locations, COM-614 can be used in lieu of COM-1550). Part #: 620LK Supplier: 1CRL2 Part #: M1 Supplier: 3AD17 Part #: M1B Supplier: 3AD17 Part #: T477W (C15292) Supplier: 06659

D. Location Zones

Zone	Area
318	Tail Cone Compartment - Right

E. Access Panels

Number	Name/Location
318BR	Tailcone Access Door

F. Prepare for the procedure

SUBTASK 05-55-42-200-018

(1) Make a copy of the data sheet (Table 605) to record data during the task.

Table 605/05-55-42-993-812 Bond Resistance Test of Connector - Tailcone Access Compartment - Data Sheet

PLANE:					
DATE:					
TECHNICIAN:					
BUNDLE NUMBER	CONNECTOR NUMBER	MEASURED RESISTANCE VALUE (mΩ)	MIN/MAX VALUE (mΩ)	PASS/ FAIL	RETEST MEASURED VALUE/COMMENTS
W3397	GD949-DC		0/1.0		

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 605/05-55-42-993-812 Bond Resistance Test of Connector - Tailcone Access Compartment - Data Sheet (Continued)

PLANE:					
DATE:					
TECHNICIAN:					
BUNDLE NUMBER	**CONNECTOR NUMBER**	**MEASURED RESISTANCE VALUE (mΩ)**	**MIN/MAX VALUE (mΩ)**	**PASS/ FAIL**	**RETEST MEASURED VALUE/COMMENTS**
W3397	GD973-ST		0/1.0		
W3399	D1857		50/119.0		
W3399	D1677		0/6.0		
W3399	D1679		0/6.0		
W3399	GD4811-ST		0/1.0		
W3399	GD973-ST		0/1.0		

SUBTASK 05-55-42-200-015

(2) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail: "The Boeing Company, Attention: Manager, Lightning / HIRF Maintenance Programs Engineering, P.O. Box 3707, MC 2J-10, Seattle, WA 98124-2207, USA".

3) By Fax: 425-717-1960.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-42-010-003

(3) Open this access panel:

Number	**Name/Location**
318BR	Tailcone Access Door

ECCN 9E991 BOEING PROPRIETARY - See title page for details

G. Procedure

SUBTASK 05-55-42-200-010

(1) Do this task: Joint Resistance Measurement, TASK 05-56-01-760-801 to measure the bond resistance for all connector listed in Table using the (intrinsically safe approved bonding meter, COM-1550):

(a) Follow the “INSPECTION NOTES” column in the Table for instructions.

(b) Record resistance value on the data sheet.

(c) Make sure the measured resistance value is within the MIN/MAX value range indicated on the data sheet.

NOTE: If the data sheet shows only MAX VALUE, the MIN VALUE is zero.

1) If the measured resistance value is not within the MIN/MAX value range indicated on the data sheet, do this task: Empennage - Troubleshooting, TASK 05-55-42-810-801.

(d) Re-connect the connector if it was disconnected during the test.

SUBTASK 05-55-42-200-011

(2) If the connector has been disconnected and re-connected, do the task listed in the RESTORATION NOTES column.

SUBTASK 05-55-42-220-003

(3) Connector listed in this Table is used for the task above.

Table 606/05-55-42-993-803

WIRE BUNDLE	CONNECTOR	PNL OR MODULE	INSPECTION NOTES	RESTORATION NOTES
W3399	D1677	FCC	Standard Measurement, backshell to structure	N/A
W3399	D1679	FCC	Standard Measurement, backshell to structure	N/A
W3399	D1857	FCC,FCC-DFS,Rudder Control	Disconnect the plug-measure from plug to station 1156 bulkhead	Installation Test listed in (Hydraulic Pressure Switch - Installation, TASK 22-11-40-400-801)
W3397	GD949-DC	FCC-DFS, Rudder Control	Standard Measurement, terminal to structure (Washer to structure optional)	N/A
W3397	GD973-ST	FCC-DFS, Rudder Control	Standard Measurement, terminal to structure (Washer to structure optional)	N/A
W3399	GD4811-ST	FCC-DFS, Rudder Control	Standard Measurement, terminal to structure (Washer to structure optional)	N/A

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 606/05-55-42-993-803 (Continued)

WIRE BUNDLE	CONNECTOR	PNL OR MODULE	INSPECTION NOTES	RESTORATION NOTES
W3399	GD973-ST	FCC-DFS, Rudder Control	Standard Measurement, terminal to structure (Washer to structure optional)	N/A

H. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-42-410-003

(1) Close this access panel:

Number	Name/Location
318BR	Tailcone Access Door

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Bond Resistance Test of Connector - Tailcone Access Compartment - Connector Location
Figure 602/05-55-42-990-807 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Bond Resistance Test of Connector - Tailcone Access Compartment - Connector Location
Figure 602/05-55-42-990-807 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-42-200-805

4. Bond Resistance Test of Connector - Vertical Stabilizer

(Figure 603)

NOTE: Applicable to airplanes with the M2445 Rudder position sensor and M2446 Rudder actuator (servo) installed.

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) As part of the AMM validation program, this procedure has been validated at a customer site for the June 15, 2012 revision.

B. References

Reference	Title
05-56-01-760-801	Joint Resistance Measurement (P/B 201)
22-11-27-710-801	Spoiler Position Sensor Test (P/B 501)

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-1550	Bonding Meter - Approved, Intrinsically Safe (Approved for use in Class I, Divisions I & II hazardous (classified) locations. Outside these hazardous locations, COM-614 can be used in lieu of COM-1550). Part #: 620LK Supplier: 1CRL2 Part #: M1 Supplier: 3AD17 Part #: M1B Supplier: 3AD17 Part #: T477W (C15292) Supplier: 06659

D. Location Zones

Zone	Area
320	Subzone - Vertical Fin and Rudder

E. Access Panels

Number	Name/Location
324JL	Vertical Fin, Access

F. Prepare for the procedure

SUBTASK 05-55-42-200-004

(1) Make a copy of the data sheet (Table 607) to record data during the task.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 607/05-55-42-993-809 Bond Resistance Test of Connector - Vertical Stabilizer - Data Sheet

PLANE:					
DATE:					
TECHNICIAN:					
BUNDLE NUMBER	**CONNECTOR NUMBER**	**MEASURED RESISTANCE VALUE (mΩ)**	**MIN/MAX VALUE (mΩ)**	**PASS/ FAIL**	**RETEST MEASURED VALUE/COMMENTS**
W7381	D11613		0/11.0		
	D11617		13/33.0		
W7383	D11615		0/11.0		
	D11619		13/33.0		

SUBTASK 05-55-42-200-016

(2) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail: "The Boeing Company, Attention: Manager, Lightning / HIRF Maintenance Programs Engineering, P.O. Box 3707, MC 2J-10, Seattle, WA 98124-2207, USA".

3) By Fax: 425-717-1960.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-42-010-004

(3) Open this access panel:

Number	**Name/Location**
324JL	Vertical Fin, Access

ECCN 9E991 BOEING PROPRIETARY - See title page for details

G. Procedure

SUBTASK 05-55-42-200-012

(1) Do this task: Joint Resistance Measurement, TASK 05-56-01-760-801 to measure the bond resistance for all connector listed in Table using the (intrinsically safe approved bonding meter, COM-1550):

(a) Follow the “INSPECTION NOTES” column in the Table for instructions.

(b) Record resistance value on the data sheet.

(c) Make sure the measured resistance value is within the MIN/MAX value range indicated on the data sheet.

NOTE: If the data sheet shows only MAX VALUE, the MIN VALUE is zero.

1) If the measured resistance value is not within the MIN/MAX value range indicated on the data sheet, do this task: Empennage - Troubleshooting, TASK 05-55-42-810-801.

(d) Re-connect the connector if it was disconnected during the test.

SUBTASK 05-55-42-200-013

(2) If the connector has been disconnected and re-connected, do the task listed in the RESTORATION NOTES column.

SUBTASK 05-55-42-220-004

(3) Connector listed in this Table is used for the task above.

Table 608/05-55-42-993-804

WIRE BUNDLE	CONNECTOR	PNL OR MODULE	INSPECTION NOTES	RESTORATION NOTES
W7381	D11613	FCC-DFCS Rudder Control	Standard Measurement, backshell to structure	N/A
W7381	D11617	FCC-DFCS Rudder Control	Disconnect the plug- measure between shell and receptacle	Spoiler Position Sensor Test, TASK 22-11-27-710-801
W7383	D11615	FCC-DFCS Rudder Control	Standard Measurement, backshell to structure	N/A
W7383	D11619	FCC-DFCS Rudder Control	Disconnect the plug- measure between shell and receptacle	Spoiler Position Sensor Test, TASK 22-11-27-710-801

H. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-42-410-004

(1) Close this access panel:

Number	Name/Location
324JL	Vertical Fin, Access

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

U69607 S0000213932_V4

Bond Resistance Test of Connector - Vertical Stabilizer - Connector Location
Figure 603/05-55-42-990-808

ECCN 9E991 BOEING PROPRIETARY - See title page for details

LOM ALL

TASK 05-55-42-810-801

5. Empennage - Troubleshooting

A. References

Reference	Title
05-56-01-760-801	Joint Resistance Measurement (P/B 201)
05-56-01-993-802	Table: TYPE OF JOINTMAXIMUM RESISTANCE (ALUMINUM CONNECTORS) (MILLIOHMS)MAXIMUM RESISTANCE (STAINLESS CONNECTORS) (MILLIOHMS) BACKSHELL-TO-RECEPTACLE2.55.0 BACKSHELL-TO-PLUG BODY2.55.0 PLUG-TO-RECEPTACLE5.01 (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-1550	Bonding Meter - Approved, Intrinsically Safe (Approved for use in Class I, Divisions I & II hazardous (classified) locations. Outside these hazardous locations, COM-614 can be used in lieu of COM-1550). Part #: 620LK Supplier: 1CRL2 Part #: M1 Supplier: 3AD17 Part #: M1B Supplier: 3AD17 Part #: T477W (C15292) Supplier: 06659

C. Procedure

SUBTASK 05-55-42-810-003

(1) Do this task: Joint Resistance Measurement, TASK 05-56-01-760-801 on the failed connector.

(a) Record measured data on the data sheet.

(b) If the measured joint resistance value is greater than the MAXIMUM RESISTANCE in (Table 05-56-01-993-802), repair this connector or wire bundle according to the (SWPM Chapter 20).

(c) If the measured joint resistance value is less than the MAXIMUM RESISTANCE in (Table 05-56-01-993-802), do the task below:

NOTE: The incorrect test set up will sometimes cause the low joint resistance value.

SUBTASK 05-55-42-810-002

(2) Do this task: Joint Resistance Measurement, TASK 05-56-01-760-801 on the connector at the other end of wire bundle using (intrinsically safe approved bonding meter, COM-1550).

(a) Record measured data on the data sheet.

1) If the measured joint resistance value is greater than the MAXIMUM RESISTANCE in (Table 05-56-01-993-802), repair this connector or wire bundle according to the (SWPM Chapter 20).

(3) If the measured joint resistance value above is still less than the MAXIMUM RESISTANCE, replace the wire bundle according to the (SWPM Chapter 20).

NOTE: The incorrect test set up will sometimes cause the low joint resistance value.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-55-42-200-005

(4) After completing the above task, make sure the tested connector is hand tight.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

HIRF/LIGHTNING PROTECTION - CONNECTORS INSIDE THE PRESSURE VESSEL - INSPECTION

1. **General**
   A. This procedure contains scheduled maintenance task data.
   B. This procedure has these tasks:
      (1) Functional inspection of the HIRF/Lightning protection of connectors in the Forward Access area.
      (2) Functional inspection of the HIRF/Lightning protection of connectors in the Nose Wheel Well.
      (3) Functional inspection of the HIRF/Lightning protection of connectors in the E/E Bay Main Equipment Center.
      (4) Functional inspection of the HIRF/Lightning protection of connectors in the Forward Cargo Compartment, Forward.
      (5) Functional inspection of the HIRF/Lightning protection of connectors in the Forward Cargo Compartment, Aft.
      (6) Functional inspection of the HIRF/Lightning protection of connectors in the Flight Compartment.
      (7) Functional inspection of the HIRF/Lightning protection of connectors in the Passenger Cabin, Forward.
   C. This Functional Inspection is a check of the quality of the electrical bond between selected connectors and airplane structure. It consists of measuring and recording the bond resistance for those connectors and repairing any faulty connections if they are found.

      NOTE: Do NOT remove connectors during this test unless the resistance measured is found to be outside the limits specified.

      (1) You will use a Bond Meter to read the resistance between the connector and airplane structure.
         (a) The measured resistance is the sum of the resistances of the “joints” that make up that connection. Those joints may include:
            1) Backshell to Plug body (BS-P).
            2) Backshell to Receptacle body (BS-R).
            3) Plug to Receptacle (P-R).
            4) Plug-To-Sensor (P-SS).
            5) Sensor-To-Structure (SS-S).
            6) Receptacle to Bracket (R-B).
            7) Bracket to Structure (B-S).
      (2) If the measured resistance value is not within the limits specified, you will perform a joint buildup measurement to locate the faulty joint. Once the fault has been located, you will refer to the Standard Wiring Practices Manual (SWPM) for corrective measures.
   D. There are two different types of connectors that will be tested:
      (1) Circular type plug-and-receptacle connectors with backshells a shield pigtail connection, and with the receptacle mounted on a bracket or structure.
      (2) Rectangular connectors consisting of a receptacle and plug pair with the receptacle mounted to a bracket or structure.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-43-200-801

2. Bond Resistance Test of Connector - Forward Access Area

(Figure 601)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) As part of the AMM validation program, this task has been validated at a customer site for the June 15, 2012 revision.

B. References

Reference	Title
05-56-01-760-801	Joint Resistance Measurement (P/B 201)
32-00-01-480-801	Landing Gear Downlock Pins Installation (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-1550	Bonding Meter - Approved, Intrinsically Safe (Approved for use in Class I, Divisions I & II hazardous (classified) locations. Outside these hazardous locations, COM-614 can be used in lieu of COM-1550). Part #: 620LK Supplier: 1CRL2 Part #: M1 Supplier: 3AD17 Part #: M1B Supplier: 3AD17 Part #: T477W (C15292) Supplier: 06659

D. Location Zones

Zone	Area
112	Area Forward of Nose Landing Gear Wheel Well

E. Access Panels

Number	Name/Location
112A	Forward Access Door

F. Prepare for the Bond Resistance Test

SUBTASK 05-55-43-040-002

(1) Do this task: Landing Gear Downlock Pins Installation, TASK 32-00-01-480-801.

SUBTASK 05-55-43-970-001

(2) Make a copy of the data sheet (Table 601) to record data during the task.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 601/05-55-43-993-825 Bond Resistance Test of Connector - Forward Access Area - Data Sheet

PLANE:					
DATE:					
TECHNICIAN:					
BUNDLE NUMBER	**CONNECTOR NUMBER**	**MEASURED RESISTANCE VALUE (mΩ)**	**MAX VALUE (mΩ)**	**PASS FAIL**	**RETEST MEASURED VALUE/COMMENTS**
W6570	D11306		11.0		

SUBTASK 05-55-43-940-001

(3) The intrinsically safe approved bonding meter, COM-1550, is required for the task.

SUBTASK 05-55-43-200-001

(4) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail: "The Boeing Company, Attention: Manager, Lightning / HIRF Maintenance Programs Engineering, P.O. Box 3707, MC 2J-10, Seattle, WA 98124-2207, USA".

3) By Fax: 425-717-1960.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

G. Bond Resistance Test of Connector

SUBTASK 05-55-43-010-003

(1) Open this access panel:

Number	Name/Location
112A	Forward Access Door

SUBTASK 05-55-43-700-009

(2) Do this task: Joint Resistance Measurement, TASK 05-56-01-760-801 from backshell to structure for all connectors listed in Table below.

(a) Record measured data for the connector to the data sheet.

(b) Make sure that the measured value is not greater than the MAX VALUE listed on the data sheet.

NOTE: The maximum allowable value for the measurement of these circular connectors is 11.0 mOhms. That value consists of the following joints:

Backshell-To-Plug (BS-P) = 2.5 mOhms

Plug-To-Sensor (P-SS) = 7.5 mOhms

Sensor-To-Structure (SS-S) = 1.0 mOhms.

1) If the measured value is greater than the MAX VALUE listed on the data sheet, repair the connector (SWPM Chapter 20).

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 602/05-55-43-993-809

WIRE BUNDLE	CONNECTOR	PNL OR MODULE	WDM
W6570	D11306	M1827	28-41-11

H. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-43-942-001

(1) Close this access panel:

Number	Name/Location
112A	Forward Access Door

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

400489 S0000134772_V2

Bond Resistance Test of Connector - Forward Access Area - Connector Location
Figure 601/05-55-43-990-809

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-43-200-802

3. Bond Resistance Test of Connector - Nose Wheel Well

(Figure 602)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) As part of the AMM validation program, this task has been validated at a customer site for the June 15, 2012 revision.

B. References

Reference	Title
05-56-01-760-801	Joint Resistance Measurement (P/B 201)
32-00-01-480-801	Landing Gear Downlock Pins Installation (P/B 201)
53-14-01-020-801	Nose Wheel Well Access Panels - Removal (P/B 401)
53-14-01-420-801	Nose Wheel Well Access Panels - Installation (P/B 401)
SWPM Chapter 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-1550	Bonding Meter - Approved, Intrinsically Safe (Approved for use in Class I, Divisions I & II hazardous (classified) locations. Outside these hazardous locations, COM-614 can be used in lieu of COM-1550). Part #: 620LK Supplier: 1CRL2 Part #: M1 Supplier: 3AD17 Part #: M1B Supplier: 3AD17 Part #: T477W (C15292) Supplier: 06659

D. Location Zones

Zone	Area
113	Area Above and Outboard of Nose Landing Gear Wheel Well - Left

E. Access Panels

Number	Name/Location
113BW	Forward Nose Wheel Well Panel

F. Prepare for the Bond Resistance Test

SUBTASK 05-55-43-040-001

(1) Do this task: Landing Gear Downlock Pins Installation, TASK 32-00-01-480-801.

SUBTASK 05-55-43-970-004

(2) Make a copy of the data sheet (Table 603) to record data during the task.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 603/05-55-43-993-819 Bond Resistance Test of Connector - Nose Wheel Well - Data Sheet

PLANE:					
DATE:					
TECHNICIAN:					
BUNDLE NUMBER	**CONNECTOR NUMBER**	**MEASURED RESISTANCE VALUE (mΩ)**	**MAX VALUE (mΩ)**	**PASS FAIL**	**RETEST MEASURED VALUE/COMMENTS**
W0088	D48116J		14.5		
LOM 402, 404, 406, 407, 411, 412, 415, 416, 420, 422-434, 437-447, 450-456					
W0088	D48128J		14.5		
LOM ALL					
W5158	D48116P		14.5		
LOM 402, 404, 406, 407, 411, 412, 415, 416, 420, 422-434, 437-447, 450-456					
W6570	D48128P		14.5		
LOM 457-999					
W0088	D47600J		14.5		
W5558	D47600P		14.5		
LOM ALL					

SUBTASK 05-55-43-940-005

(3) The intrinsically safe approved bonding meter, COM-1550, is required for the task.

SUBTASK 05-55-43-200-002

(4) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail: "The Boeing Company, Attention: Manager, Lightning / HIRF Maintenance Programs Engineering, P.O. Box 3707, MC 2J-10, Seattle, WA 98124-2207, USA".

3) By Fax: 425-717-1960.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-43-010-002

(5) Open this access panel:

Number	Name/Location
113BW	Forward Nose Wheel Well Panel

(a) Do this task: Nose Wheel Well Access Panels - Removal, TASK 53-14-01-020-801.

G. Bond Resistance Test of Connector

SUBTASK 05-55-43-010-005

(1) Gain access to the inside of Junction Box J48:

(a) Remove the 4 bolts holding the protective cover in place and set it aside.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-55-43-700-010

(2) Do this task: Joint Resistance Measurement, TASK 05-56-01-760-801 from backshell to structure for all connectors listed in Table below.

(a) Record measured data for the connector to the data sheet.

(b) Make sure that the measured value is not greater than the MAX VALUE listed on the data sheet.

NOTE: The maximum allowable value for the measurement of these rectangular connectors is 14.5 mOhms. That value consists of the following joints:

Plug-to-Receptacle (P-R) defined as 10 mOhms for these connectors

Receptacle-To-Bracket (R-B) = 2.5 mOhms

Bracket- to- bond strap = 1.0 mOhms

Bond strap-To-stanchion = 1.0 mOhms.

1) If the measured value is greater than the MAX VALUE listed on the data sheet, repair the connector (SWPM Chapter 20).

Table 604/05-55-43-993-810

WIRE BUNDLE	CONNECTOR	PNL OR MODULE	WDM
W0088	D48116J	J48A Pos 13	28-41-11
W5158	D48116P	J48A Pos 13	28-41-11
LOM 402, 404, 406, 407, 411, 412, 415, 416, 420, 422-434, 437-447, 450-456			
W0088	D48128J	J48A Pos 24	28-41-11
LOM 457-999			
W0088	D47600J	J48A Pos 24	28-41-11
LOM 402, 404, 406, 407, 411, 412, 415, 416, 420, 422-434, 437-447, 450-456			
W6570	D48128P	J48A Pos 24	28-41-11
LOM 457-999			
W5558	D47600P	J48A Pos 24	28-41-11
LOM ALL			

H. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-43-942-002

(1) Reinstall the Junction Box J48 protective cover.

SUBTASK 05-55-43-942-009

(2) Close this access panel:

(Nose Wheel Well Access Panels - Installation, TASK 53-14-01-420-801)

Number	Name/Location
113BW	Forward Nose Wheel Well Panel

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

NOSE WHEEL WELL

A

400707 S0000135328_V2

Bond Resistance Test of Connector - Nose Wheel Well - Connector Location
Figure 602/05-55-43-990-810 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

JUNCTION BOX, J48

B

400708 S0000135331_V2

Bond Resistance Test of Connector - Nose Wheel Well - Connector Location
Figure 602/05-55-43-990-810 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

JUNCTION BOX, J48

B

2921327 S0000703577_V1

Bond Resistance Test of Connector - Nose Wheel Well - Connector Location
Figure 602/05-55-43-990-810 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-43-200-803

4. Bond Resistance Test of Connector - Main Equipment Center

(Figure 603)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) As part of the AMM validation program, this task has been validated at a customer site for the June 15, 2012 revision.

B. References

Reference	Title
05-56-01-760-801	Joint Resistance Measurement (P/B 201)
32-00-01-480-801	Landing Gear Downlock Pins Installation (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-1550	Bonding Meter - Approved, Intrinsically Safe (Approved for use in Class I, Divisions I & II hazardous (classified) locations. Outside these hazardous locations, COM-614 can be used in lieu of COM-1550). Part #: 620LK Supplier: 1CRL2 Part #: M1 Supplier: 3AD17 Part #: M1B Supplier: 3AD17 Part #: T477W (C15292) Supplier: 06659

D. Location Zones

Zone	Area
117	Electrical and Electronics Compartment - Left

E. Access Panels

Number	Name/Location
117A	Electronic Equipment Access Door

F. Prepare for the Bond Resistance Test

SUBTASK 05-55-43-040-003

(1) Do this task: Landing Gear Downlock Pins Installation, TASK 32-00-01-480-801.

SUBTASK 05-55-43-970-005

(2) Make a copy of the data sheet (Table 605) to record data during the task.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 605/05-55-43-993-820 Bond Resistance Test of Connector - Main Equipment Center - Data Sheet

PLANE:					
DATE:					
TECHNICIAN:					
BUNDLE NUMBER	**CONNECTOR NUMBER**	**MEASURED RESISTANCE VALUE (mΩ)**	**MAX VALUE (mΩ)**	**PASS FAIL**	**RETEST MEASURED VALUE/COMMENTS**
W2363	D04069P		14.5		
W2465	D08019J		11.0		
W5367	D04073P		14.5		
W5375	D04077J		11.0		

SUBTASK 05-55-43-940-006

(3) The intrinsically safe approved bonding meter, COM-1550, is required for the task.

SUBTASK 05-55-43-200-003

(4) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail: "The Boeing Company, Attention: Manager, Lightning / HIRF Maintenance Programs Engineering, P.O. Box 3707, MC 2J-10, Seattle, WA 98124-2207, USA".

3) By Fax: 425-717-1960.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-43-010-004

(5) Open this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

G. Bond Resistance Test of Connector

SUBTASK 05-55-43-700-011

(1) Do this task: Joint Resistance Measurement, TASK 05-56-01-760-801 from backshell to structure for all connectors listed in Table below.

(a) Record measured data for the connector to the data sheet.

(b) Make sure that the measured value is not greater than the MAX VALUE listed on the data sheet.

NOTE: The maximum allowable value for the measurement of the circular connectors is 11.0 mOhms. That value consists of the following joints:

BS-P (2.5 mOhms)

P-R (5.0 mOhms)

R-B (2.5 mOhms)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

B-S (1.0 mOhms).

NOTE: The maximum allowable value for the measurement of the rectangular connectors is 14.5 mOhms. That value consists of the following joints:

Plug-to-Receptacle (P-R) = 10 mOhms for these connectors

Receptacle-To-Bracket (R-B) = 2.5 mOhms

Bracket-to-bond strap (1.0 mOhms)

Bond strap-to-stanchion (1.0 mOhms).

1) If the measured value is greater than the MAX VALUE listed on the data sheet, repair the connector (SWPM Chapter 20).

Table 606/05-55-43-993-817

WIRE BUNDLE	CONNECTOR	PNL OR MODULE	WDM
W2363	D04069P	E1-1 Pos 29	22-11-11
W2465	D08019J	E1-4 Pos 1	22-11-11
W5367	D04073P	E1-1 Pos 27	22-11-31
W5375	D04077J	E1-4 Pos 15	22-11-31

H. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-43-942-003

(1) Close this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

ELECTRONIC EQUIPMENT RACKS

A

400733 S0000135456_V3

Bond Resistance Test of Connector - Main Equipment Center - Connector Location
Figure 603/05-55-43-990-811 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

400736 S0000135458_V2

Bond Resistance Test of Connector - Main Equipment Center - Connector Location
Figure 603/05-55-43-990-811 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

400740 S0000135459_V3

Bond Resistance Test of Connector - Main Equipment Center - Connector Location
Figure 603/05-55-43-990-811 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-43-200-804

5. Bond Resistance Test of Connector - Forward Cargo Compartment, Forward

(Figure 604)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) As part of the Aircraft Maintenance Manual (AMM) validation program, this task has been validated at a customer site for the June 15, 2012 revision.

B. References

Reference	Title
05-56-01-760-801	Joint Resistance Measurement (P/B 201)
32-00-01-480-801	Landing Gear Downlock Pins Installation (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-1550	Bonding Meter - Approved, Intrinsically Safe (Approved for use in Class I, Divisions I & II hazardous (classified) locations. Outside these hazardous locations, COM-614 can be used in lieu of COM-1550). Part #: 620LK Supplier: 1CRL2 Part #: M1 Supplier: 3AD17 Part #: M1B Supplier: 3AD17 Part #: T477W (C15292) Supplier: 06659

D. Location Zones

Zone	Area
121	Forward Cargo Compartment - Left
122	Forward Cargo Compartment - Right

E. Access Panels

Number	Name/Location
121JW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD
121KW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FILTER COVER
122HW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FAN COVER

F. Prepare for the Bond Resistance Test

SUBTASK 05-55-43-040-004

(1) Do this task: Landing Gear Downlock Pins Installation, TASK 32-00-01-480-801.

SUBTASK 05-55-43-970-006

(2) Make a copy of the data sheet (Table 607) to record data during the task.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 607/05-55-43-993-821 Bond Resistance Test of Connector - Forward Cargo Compartment, Forward - Data Sheet

PLANE:					
DATE:					
TECHNICIAN:					
BUNDLE NUMBER	**CONNECTOR NUMBER**	**MEASURED RESISTANCE VALUE (mΩ)**	**MAX VALUE (mΩ)**	**PASS FAIL**	**RETEST MEASURED VALUE/COMMENTS**
W0220	D40130J		14.5		
W0220	D40136J		14.5		
W0220	D40450J		14.5		
W0410	D40156J		14.5		
W0410	D40158J		14.5		
W0410	D40390J		14.5		
W0422	D40164J		14.5		
W0422	D40388J		14.5		
W0422	D40618J		14.5		
W3170	D49994P		14.5		
W4170	D40732P		14.5		
W5158	D40618P		14.5		
W5162	D40130P		14.5		
W5310	D40448P		14.5		
W5310	D40450P		14.5		
W5375	D42053P		14.5		
W5564	D40136P		14.5		
W6162	D40156P		14.5		
W6412	D40388P		14.5		
W6412	D40390P		14.5		
W6412	D40394P		14.5		
W6564	D40158P		14.5		
W6586	D40164P		14.5		

SUBTASK 05-55-43-940-007

(3) The intrinsically safe approved bonding meter, COM-1550, is required for the task.

SUBTASK 05-55-43-200-004

(4) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

ECCN 9E991 BOEING PROPRIETARY - See title page for details

2) By Mail: "The Boeing Company, Attention: Manager, Lightning / HIRF Maintenance Programs Engineering, P.O. Box 3707, MC 2J-10, Seattle, WA 98124-2207, USA".

3) By Fax: 425-717-1960.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-43-010-006

(5) Open these access panels:

Number	Name/Location
121JW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD
121KW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FILTER COVER
122HW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FAN COVER

G. Bond Resistance Test of Connector

SUBTASK 05-55-43-700-012

(1) Do this task: Joint Resistance Measurement, TASK 05-56-01-760-801 from backshell to structure for all connectors listed in Table below.

(a) Record measured data for the connector to the data sheet.

(b) Make sure that the measured value is not greater than the MAX VALUE listed on the data sheet.

NOTE: The maximum allowable value for the measurement of these rectangular connectors is 14.5 mOhms. That value consists of the following joints:

Plug-to-Receptacle (P-R) = 10 mOhms for these connectors

Receptacle-To-Bracket (R-B) = 2.5 mOhms

Bracket-to-bond strap (1.0 mOhms)

Bond strap-to-stanchion (1.0 mOhms).

1) If the measured value is greater than the MAX VALUE listed on the data sheet, repair the connector (SWPM Chapter 20).

Table 608/05-55-43-993-812

WIRE BUNDLE	CONNECTOR	PNL OR MODULE	WDM
W0220	D40130J	E2-2 Pos 25	73-31-11
W0220	D40136J	E2-2 Pos 7	80-11-11
W0220	D40450J	E2-2 Pos 24	73-31-11
W0410	D40156J	E4-1 Pos 50	73-21-21
W0410	D40158J	E4-1 Pos 42	76-21-21
W0410	D40390J	E4-1 Pos 52	73-21-31
W0422	D40164J	E4-2 Pos 15	28-41-11
W0422	D40388J	E4-2 Pos 24	27-62-11
W0422	D40618J	E4-2 Pos 35	24-33-11
W3170	D49994P	E3-1 Pos 14	79-33-11

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 608/05-55-43-993-812 (Continued)

WIRE BUNDLE	CONNECTOR	PNL OR MODULE	WDM
W4170	D40732P	E3-1 Pos 36	77-12-11
W5158	D40618P	E4-2 Pos 35	24-33-11
W5162	D40130P	E2-2 Pos 25	73-31-11
W5310	D40448P	E3-1 Pos 11	73-24-11
W5310	D40450P	E2-2 Pos 24	73-31-11
W5375	D42053P	E3-2 Pos 47	27-18-11
W5564	D40136P	E2-2 Pos 7	80-11-11
W6162	D40156P	E4-1 Pos 50	73-21-21
W6412	D40388P	E4-2 Pos 24	27-62-11
W6412	D40390P	E4 -1 Pos 52	73-21-31
W6412	D40394P	E3-1 Pos 34	36-11-11
W6564	D40158P	E4-1 Pos 42	76-21-21
W6586	D40164P	E4-2 Pos 15	28-41-11

H. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-43-942-004

(1) Close these access panels:

Number	Name/Location
121JW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD
121KW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FILTER COVER
122HW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FAN COVER

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FORWARD CARGO COMPARTMENT

A

400751 S0000135618_V2

Bond Resistance Test of Connector - Forward Cargo Compartment, Forward - Connector Location
Figure 604/05-55-43-990-812 (Sheet 1 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

E2-2 SHELF

B

400752 S0000135716_V2

Bond Resistance Test of Connector - Forward Cargo Compartment, Forward - Connector Location
Figure 604/05-55-43-990-812 (Sheet 2 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

E3-1, -2 SHELVES

C

400753 S0000135717_V2

Bond Resistance Test of Connector - Forward Cargo Compartment, Forward - Connector Location
Figure 604/05-55-43-990-812 (Sheet 3 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

E4-1, -2 SHELVES

D

400754 S0000135718_V3

Bond Resistance Test of Connector - Forward Cargo Compartment, Forward - Connector Location
Figure 604/05-55-43-990-812 (Sheet 4 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-43-200-805

6. Bond Resistance Test of Connector - Forward Cargo Compartment, Aft

(Figure 605)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) As part of the AMM validation program, this task has been validated at a customer site for the June 15, 2012 revision.

B. References

Reference	Title
05-56-01-760-801	Joint Resistance Measurement (P/B 201)
21-25-01-000-801	Recirculation Air Filter - Removal (P/B 401)
21-25-01-400-801	Recirculation Air Filter - Installation (P/B 401)
32-00-01-480-801	Landing Gear Downlock Pins Installation (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-1550	Bonding Meter - Approved, Intrinsically Safe (Approved for use in Class I, Divisions I & II hazardous (classified) locations. Outside these hazardous locations, COM-614 can be used in lieu of COM-1550). Part #: 620LK Supplier: 1CRL2 Part #: M1 Supplier: 3AD17 Part #: M1B Supplier: 3AD17 Part #: T477W (C15292) Supplier: 06659

D. Location Zones

Zone	Area
121	Forward Cargo Compartment - Left
122	Forward Cargo Compartment - Right

E. Access Panels

Number	Name/Location
121EW	Panel Assy - Fwd Cargo Compartment Aft Bulkhead
122GW	Panel Assy - FWD Cargo Compartment Aft Bulkhead

F. Prepare for the Bond Resistance Test

SUBTASK 05-55-43-040-005

(1) Do this task: Landing Gear Downlock Pins Installation, TASK 32-00-01-480-801.

SUBTASK 05-55-43-020-001

(2) If it is necessary, do this task: Recirculation Air Filter - Removal, TASK 21-25-01-000-801.

SUBTASK 05-55-43-010-013

(3) Remove recirculation air filter supports as necessary to access the connector/wire bundle.

SUBTASK 05-55-43-970-002

(4) Make a copy of the data sheet (Table 609) to record data during the task.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 609/05-55-43-993-822 Bond Resistance Test of Connector - Forward Cargo Compartment, Aft - Data Sheet

PLANE:					
DATE:					
TECHNICIAN:					
BUNDLE NUMBER	**CONNECTOR NUMBER**	**MEASURED RESISTANCE VALUE (mΩ)**	**MAX VALUE (mΩ)**	**PASS FAIL**	**RETEST MEASURED VALUE/COMMENTS**
W5162	D39921		17.5		
W5170	D39925		17.5		
W5172	D39917		17.5		
W5564	D39909		17.5		
W6162	D39922		17.5		
W6170	D39926		17.5		
W6172	D39918		17.5		
W6564	D39910		17.5		
W6586	D39906		17.5		

SUBTASK 05-55-43-940-003

(5) The intrinsically safe approved bonding meter, COM-1550, is required for the task.

SUBTASK 05-55-43-200-005

(6) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail: "The Boeing Company, Attention: Manager, Lightning / HIRF Maintenance Programs Engineering, P.O. Box 3707, MC 2J-10, Seattle, WA 98124-2207, USA".

3) By Fax: 425-717-1960.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-43-010-007

(7) Open these access panels:

Number	Name/Location
121EW	Panel Assy - Fwd Cargo Compartment Aft Bulkhead
122GW	Panel Assy - FWD Cargo Compartment Aft Bulkhead

G. Bond Resistance Test of Connectors

SUBTASK 05-55-43-700-013

(1) Do this task: Joint Resistance Measurement, TASK 05-56-01-760-801 from backshell to structure for all connectors listed in Table below.

NOTE: Do NOT use the body feed-thru insert for the structure measurement point. The bond meter probes are to be placed on the backshell and body structure nearby.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(a) Record measured data for the connector to the data sheet.

(b) Make sure that the measured value is not greater than the MAX VALUE listed on the data sheet.

NOTE: The maximum allowable value for the measurements of these circular connectors is 17.5 mOhms. That value consists of the following joints:

Backshell-To-Plug (BS-P) = 2.5 mOhms

Plug-To-Receptacle (P-R) = 5.0 mOhms

Receptacle-To-Structure (R-S, including the insert) =10.0 mOhms.

1) If the measured value is greater than the MAX VALUE listed on the data sheet, repair the connector (SWPM Chapter 20).

Table 610/05-55-43-993-813

WIRE BUNDLE	CONNECTOR	PNL OR MODULE	WDM
W5162	D39921	AC0520 DM11	73-21-21
W5170	D39925	AC0520 DM13	79-31-11
W5172	D39917	AC0520 DM09	73-21-21
W5564	D39909	AC0520 DM05	76-21-11
W6162	D39922	AD0520 DM12	73-21-21
W6170	D39926	AD0520 DM14	30-21-21
W6172	D39918	AD0520 DM10	73-21-21
W6564	D39910	AD0520 DM06	76-21-21
W6586	D39906	AD0520 DM04	28-41-11

H. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-43-942-005

(1) Reinstall any recirculation air filter supports that were removed.

SUBTASK 05-55-43-420-001

(2) If it is necessary, do this task: Recirculation Air Filter - Installation, TASK 21-25-01-400-801.

SUBTASK 05-55-43-940-009

(3) Close these access panels:

Number	Name/Location
121EW	Panel Assy - Fwd Cargo Compartment Aft Bulkhead
122GW	Panel Assy - FWD Cargo Compartment Aft Bulkhead

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

400769 S0000135754_V2

Bond Resistance Test of Connector - Forward Cargo Compartment, Aft - Connector Location
Figure 605/05-55-43-990-813 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

DISCONNECT PANEL, AC0520

B

400771 S0000135756_V2

Bond Resistance Test of Connector - Forward Cargo Compartment, Aft - Connector Location
Figure 605/05-55-43-990-813 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

DISCONNECT PANEL, AD0520

C

NOTE:

MIX BAY AIR DISTRIBUTION SYSTEM NOT SHOWN FOR CLARITY.

400773 S0000135757_V2

Bond Resistance Test of Connector - Forward Cargo Compartment, Aft - Connector Location
Figure 605/05-55-43-990-813 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-43-200-807

7. Bond Resistance Test of Connector - Flight Compartment

(Figure 606)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) As part of the AMM validation program, this task has been validated at a customer site for the June 15, 2012 revision.

B. References

Reference	Title
05-56-01-760-801	Joint Resistance Measurement (P/B 201)
32-00-01-480-801	Landing Gear Downlock Pins Installation (P/B 201)
SWPM 20-60	Standard Connector Processes

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-1550	Bonding Meter - Approved, Intrinsically Safe (Approved for use in Class I, Divisions I & II hazardous (classified) locations. Outside these hazardous locations, COM-614 can be used in lieu of COM-1550). Part #: 620LK Supplier: 1CRL2 Part #: M1 Supplier: 3AD17 Part #: M1B Supplier: 3AD17 Part #: T477W (C15292) Supplier: 06659

D. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right

E. Prepare for the Bond Resistance Test

SUBTASK 05-55-43-040-006

(1) Do this task: Landing Gear Downlock Pins Installation, TASK 32-00-01-480-801.

SUBTASK 05-55-43-970-003

(2) Make a copy of the data sheet (Table 611) to record data during the task.

Table 611/05-55-43-993-823 Bond Resistance Test of Connector - Flight Compartment - Data Sheet

PLANE:					
DATE:					
TECHNICIAN:					
BUNDLE NUMBER	CONNECTOR NUMBER	MEASURED RESISTANCE VALUE (mΩ)	MAX VALUE (mΩ)	PASS FAIL	RETEST MEASURED VALUE/COMMENTS
W2363	D00299		11.0		

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 611/05-55-43-993-823 Bond Resistance Test of Connector - Flight Compartment - Data Sheet (Continued)

PLANE:					
DATE:					
TECHNICIAN:					
BUNDLE NUMBER	**CONNECTOR NUMBER**	**MEASURED RESISTANCE VALUE (mΩ)**	**MAX VALUE (mΩ)**	**PASS FAIL**	**RETEST MEASURED VALUE/COMMENTS**
W2363	D00301		11.0		
W2363	GD977		1.0		
W2363	GD981		1.0		
W2465	D01815		11.0		
W2465	GD980		1.0		
W2465	GD985		1.0		

SUBTASK 05-55-43-940-004

(3) The intrinsically safe approved bonding meter, COM-1550, is required for the task.

SUBTASK 05-55-43-200-006

(4) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail: "The Boeing Company, Attention: Manager, Lightning / HIRF Maintenance Programs Engineering, P.O. Box 3707, MC 2J-10, Seattle, WA 98124-2207, USA".

3) By Fax: 425-717-1960.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-43-010-008

(5) Gain access to the connectors behind the Mode Control Panel (MCP).

(a) Loosen the fasteners on MCP and slide it out to access the connectors.

SUBTASK 05-55-43-010-010

(6) Gain access to the connectors behind the AutoBrake/AntiSkid/Engine Control Panel.

(a) Loosen the four, quarter turn fasteners and lift the AutoBrake/AntiSkid/Engine Control Panel assembly out of the center main panel.

CAUTION

PROTECT THE DISPLAY UNITS THAT ARE LOCATED BELOW THE AUTOBRAKE/ANTISKID/ENGINE CONTROL PANEL. SHARP EDGES CAN CAUSE DAMAGE WHEN YOU REMOVE AND HANG THE PANEL. IF YOU DO NOT OBEY, DAMAGE TO DISPLAY UNITS CAN OCCUR.

(b) Carefully hang the panel assembly by the connecting wire bundles.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

F. Bond Resistance Test of Connector

SUBTASK 05-55-43-700-014

(1) Do this task: Joint Resistance Measurement, TASK 05-56-01-760-801 from backshell to structure for all connectors and ground points listed in the Table 612.

(a) Record measured data for the connector to the data sheet.

(b) Make sure that the measured value is not greater than the MAX VALUE listed on the data sheet.

NOTE: The maximum allowable value for the measurement of these circular connectors is 11.0 mOhms. That value consists of the following joints:

Backshell-to-Plug (BS-P) = 2.5 mOhms

Plug-To-Receptacle (P-R) = 5.0 mOhms

Receptacle-To-Bracket (R-B) = 2.5 mOhms

Backshell-To-Structure (B-S) =1.0 mOhms.

NOTE: The maximum resistance for the ground points to structure is 1.0 mOhms.

1) If the measured value is greater than the MAX VALUE listed on the data sheet, repair the connector (SWPM 20-60).

Table 612/05-55-43-993-814

WIRE BUNDLE	CONNECTOR	PNL OR MODULE	WDM
W2363	D00299	Mode Control Panel	22-11-11
W2363	D00301	Mode Control Panel	22-11-11
W2363	GD977	Shield Gnd	22-11-11
W2363	GD981	Shield Gnd	22-11-11
W2465	D01815	Mode Control Panel	22-11-11
W2465	GD980	Shield Gnd	22-11-11
W2465	GD985	Shield Gnd	22-11-11

G. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-43-942-007

CAUTION PROTECT THE DISPLAY UNITS THAT ARE LOCATED BELOW THE AUTOBRAKE/ANTISKID/ENGINE CONTROL PANEL. SHARP EDGES CAN CAUSE DAMAGE WHEN YOU INSTALL THE PANEL. IF YOU DO NOT OBEY, DAMAGE TO DISPLAY UNITS CAN OCCUR.

(1) Reinstall the AutoBrake/AntiSkid/Engine Control Panel assembly and tighten the fasteners.

SUBTASK 05-55-43-942-008

(2) Reinstall the MCP and tighten the fasteners.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FLIGHT COMPARTMENT

400782 S0000135812_V6

Bond Resistance Test of Connector - Flight Compartment - Connector Location
Figure 606/05-55-43-990-814 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

B

418363 S0000137020_V2

Bond Resistance Test of Connector - Flight Compartment - Connector Location
Figure 606/05-55-43-990-814 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-43-200-808

8. Bond Resistance Test of Connector - Passenger Compartment, Forward

(Figure 607)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) As part of the AMM validation program, this task has been validated at a customer site for the June 15, 2012 revision.

B. References

Reference	Title
05-56-01-760-801	Joint Resistance Measurement (P/B 201)
25-21-45-000-801	Ceiling Panel - Removal (P/B 401)
25-21-45-000-803-001	Main Ceiling Panel - Removal (P/B 401)
25-21-45-400-801	Ceiling Panel - Installation (P/B 401)
25-21-45-400-803-001	Main Ceiling Panel - Installation (P/B 401)
32-00-01-480-801	Landing Gear Downlock Pins Installation (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-1550	Bonding Meter - Approved, Intrinsically Safe (Approved for use in Class I, Divisions I & II hazardous (classified) locations. Outside these hazardous locations, COM-614 can be used in lieu of COM-1550). Part #: 620LK Supplier: 1CRL2 Part #: M1 Supplier: 3AD17 Part #: M1B Supplier: 3AD17 Part #: T477W (C15292) Supplier: 06659

D. Location Zones

Zone	Area
230	Subzone - Passenger Compartment - Body Station 360.00 to 663.75

E. Prepare for the Bond Resistance Test

SUBTASK 05-55-43-040-007

(1) Do this task: Landing Gear Downlock Pins Installation, TASK 32-00-01-480-801.

SUBTASK 05-55-43-970-007

(2) Make a copy of the data sheet (Table 613) to record data during the task.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 613/05-55-43-993-824 Bond Resistance Test of Connector - Passenger Compartment, Forward - Data Sheet

PLANE:					
DATE:					
TECHNICIAN:					
BUNDLE NUMBER	**CONNECTOR NUMBER**	**MEASURED RESISTANCE VALUE (mΩ)**	**MAX VALUE (mΩ)**	**PASS FAIL**	**RETEST MEASURED VALUE/COMMENTS**
W3170/ W5172	D40736P/J		10.0		
W3170/ W5170	D40734P/J		10.0		
W4170/ W6170	D40728P/J		10.0		

SUBTASK 05-55-43-940-008

(3) The intrinsically safe approved bonding meter, COM-1550, is required for the task.

SUBTASK 05-55-43-200-007

(4) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail: "The Boeing Company, Attention: Manager, Lightning / HIRF Maintenance Programs Engineering, P.O. Box 3707, MC 2J-10, Seattle, WA 98124-2207, USA".

3) By Fax: 425-717-1960.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-43-010-009

(5) Remove the ceiling panels at STA 410 and 424 to get access to the disconnect panel above the passenger compartment ceiling (TASK 25-21-45-000-801 or TASK 25-21-45-000-803-001).

F. Bond Resistance Test of Connector

SUBTASK 05-55-43-700-015

(1) Do this task: Joint Resistance Measurement, TASK 05-56-01-760-801 using the (intrinsically safe approved bonding meter, COM-1550) for all connectors listed in Table below:

(a) Measure the joint resistance between backshell of a connector to backshell of the connector at the other side of bracket.

NOTE: Bond meter probes should be placed on backshell of P side connector to backshell of J side connector.

(b) Record measured data for the connector to the data sheet.

(c) Make sure that the measured value is not greater than the MAX VALUE listed on the data sheet.

NOTE: The maximum allowable value for the measurement of these circular connectors is 10.0 mOhms. That value consists of the following joints:

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Backshell-To-Plug (BS-P at P side) = 2.5 mOhms

Plug-To-Receptacle (P-R) = 5.0 mOhms

Receptacle-To-Backshell (R-BS at J side) = 2.5 mOhms.

1) If the measured value is greater than the MAX VALUE listed on the data sheet, do the joint measurement on the breakdown joints.

2) If any of the joint measurement values is higher than the maximum values below, repair the connector (SWPM Chapter 20).

   a) Maximum joint value from backshell to plug (at P side) is 2.5 mOhms.

   b) Maximum joint value from plug to receptacle is 5.0 mOhms.

   c) Maximum joint value from receptacle to backshell (at J side) is 2.5 mOhms.

Table 614/05-55-43-993-816

WIRE BUNDLE	CONNECTOR	PNL OR MODULE	WDM
W3170/W5172	D40736P to D40736J	AB0420A Pos 2	79-31-11
W3170/W5170	D40734P to D40734J	AB0420A Pos 1	79-31-11
W4170/W6170	D40728P to D40728J	AB0405B Pos 1	77-12-11

G. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-43-942-006

(1) Install the ceiling panels at STA 410 and 424 (TASK 25-21-45-400-801 or TASK 25-21-45-400-803-001).

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

400788 S0000135856_V2

Bond Resistance Test of Connector - Passenger Compartment, Forward - Connector Location
Figure 607/05-55-43-990-815 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

2524667 S0000592005_V1

Bond Resistance Test of Connector - Passenger Compartment, Forward - Connector Location
Figure 607/05-55-43-990-815 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

DISCONNECT PANEL, AB0420A

B

DISCONNECT PANEL, AB0405B

C

400790 S0000135857_V2

Bond Resistance Test of Connector - Passenger Compartment, Forward - Connector Location
Figure 607/05-55-43-990-815 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

H/L PROTECTION - LRT - LEFT SIDE WIRE BUNDLES - FUNCTIONAL CHECK

1. General

A. This procedure contains scheduled maintenance task data.

B. This procedure contains tasks that inspect selected wire bundles and connectors on the left side of the airplane.

TASK 05-55-44-200-801

2. Loop Resistance Test of Wire Bundle - Left Main Landing Gear Wheel Well

(Figure 601)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) As part of the AMM validation program, this procedure has been validated at a customer site for the June 15, 2012 revision.

B. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
32-00-01-080-801	Landing Gear Downlock Pins Removal (P/B 201)
32-00-01-480-801	Landing Gear Downlock Pins Installation (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

D. Location Zones

Zone	Area
133	Main Landing Gear Wheel Well, Body Station 663.75 to Body Station 727.00 - Left

E. Prepare for the procedure

SUBTASK 05-55-44-940-008

(1) The loop resistance tester, SPL-1636, or MK loop resistance tester, SPL-18565, is required for this task.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-55-44-970-001

(2) Make a copy of the data sheet (Table 601) to record data during the task to record data during the task.

Table 601/05-55-44-993-817 Loop Resistance Test of Wire Bundle - Left Main Landing Gear Wheel Well - Data Sheet

PLANE:					
DATE:					
TECHNICIAN:					
BUNDLE NUMBER	**CONNECTOR NUMBER**	**MEASURED LOOP RESISTANCE VALUE (mΩ)**	**MIN/MAX VALUE (mΩ)**	**PASS/ FAIL**	**RETEST MEASURED VALUE/COMMENTS**
W1022	D42100P		11 - 49		
	D42102P		27 - 70		

SUBTASK 05-55-44-420-003

(3) Do this task: Landing Gear Downlock Pins Installation, TASK 32-00-01-480-801.

SUBTASK 05-55-44-200-015

(4) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail: "The Boeing Company, Attention: Manager, Lightning / HIRF Maintenance Programs Engineering, P.O. Box 3707, MC 2J-10, Seattle, WA 98124-2207, USA".

3) By Fax: 425-717-1960.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

F. Procedure

SUBTASK 05-55-44-200-001

(1) Procedure to do the Functional Check of the wire bundle shielding:

NOTE: This step checks the wire bundle shielding for the scheduled maintenance check. This step also checks the wire bundle shielding after any repair is done with the wire bundle or connector.

(a) Measure the loop resistance (TASK 05-56-03-200-801 or TASK 05-56-05-200-801) for each wire bundle listed in Table(s) using the loop resistance tester, SPL-1636, or MK loop resistance tester, SPL-18565, correspondingly:

NOTE: In the case of multiple wire bundles going to/from a connector, make sure the coupler is only around the desired bundle. This may require removing (and replacing) wire ties to separate the bundles enough for coupler connection.

1) Record the measured value to the data sheet.

2) Make sure the measured value is within the MIN/MAX value range listed in the data sheet.

3) If the measured value is not within the MIN/MAX value range, do the Troubleshooting step below for the wire bundle shielding failure.

4) This step is complete when all wire bundles listed in Table were tested and passed.

SUBTASK 05-55-44-810-003

(2) Procedure to do the Troubleshooting step for the wire bundle shielding:

NOTE: Perform this step only if the measured value of the Functional Check of the wire bundle shielding is not within the MIN/MAX value range.

NOTE: Record all the measurement data to the data sheet. This should include both initial and final values. Also record the troubleshooting steps taken to the RETEST MEASURED VALUE/COMMENTS column.

(a) If the wire bundle shield resistance is less than the MIN value, do the following:

1) Check the test setup. Make sure that the couplers are only around the desired wire bundle and closed properly.

2) If the test setup is OK, check the operation of the LRT or ExLRT. To check the LRT or ExLRT operation, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801 or ExLRT Standard Measurement, TASK 05-56-02-200-802.

3) If no problem is found, check the entire length of the wire bundle. Look for signs of chafing or damage to the wire bundle that can cause the shield to short to structure.

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

a) If a problem is found, repair or replace in accordance with the SWPM Chapter 20.

4) If no defects are found with the wire bundle and the loop resistance value stays less than the MIN value, record this value and contact Boeing for support.

(b) If the wire bundle shield loop resistance is more than the MAX value, do the following:

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1) Measure the joint resistance across the connector from the ground terminal to primary structure (TASK 05-56-04-200-801 or TASK 05-56-05-200-801).

a) If the joint value measured is more than the maximum joint resistance value in the data table listed in TASK 05-56-04-200-801 or TASK 05-56-05-200-801, repair in accordance with the SWPM Chapter 20.

b) If the measured resistance value stays more than the maximum value given in the data table, do this step:

<1> Record the resistance value and contact Boeing for support.

(c) After the wire bundle or connector is repaired, do the Functional Check of the wire bundle shielding again on this wire bundle.

SUBTASK 05-55-44-200-002

(3) Connectors listed in this Table are used for the task(s) above.

Table 602/05-55-44-993-810 Left Wheel Well Connectors

WIRE BUNDLE	CONNECTOR	WDM	PNL OR MODULE
W1022	D42100P	22-11-31, 27-18-11, 27-32-21, 27-62-14	AL720A or AL0720A POS 3 - Spoiler, FCC
W1022	D42102P	22-11-31, 27-18-11, 27-32-21, 27-62-14	AL720A or AL0720A POS 2 - Spoiler, FCC

G. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-44-940-001

(1) Do this task: Landing Gear Downlock Pins Removal, TASK 32-00-01-080-801.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

LEFT WHEEL WELL
A

U68847 S0000213532_V2

Loop Resistance Test of Wire Bundle - Left Main Landing Gear Wheel Well - Connector Location
Figure 601/05-55-44-990-806 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

DISCONNECT PANEL, AL0720A

B

NOTE:

COVER PLATE REMOVED.

U68864 S0000213533_V2

Loop Resistance Test of Wire Bundle - Left Main Landing Gear Wheel Well - Connector Location
Figure 601/05-55-44-990-806 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-44-200-802

3. Loop Resistance Test of Wire Bundle - Left Wing to Body Fairing

(Figure 602)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) As part of the AMM validation program, this procedure has been validated at a customer site for the June 15, 2012 revision.

B. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
27-81-00-040-801	Leading Edge Flaps and Slats Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

D. Location Zones

Zone	Area
191	Lower Wing-To-Body Fairing - Forward of Wing Box

E. Access Panels

Number	Name/Location
191FL	Forward Wing To Body Fairing Panel - Mid Fairing, Above Ram Air Inlet

F. Prepare for the Wire Bundle Loop Resistance Test

SUBTASK 05-55-44-940-009

(1) The loop resistance tester, SPL-1636, or MK loop resistance tester, SPL-18565, is required for this task.

SUBTASK 05-55-44-040-001

(2) Make a copy of the data sheet (Table 603) to record data during the task.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 603/05-55-44-993-818 Loop Resistance Test of Wire Bundle - Left Wing to Body Fairing - Data Sheet

PLANE:					
DATE:					
TECHNICIAN:					
BUNDLE NUMBER	**CONNECTOR NUMBER**	**MEASURED LOOP RESISTANCE VALUE (mΩ)**	**MIN/MAX VALUE (mΩ)**	**PASS/ FAIL**	**RETEST MEASURED VALUE/COMMENTS**
W1182	D39931		14 - 49		
W1184	D39911		15 - 51		

SUBTASK 05-55-44-040-006

(3) Do this task:Leading Edge Flaps and Slats Deactivation, TASK 27-81-00-040-801.

SUBTASK 05-55-44-200-016

(4) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail: "The Boeing Company, Attention: Manager, Lightning / HIRF Maintenance Programs Engineering, P.O. Box 3707, MC 2J-10, Seattle, WA 98124-2207, USA".

3) By Fax: 425-717-1960.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-55-44-010-002

(5) Open this access panel:

Number	Name/Location
191FL	Forward Wing To Body Fairing Panel - Mid Fairing, Above Ram Air Inlet

G. Wire Bundle Loop Resistance Test

SUBTASK 05-55-44-200-003

(1) Procedure to do the Functional Check of the wire bundle shielding:

NOTE: This step checks the wire bundle shielding for the scheduled maintenance check. This step also checks the wire bundle shielding after any repair is done with the wire bundle or connector.

(a) Measure the loop resistance (TASK 05-56-03-200-801 or TASK 05-56-05-200-801) for each wire bundle listed in Table(s) using the loop resistance tester, SPL-1636, or MK loop resistance tester, SPL-18565, correspondingly:

NOTE: In the case of multiple wire bundles going to/from a connector, make sure the coupler is only around the desired bundle. This may require removing (and replacing) wire ties to separate the bundles enough for coupler connection.

1) Record the measured value to the data sheet.

2) Make sure the measured value is within the MIN/MAX value range listed in the data sheet.

3) If the measured value is not within the MIN/MAX value range, do the Troubleshooting step below for the wire bundle shielding failure.

4) This step is complete when all wire bundles listed in Table were tested and passed.

SUBTASK 05-55-44-810-004

(2) Procedure to do the Troubleshooting step for the wire bundle shielding:

NOTE: Perform this step only if the measured value of the Functional Check of the wire bundle shielding is not within the MIN/MAX value range.

NOTE: Record all the measurement data to the data sheet. This should include both initial and final values. Also record the troubleshooting steps taken to the RETEST MEASURED VALUE/COMMENTS column.

(a) If the wire bundle shield resistance is less than the MIN value, do the following:

1) Check the test setup. Make sure that the couplers are only around the desired wire bundle and closed properly.

2) If the test setup is OK, check the operation of the LRT or ExLRT. To check the LRT or ExLRT operation, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801 or ExLRT Standard Measurement, TASK 05-56-02-200-802.

3) If no problem is found, check the entire length of the wire bundle. Look for signs of chafing or damage to the wire bundle that can cause the shield to short to structure.

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

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a) If a problem is found, repair or replace in accordance with the SWPM Chapter 20.

4) If no defects are found with the wire bundle and the loop resistance value stays less than the MIN value, record this value and contact Boeing for support.

(b) If the wire bundle shield loop resistance is more than the MAX value, do the following:

1) Measure the joint resistance across the connector from the ground terminal to primary structure (TASK 05-56-04-200-801 or TASK 05-56-05-200-801).

a) If the joint value measured is more than the maximum joint resistance value in the data table listed in TASK 05-56-04-200-801 or TASK 05-56-05-200-801, repair in accordance with the SWPM Chapter 20.

b) If the measured resistance value stays more than the maximum value given in the data table, do this step:

<1> Record the resistance value and contact Boeing for support.

(c) After the wire bundle or connector is repaired, do the Functional Check of the wire bundle shielding again on this wire bundle.

SUBTASK 05-55-44-200-004

(3) Connectors listed in this table are used for the task(s) above.

Table 604/05-55-44-993-811

WIRE BUNDLE	CONNECTOR	WDM	PNL OR MODULE
W1182	D39931	26-11-11, 73-22-11, 74-11-11	AC520, Alt Pwr - EEC
W1184	D39911	76-21-11, 77-12-21, 80-11-11	AC520, CDS - M2 Speed

H. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-44-410-001

(1) Close this access panel:

Number	Name/Location
191FL	Forward Wing To Body Fairing Panel - Mid Fairing, Above Ram Air Inlet

SUBTASK 05-55-44-440-001

(2) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

U68923 S0000213575_V4

Loop Resistance Test of Wire Bundle - Left Wing to Body Fairing - Connection Location
Figure 602/05-55-44-990-807

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-44-200-803

4. Loop Resistance Test of Wire Bundle - Left Wing Trailing Edge

(Figure 603)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) As part of the AMM validation program, this procedure has been validated at a customer site for the June 15, 2012 revision.

B. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
27-51-00-040-801	Trailing Edge Flap System Deactivation (P/B 201)
27-51-00-440-801	Trailing Edge Flap System Reactivation (P/B 201)
27-51-00-860-803	Extend the Trailing Edge Flaps (P/B 201)
27-51-00-860-804	Retract the Trailing Edge Flaps (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

D. Location Zones

Zone	Area
550	Subzone - Left Wing: Trailing Edge, Aft of Rear Spar, Inbd of Outboard Trailing Edge Flap
560	Subzone - Left Wing: Trailing Edge , Aft of Rear Spar, Outboard of Inbd Trailing Edge Flap, Inbd of Fixed Trailing Edge

E. Prepare for the procedure

SUBTASK 05-55-44-940-010

(1) The loop resistance tester, SPL-1636, or MK loop resistance tester, SPL-18565, is required for this task.

SUBTASK 05-55-44-010-003

(2) Make a copy of the data sheet (Table 605) to record data during the task.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 605/05-55-44-993-819 Loop Resistance Test of Wire Bundle - Left Wing Trailing Edge - Data Sheet

PLANE:					
DATE:					
TECHNICIAN:					
BUNDLE NUMBER	**CONNECTOR NUMBER**	**MEASURED LOOP RESISTANCE VALUE (mΩ)**	**MIN/MAX VALUE (mΩ)**	**PASS/ FAIL**	**RETEST MEASURED VALUE/COMMENTS**
W1024	D00275		9 - 36		
	D01695		46 - 110		
	D01699		47 - 111		

SUBTASK 05-55-44-580-001

(3) Do this task: Extend the Trailing Edge Flaps, TASK 27-51-00-860-803.

SUBTASK 05-55-44-040-002

(4) Do this task: Trailing Edge Flap System Deactivation, TASK 27-51-00-040-801.

SUBTASK 05-55-44-200-017

(5) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail: "The Boeing Company, Attention: Manager, Lightning / HIRF Maintenance Programs Engineering, P.O. Box 3707, MC 2J-10, Seattle, WA 98124-2207, USA".

3) By Fax: 425-717-1960.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

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F. Procedure

SUBTASK 05-55-44-200-006

(1) Procedure to do the Functional Check of the wire bundle shielding:

NOTE: This step checks the wire bundle shielding for the scheduled maintenance check. This step also checks the wire bundle shielding after any repair is done with the wire bundle or connector.

(a) Measure the loop resistance (TASK 05-56-03-200-801 or TASK 05-56-05-200-801) for each wire bundle listed in Table(s) using the loop resistance tester, SPL-1636, or MK loop resistance tester, SPL-18565, correspondingly:

NOTE: In the case of multiple wire bundles going to/from a connector, make sure the coupler is only around the desired bundle. This may require removing (and replacing) wire ties to separate the bundles enough for coupler connection.

1) Record the measured value to the data sheet.

2) Make sure the measured value is within the MIN/MAX value range listed in the data sheet.

3) If the measured value is not within the MIN/MAX value range, do the Troubleshooting step below for the wire bundle shielding failure.

4) This step is complete when all wire bundles listed in Table were tested and passed.

SUBTASK 05-55-44-810-005

(2) Procedure to do the Troubleshooting step for the wire bundle shielding:

NOTE: Perform this step only if the measured value of the Functional Check of the wire bundle shielding is not within the MIN/MAX value range.

NOTE: Record all the measurement data to the data sheet. This should include both initial and final values. Also record the troubleshooting steps taken to the RETEST MEASURED VALUE/COMMENTS column.

(a) If the wire bundle shield resistance is less than the MIN value, do the following:

1) Check the test setup. Make sure that the couplers are only around the desired wire bundle and closed properly.

2) If the test setup is OK, check the operation of the LRT or ExLRT. To check the LRT or ExLRT operation, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801 or ExLRT Standard Measurement, TASK 05-56-02-200-802.

3) If no problem is found, check the entire length of the wire bundle. Look for signs of chafing or damage to the wire bundle that can cause the shield to short to structure.

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

a) If a problem is found, repair or replace in accordance with the SWPM Chapter 20.

4) If no defects are found with the wire bundle and the loop resistance value stays less than the MIN value, record this value and contact Boeing for support.

(b) If the wire bundle shield loop resistance is more than the MAX value, do the following:

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1) Measure the joint resistance across the connector from the ground terminal to primary structure (TASK 05-56-04-200-801 or TASK 05-56-05-200-801).

a) If the joint value measured is more than the maximum joint resistance value in the data table listed in TASK 05-56-04-200-801 or TASK 05-56-05-200-801, repair in accordance with the SWPM Chapter 20.

b) If the measured resistance value stays more than the maximum value given in the data table, do this step:

<1> Record the resistance value and contact Boeing for support.

(c) After the wire bundle or connector is repaired, do the Functional Check of the wire bundle shielding again on this wire bundle.

SUBTASK 05-55-44-200-007

(3) Connectors listed in this Table are used for the task(s) above.

Table 606/05-55-44-993-812

WIRE BUNDLE	CONNECTOR	WDM	PNL OR MODULE
W1024	D275 or D00275	22-11-11, 22-12-31, 27-32-21, 27-52-11	T427-Flap Posn Sensor
W1024	D1695	22-11-31	Spoiler 4, FCC (POS 1)
W1024	D1699	22-11-31	Spoiler 4, FCC (POS 2)

G. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-44-440-002

(1) Do this task Trailing Edge Flap System Reactivation, TASK 27-51-00-440-801

SUBTASK 05-55-44-410-002

(2) Do this task: Retract the Trailing Edge Flaps, TASK 27-51-00-860-804.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

U68939 S0000213582_V3

Loop Resistance Test of Wire Bundle - Left Wing Trailing Edge - Connector Location
Figure 603/05-55-44-990-808 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

U68957 S0000213583_V2

Loop Resistance Test of Wire Bundle - Left Wing Trailing Edge - Connector Location
Figure 603/05-55-44-990-808 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-44-200-804

5. Loop Resistance Test of Wire Bundle - Left Wing Leading Edge

(Figure 604)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) As part of the AMM validation program, this procedure has been validated at a customer site for the June 15, 2012 revision.

B. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
27-81-00-040-801	Leading Edge Flaps and Slats Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
27-81-00-860-803	Leading Edge Flaps and Slats Extension (P/B 201)
27-81-00-860-804	Leading Edge Flaps and Slats Retraction (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

D. Location Zones

Zone	Area
510	Subzone - Left Wing: Leading Edge, Fwd of Front Spar, Inbd of Strut and Nacelle Gap Cover Area
520	Subzone - Left Wing: Leading Edge, Fwd of Front Spar, Outboard of Strut and Nacelle Gap Cover Area

E. Access Panels

Number	Name/Location
431CR	Forward Strut Fairing, Right Overwing Fairing, Strut 1
511AB	Inboard Leading Edge, Lower Removable Panel

ECCN 9E991 BOEING PROPRIETARY - See title page for details

F. Prepare for the procedure

SUBTASK 05-55-44-940-011

(1) The loop resistance tester, SPL-1636, or MK loop resistance tester, SPL-18565, is required for this task.

SUBTASK 05-55-44-010-004

(2) Make a copy of the data sheet (Table 607) to record data during the task.

Table 607/05-55-44-993-820 Loop Resistance Test of Wire Bundle - Left Wing Leading Edge - Data Sheet

PLANE:					
DATE:					
TECHNICIAN:					
BUNDLE NUMBER	**CONNECTOR NUMBER**	**MEASURED LOOP RESISTANCE VALUE (mΩ)**	**MIN/MAX VALUE (mΩ)**	**PASS/ FAIL**	**RETEST MEASURED VALUE/COMMENTS**
W1164	D30016		7 - 30		
W1168	D30084		3 - 19		
W1172	D30042		3 - 20		
W1178	D8056		5 - 29		

SUBTASK 05-55-44-580-002

(3) Do this task: Leading Edge Flaps and Slats Extension, TASK 27-81-00-860-803.

SUBTASK 05-55-44-040-003

(4) Do this task: Leading Edge Flaps and Slats Deactivation, TASK 27-81-00-040-801.

SUBTASK 05-55-44-200-018

(5) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

ECCN 9E991 BOEING PROPRIETARY - See title page for details

2) By Mail: "The Boeing Company, Attention: Manager, Lightning / HIRF Maintenance Programs Engineering, P.O. Box 3707, MC 2J-10, Seattle, WA 98124-2207, USA".

3) By Fax: 425-717-1960.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-44-010-005

(6) Open these access panels:

Number	Name/Location
431CR	Forward Strut Fairing, Right Overwing Fairing, Strut 1
511AB	Inboard Leading Edge, Lower Removable Panel

G. Procedure

SUBTASK 05-55-44-200-009

(1) Procedure to do the Functional Check of the wire bundle shielding:

NOTE: This step checks the wire bundle shielding for the scheduled maintenance check. This step also checks the wire bundle shielding after any repair is done with the wire bundle or connector.

(a) Measure the loop resistance (TASK 05-56-03-200-801 or TASK 05-56-05-200-801) for each wire bundle listed in Table(s) using the loop resistance tester, SPL-1636, or MK loop resistance tester, SPL-18565, correspondingly:

NOTE: In the case of multiple wire bundles going to/from a connector, make sure the coupler is only around the desired bundle. This may require removing (and replacing) wire ties to separate the bundles enough for coupler connection.

1) Record the measured value to the data sheet.

2) Make sure the measured value is within the MIN/MAX value range listed in the data sheet.

3) If the measured value is not within the MIN/MAX value range, do the Troubleshooting step below for the wire bundle shielding failure.

4) This step is complete when all wire bundles listed in Table were tested and passed.

SUBTASK 05-55-44-810-006

(2) Procedure to do the Troubleshooting step for the wire bundle shielding:

NOTE: Perform this step only if the measured value of the Functional Check of the wire bundle shielding is not within the MIN/MAX value range.

NOTE: Record all the measurement data to the data sheet. This should include both initial and final values. Also record the troubleshooting steps taken to the RETEST MEASURED VALUE/COMMENTS column.

(a) If the wire bundle shield resistance is less than the MIN value, do the following:

1) Check the test setup. Make sure that the couplers are only around the desired wire bundle and closed properly.

2) If the test setup is OK, check the operation of the LRT or ExLRT. To check the LRT or ExLRT operation, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801 or ExLRT Standard Measurement, TASK 05-56-02-200-802.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

3) If no problem is found, check the entire length of the wire bundle. Look for signs of chafing or damage to the wire bundle that can cause the shield to short to structure.

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

a) If a problem is found, repair or replace in accordance with the SWPM Chapter 20.

4) If no defects are found with the wire bundle and the loop resistance value stays less than the MIN value, record this value and contact Boeing for support.

(b) If the wire bundle shield loop resistance is more than the MAX value, do the following:

1) Measure the joint resistance across the connector from the ground terminal to primary structure (TASK 05-56-04-200-801 or TASK 05-56-05-200-801).

a) If the joint value measured is more than the maximum joint resistance value in the data table listed in TASK 05-56-04-200-801 or TASK 05-56-05-200-801, repair in accordance with the SWPM Chapter 20.

b) If the measured resistance value stays more than the maximum value given in the data table, do this step:

<1> Record the resistance value and contact Boeing for support.

(c) After the wire bundle or connector is repaired, do the Functional Check of the wire bundle shielding again on this wire bundle.

SUBTASK 05-55-44-200-010

(3) Connectors listed in this Table are used for the task(s) above.

Table 608/05-55-44-993-813

WIRE BUNDLE	CONNECTOR	WDM	PNL OR MODULE
W1164	D30016	24-11-11, 24-21-11, 24-24-11, 29-11-11, 76-21-11, 77-12-21, 80-11-11	AW258L, M2 speed - CDS
W1168	D30084	30-11-11, 36-11-11, 73-21-11, 73-21-12, 73-21-21, 73-24-11, 73-24-12, 77-31-11, 78-35-11, 78-26-11	AW258L, EEC, CDS
W1172	D30042	73-21-11, 73-21-12, 73-21-21, 73-24-11, 73-24-12, 74-31-11, 78-32-51, 78-35-11, 78-36-11	AW258L, EEC - P8
W1178	D8056	26-11-11, 30-21-11, 31-62-14, 73-22-11, 74-11-11, 77-12-11, 77-31-11, 79-31-11	AW258L, Alt pwr - EEC

H. Put the Airplane Back to Its Usual Condition.

SUBTASK 05-55-44-410-003

(1) Close these access panels:

Number	Name/Location
431CR	Forward Strut Fairing, Right Overwing Fairing, Strut 1

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

Number	Name/Location
511AB	Inboard Leading Edge, Lower Removable Panel

SUBTASK 05-55-44-440-003

(2) Do this task if necessary: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

SUBTASK 05-55-44-440-004

(3) Do this task if necessary: Leading Edge Flaps and Slats Retraction, TASK 27-81-00-860-804.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Loop Resistance Test of Wire Bundle - Left Wing Leading Edge - Connector Location
Figure 604/05-55-44-990-809 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

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Loop Resistance Test of Wire Bundle - Left Wing Leading Edge - Connector Location
Figure 604/05-55-44-990-809 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-44-200-805

6. Loop Resistance Test of Wire Bundle - Strut Disconnect - Left Engine

(Figure 605)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) As part of the AMM validation program, this procedure has been validated at a customer site for the June 15, 2012 revision.

B. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
27-81-00-040-801	Leading Edge Flaps and Slats Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
27-81-00-860-803	Leading Edge Flaps and Slats Extension (P/B 201)
27-81-00-860-804	Leading Edge Flaps and Slats Retraction (P/B 201)
78-31-00-040-802-F00	Thrust Reverser Deactivation For Ground Maintenance (P/B 201)
78-31-00-440-803-F00	Thrust Reverser Activation After Ground Maintenance (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

D. Consumable Materials

Reference	Description	Specification
D00633	Grease - Aircraft General Purpose	BMS3-33

E. Location Zones

Zone	Area
431	Engine 1 - Forward Strut Fairing

ECCN 9E991 BOEING PROPRIETARY - See title page for details

F. Access Panels

Number	Name/Location
431AL	Forward Strut Fairing, Left Thrust Reverser Disconnect, Strut 1
431AR	Forward Strut Fairing, Right Thrust Reverser Disconnect, Strut 1
431AT	Forward Strut Fairing, Thumbnail Fairing, Strut 1

G. Prepare for the Test

SUBTASK 05-55-44-940-012

(1) The loop resistance tester, SPL-1636, or MK loop resistance tester, SPL-18565, is required for this task.

SUBTASK 05-55-44-010-006

(2) Make a copy of the data sheet (Table 609, Table 610) to record data during the task.

Table 609/05-55-44-993-821 Loop Resistance Test of Wire Bundle - Strut Disconnect - Left Engine - Data Sheet

PLANE:					
DATE:					
TECHNICIAN:					
BUNDLE NUMBER	**CONNECTOR NUMBER**	**MEASURED JOINT RESISTANCE VALUE (mΩ)**	**MIN/MAX VALUE (mΩ)**	**PASS/ FAIL**	**RETEST MEASURED VALUE/COMMENTS**
W1168	D30208		5 - 25		
W1168	D30210		2 - 18		
W1172	D30202		4 - 23		
W1172	D30206		2 - 18		

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 610/05-55-44-993-822 Loop Resistance Test of Wire Bundle - Strut Disconnect - Left Engine - Data Sheet

PLANE:					
DATE:					
TECHNICIAN:					
BUNDLE NUMBER	**CONNECTOR NUMBER**	**MEASURED LOOP RESISTANCE VALUE (mΩ)**	**MIN/MAX VALUE (mΩ)**	**PASS/ FAIL**	**RETEST MEASURED VALUE/COMMENTS**
W1164	D30234		7 - 30		
W1166	D30256		25 - 60		
W1168	D30260		3 - 19		
W1170	D30212		8 - 30		
	D30228		11 - 39		
W1172	D30224		3 - 21		

SUBTASK 05-55-44-200-019

(3) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail: "The Boeing Company, Attention: Manager, Lightning / HIRF Maintenance Programs Engineering, P.O. Box 3707, MC 2J-10, Seattle, WA 98124-2207, USA".

3) By Fax: 425-717-1960.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-44-860-001

(4) Do this task: Leading Edge Flaps and Slats Extension, TASK 27-81-00-860-803.

SUBTASK 05-55-44-040-004

(5) Do this task: Leading Edge Flaps and Slats Deactivation, TASK 27-81-00-040-801.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-55-44-040-005

(6) Do this task: Thrust Reverser Deactivation For Ground Maintenance, TASK 78-31-00-040-802-F00.

SUBTASK 05-55-44-010-007

(7) Open these access panels:

Number	Name/Location
431AL	Forward Strut Fairing, Left Thrust Reverser Disconnect, Strut 1
431AR	Forward Strut Fairing, Right Thrust Reverser Disconnect, Strut 1
431AT	Forward Strut Fairing, Thumbnail Fairing, Strut 1

H. Loop Resistance Test of Wire Bundle - Strut Disconnect

SUBTASK 05-55-44-420-001

(1) Procedure to do the Joint Resistance check for connectors listed in Table below:

(a) For W1168-D30208:

1) Place the LRT Sense coupler on W1168 common to connector D30208.

2) Place the LRT Drive coupler on W1172 common to connector D30202.

3) Placing one Joint probe on D30208's receptacle and the other on the strut tray primary structure, measure the joint resistance (TASK 05-56-04-200-801 or TASK 05-56-05-200-801) and record the value on the data sheet.

NOTE: The Loop Resistance Measurement task is required as it is part of the Joint Resistance Measurement task.

(b) For W1172-D30202:

1) Place the LRT Sense coupler on W1172 common to connector D30202.

2) Place the LRT Drive coupler on W1168 common to connector D30208.

3) Placing one Joint probe on D30202's receptacle and the other on the strut tray primary structure, measure the joint resistance (TASK 05-56-04-200-801 or TASK 05-56-05-200-801) and record the value on the data sheet.

NOTE: The Loop Resistance Measurement task is required as it is part of the Joint Resistance Measurement task.

(c) For W1168-D30210:

1) Place the LRT Sense coupler on W1168 common to connector D30210.

2) Place the LRT Drive coupler on W1172 common to connector D30206.

3) Placing one Joint probe on D30210's receptacle and the other on the strut tray primary structure, measure the joint resistance (TASK 05-56-04-200-801 or TASK 05-56-05-200-801) and record the value on the data sheet.

NOTE: The Loop Resistance Measurement task is required as it is part of the Joint Resistance Measurement task.

(d) For W1172-D30206:

1) Place the LRT Sense coupler on W1172 common to connector D30206.

2) Place the LRT Drive coupler on W1168 common to connector D30210.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

3) Placing one Joint probe on D30206's receptacle and the other on the strut tray primary structure, measure the joint resistance (TASK 05-56-04-200-801 or TASK 05-56-05-200-801) and record the value on the data sheet.

NOTE: The Loop Resistance Measurement task is required as it is part of the Joint Resistance Measurement task.

Table 611/05-55-44-993-814

WIRE BUNDLE	CONNECTOR	WDM	PNL OR MODULE
W1168	D30208	78-35-11, 78-36-11	AS2L, T/R LVDT- EEC
W1168	D30210	78-35-11, 78-36-11	AS2I
W1172	D30202	78-32-51, 78-35-11, 78-36-11	T/R LVDT, EEC - P8
W1172	D30206	78-32-51, 78-35-11, 78-36-11	T/R LVDT, EEC - P8

(2) If any measured value is not within the MIN/MAX value range indicated on the data sheet, measure the joint resistance build-up on that connector (TASK 05-56-04-200-801 or TASK 05-56-05-200-801).

(a) If a measurement value is greater than MAXIMUM ALLOWABLE RESISTANCE value, repair the failed connector per SWPM Chapter 20.

SUBTASK 05-55-44-200-012

(3) Procedure to do the Functional Check of the wire bundle shielding:

NOTE: This step checks the wire bundle shielding for the scheduled maintenance check. This step also checks the wire bundle shielding after any repair is done with the wire bundle or connector.

(a) Measure the loop resistance (TASK 05-56-03-200-801 or TASK 05-56-05-200-801) for each wire bundle listed in Table(s) using the loop resistance tester, SPL-1636, or MK loop resistance tester, SPL-18565, correspondingly:

NOTE: In the case of multiple wire bundles going to/from a connector, make sure the coupler is only around the desired bundle. This may require removing (and replacing) wire ties to separate the bundles enough for coupler connection.

1) Record the measured value to the data sheet.

2) Make sure the measured value is within the MIN/MAX value range listed in the data sheet.

3) If the measured value is not within the MIN/MAX value range, do the Troubleshooting step below for the wire bundle shielding failure.

4) This step is complete when all wire bundles listed in Table were tested and passed.

SUBTASK 05-55-44-810-007

(4) Procedure to do the Troubleshooting step for the wire bundle shielding:

NOTE: Perform this step only if the measured value of the Functional Check of the wire bundle shielding is not within the MIN/MAX value range.

NOTE: Record all the measurement data to the data sheet. This should include both initial and final values. Also record the troubleshooting steps taken to the RETEST MEASURED VALUE/COMMENTS column.

(a) If the wire bundle shield resistance is less than the MIN value, do the following:

ECCN 9E991 BOEING PROPRIETARY - See title page for details

1) Check the test setup. Make sure that the couplers are only around the desired wire bundle and closed properly.

2) If the test setup is OK, check the operation of the LRT or ExLRT. To check the LRT or ExLRT operation, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801 or ExLRT Standard Measurement, TASK 05-56-02-200-802.

3) If no problem is found, check the entire length of the wire bundle. Look for signs of chafing or damage to the wire bundle that can cause the shield to short to structure.

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

a) If a problem is found, repair or replace in accordance with the SWPM Chapter 20.

4) If no defects are found with the wire bundle and the loop resistance value stays less than the MIN value, record this value and contact Boeing for support.

(b) If the wire bundle shield loop resistance is more than the MAX value, do the following:

1) Measure the joint resistance across the connector from the ground terminal to primary structure (TASK 05-56-04-200-801 or TASK 05-56-05-200-801).

a) If the joint value measured is more than the maximum joint resistance value in the data table listed in TASK 05-56-04-200-801 or TASK 05-56-05-200-801, repair in accordance with the SWPM Chapter 20.

b) If the measured resistance value stays more than the maximum value given in the data table, do this step:

<1> Record the resistance value and contact Boeing for support.

(c) After the wire bundle or connector is repaired, do the Functional Check of the wire bundle shielding again on this wire bundle.

SUBTASK 05-55-44-200-013

(5) Connectors listed in this Table are used for the task(s) above.

Table 612/05-55-44-993-815

WIRE BUNDLE	CONNECTOR	WDM	PNL OR MODULE
W1164	D30234	24-11-11, 24-21-11, 24-24-11, 29-11-11, 76-21-11, 77-12-21, 80-11-11	AS1L, M2 speed - CDS
W1166	D30256	73-22-11, 74-11-11	AS1L, Pwr relay-alt pwr EEC
W1168	D30260	73-21-11, 73-21-12, 73-21-21, 73-24-11, 73-24-12, 74-31-11, 78-35-11	AS1L
W1170	D30212	73-22-11, 74-11-11, 77-12-11	AS1L, EEC-eng start

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Table 612/05-55-44-993-815 (Continued)

WIRE BUNDLE	CONNECTOR	WDM	PNL OR MODULE
W1170	D30228	30-21-11, 31-62-14, 77-31-11, 79-31-11	AS1L
W1172	D30224	73-21-11, 73-21-12, 73-21-21, 73-24-11, 73-24-12, 74-31-11, 78-35-11	AS1L, EEC - P8

I. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-44-410-004

(1) Close this access panel:

Number	Name/Location
431AT	Forward Strut Fairing, Thumbnail Fairing, Strut 1

SUBTASK 05-55-44-410-008

(2) Do these steps to close the applicable access panels:

(a) Close these access panels:

Number	Name/Location
431AL	Forward Strut Fairing, Left Thrust Reverser Disconnect, Strut 1
431AR	Forward Strut Fairing, Right Thrust Reverser Disconnect, Strut 1

(b) Install the bolts with grease, D00633, on the access panels.

1) Install the two lower bolts and tighten sufficiently to compress the seal before torque.

NOTE: The access panel and seal under panel are installed as one assembly.

a) Make sure that the seal does not have interference with the seal on the thumbnail fairing.

2) Install the four upper bolts.

3) Tighten the bolts to 65 ±15 in-lb (7 ±2 N·m).

SUBTASK 05-55-44-440-005

(3) Do this task: Thrust Reverser Activation After Ground Maintenance, TASK 78-31-00-440-803-F00.

SUBTASK 05-55-44-440-006

(4) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

SUBTASK 05-55-44-410-005

(5) Do this task: Leading Edge Flaps and Slats Retraction, TASK 27-81-00-860-804.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

NOTE:

PANELS 431AT, 431AL AND 431AR HAVE BEEN REMOVED.

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Loop Resistance Test of Wire Bundle - Strut Disconnect - Left Engine - Connector Location
Figure 605/05-55-44-990-810

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-44-200-806

7. Loop Resistance Test of Wire Bundle - Left Wing to Body Fairing

(Figure 606)

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
27-81-00-040-801	Leading Edge Flaps and Slats Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

C. Location Zones

Zone	Area
191	Lower Wing-To-Body Fairing - Forward of Wing Box

D. Access Panels

Number	Name/Location
191FL	Forward Wing To Body Fairing Panel - Mid Fairing, Above Ram Air Inlet

E. Prepare for the procedure

SUBTASK 05-55-44-940-013

(1) The loop resistance tester, SPL-1636, or MK loop resistance tester, SPL-18565, is required for this task.

SUBTASK 05-55-44-200-020

(2) Make a copy of the data sheet (Table 613) to record data during the task.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 613/05-55-44-993-823 Loop Resistance Test of Wire Bundle - Left Wing to Body Fairing - Data Sheet

PLANE:					
DATE:					
TECHNICIAN:					
BUNDLE NUMBER	**CONNECTOR NUMBER**	**MEASURED LOOP RESISTANCE VALUE (mΩ)**	**MIN/MAX VALUE (mΩ)**	**PASS/ FAIL**	**RETEST MEASURED VALUE/COMMENTS**
W1174	D39919		4 - 26		
W1176	D39923		5 - 28		

SUBTASK 05-55-44-200-021

(3) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail: "The Boeing Company, Attention: Manager, Lightning / HIRF Maintenance Programs Engineering, P.O. Box 3707, MC 2J-10, Seattle, WA 98124-2207, USA".

3) By Fax: 425-717-1960.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-44-010-009

(4) Do this task:Leading Edge Flaps and Slats Deactivation, TASK 27-81-00-040-801.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-55-44-010-008

(5) Open this access panel:

Number	Name/Location
191FL	Forward Wing To Body Fairing Panel - Mid Fairing, Above Ram Air Inlet

F. Procedure

SUBTASK 05-55-44-200-022

(1) Procedure to do the Functional Check of the wire bundle shielding:

NOTE: This step checks the wire bundle shielding for the scheduled maintenance check. This step also checks the wire bundle shielding after any repair is done with the wire bundle or connector.

(a) Measure the loop resistance (TASK 05-56-03-200-801 or TASK 05-56-05-200-801) for each wire bundle listed in Table(s) using the loop resistance tester, SPL-1636, or MK loop resistance tester, SPL-18565, correspondingly:

NOTE: In the case of multiple wire bundles going to/from a connector, make sure the coupler is only around the desired bundle. This may require removing (and replacing) wire ties to separate the bundles enough for coupler connection.

1) Record the measured value to the data sheet.

2) Make sure the measured value is within the MIN/MAX value range listed in the data sheet.

3) If the measured value is not within the MIN/MAX value range, do the Troubleshooting step below for the wire bundle shielding failure.

4) This step is complete when all wire bundles listed in Table were tested and passed.

SUBTASK 05-55-44-810-008

(2) Procedure to do the Troubleshooting step for the wire bundle shielding:

NOTE: Perform this step only if the measured value of the Functional Check of the wire bundle shielding is not within the MIN/MAX value range.

NOTE: Record all the measurement data to the data sheet. This should include both initial and final values. Also record the troubleshooting steps taken to the RETEST MEASURED VALUE/COMMENTS column.

(a) If the wire bundle shield resistance is less than the MIN value, do the following:

1) Check the test setup. Make sure that the couplers are only around the desired wire bundle and closed properly.

2) If the test setup is OK, check the operation of the LRT or ExLRT. To check the LRT or ExLRT operation, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801 or ExLRT Standard Measurement, TASK 05-56-02-200-802.

3) If no problem is found, check the entire length of the wire bundle. Look for signs of chafing or damage to the wire bundle that can cause the shield to short to structure.

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

a) If a problem is found, repair or replace in accordance with the SWPM Chapter 20.

4) If no defects are found with the wire bundle and the loop resistance value stays less than the MIN value, record this value and contact Boeing for support.

(b) If the wire bundle shield loop resistance is more than the MAX value, do the following:

1) Measure the joint resistance across the connector from the ground terminal to primary structure (TASK 05-56-04-200-801 or TASK 05-56-05-200-801).

a) If the joint value measured is more than the maximum joint resistance value in the data table listed in TASK 05-56-04-200-801 or TASK 05-56-05-200-801, repair in accordance with the SWPM Chapter 20.

b) If the measured resistance value stays more than the maximum value given in the data table, do this step:

<1> Record the resistance value and contact Boeing for support.

(c) After the wire bundle or connector is repaired, do the Functional Check of the wire bundle shielding again on this wire bundle.

SUBTASK 05-55-44-200-023

(3) Connectors listed in this Table are used for the task(s) above.

Table 614/05-55-44-993-816

WIRE BUNDLE	CONNECTOR	WDM	PNL OR MODULE
W1174	D39919	73-21-11, 73-21-12, 73-21-21, 73-24-11, 73-24-12, 74-31-11, 78-32-51, 78-35-11, 78-36-11	AC520, CDS - EEC
W1176	D39923	30-11-11, 36-11-11, 73-21-11, 73-21-12, 73-21-21, 73-24-11, 73-24-12, 77-31-11, 78-35-11, 78-36-11	AC520, EEC

G. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-44-410-006

(1) Close this access panel:

Number	Name/Location
191FL	Forward Wing To Body Fairing Panel - Mid Fairing, Above Ram Air Inlet

SUBTASK 05-55-44-410-007

(2) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Loop Resistance Test of Wire Bundle - Left Wing to Body Fairing - Connection Location
Figure 606/05-55-44-990-812

ECCN 9E991 BOEING PROPRIETARY - See title page for details

H/L PROTECTION -LRT- RIGHT SIDE WIRE BUNDLES - FUNCTIONAL CHECK

1. General

A. This procedure contains scheduled maintenance task data.

B. This procedure contains tasks that inspect selected wire bundles and connectors on the right side of the airplane.

TASK 05-55-45-200-801

2. Loop Resistance Test of Wire Bundle - Right Main Landing Gear Wheel Well

(Figure 601)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) As part of the AMM validation program, this procedure has been validated at a customer site for the June 15, 2012 revision.

B. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
32-00-01-080-801	Landing Gear Downlock Pins Removal (P/B 201)
32-00-01-480-801	Landing Gear Downlock Pins Installation (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

D. Location Zones

Zone	Area
134	Main Landing Gear Wheel Well, Body Station 663.75 to Body Station 727.00 - Right

E. Prepare for the procedure

SUBTASK 05-55-45-940-009

(1) The loop resistance tester, SPL-1636, or MK loop resistance tester, SPL-18565, is required for this task.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-55-45-010-001

(2) Make a copy of the data sheet (Table 601) to record data during the task.

Table 601/05-55-45-993-823 Loop Resistance Test of Wire Bundle - Right Main Landing Gear Wheel Well - Data Sheet

PLANE:					
DATE:					
TECHNICIAN:					
BUNDLE NUMBER	**CONNECTOR NUMBER**	**MEASURED LOOP RESISTANCE VALUE (mΩ)**	**MIN/MAX VALUE (mΩ)**	**PASS FAIL**	**RETEST MEASURED VALUE/COMMENTS**
W1032	D43100P		11-49		
	D43102P		31-75		

SUBTASK 05-55-45-940-007

(3) Do this task: Landing Gear Downlock Pins Installation, TASK 32-00-01-480-801.

SUBTASK 05-55-45-200-021

(4) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail: "The Boeing Company, Attention: Manager, Lightning / HIRF Maintenance Programs Engineering, P.O. Box 3707, MC 2J-10, Seattle, WA 98124-2207, USA".

3) By Fax: 425-717-1960.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

F. Procedure

SUBTASK 05-55-45-200-001

(1) Procedure to do the Functional Check of the wire bundle shielding:

NOTE: This step checks the wire bundle shielding for the scheduled maintenance check. This step also checks the wire bundle shielding after any repair is done with the wire bundle or connector.

(a) Measure the loop resistance (TASK 05-56-03-200-801 or TASK 05-56-05-200-801) for each wire bundle listed in Table(s) using the loop resistance tester, SPL-1636, or MK loop resistance tester, SPL-18565, correspondingly:

NOTE: In the case of multiple wire bundles going to/from a connector, make sure the coupler is only around the desired bundle. This may require removing (and replacing) wire ties to separate the bundles enough for coupler connection.

1) Record the measured value to the data sheet.

2) Make sure the measured value is within the MIN/MAX value range listed in the data sheet.

3) If the measured value is not within the MIN/MAX value range, do the Troubleshooting step below for the wire bundle shielding failure.

4) This step is complete when all wire bundles listed in Table were tested and passed.

SUBTASK 05-55-45-810-001

(2) Procedure to do the Troubleshooting step for the wire bundle shielding:

NOTE: Perform this step only if the measured value of the Functional Check of the wire bundle shielding is not within the MIN/MAX value range.

NOTE: Record all the measurement data to the data sheet. This should include both initial and final values. Also record the troubleshooting steps taken to the RETEST MEASURED VALUE/COMMENTS column.

(a) If the wire bundle shield resistance is less than the MIN value, do the following:

1) Check the test setup. Make sure that the couplers are only around the desired wire bundle and closed properly.

2) If the test setup is OK, check the operation of the LRT or ExLRT. To check the LRT or ExLRT operation, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801 or ExLRT Standard Measurement, TASK 05-56-02-200-802.

3) If no problem is found, check the entire length of the wire bundle. Look for signs of chafing or damage to the wire bundle that can cause the shield to short to structure.

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

a) If a problem is found, repair or replace in accordance with the SWPM Chapter 20.

4) If no defects are found with the wire bundle and the loop resistance value stays less than the MIN value, record this value and contact Boeing for support.

(b) If the wire bundle shield loop resistance is more than the MAX value, do the following:

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1) Measure the joint resistance across the connector from the ground terminal to primary structure (TASK 05-56-04-200-801 or TASK 05-56-05-200-801).

a) If the joint value measured is more than the maximum joint resistance value in the data table listed in TASK 05-56-04-200-801 or TASK 05-56-05-200-801, repair in accordance with the SWPM Chapter 20.

b) If the measured resistance value stays more than the maximum value given in the data table, do this step:

<1> Record the resistance value and contact Boeing for support.

(c) After the wire bundle or connector is repaired, do the Functional Check of the wire bundle shielding again on this wire bundle.

SUBTASK 05-55-45-200-002

(3) Connectors listed in this Table are used for the task(s) above.

Table 602/05-55-45-993-810

WIRE BUNDLE	CONNECTOR	WDM	PNL OR MODULE
W1032	D43100P	22-11-31, 27-18-11, 27-32-11, 27-62-14	AL720C or AL0720C POS 1 - Spoiler, DFCS
W1032	D43102P	22-11-11, 22-11-31, 22-12-41	AL720D or AL0720D POS 2 - Spoiler, DFCS

G. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-45-940-001

(1) Do this task: Landing Gear Downlock Pins Removal, TASK 32-00-01-080-801.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Loop Resistance Test of Wire Bundle - Right Main Landing Gear Wheel Well - Connector Location
Figure 601/05-55-45-990-807 (Sheet 1 of 2)

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DISCONNECT PANELS, AL0720C AND AL0720D

B

NOTE:
COVER PLATE REMOVED.

U69027 S0000213683_V2

Loop Resistance Test of Wire Bundle - Right Main Landing Gear Wheel Well - Connector Location
Figure 601/05-55-45-990-807 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-45-200-802

3. Loop Resistance Test of Wire Bundle - Right Wing to Body Fairing

(Figure 602)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) As part of the AMM validation program, this procedure has been validated at a customer site for the June 15, 2012 revision.

B. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
27-81-00-040-801	Leading Edge Flaps and Slats Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

D. Location Zones

Zone	Area
191	Lower Wing-To-Body Fairing - Forward of Wing Box

E. Access Panels

Number	Name/Location
191FR	Forward Wing To Body Fairing Panel - Mid Fairing, Above Ram Air Inlet

F. Prepare for the procedure

SUBTASK 05-55-45-940-010

(1) The loop resistance tester, SPL-1636, or MK loop resistance tester, SPL-18565, is required for this task.

SUBTASK 05-55-45-200-004

(2) Make a copy of the data sheet (Table 603) to record data during the task.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 603/05-55-45-993-817 Loop Resistance Test of Wire Bundle - Right Wing to Body Fairing - Data Sheet

PLANE:					
DATE:					
TECHNICIAN:					
BUNDLE NUMBER	**CONNECTOR NUMBER**	**MEASURED LOOP RESISTANCE VALUE (mΩ)**	**MIN/MAX VALUE (mΩ)**	**PASS FAIL**	**RETEST MEASURED VALUE/COMMENTS**
W1282	D39932		14-48		
W1284	D39912		13-47		

SUBTASK 05-55-45-200-022

(3) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail: "The Boeing Company, Attention: Manager, Lightning / HIRF Maintenance Programs Engineering, P.O. Box 3707, MC 2J-10, Seattle, WA 98124-2207, USA".

3) By Fax: 425-717-1960.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-45-040-001

(4) Deactivate the Leading edge Slats:

(a) Do this task: Leading Edge Flaps and Slats Deactivation, TASK 27-81-00-040-801.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-55-45-010-002

(5) Open this access panel:

Number	Name/Location
191FR	Forward Wing To Body Fairing Panel - Mid Fairing, Above Ram Air Inlet

G. Procedure

SUBTASK 05-55-45-200-005

(1) Procedure to do the Functional Check of the wire bundle shielding:

NOTE: This step checks the wire bundle shielding for the scheduled maintenance check. This step also checks the wire bundle shielding after any repair is done with the wire bundle or connector.

(a) Measure the loop resistance (TASK 05-56-03-200-801 or TASK 05-56-05-200-801) for each wire bundle listed in Table(s) using the loop resistance tester, SPL-1636, or MK loop resistance tester, SPL-18565, correspondingly:

NOTE: In the case of multiple wire bundles going to/from a connector, make sure the coupler is only around the desired bundle. This may require removing (and replacing) wire ties to separate the bundles enough for coupler connection.

1) Record the measured value to the data sheet.

2) Make sure the measured value is within the MIN/MAX value range listed in the data sheet.

3) If the measured value is not within the MIN/MAX value range, do the Troubleshooting step below for the wire bundle shielding failure.

4) This step is complete when all wire bundles listed in Table were tested and passed.

SUBTASK 05-55-45-810-002

(2) Procedure to do the Troubleshooting step for the wire bundle shielding:

NOTE: Perform this step only if the measured value of the Functional Check of the wire bundle shielding is not within the MIN/MAX value range.

NOTE: Record all the measurement data to the data sheet. This should include both initial and final values. Also record the troubleshooting steps taken to the RETEST MEASURED VALUE/COMMENTS column.

(a) If the wire bundle shield resistance is less than the MIN value, do the following:

1) Check the test setup. Make sure that the couplers are only around the desired wire bundle and closed properly.

2) If the test setup is OK, check the operation of the LRT or ExLRT. To check the LRT or ExLRT operation, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801 or ExLRT Standard Measurement, TASK 05-56-02-200-802.

3) If no problem is found, check the entire length of the wire bundle. Look for signs of chafing or damage to the wire bundle that can cause the shield to short to structure.

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

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a) If a problem is found, repair or replace in accordance with the SWPM Chapter 20.

4) If no defects are found with the wire bundle and the loop resistance value stays less than the MIN value, record this value and contact Boeing for support.

(b) If the wire bundle shield loop resistance is more than the MAX value, do the following:

1) Measure the joint resistance across the connector from the ground terminal to primary structure (TASK 05-56-04-200-801 or TASK 05-56-05-200-801).

a) If the joint value measured is more than the maximum joint resistance value in the data table listed in TASK 05-56-04-200-801 or TASK 05-56-05-200-801, repair in accordance with the SWPM Chapter 20.

b) If the measured resistance value stays more than the maximum value given in the data table, do this step:

<1> Record the resistance value and contact Boeing for support.

(c) After the wire bundle or connector is repaired, do the Functional Check of the wire bundle shielding again on this wire bundle.

SUBTASK 05-55-45-200-006

(3) Connectors listed in this Table are used for the task(s) above.

Table 604/05-55-45-993-811

WIRE BUNDLE	CONNECTOR	WDM	PNL OR MODULE
W1282	D39932	26-11-21, 73-22-11, 74-11-11	AC520, Alt pwr - Relay
W1284	D39912	76-21-21, 77-12-21, 80-11-11	AC520, EEC - Starter valve

H. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-45-410-001

(1) Close this access panel:

Number	Name/Location
191FR	Forward Wing To Body Fairing Panel - Mid Fairing, Above Ram Air Inlet

SUBTASK 05-55-45-440-001

(2) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Loop Resistance Test of Wire Bundle - Right Wing to Body Fairing - Connector Location
Figure 602/05-55-45-990-808

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-45-200-803

4. Loop Resistance Test of Wire Bundle - Right Wing Trailing Edge

(Figure 603)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) As part of the AMM validation program, this procedure has been validated at a customer site for the June 15, 2012 revision.

B. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
27-51-00-040-801	Trailing Edge Flap System Deactivation (P/B 201)
27-51-00-440-801	Trailing Edge Flap System Reactivation (P/B 201)
27-51-00-860-803	Extend the Trailing Edge Flaps (P/B 201)
27-51-00-860-804	Retract the Trailing Edge Flaps (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

D. Location Zones

Zone	Area
650	Subzone - Right Wing: Trailing Edge, Aft of Rear Spar, Inboard of Outboard Trailing Edge Flap
660	Subzone - Right Wing: Trailing Edge, Aft of Rear Spar, Outboard of Inboard Trailing Edge Flap, Inboard of Fixed Trailing Edge

E. Prepare for the procedure

SUBTASK 05-55-45-940-011

(1) The loop resistance tester, SPL-1636, or MK loop resistance tester, SPL-18565, is required for this task.

SUBTASK 05-55-45-200-019

(2) Make a copy of the data sheet (Table 605) to record data during the task.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 605/05-55-45-993-818 Loop Resistance Test of Wire Bundle - Right Wing Trailing Edge - Data Sheet

PLANE:					
DATE:					
TECHNICIAN:					
BUNDLE NUMBER	**CONNECTOR NUMBER**	**MEASURED LOOP RESISTANCE VALUE (mΩ)**	**MIN/MAX VALUE (mΩ)**	**PASS FAIL**	**RETEST MEASURED VALUE/COMMENTS**
W1034	D00229		9-36		
	D1697		46-109		
	D1701		45-108		

SUBTASK 05-55-45-200-023

(3) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail: "The Boeing Company, Attention: Manager, Lightning / HIRF Maintenance Programs Engineering, P.O. Box 3707, MC 2J-10, Seattle, WA 98124-2207, USA".

3) By Fax: 425-717-1960.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-45-010-003

(4) Do this task: Extend the Trailing Edge Flaps, TASK 27-51-00-860-803.

SUBTASK 05-55-45-040-002

(5) Do this task: Trailing Edge Flap System Deactivation, TASK 27-51-00-040-801.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

F. Procedure

SUBTASK 05-55-45-200-008

(1) Procedure to do the Functional Check of the wire bundle shielding:

NOTE: This step checks the wire bundle shielding for the scheduled maintenance check. This step also checks the wire bundle shielding after any repair is done with the wire bundle or connector.

(a) Measure the loop resistance (TASK 05-56-03-200-801 or TASK 05-56-05-200-801) for each wire bundle listed in Table(s) using the loop resistance tester, SPL-1636, or MK loop resistance tester, SPL-18565, correspondingly:

NOTE: In the case of multiple wire bundles going to/from a connector, make sure the coupler is only around the desired bundle. This may require removing (and replacing) wire ties to separate the bundles enough for coupler connection.

1) Record the measured value to the data sheet.

2) Make sure the measured value is within the MIN/MAX value range listed in the data sheet.

3) If the measured value is not within the MIN/MAX value range, do the Troubleshooting step below for the wire bundle shielding failure.

4) This step is complete when all wire bundles listed in Table were tested and passed.

SUBTASK 05-55-45-810-003

(2) Procedure to do the Troubleshooting step for the wire bundle shielding:

NOTE: Perform this step only if the measured value of the Functional Check of the wire bundle shielding is not within the MIN/MAX value range.

NOTE: Record all the measurement data to the data sheet. This should include both initial and final values. Also record the troubleshooting steps taken to the RETEST MEASURED VALUE/COMMENTS column.

(a) If the wire bundle shield resistance is less than the MIN value, do the following:

1) Check the test setup. Make sure that the couplers are only around the desired wire bundle and closed properly.

2) If the test setup is OK, check the operation of the LRT or ExLRT. To check the LRT or ExLRT operation, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801 or ExLRT Standard Measurement, TASK 05-56-02-200-802.

3) If no problem is found, check the entire length of the wire bundle. Look for signs of chafing or damage to the wire bundle that can cause the shield to short to structure.

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

a) If a problem is found, repair or replace in accordance with the SWPM Chapter 20.

4) If no defects are found with the wire bundle and the loop resistance value stays less than the MIN value, record this value and contact Boeing for support.

(b) If the wire bundle shield loop resistance is more than the MAX value, do the following:

ECCN 9E991 BOEING PROPRIETARY - See title page for details

1) Measure the joint resistance across the connector from the ground terminal to primary structure (TASK 05-56-04-200-801 or TASK 05-56-05-200-801).

a) If the joint value measured is more than the maximum joint resistance value in the data table listed in TASK 05-56-04-200-801 or TASK 05-56-05-200-801, repair in accordance with the SWPM Chapter 20.

b) If the measured resistance value stays more than the maximum value given in the data table, do this step:

<1> Record the resistance value and contact Boeing for support.

(c) After the wire bundle or connector is repaired, do the Functional Check of the wire bundle shielding again on this wire bundle.

SUBTASK 05-55-45-200-009

(3) Connectors listed in this Table are used for the task(s) above.

Table 606/05-55-45-993-812

WIRE BUNDLE	CONNECTOR	WDM	PNL OR MODULE
W1034	D00229	22-11-11, 22-12-41, 27-32-11, 27-52-11	T428-Flap Posn Sensor
W1034	D1697	22-11-31	Spoiler 9, sensor, FCC (a)
W1034	D1701	22-11-31	Spoiler 9, sensor, FCC (b)

G. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-45-440-002

(1) Do this task: Trailing Edge Flap System Reactivation, TASK 27-51-00-440-801.

SUBTASK 05-55-45-410-002

(2) Do this task: Retract the Trailing Edge Flaps, TASK 27-51-00-860-804.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

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Loop Resistance Test of Wire Bundle - Right Wing Trailing Edge - Connector Location
Figure 603/05-55-45-990-809 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

U69089 S0000213710_V2

Loop Resistance Test of Wire Bundle - Right Wing Trailing Edge - Connector Location
Figure 603/05-55-45-990-809 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-45-200-804

5. Loop Resistance Test of Wire Bundle - Right Wing Leading Edge

(Figure 604)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) As part of the AMM validation program, this procedure has been validated at a customer site for the June 15, 2012 revision.

B. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
27-81-00-040-801	Leading Edge Flaps and Slats Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
27-81-00-860-803	Leading Edge Flaps and Slats Extension (P/B 201)
27-81-00-860-804	Leading Edge Flaps and Slats Retraction (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

D. Location Zones

Zone	Area
610	Subzone - Right Wing: Leading Edge, Forward of Front Spar, Inboard of Nacelle Strut, Including Gap Cover Area
620	Subzone - Right Wing: Leading Edge, Forward of Front Spar, Outboard of Nacelle Strut

E. Access Panels

Number	Name/Location
441CL	Forward Strut Fairing, Left Overwing Fairing, Strut 2
611AB	Inboard Leading Edge, Lower Removable Access Panel
621GB	Refuel Access Panel - Slat Station 143.27

ECCN 9E991 BOEING PROPRIETARY - See title page for details

F. Prepare for the procedure

SUBTASK 05-55-45-940-012

(1) The loop resistance tester, SPL-1636, or MK loop resistance tester, SPL-18565, is required for this task.

SUBTASK 05-55-45-200-018

(2) Make a copy of the data sheet (Table 607) to record data during the task.

Table 607/05-55-45-993-819 Loop Resistance Test of Wire Bundle - Right Wing Leading Edge - Data Sheet

PLANE:					
DATE:					
TECHNICIAN:					
BUNDLE NUMBER	CONNECTOR NUMBER	MEASURED LOOP RESISTANCE VALUE (mΩ)	MIN/MAX VALUE (mΩ)	PASS FAIL	RETEST MEASURED VALUE/COMMENTS
W1264	D30116		9-33		
W1268	D30184		3-20		
W1272	D30142		3-20		
W1278	D8156J		5-29		
W1664	D4578J		3-23		

SUBTASK 05-55-45-200-024

(3) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail: "The Boeing Company, Attention: Manager, Lightning / HIRF Maintenance Programs Engineering, P.O. Box 3707, MC 2J-10, Seattle, WA 98124-2207, USA".

ECCN 9E991 BOEING PROPRIETARY - See title page for details

3) By Fax: 425-717-1960.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-45-010-004

(4) Do this task: Leading Edge Flaps and Slats Extension, TASK 27-81-00-860-803.

SUBTASK 05-55-45-040-003

(5) Do this task: Leading Edge Flaps and Slats Deactivation, TASK 27-81-00-040-801.

SUBTASK 05-55-45-010-005

(6) Open these access panels:

Number	Name/Location
441CL	Forward Strut Fairing, Left Overwing Fairing, Strut 2
611AB	Inboard Leading Edge, Lower Removable Access Panel
621GB	Refuel Access Panel - Slat Station 143.27

G. Procedure

SUBTASK 05-55-45-200-011

(1) Procedure to do the Functional Check of the wire bundle shielding:

NOTE: This step checks the wire bundle shielding for the scheduled maintenance check. This step also checks the wire bundle shielding after any repair is done with the wire bundle or connector.

(a) Measure the loop resistance (TASK 05-56-03-200-801 or TASK 05-56-05-200-801) for each wire bundle listed in Table(s) using the loop resistance tester, SPL-1636, or MK loop resistance tester, SPL-18565, correspondingly:

NOTE: In the case of multiple wire bundles going to/from a connector, make sure the coupler is only around the desired bundle. This may require removing (and replacing) wire ties to separate the bundles enough for coupler connection.

1) Record the measured value to the data sheet.

2) Make sure the measured value is within the MIN/MAX value range listed in the data sheet.

3) If the measured value is not within the MIN/MAX value range, do the Troubleshooting step below for the wire bundle shielding failure.

4) This step is complete when all wire bundles listed in Table were tested and passed.

SUBTASK 05-55-45-810-004

(2) Procedure to do the Troubleshooting step for the wire bundle shielding:

NOTE: Perform this step only if the measured value of the Functional Check of the wire bundle shielding is not within the MIN/MAX value range.

NOTE: Record all the measurement data to the data sheet. This should include both initial and final values. Also record the troubleshooting steps taken to the RETEST MEASURED VALUE/COMMENTS column.

(a) If the wire bundle shield resistance is less than the MIN value, do the following:

1) Check the test setup. Make sure that the couplers are only around the desired wire bundle and closed properly.

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2) If the test setup is OK, check the operation of the LRT or ExLRT. To check the LRT or ExLRT operation, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801 or ExLRT Standard Measurement, TASK 05-56-02-200-802.

3) If no problem is found, check the entire length of the wire bundle. Look for signs of chafing or damage to the wire bundle that can cause the shield to short to structure.

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

a) If a problem is found, repair or replace in accordance with the SWPM Chapter 20.

4) If no defects are found with the wire bundle and the loop resistance value stays less than the MIN value, record this value and contact Boeing for support.

(b) If the wire bundle shield loop resistance is more than the MAX value, do the following:

1) Measure the joint resistance across the connector from the ground terminal to primary structure (TASK 05-56-04-200-801 or TASK 05-56-05-200-801).

a) If the joint value measured is more than the maximum joint resistance value in the data table listed in TASK 05-56-04-200-801 or TASK 05-56-05-200-801, repair in accordance with the SWPM Chapter 20.

b) If the measured resistance value stays more than the maximum value given in the data table, do this step:

<1> Record the resistance value and contact Boeing for support.

(c) After the wire bundle or connector is repaired, do the Functional Check of the wire bundle shielding again on this wire bundle.

SUBTASK 05-55-45-200-012

(3) Connectors listed in this Table are used for the task(s) above.

Table 608/05-55-45-993-813

WIRE BUNDLE	CONNECTOR	WDM	PNL OR MODULE
W1264	D30116	24-11-21, 24-21-21, 24-24-21, 29-11-11, 76-21-21, 77-12-21, 80-11-11	AW258R, M2 speed - CDS
W1268	D30184	30-11-11, 36-11-11, 73-21-11, 73-21-12, 73-21-21, 73-24-12, 73-24-21, 77-31-21, 78-35-21, 78-36-21	AW258R, EEC, CDS
W1272	D30142	73-21-11, 73-21-12, 73-21-21, 73-24-12, 73-24-21, 74-31-11, 78-32-61, 78-35-21, 78-36-21	AW258R, EEC - P8

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Table 608/05-55-45-993-813 (Continued)

WIRE BUNDLE	CONNECTOR	WDM	PNL OR MODULE
W1278	D8156J	26-11-21, 30-21-21, 31-62-24, 73-22-11, 74-11-11, 77-12-11, 77-31-21, 79-31-11	AW258R, Alt pwr - EEC
W1664	D4578J	28-41-11, 28-44-11	AD520, Wing Refuel Panel

H. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-45-410-003

(1) Close these access panels:

Number	Name/Location
441CL	Forward Strut Fairing, Left Overwing Fairing, Strut 2
611AB	Inboard Leading Edge, Lower Removable Access Panel
621GB	Refuel Access Panel - Slat Station 143.27

SUBTASK 05-55-45-440-003

(2) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

SUBTASK 05-55-45-440-006

(3) Do this task: Leading Edge Flaps and Slats Retraction, TASK 27-81-00-860-804.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Loop Resistance Test of Wire Bundle - Right Wing Leading Edge - Connector Location
Figure 604/05-55-45-990-810 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Loop Resistance Test of Wire Bundle - Right Wing Leading Edge - Connector Location
Figure 604/05-55-45-990-810 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-45-200-805

6. Loop Resistance Test of Wire Bundle - Strut Disconnect - Right Engine

(Figure 605)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) As part of the AMM validation program, this task has been validated at a customer site for the June 15, 2012 revision.

B. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
27-81-00-040-801	Leading Edge Flaps and Slats Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
27-81-00-860-803	Leading Edge Flaps and Slats Extension (P/B 201)
27-81-00-860-804	Leading Edge Flaps and Slats Retraction (P/B 201)
78-31-00-040-802-F00	Thrust Reverser Deactivation For Ground Maintenance (P/B 201)
78-31-00-440-803-F00	Thrust Reverser Activation After Ground Maintenance (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

D. Consumable Materials

Reference	Description	Specification
D00633	Grease - Aircraft General Purpose	BMS3-33

E. Location Zones

Zone	Area
441	Engine 2 - Forward Strut Fairing

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F. **Access Panels**

Number	Name/Location
441AL	Forward Strut Fairing, Left Thrust Reverser Disconnect, Strut 2
441AR	Forward Strut Fairing, Right Thrust Reverser Disconnect, Strut 2
441AT	Forward Strut Fairing, Thumbnail Fairing, Strut 2

G. **Prepare for the Loop Resistance Test of Wire Bundle**

SUBTASK 05-55-45-940-013

(1) The loop resistance tester, SPL-1636, or MK loop resistance tester, SPL-18565, is required for this task.

SUBTASK 05-55-45-200-014

(2) Make a copy of the data sheet (Table 609 and Table 610) to record data during the task.

Table 609/05-55-45-993-820 Loop Resistance Test of Wire Bundle - Strut Disconnect - Right Engine - Data Sheet

PLANE:					
DATE:					
TECHNICIAN:					
BUNDLE NUMBER	**CONNECTOR NUMBER**	**MEASURED JOINT RESISTANCE VALUE (mΩ)**	**MIN/MAX VALUE (mΩ)**	**PASS FAIL**	**RETEST MEASURED VALUE/COMMENTS**
W1268	D30408		6-26		
W1268	D30410		2-18		
W1272	D30402		2-24		
W1272	D30406		2-18		

Table 610/05-55-45-993-821 Loop Resistance Test of Wire Bundle - Strut Disconnect - Right Engine - Data Sheet

PLANE:					
DATE:					
TECHNICIAN:					
BUNDLE NUMBER	**CONNECTOR NUMBER**	**MEASURED LOOP RESISTANCE VALUE (mΩ)**	**MIN/MAX VALUE (mΩ)**	**PASS FAIL**	**RETEST MEASURED VALUE/COMMENTS**
W1264	D30434		9-33		
W1266	D30456		29-70		
W1268	D30460		3-19		
W1270	D30428		13-43		
W1272	D30424		3-20		

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-55-45-200-020

(3) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail: "The Boeing Company, Attention: Manager, Lightning / HIRF Maintenance Programs Engineering, P.O. Box 3707, MC 2J-10, Seattle, WA 98124-2207, USA".

3) By Fax: 425-717-1960.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-45-010-006

(4) Do this task: Leading Edge Flaps and Slats Extension, TASK 27-81-00-860-803.

SUBTASK 05-55-45-040-004

(5) Do this task: Leading Edge Flaps and Slats Deactivation, TASK 27-81-00-040-801.

SUBTASK 05-55-45-040-005

(6) Do this task: Thrust Reverser Deactivation For Ground Maintenance, TASK 78-31-00-040-802-F00.

SUBTASK 05-55-45-010-007

(7) Open these access panels:

Number	Name/Location
441AL	Forward Strut Fairing, Left Thrust Reverser Disconnect, Strut 2
441AR	Forward Strut Fairing, Right Thrust Reverser Disconnect, Strut 2
441AT	Forward Strut Fairing, Thumbnail Fairing, Strut 2

H. Loop Resistance Test of Wire Bundle

SUBTASK 05-55-45-420-002

(1) Do the Joint Resistance check for connectors listed in Table 611:

(a) For W1268-D30408:

1) Place the LRT Sense coupler on W1268 common to connector D30408.

2) Place the LRT Drive coupler on W1272 common to connector D30402.

3) Placing one Joint probe on D30408's receptacle and the other on the strut tray primary structure, measure the joint resistance and record the value on the data sheet (TASK 05-56-04-200-801 or TASK 05-56-05-200-801).

(b) For W1268-D30410:

1) Place the LRT Sense coupler on W1268 common to connector D30410.

2) Place the LRT Drive coupler on W1272 common to connector D30406.

3) Placing one Joint probe on D30410's receptacle and the other on the strut tray primary structure, measure the joint resistance and record the value on the data sheet (TASK 05-56-04-200-801 or TASK 05-56-05-200-801).

(c) For W1272-D30402:

1) Place the LRT Sense coupler on W1272 common to connector D30402.

2) Place the LRT Drive coupler on W1268 common to connector D30408.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

3) Placing one Joint probe on D30402's receptacle and the other on the strut tray primary structure, measure the joint resistance and record the value on the data sheet (TASK 05-56-04-200-801 or TASK 05-56-05-200-801).

(d) For W1272-D30406:

1) Place the LRT Sense coupler on W1272 common to connector D30406.

2) Place the LRT Drive coupler on W1268 common to connector D30410.

3) Placing one Joint probe on D30406's receptacle and the other on the strut tray primary structure, measure the joint resistance and record the value on the data sheet (TASK 05-56-04-200-801 or TASK 05-56-05-200-801).

Table 611/05-55-45-993-814

WIRE BUNDLE	CONNECTOR	WDM	PNL OR MODULE
W1268	D30408	78-35-21, 78-36-21	AS2R, T/R LVDT - EEC
W1268	D30410	78-35-21, 78-36-21	AS3R, EEC - T/R LVDT
W1272	D30402	78-32-61, 78-35-21, 78-36-21	AS2R, EEC - T/R LVDT
W1272	D30406	78-32-61, 78-35-21, 78-36-21	AS3R, EEC - T/R LVDT

SUBTASK 05-55-45-200-029

(2) If any measured value is not within the MIN/MAX value range indicated on the data sheet, measure the joint resistance build-up on that connector (TASK 05-56-04-200-801 or TASK 05-56-05-200-801).

(a) If a measurement value is greater than MAXIMUM ALLOWABLE RESISTANCE value, repair the failed connector (SWPM Chapter 20).

SUBTASK 05-55-45-200-036

(3) Do the functional check of the wire bundle shielding:

NOTE: This step does the check of the wire bundle shielding for the scheduled maintenance check. This step also does the check of the wire bundle shielding after any repair is done with the wire bundle or connector.

(a) Measure the loop resistance for each wire bundle listed in Table 612 using the loop resistance tester, SPL-1636, or MK loop resistance tester, SPL-18565, correspondingly (TASK 05-56-03-200-801 or TASK 05-56-05-200-801).

NOTE: In the case of multiple wire bundles going to/from a connector, make sure that the coupler is only around the desired bundle. This can require removing (and replacing) wire ties to separate the bundles enough for coupler connection.

1) Record the measured value to the data sheet.

2) Make sure that the measured value is within the MIN/MAX value range listed in the data sheet.

3) If the measured value is not within the MIN/MAX value range, do the troubleshooting step below for the wire bundle shielding failure.

4) This step is complete when all wire bundles listed in Table 612 were tested and passed.

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SUBTASK 05-55-45-810-007

(4) If it is necessary, do the troubleshooting for the wire bundle shielding:

NOTE: Do this step only if the measured value of the functional check of the wire bundle shielding is not within the MIN/MAX value range.

NOTE: Record all the measurement data to the data sheet. This should include both initial and final values. Also record the troubleshooting steps taken to the RETEST MEASURED VALUE/COMMENTS column.

(a) If the wire bundle shield resistance is less than the MIN value, do the following:

1) Do the check of the test setup and make sure that the couplers are only around the desired wire bundle and closed properly.

2) If the test setup is OK, do a check of the operation of the LRT or ExLRT (TASK 05-56-02-200-801 or TASK 05-56-02-200-802).

3) If no problem is found, do a check of the entire length of the wire bundle for signs of chafing or damage to the wire bundle that can cause the shield to short to structure.

NOTE: An example could be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another could be some metallic object penetrating the insulation and making contact between the shield and structure.

a) If a problem is found, repair or replace (SWPM Chapter 20).

4) If no defects are found with the wire bundle and the loop resistance value stays less than the MIN value, record this value and contact Boeing for support.

(b) If the wire bundle shield loop resistance is more than the MAX value, do the following:

1) Measure the joint resistance across the connector from the ground terminal to primary structure (TASK 05-56-04-200-801 or TASK 05-56-05-200-801).

a) If the joint value measured is more than the maximum joint resistance value in the data table listed in TASK 05-56-04-200-801 or TASK 05-56-05-200-801, correct the problem (SWPM Chapter 20).

b) If the measured resistance value stays more than the maximum value given in the data table, do this step:

<1> Record the resistance value and contact Boeing for support.

(c) After the wire bundle or connector is repaired, do the functional check of the wire bundle shielding again on this wire bundle.

SUBTASK 05-55-45-200-016

(5) Connectors listed in Table 612 are used for the steps above.

Table 612/05-55-45-993-815

WIRE BUNDLE	CONNECTOR	WDM	PNL OR MODULE
W1264	D30434	24-11-21, 24-21-21, 24-24-21, 29-11-11, 76-21-21, 77-12-21, 80-11-11	AS1R, M2 speed - CDS
W1266	D30456	73-22-11, 74-11-11	AS1R, Pwr relay-alt pwr EEC

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 612/05-55-45-993-815 (Continued)

WIRE BUNDLE	CONNECTOR	WDM	PNL OR MODULE
W1268	D30460	73-21-11, 73-21-12, 73-21-21, 73-24-12, 73-24-21, 78-35-21	AS1R, EEC - T/R LVDT
W1270	D30428	30-21-21, 31-62-24, 77-31-21, 79-31-11	AS1R
W1272	D30424	73-21-11, 73-21-12, 73-21-21, 73-24-12, 73-24-21, 74-31-11, 78-35-21	AS1R, EEC - T/R LVDT

I. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-45-410-004

(1) Close this access panel:

Number	Name/Location
441AT	Forward Strut Fairing, Thumbnail Fairing, Strut 2

SUBTASK 05-55-45-410-008

(2) Do these steps to close the applicable access panels:

(a) Close these access panels:

Number	Name/Location
441AL	Forward Strut Fairing, Left Thrust Reverser Disconnect, Strut 2
441AR	Forward Strut Fairing, Right Thrust Reverser Disconnect, Strut 2

(b) Install the bolts with grease, D00633, on the access panels.

1) Install the two lower bolts and tighten sufficiently to compress the seal before torque.

NOTE: The access panel and seal under panel are installed as one assembly.

a) Make sure that the seal does not have interference with seal on the thumbnail fairing.

2) Install the four upper bolts.

3) Tighten the bolts to 65 ±15 in-lb (7 ±2 N·m).

SUBTASK 05-55-45-440-004

(3) Do this task: Thrust Reverser Activation After Ground Maintenance, TASK 78-31-00-440-803-F00.

SUBTASK 05-55-45-440-005

(4) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

SUBTASK 05-55-45-410-005

(5) Do this task: Leading Edge Flaps and Slats Retraction, TASK 27-81-00-860-804.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

NOTE:
PANELS 441AT, 441AL AND 441AR HAVE BEEN REMOVED.

U69100 S0000213731_V3

Loop Resistance Test of Wire Bundle - Strut Disconnect - Right Engine - Connector Location
Figure 605/05-55-45-990-811

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-45-200-806

7. Loop Resistance Test of Wire Bundle - Right Wing to Body Fairing

(Figure 606)

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
27-81-00-040-801	Leading Edge Flaps and Slats Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

C. Location Zones

Zone	Area
191	Lower Wing-To-Body Fairing - Forward of Wing Box

D. Access Panels

Number	Name/Location
191FR	Forward Wing To Body Fairing Panel - Mid Fairing, Above Ram Air Inlet

E. Prepare for the procedure

SUBTASK 05-55-45-940-014

(1) The loop resistance tester, SPL-1636, or MK loop resistance tester, SPL-18565, is required for this task.

SUBTASK 05-55-45-200-025

(2) Make a copy of the data sheet (Table 613) to record data during the task.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 613/05-55-45-993-822 Loop Resistance Test of Wire Bundle - Right Wing to Body Fairing - Data Sheet

PLANE:					
DATE:					
TECHNICIAN:					
BUNDLE NUMBER	**CONNECTOR NUMBER**	**MEASURED LOOP RESISTANCE VALUE (mΩ)**	**MIN/MAX VALUE (mΩ)**	**PASS FAIL**	**RETEST MEASURED VALUE/COMMENTS**
W1274	D39920		4-25		
W1276	D39924		5-28		

SUBTASK 05-55-45-200-026

(3) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail: "The Boeing Company, Attention: Manager, Lightning / HIRF Maintenance Programs Engineering, P.O. Box 3707, MC 2J-10, Seattle, WA 98124-2207, USA".

3) By Fax: 425-717-1960.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-45-010-008

(4) Do this task: Leading Edge Flaps and Slats Deactivation, TASK 27-81-00-040-801.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-55-45-010-009

(5) Open this access panel:

Number	Name/Location
191FR	Forward Wing To Body Fairing Panel - Mid Fairing, Above Ram Air Inlet

F. Procedure

SUBTASK 05-55-45-200-027

(1) Procedure to do the Functional Check of the wire bundle shielding:

NOTE: This step checks the wire bundle shielding for the scheduled maintenance check. This step also checks the wire bundle shielding after any repair is done with the wire bundle or connector.

(a) Measure the loop resistance (TASK 05-56-03-200-801 or TASK 05-56-05-200-801) for each wire bundle listed in Table(s) using the loop resistance tester, SPL-1636, or MK loop resistance tester, SPL-18565, correspondingly:

NOTE: In the case of multiple wire bundles going to/from a connector, make sure the coupler is only around the desired bundle. This may require removing (and replacing) wire ties to separate the bundles enough for coupler connection.

1) Record the measured value to the data sheet.

2) Make sure the measured value is within the MIN/MAX value range listed in the data sheet.

3) If the measured value is not within the MIN/MAX value range, do the Troubleshooting step below for the wire bundle shielding failure.

4) This step is complete when all wire bundles listed in Table were tested and passed.

SUBTASK 05-55-45-810-006

(2) Procedure to do the Troubleshooting step for the wire bundle shielding:

NOTE: Perform this step only if the measured value of the Functional Check of the wire bundle shielding is not within the MIN/MAX value range.

NOTE: Record all the measurement data to the data sheet. This should include both initial and final values. Also record the troubleshooting steps taken to the RETEST MEASURED VALUE/COMMENTS column.

(a) If the wire bundle shield resistance is less than the MIN value, do the following:

1) Check the test setup. Make sure that the couplers are only around the desired wire bundle and closed properly.

2) If the test setup is OK, check the operation of the LRT or ExLRT. To check the LRT or ExLRT operation, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801 or ExLRT Standard Measurement, TASK 05-56-02-200-802.

3) If no problem is found, check the entire length of the wire bundle. Look for signs of chafing or damage to the wire bundle that can cause the shield to short to structure.

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

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a) If a problem is found, repair or replace in accordance with the SWPM Chapter 20.

4) If no defects are found with the wire bundle and the loop resistance value stays less than the MIN value, record this value and contact Boeing for support.

(b) If the wire bundle shield loop resistance is more than the MAX value, do the following:

1) Measure the joint resistance across the connector from the ground terminal to primary structure (TASK 05-56-04-200-801 or TASK 05-56-05-200-801).

a) If the joint value measured is more than the maximum joint resistance value in the data table listed in TASK 05-56-04-200-801 or TASK 05-56-05-200-801, repair in accordance with the SWPM Chapter 20.

b) If the measured resistance value stays more than the maximum value given in the data table, do this step:

<1> Record the resistance value and contact Boeing for support.

(c) After the wire bundle or connector is repaired, do the Functional Check of the wire bundle shielding again on this wire bundle.

SUBTASK 05-55-45-200-028

(3) Connectors listed in this Table are used for the task(s) above.

Table 614/05-55-45-993-816

WIRE BUNDLE	CONNECTOR	WDM	PNL OR MODULE
W1274	D39920	73-21-11, 73-21-12, 73-21-21, 73-24-12, 73-24-21, 74-31-11, 78-32-61, 78-35-21, 78-36-21	AD520, EEC
W1276	D39924	30-11-11, 36-11-11, 73-21-11, 73-21-12, 73-21-21, 73-24-12, 73-24-21, 77-31-21, 78-35-21, 78-36-21	AD520, EEC

G. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-45-410-006

(1) Close this access panel:

Number	Name/Location
191FR	Forward Wing To Body Fairing Panel - Mid Fairing, Above Ram Air Inlet

SUBTASK 05-55-45-410-007

(2) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Loop Resistance Test of Wire Bundle - Right Wing to Body Fairing - Connector Location
Figure 606/05-55-45-990-813

ECCN 9E991 BOEING PROPRIETARY - See title page for details

H/L PROTECTION -LRT- EMPENNAGE WIRE BUNDLES INSPECTION

1. General

A. This procedure contains tasks that inspect selected wire bundles and connectors in the empennage area of the airplane.

TASK 05-55-46-200-801

2. Loop Resistance Test of Wire Bundle - Stabilizer Trim Compartment

(Figure 601)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is a scheduled maintenance task.

B. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

D. Location Zones

Zone	Area
310	Fuselage - Body Station 1016.00 to Body Station 1217.00

E. Access Panels

Number	Name/Location
311BL	Stabilizer Trim Access Door

F. Prepare for the procedure

SUBTASK 05-55-46-200-030

(1) The loop resistance tester, SPL-1636, or MK loop resistance tester, SPL-18565, is required for this task.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-55-46-200-023

(2) Make a copy of the following Loop Resistance data sheet to record data during the task.

Table 601/05-55-46-993-818 Loop Resistance Test of Wire Bundle - Stabilizer Trim Compartment - Data Sheet

PLANE:					
DATE:					
TECHNICIAN:					
BUNDLE NUMBER	**CONNECTOR NUMBER**	**MEASURED LOOP RESISTANCE VALUE (mΩ)**	**MIN/MAX VALUE (mΩ)**	**PASS FAIL**	**RETEST MEASURED VALUE/COMMENTS**
W4724	D10434		13–38		
	D10436		7–24		
W4726	D10912		11–33		

SUBTASK 05-55-46-200-016

(3) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail: "The Boeing Company, Attention: Manager, Lightning / HIRF Maintenance Programs Engineering, P.O. Box 3707, MC 2J-10, Seattle, WA 98124-2207, USA".

3) By Fax: 425-717-1960.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-55-46-010-001

(4) Open this access panel:

Number	Name/Location
311BL	Stabilizer Trim Access Door

G. Procedure

SUBTASK 05-55-46-200-006

(1) Procedure to do the Functional Check of the wire bundle shielding:

NOTE: This step checks the wire bundle shielding for the scheduled maintenance check. This step also checks the wire bundle shielding after any repair is done with the wire bundle or connector.

(a) Measure the loop resistance (TASK 05-56-03-200-801 or TASK 05-56-05-200-801) for each wire bundle listed in Table(s) using the loop resistance tester, SPL-1636, or MK loop resistance tester, SPL-18565, correspondingly:

NOTE: In the case of multiple wire bundles going to/from a connector, make sure the coupler is only around the desired bundle. This may require removing (and replacing) wire ties to separate the bundles enough for coupler connection.

1) Record the measured value to the data sheet.

2) Make sure the measured value is within the MIN/MAX value range listed in the data sheet.

3) If the measured value is not within the MIN/MAX value range, do the Troubleshooting step below for the wire bundle shielding failure.

4) This step is complete when all wire bundles listed in Table were tested and passed.

SUBTASK 05-55-46-810-003

(2) Procedure to do the Troubleshooting step for the wire bundle shielding:

NOTE: Perform this step only if the measured value of the Functional Check of the wire bundle shielding is not within the MIN/MAX value range.

NOTE: Record all the measurement data to the data sheet. This should include both initial and final values. Also record the troubleshooting steps taken to the RETEST MEASURED VALUE/COMMENTS column.

(a) If the wire bundle shield resistance is less than the MIN value, do the following:

1) Check the test setup. Make sure that the couplers are only around the desired wire bundle and closed properly.

2) If the test setup is OK, check the operation of the LRT or ExLRT. To check the LRT or ExLRT operation, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801 or ExLRT Standard Measurement, TASK 05-56-02-200-802.

3) If no problem is found, check the entire length of the wire bundle. Look for signs of chafing or damage to the wire bundle that can cause the shield to short to structure.

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

a) If a problem is found, repair or replace in accordance with the SWPM Chapter 20.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

4) If no defects are found with the wire bundle and the loop resistance value stays less than the MIN value, record this value and contact Boeing for support.

(b) If the wire bundle shield loop resistance is more than the MAX value, do the following:

1) Measure the joint resistance across the connector from the ground terminal to primary structure (TASK 05-56-04-200-801 or TASK 05-56-05-200-801).

a) If the joint value measured is more than the maximum joint resistance value in the data table listed in TASK 05-56-04-200-801 or TASK 05-56-05-200-801, repair in accordance with the SWPM Chapter 20.

b) If the measured resistance value stays more than the maximum value given in the data table, do this step:

<1> Record the resistance value and contact Boeing for support.

(c) After the wire bundle or connector is repaired, do the Functional Check of the wire bundle shielding again on this wire bundle.

SUBTASK 05-55-46-200-008

(3) Connectors listed in this Table are used for the task(s) above.

Table 602/05-55-46-993-809

WIRE BUNDLE	CONNECTOR	WDM	PNL OR MODULE
W4724	D10434	49-41-11, 49-52-31, 49-62-12, 49-62-51, 49-94-21	APU ECU
W4724	D10436	49-52-31, 49-62-12	APU ECU
W4726	D10912	49-52-31, 49-62-12, 49-71-21, 49-94-21	APU ECU

H. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-46-410-001

(1) Close this access panel:

Number	Name/Location
311BL	Stabilizer Trim Access Door

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

U69612 S0000213850_V2

Loop Resistance Test of Wire Bundle - Stabilizer Trim Compartment - Connector Location
Figure 601/05-55-46-990-808

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-46-200-802

3. Loop Resistance Test of Wire Bundle - Tailcone Access Compartment

(Figure 602)

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2
SPL-8965	LRT Jumper Cable Kit (12-ft cable IA2401-1 & 42-ft cable IA2402-1) Part #: 906-10281-1 Supplier: 3X2T2
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432
SPL-18884	Cable Kit - Jumper, ExLRT Part #: XLR-9801-01 Supplier: KC432

C. Access Panels

Number	Name/Location
318BR	Tailcone Access Door

D. Prepare for the procedure

SUBTASK 05-55-46-200-027

(1) The loop resistance tester, SPL-1636, or MK loop resistance tester, SPL-18565, is required for this task.

SUBTASK 05-55-46-200-024

(2) Record the measured resistance values in the table(s) below.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 603/05-55-46-993-820 Loop/Joint Resistance Test of Wire Bundle - Tailcone Access Compartment - Data Sheet

PLANE:						
DATE:						
TECH:						
BUNDLE NUMBER	CONNECTOR NUMBER	MEASUREMENT TYPE	MEASURED JOINT VALUE (mΩ)	MIN/MAX VALUE (mΩ)	PASS FAIL	RETEST MEASURED VALUE/COMMENTS
W3399	D1857	JOINT		50-119		
	GD973-ST	JOINT*[1]		1.0 MAX		
	GD4811-ST	JOINT*[1]		1.0 MAX		
	D1677	LOOP		40-96		
	D1679	LOOP		42-100		
W3397	GD949–ST	JOINT*[1]		1.0 MAX		
	GD973–ST	JOINT *[1]		1.0 MAX		
	D1711	LOOP		39-94		
	D1829	LOOP		39-94		
	D2205	LOOP		42-100		

*[1] Reference values for trouble shooting.

SUBTASK 05-55-46-200-015

(3) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail: "The Boeing Company, Attention: Manager, Lightning / HIRF Maintenance Programs Engineering, P.O. Box 3707, MC 2J-10, Seattle, WA 98124-2207, USA".

3) By Fax: 425-717-1960.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-55-46-010-004

(4) Open this access panel:

Number	Name/Location
318BR	Tailcone Access Door

E. Procedure

SUBTASK 05-55-46-280-005

(1) Do this task to test W3399-D1857:

(a) Connect one end of the 12 foot jumper, (jumper cable assembly, LRT (loop resistance tester), SPL-8965) or (ExLRT jumper cable kit, SPL-18884), to the housing of switch S773 (NOT the switch connector itself).

(b) Connect the other end of the 12 foot jumper, (jumper cable assembly, LRT (loop resistance tester), SPL-8965) or (ExLRT jumper cable kit, SPL-18884), to ground terminal GD479DC.

(c) Attach the drive coupler of the LRT to the 12-foot jumper cable.

(d) Attach the sense coupler of the LRT to the W3399 wire bundle.

(e) Do the Modified Loop Resistance Measurement (TASK 05-56-03-200-801 or TASK 05-56-05-200-801) for this setup loop. Make sure the loop resistance value is between 10 - 75 milliohms.

NOTE: The loop resistance value is for reference only (do not record).

(f) Measure the joint resistance (TASK 05-56-04-200-801 or TASK 05-56-05-200-801) from the S773 housing near D1857 to airplane structure.

NOTE: The joint resistance value measured in this step should be within the resistance limit specified in Table 603.

1) Record joint measurement value on the data sheet.

2) Make sure the joint measurement value is within the MIN/MAX value listed on the data sheet.

3) If the joint measurement value is not within the MIN/MAX value, repair according to SWPM Chapter 20.

(2) Do this task to test other points listed in Table below:

NOTE: Refer to Table 603 for resistance range and resistance test type.

(a) Place the LRT couplers around the ground wire near ground terminal.

(b) Measure the loop resistance (TASK 05-56-03-200-801 or TASK 05-56-05-200-801).

1) Make sure the loop measurement values are within the MIN/MAX values listed on the data sheet.

NOTE: The loop resistance value is to determine pass/fail (do not record). Joint resistance measurements are only required for trouble shooting unless specified.

(c) If necessary, measure the joint resistance (TASK 05-56-04-200-801 or TASK 05-56-05-200-801) from the ground terminal washer to airplane structure.

1) Record measured joint resistance value on the data sheet.

2) Make sure the joint measurement value is within the MAX value listed on the data sheet.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

3) If the joint measurement value is not within the MAX value, repair according to SWPM Chapter 20.

Table 604/05-55-46-993-810

WIRE BUNDLE	CONNECTOR	WDM	PNL OR MODULE
W3399	D01857	22-11-12	FCC-DFS, Elevator
W3397	GD949-ST	22-12-31	FCC-DFS, Elevator
W3397	GD973-ST	22-11-12	FCC-DFS, Elevator
W3397	D1711	22-12-31	FCC
W3397	D1829	22-12-31	FCC
W3397	D2205	22-12-31	FCC
W3399	GD973-ST	22-12-41	FCC-DFS, Elevator
W3399	GD4811-ST	22-12-41	FCC-DFS, Stab Position Sensor
W3399	D1677	22-12-41	FCC
W3399	D1679	22-12-41	FCC

F. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-46-410-002

(1) Close this access panel:

Number	Name/Location
318BR	Tailcone Access Door

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Loop Resistance Test of Wire Bundle - Tailcone Access Compartment - Connector Location
Figure 602/05-55-46-990-805 (Sheet 1 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Loop Resistance Test of Wire Bundle - Tailcone Access Compartment - Connector Location
Figure 602/05-55-46-990-805 (Sheet 2 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

1971726 S0000378047_V3

Loop Resistance Test of Wire Bundle - Tailcone Access Compartment - Connector Location
Figure 602/05-55-46-990-805 (Sheet 3 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

1972174 S0000378048_V3

Loop Resistance Test of Wire Bundle - Tailcone Access Compartment - Connector Location
Figure 602/05-55-46-990-805 (Sheet 4 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-46-200-803

4. Loop Resistance Test of Wire Bundle - Vertical Stabilizer

(Figure 603)

NOTE: Applicable to airplanes with the M2445 Rudder position sensor and M2446 Rudder actuator (servo) installed.

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

C. Location Zones

Zone	Area
320	Subzone - Vertical Fin and Rudder

D. Access Panels

Number	Name/Location
324JL	Vertical Fin, Access

E. Prepare for the Loop Resistance Test

SUBTASK 05-55-46-010-003

(1) Open this access panel:

Number	Name/Location
324JL	Vertical Fin, Access

SUBTASK 05-55-46-200-028

(2) The loop resistance tester, SPL-1636, or MK loop resistance tester, SPL-18565, is required for this task.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

LOM 427-431, 450, 465-999 (Continued)

SUBTASK 05-55-46-200-025

(3) Make a copy of the data sheet (Table 605) to record data during the task.

Table 605/05-55-46-993-825 Loop Resistance Test of Wire Bundle - Vertical Stabilizer - Data Sheet

PLANE:					
DATE:					
TECHNICIAN:					
BUNDLE NUMBER	**CONNECTOR NUMBER**	**MEASURED LOOP RESISTANCE VALUE (mΩ)**	**MIN/MAX VALUE (mΩ)**	**PASS FAIL**	**RETEST MEASURED VALUE/COMMENTS**
W7381	D11613		48–114		
	D11617		SDI		
W7383	D11615		53–126		
	D11619		SDI		

SUBTASK 05-55-46-200-017

(4) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail: "The Boeing Company, Attention: Manager, Lightning / HIRF Maintenance Programs Engineering, P.O. Box 3707, MC 2J-10, Seattle, WA 98124-2207, USA".

3) By Fax: 425-717-1960.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

F. Loop Resistance Test of Wire Bundle Vertical Stabilizer

SUBTASK 05-55-46-280-003

(1) Do these tasks for the wire bundles/ connectors listed in Table 606:

ECCN 9E991 BOEING PROPRIETARY - See title page for details

LOM 427-431, 450, 465-999 (Continued)

(a) For connectors D11613 and D11615, measure the loop resistance (TASK 05-56-03-200-801 or TASK 05-56-05-200-801).

1) Record measurement data for each connector on the data sheet in (Table 605).

2) Make sure that the measured value is within the MIN/MAX value range listed in the data sheet.

3) If the measured value is not within the MIN/MAX value range, do the Troubleshooting step below for the wire bundle shielding failure.

(b) For connectors D11617 and D11619, do the Special Detailed Inspections (SDI) on each connector.

1) Make sure that the connector is tight.

a) If a connector was loose and was tightened, note that on the data sheet.

(c) Repeat the above tasks as required for all connectors listed in the table.

Table 606/05-55-46-993-808

WIRE BUNDLE	CONNECTOR	WDM	PNL OR MODULE
W7381	D11613	22-11-81	FCC-DFCS Rudder Control
W7381	D11617	22-11-81	FCC-DFCS Rudder Control
W7383	D11615	22-11-81	FCC-DFCS Rudder Control
W7383	D11619	22-11-81	FCC-DFCS Rudder Control

SUBTASK 05-55-46-200-018

(2) Procedure to do the Troubleshooting step for the wire bundle shielding:

NOTE: Perform this step only if the measured value of the Functional Check of the wire bundle shielding is not within the MIN/MAX value range.

NOTE: Record all the measurement data to the data sheet. This should include both initial and final values. Also record the troubleshooting steps taken to the RETEST MEASURED VALUE/COMMENTS column.

(a) If the wire bundle shield resistance is less than the MIN value, do the following:

1) Check the test setup. Make sure that the couplers are only around the desired wire bundle and closed properly.

2) If the test setup is OK, check the operation of the LRT or ExLRT. To check the LRT or ExLRT operation, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801 or ExLRT Standard Measurement, TASK 05-56-02-200-802.

3) If no problem is found, check the entire length of the wire bundle. Look for signs of chafing or damage to the wire bundle that can cause the shield to short to structure.

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

a) If a problem is found, repair or replace in accordance with the SWPM Chapter 20.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

4) If no defects are found with the wire bundle and the loop resistance value stays less than the MIN value, record this value and contact Boeing for support.

(b) If the wire bundle shield loop resistance is more than the MAX value, do the following:

1) Measure the joint resistance across the connector from the ground terminal to primary structure (TASK 05-56-04-200-801 or TASK 05-56-05-200-801).

a) If the joint value measured is more than the maximum joint resistance value in the data table listed in TASK 05-56-04-200-801 or TASK 05-56-05-200-801, repair in accordance with the SWPM Chapter 20.

b) If the measured resistance value stays more than the maximum value given in the data table, do this step:

<1> Record the resistance value and contact Boeing for support.

(c) After the wire bundle or connector is repaired, do the Functional Check of the wire bundle shielding again on this wire bundle.

G. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-46-410-003

(1) Close this access panel:

Number	Name/Location
324JL	Vertical Fin, Access

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

U69607 S0000213932_V4

Loop Resistance Test of Wire Bundle - Vertical Stabilizer - Connector Location
Figure 603/05-55-46-990-806

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-46-200-804

5. Loop Resistance Test of Wire Bundle - Tailcone Strobe Light

(Figure 604)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is a Functional check of the Lightning/HIRF protection components in the tail cone for electrical bond degradation using the Loop Resistance Tester (LRT).

B. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

D. Location Zones

Zone	Area
318	Tail Cone Compartment - Right

E. Access Panels

Number	Name/Location
318BR	Tailcone Access Door

F. Prepare for the procedure

SUBTASK 05-55-46-200-029

(1) The loop resistance tester, SPL-1636, or MK loop resistance tester, SPL-18565, is required for this task.

SUBTASK 05-55-46-200-026

(2) Make a copy of the data sheet (Table 607) to record data during the task.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 607/05-55-46-993-826 Loop Resistance Test of Wire Bundle - Tailcone Strobe Light - Data Sheet

PLANE:					
DATE:					
TECHNICIAN:					
BUNDLE NUMBER	**CONNECTOR NUMBER**	**MEASURED LOOP RESISTANCE VALUE (mΩ)**	**MIN/MAX VALUE (mΩ)**	**PASS FAIL**	**RESET MEASURED VALUE/COMMENTS**
W7152	D00148		17–42		

SUBTASK 05-55-46-200-019

(3) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail: "The Boeing Company, Attention: Manager, Lightning / HIRF Maintenance Programs Engineering, P.O. Box 3707, MC 2J-10, Seattle, WA 98124-2207, USA".

3) By Fax: 425-717-1960.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-46-010-005

(4) Open this access panel:

Number	Name/Location
318BR	Tailcone Access Door

ECCN 9E991 BOEING PROPRIETARY - See title page for details

G. Procedure

SUBTASK 05-55-46-200-002

(1) Procedure to do the Functional Check of the wire bundle shielding:

NOTE: This step checks the wire bundle shielding for the scheduled maintenance check. This step also checks the wire bundle shielding after any repair is done with the wire bundle or connector.

(a) Measure the loop resistance (TASK 05-56-03-200-801 or TASK 05-56-05-200-801) for each wire bundle listed in Table(s) using the loop resistance tester, SPL-1636, or MK loop resistance tester, SPL-18565, correspondingly:

NOTE: In the case of multiple wire bundles going to/from a connector, make sure the coupler is only around the desired bundle. This may require removing (and replacing) wire ties to separate the bundles enough for coupler connection.

1) Record the measured value to the data sheet.

2) Make sure the measured value is within the MIN/MAX value range listed in the data sheet.

3) If the measured value is not within the MIN/MAX value range, do the Troubleshooting step below for the wire bundle shielding failure.

4) This step is complete when all wire bundles listed in Table were tested and passed.

SUBTASK 05-55-46-810-002

(2) Procedure to do the Troubleshooting step for the wire bundle shielding:

NOTE: Perform this step only if the measured value of the Functional Check of the wire bundle shielding is not within the MIN/MAX value range.

(a) If the wire bundle shield resistance is less than the MIN value, do the following:

1) Check the test setup. Make sure that the couplers are only around the desired wire bundle and closed properly.

2) If the test setup is OK, check the operation of the LRT or ExLRT. To check the LRT or ExLRT operation, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801 or ExLRT Standard Measurement, TASK 05-56-02-200-802.

3) If no problem is found, check the entire length of the wire bundle. Look for signs of chafing or damage to the wire bundle that can cause the shield to short to structure.

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

a) If a problem is found, repair or replace in accordance with the (SWPM Chapter 20).

4) If no defects are found with the wire bundle and the loop resistance value stays less than the MIN value, record this value and contact Boeing for support.

(b) If the wire bundle shield loop resistance is more than the MAX value, at the tailstrobe light location, do the following:

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1) Measure the joint resistance on the tailstrobe light connector as the following (TASK 05-56-04-200-801 or TASK 05-56-05-200-801):

a) Make sure that the joint resistance values from the braidsock to plug and plug to receptacle are not more than the maximum joint resistance values in the data table listed in TASK 05-56-04-200-801 or TASK 05-56-05-200-801.

b) Make sure that the joint resistance value from receptacle to Line Replaceable Unit (LRU) is not more than 2.5 milliohms

c) Make sure the joint resistance value from LRU to tailstrobe light housing is not more than 5.0 milliohms

d) If any joint measurement value is more than the maximum value, repair in accordance with the SWPM Chapter 20.

e) If all joint measurement value are not more than the maximum joint resistance values, do the task below.

(c) At the other end connector of the wire bundle, do the following:

1) Measure the joint resistance across the connector from the backshell to primary structure (TASK 05-56-04-200-801 or TASK 05-56-05-200-801).

a) If any joint value measured is more than the maximum joint resistance value in the data table listed in TASK 05-56-04-200-801 or TASK 05-56-05-200-801, repair in accordance with the SWPM Chapter 20.

b) If the measured resistance value stays more than the maximum value given in the data table, do this step:

<1> Record the resistance value and contact Boeing for support.

(d) After the wire bundle or connector is repaired, do the Functional Check of the wire bundle shielding again on this wire bundle.

SUBTASK 05-55-46-200-003

(3) Connector listed in this Table are used for the task(s) above.

Table 608/05-55-46-993-807

WIRE BUNDLE	CONNECTOR	WDM	PNL OR MODULE
W7152	D00148	33–44–12	Exterior Light

H. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-46-410-004

(1) Close this access panel:

Number	Name/Location
318BR	Tailcone Access Door

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

2035766 S0000409762_V2

Loop Resistance Test of Wire Bundle - Tailcone Strobe Light - Connector Location
Figure 604/05-55-46-990-807

ECCN 9E991 BOEING PROPRIETARY - See title page for details

HIRF/LIGHTNING CONNECTORS - LRT- PRESSURE VESSEL - FUNCTIONAL CHECK

1. General

A. This procedure has these tasks:

(1) Functionally check the Lightning/HIRF protection components in the LRRA Antenna installation .

TASK 05-55-47-200-801

2. Loop Resistance Test of Wire Bundle - LRRA

(Figure 601)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is a Functional check of the Lightning/HIRF protection components in the LRRA Antenna for electrical bond degradation using the Loop Resistance Tester (LRT).

(2) For ease of access, perform the functional check of the LRRA wire bundles at the EE bay area.

(3) Boeing requests that all data recorded while doing this procedure be submitted to the Boeing Company for engineering analysis. Send the data to one of the following addresses:

(a) Electronically: MTCProgLHIRFTaskCardData@boeing.com.

(b) By mail : "The Boeing Company, Attention: Manager, Lightning / HIRF, Mail Code: MC 2J-51, BLDG 11-14N, 2925 S. 112th St., Tukwila, WA 98108, USA".

(c) By Fax: 206-662-3672.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

B. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
34-33-11 P/B 401	LOW RANGE RADIO ALTIMETER ANTENNA - REMOVAL/INSTALLATION
34-33-21-000-801	Low Range Radio Altimeter (LRRA) Receiver/Transmitter (R/T) Removal (P/B 401)
34-33-21-400-801	Low Range Radio Altimeter (LRRA) Receiver/Transmitter (R/T) Installation (P/B 401)
SWPM Chapter 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Reference	Description
COM-1550	Bonding Meter - Approved, Intrinsically Safe (Approved for use in Class I, Divisions I & II hazardous (classified) locations. Outside these hazardous locations, COM-614 can be used in lieu of COM-1550). Part #: 620LK Supplier: 1CRL2 Part #: M1 Supplier: 3AD17 Part #: M1B Supplier: 3AD17 Part #: T477W (C15292) Supplier: 06659
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

D. Location Zones

Zone	Area
117	Electrical and Electronics Compartment - Left

E. Access Panels

Number	Name/Location
117A	Electronic Equipment Access Door
117AW	Equipment Access Door Cover
121KW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FILTER COVER
121LW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FAN COVER

F. Prepare for the Functional Test

SUBTASK 05-55-47-940-003

(1) The loop resistance tester, SPL-1636, or MK loop resistance tester, SPL-18565, is required for this task.

SUBTASK 05-55-47-940-001

(2) The intrinsically safe approved bonding meter, COM-1550 is required.

NOTE: Use this tool only if the troubleshooting task is required.

SUBTASK 05-55-47-200-001

(3) Make a copy of the data sheet (Table 601) to record data during the task.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 601/05-55-47-993-801 Loop Resistance Test of Wire Bundle - LRRA - Data Sheet

PLANE:					
DATE:					
TECHNICIAN:					
BUNDLE NUMBER	**CONNECTOR NUMBER**	**MEASURED LOOP RESISTANCE VALUE (mΩ)**	**MIN/MAX VALUE (mΩ)**	**PASS/ FAIL**	**RETEST MEASURED VALUE/COMMENTS**
W5295	D03667A		19 - 51		
W5293	D03667B		19 - 51		
W5299	D03669A		19 - 51		
W5297	D03669B		19 - 51		

(4) Open these access panels:

Number	Name/Location
121KW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FILTER COVER
121LW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FAN COVER

(5) Open these access panels only when the troubleshooting task is required:

Number	Name/Location
117A	Electronic Equipment Access Door
117AW	Equipment Access Door Cover

G. Functional Test Procedure

SUBTASK 05-55-47-200-002

(1) Procedure to do the Functional Check of the wire bundle shielding:

NOTE: This step checks the wire bundle shielding for the scheduled maintenance check. This step also checks the wire bundle shielding after any repair is done with the wire bundle or connector.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(a) Measure the loop resistance (TASK 05-56-03-200-801 or TASK 05-56-05-200-801) for each wire bundle listed in Table(s) using the loop resistance tester, SPL-1636, or MK loop resistance tester, SPL-18565, correspondingly:

NOTE: In the case of multiple wire bundles going to/from a connector, make sure the coupler is only around the desired bundle. This may require removing (and replacing) wire ties to separate the bundles enough for coupler connection.

1) Record the measured value to the data sheet.

2) Make sure the measured value is within the MIN/MAX value range listed in the data sheet.

3) If the measured value is not within the MIN/MAX value range, do the Troubleshooting step below for the wire bundle shielding failure.

4) This step is complete when all wire bundles listed in Table were tested and passed.

SUBTASK 05-55-47-200-004

(2) Connectors listed in this Table are used for the task above.

WIRE BUNDLE	CONNECTOR	WDM	PNL OR MODULE
W5293	D3667B	34–33–11	M1735
W5295	D3667A	34–33–11	M1735
W5297	D3669B	34–33–21	M1736
W5299	D3669A	34–33–21	M1736

SUBTASK 05-55-47-200-003

(3) Procedure to do the Troubleshooting step for the wire bundle shielding:

NOTE: Perform this step only if the measured value of the Functional Check of the wire bundle shielding is not within the MIN/MAX value range.

(a) If the wire bundle shield resistance is less than the MIN value, do the following:

1) Check the test setup. Make sure that the couplers are only around the desired wire bundle and closed properly.

2) If the test setup is OK, check the operation of the LRT or ExLRT. To check the LRT or ExLRT operation, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801 or ExLRT Standard Measurement, TASK 05-56-02-200-802.

3) If no problem is found, check the entire length of the wire bundle. Look for signs of chafing or damage to the wire bundle that can cause the shield to short to structure.

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

a) If a problem is found, repair or replace in accordance with SWPM Chapter 20.

4) If no defects are found with the wire bundle and the loop resistance value stays less than the MIN value, record this value and contact Boeing for support.

(b) If the wire bundle shield loop resistance is more than the MAX value, do the troubleshooting at the antenna end first.

NOTE: When the loop resistance is high, the failure likely is at the antenna end.

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1) Measure the joint resistance (TASK 05-56-04-200-801 or TASK 05-56-05-200-801) on the coax connector from plug to airplane structure:
   a) Make sure that the joint resistance value is not more than 8.5 milliohms.
   b) If the joint resistance value is more than 8.5 milliohms, do the following:
      <1> Measure the joint resistance on the coax connector from plug to receptacle (TASK 05-56-04-200-801 or TASK 05-56-05-200-801).
      <2> Make sure that the joint resistance value from plug to receptacle is not more than 5 milliohms.
      <3> If the joint resistance value is more than 5 milliohms, repair in accordance with the SWPM Chapter 20.
      <4> If the joint resistance value is not more than 5 milliohms, measure the joint resistance on the coax connector from receptacle to airplane structure (TASK 05-56-04-200-801 or TASK 05-56-05-200-801).
      <5> Verify that the joint resistance value is not more than 3.5 milliohms. If the joint resistance value is greater than 3.5 milliohms, replace the antenna (LOW RANGE RADIO ALTIMETER ANTENNA - REMOVAL/INSTALLATION, PAGEBLOCK 34-33-11/401).

WIRE BUNDLE	CONNECTOR AT LRRA END	CONNECTOR AT ANTENNA END	WDM
W5293	D3667B	D3671	34–33–11
W5295	D3667A	D3675	34–33–11
W5297	D3669B	D3673	34–33–21
W5299	D3669A	D3677	34–33–21

   c) If the joint resistance value is not more than 8.5 milliohms, move to connector at the LRRA Transceiver end of same wire bundle.
2) At the LRRA Transceiver end of the wire bundle, do the following:
   a) Remove the LRRA Transceiver, do this task: Low Range Radio Altimeter (LRRA) Receiver/Transmitter (R/T) Removal, TASK 34-33-21-000-801.
   b) Using intrinsically safe approved bonding meter, COM-1550, measure the resistance from the RA coax connector shell to the case of the LRRA Transceiver.
      <1> If the measured value is greater than 10 milliohms, replace the LRRA Transceiver.
   c) Using an intrinsically safe approved bonding meter, COM-1550, make sure that the resistance from the LRU mating coax connector shell, in the rack, to the cable backshell on the other side of the connector block (the cable going to the antenna) is no greater than 5 milliohms.
      <1> If the measured value is greater than 5 milliohms, troubleshoot the joint and either replace the coax connector block, repair the coax connector on the antenna cable, or replace the antenna cable connector.
      <2> If any repair is done, repeat the bond resistance measurement to verify that the measured resistance is now 5 milliohms or less.
   d) Re-install the LRRA Transceiver, do this task: Low Range Radio Altimeter (LRRA) Receiver/Transmitter (R/T) Installation, TASK 34-33-21-400-801.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

e) If a measured resistance value stays more than the given maximum value for the joint, do this step:

<1> Record the resistance value and contact Boeing for support.

(c) After the wire bundle or connector is repaired, do the Functional Check of the wire bundle shielding again on this wire bundle.

H. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-47-410-001

(1) Close these access panels:

Number	Name/Location
121KW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FILTER COVER
121LW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD FAN COVER

(2) Close these access panels:

Number	Name/Location
117A	Electronic Equipment Access Door
117AW	Equipment Access Door Cover

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Loop Resistance Test of Wire Bundle - LRRA - Connector Location
Figure 601/05-55-47-990-802 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Loop Resistance Test of Wire Bundle - LRRA - Connector Location
Figure 601/05-55-47-990-802 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

HIRF/LIGHTNING - FQIS WIRING AND BONDING - INSPECTION

1. **General**
   A. This procedure contains scheduled maintenance task data.
   B. This procedure contains tasks that inspect the bonding of the Fuel Quantity Indicating System (FQIS) wiring connectors at the fuel tank receptacles and inboard disconnect panels.
   C. Tasks contained in this procedure are:
      (1) FQIS Wiring And Bonding - Inspection
      NOTE: This task checks the shielding and connector bonding of the Fuel Quantity Indicating System out-tank wire bundles at the spar penetrations.
      (2) FQIS - Out Tank Connectors - Electrical Bonding Resistance Check
      (3) FQIS Wire Bundles - Fault isolation
      NOTE: This task is only used when the loop resistance value is out-of-range. During the test, record the Loop Resistance and Joint Resistance values to Data sheets.

SFAR 88

TASK 05-55-54-200-801

2. **FQIS Wiring And Bonding - Inspection**
   (Figure 601, Figure 602 and Figure 603)
   NOTE: This procedure is a scheduled maintenance task.
   A. General
      (1) This task has one or more steps which are a means to satisfy Airworthiness Limitation Instruction (ALI) requirements. An ALI note will follow the step to which it applies. Any step or sub-step that precedes or follows an ALI identified step is not subject to the ALI requirement.
      NOTE: This is applicable to Airworthiness Limitation 28-AWL-03.
      (2) To inspect the FQIS connectors at the fuel tank spar penetrations, a ladder and safety equipment may be required.
      (3) You will do Loop Resistance measurements on the wire bundles at the connectors listed in (Table 602) at the tank end of the bundles.
      NOTE: If the Loop Resistance measurement is not within limits, fault isolation on the tested wire bundle is required.
      (4) Boeing requests that all data recorded while doing this procedure be submitted to the Boeing Company for engineering analysis. Send the data to one of the following addresses:
         (a) Electronically: MTCProgLHIRFTaskCardData@boeing.com.
         (b) By mail : "The Boeing Company, Attention: Manager, Lightning / HIRF, Maintenance Programs Engineering, MC 110-SC15, BLDG 80, 2201 Seal Beach Blvd., Seal Beach, CA USA 90740, USA".
         (c) By Fax: +01 562-797-3634.
         NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program. This step is not required for the AWL or any regulatory requirement.
   B. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

Reference	Title
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
28-00-00-910-801	Airworthiness Limitation Precautions (P/B 201)
28-41-00-710-801	Operational Test - Fuel Quantity Indicating System (P/B 501)
32-00-01-080-801	Landing Gear Downlock Pins Removal (P/B 201)
32-00-01-480-801	Landing Gear Downlock Pins Installation (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-14504	Tester - Loop Resistance Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2

D. Location Zones

Zone	Area
133	Main Landing Gear Wheel Well, Body Station 663.75 to Body Station 727.00 - Left
510	Subzone - Left Wing: Leading Edge, Fwd of Front Spar, Inbd of Strut and Nacelle Gap Cover Area
610	Subzone - Right Wing: Leading Edge, Forward of Front Spar, Inboard of Nacelle Strut, Including Gap Cover Area

E. Access Panels

Number	Name/Location
521BB	Outboard Lower Fixed Leading Edge Access Panel - Slat Station 36.02
621BB	Outboard Lower Fixed Leading Edge Access Panel - Slat Station 36.02

F. Prepare for the Inspection Procedure

SUBTASK 05-55-54-410-001

(1) Do this task: Landing Gear Downlock Pins Installation, TASK 32-00-01-480-801.

SUBTASK 05-55-54-010-001

(2) Open these access panels:

Number	Name/Location
521BB	Outboard Lower Fixed Leading Edge Access Panel - Slat Station 36.02
621BB	Outboard Lower Fixed Leading Edge Access Panel - Slat Station 36.02

SUBTASK 05-55-54-840-001

(3) Make a copy of the data sheet (Table 601) to record data during the task.

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Table 601/05-55-54-993-808 FQIS Wiring and Bonding - Inspection - Data Sheet

PLANE:					
DATE:					
TECHNICIAN:					
BUNDLE NUMBER	**CONNECTOR NUMBER**	**MEASURED LOOP VALUE (mΩ)**	**MIN/MAX VALUE (mΩ)**	**PASS FAIL**	**RETEST MEASURED VALUE/COMMENTS**
LOOP RESISTANCE MEASUREMENTS:					
W1140	D11312		40/138		
W1138	D11314		40/138		
W7580	D11316		9/40		

SUBTASK 05-55-54-200-001

28-AWL-03: ALI

(4) To prepare the loop resistance tester, SPL-14504, (LRT) (BAE Systems Dallas Service Center (3X2T2), P/N 906-10246-2 or 906-10246-3 only), for use, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801.

NOTE: ALI - Refer to the task: Airworthiness Limitation Precautions, TASK 28-00-00-910-801, for important Information on airworthiness limitation instructions (ALIs).

NOTE: This is applicable to Airworthiness Limitation 28-AWL-03.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

G. FQIS Connector Wiring and Bonding Inspection

SUBTASK 05-55-54-760-001

28-AWL-03: ALI

(1) Do a Loop Resistance Measurement on every wire bundle listed in Table 602.

NOTE: ALI - Refer to the task: Airworthiness Limitation Precautions, TASK 28-00-00-910-801, for important Information on airworthiness limitation instructions (ALIs).

NOTE: This is applicable to Airworthiness Limitation 28-AWL-03.

NOTE: Typical LRT connections for the FQIS wire bundles are shown on (Figure 601)

28-AWL-03: ALI

(a) Put the LRT Drive and Sense couplers on the wire bundle before the point where the out-tank wire bundle shields breakout from the bundle, and do this task: Loop Resistance Measurement, TASK 05-56-03-200-801.

NOTE: ALI - Refer to the task: Airworthiness Limitation Precautions, TASK 28-00-00-910-801, for important Information on airworthiness limitation instructions (ALIs).

NOTE: This is applicable to Airworthiness Limitation 28-AWL-03.

(b) Record the value to the data sheet.

28-AWL-03: ALI

(c) Make sure the measured resistance value of the shield to ground termination is within the MIN/MAX values range listed in the data sheet (Table 601).

NOTE: ALI - Refer to the task: Airworthiness Limitation Precautions, TASK 28-00-00-910-801, for important Information on airworthiness limitation instructions (ALIs).

NOTE: This is applicable to Airworthiness Limitation 28-AWL-03.

(d) If the measured loop resistance value is not within the MIN/MAX values listed in the data sheet, do this task: FQIS Wiring And Bonding - Fault Isolation, TASK 05-55-54-810-805.

(e) If the measured loop resistance value is within the MIN/MAX values, continue to test on the next wire bundle in the Table.

Table 602/05-55-54-993-801

WIRE BUNDLE NUMBER	CONNECTOR	CONN NUMBER	GROUND	WDM
W1140	LEFT MAIN TANK W/O DENSITOMETER	D11312	GD3950-ST	28-41-11
W1138	RIGHT MAIN TANK W/O DENSITOMETER	D11314	GD3952-ST	28-41-11
W7580	CENTER MAIN TANK W/O DENSITOMETER	D11316	GD3774-ST	28-41-11

SUBTASK 05-55-54-710-002

(2) After doing the loop resistance measurement, perform the visual check on the ground wire terminations, connectors, and backshells associated with the wire bundle and make sure they are hand tight, and that there is no evidence of gross degradation or accidental damage. Also, for connector with ground wire which goes from pigtail-to-backshell and ground stud, visually/physically inspect the pigtail-to-backshell terminations and make sure the pigtail is securely fastened to the connector backshell.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(a) If a loose connector or backshell is found, record that condition to the Data Sheet. Repair per (SWPM Chapter 20).

(b) If a loose connector or backshell is found and tightened, retest the wire bundle (FQIS Wiring And Bonding - Inspection, TASK 05-55-54-200-801).

(c) Make a note of that condition for future reference.

H. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-54-710-001

(1) If any FQIS wire bundles were disturbed during the accomplishment of this procedure, then do this task: Operational Test - Fuel Quantity Indicating System, TASK 28-41-00-710-801.

SUBTASK 05-55-54-940-001

(2)

Close these access panels:

Number	Name/Location
521BB	Outboard Lower Fixed Leading Edge Access Panel - Slat Station 36.02
621BB	Outboard Lower Fixed Leading Edge Access Panel - Slat Station 36.02

SUBTASK 05-55-54-860-001

(3) Do this task: Landing Gear Downlock Pins Removal, TASK 32-00-01-080-801.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

LOOP RESISTANCE TESTER CONNECTIONS - LOOP TEST

J79867 S0000179417_V3

FQIS Wiring And Bonding - Inspection - Loop Resistance Test Connections
Figure 601/05-55-54-990-802

ECCN 9E991 BOEING PROPRIETARY - See title page for details

1839117 S0000324980_V4

FQIS Wiring And Bonding - Inspection - Connector Locations
Figure 602/05-55-54-990-803 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

1839119 S0000324981_V3

FQIS Wiring And Bonding - Inspection - Connector Locations
Figure 602/05-55-54-990-803 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

ENGINE VALVE SHUTOFF ACCESS
(LEFT SIDE IS SHOWN, RIGHT SIDE IS OPPOSITE)

A

J86734 S0000182303_V3

FQIS Wiring and Bonding Inspection - Connector LocationsEngine Valve Shutoff
Figure 603/05-55-54-990-805

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-54-200-802

3. FQIS - Out Tank Connectors - Electrical Bonding Resistance Check

(Figure 604)

A. General

(1) This procedure is an unscheduled maintenance task.

(2) This task has one or more steps which are a means to satisfy Critical Design Configuration Control Limitation (CDCCL) requirements. A CDCCL note will follow the step to which it applies. Any step or sub-step that precedes or follows a CDCCL identified step is not subject to the CDCCL requirement.

(a) For important information on CDCCL requirements, refer to this task: Airworthiness Limitation Precautions, TASK 05-00-00-910-802.

NOTE: This is applicable to Airworthiness Limitation 28-AWL-04.

B. References

Reference	Title
05-00-00-910-802	Airworthiness Limitation Precautions (P/B 201)
SWPM 20-20-00	ELECTRICAL BONDING PROCESSES
SWPM Chapter 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-1550	Bonding Meter - Approved, Intrinsically Safe (Approved for use in Class I, Divisions I & II hazardous (classified) locations. Outside these hazardous locations, COM-614 can be used in lieu of COM-1550). Part #: 620LK Supplier: 1CRL2 Part #: M1 Supplier: 3AD17 Part #: M1B Supplier: 3AD17 Part #: T477W (C15292) Supplier: 06659

D. FQIS - Out Tank Connectors - Electrical Bonding Resistance Check

SUBTASK 05-55-54-200-002

28-AWL-04: CDCCL

(1) Measure the electrical bonding resistance from the shield terminal lug on the connector backshell to airplane structure for each connector listed in Table 603 (SWPM 20-20-00):

NOTE: CDCCL - Refer to the task: Airworthiness Limitation Precautions, TASK 05-00-00-910-802, for information on Critical Design Configuration Control Limitations (CDCCLs).

NOTE: This is applicable to Airworthiness Limitation 28-AWL-04.

(a) Use an intrinsically safe approved bonding meter, COM-1550.

(b) To measure the joint resistance, do these steps:

1) Connect one probe of the intrinsically safe approved bonding meter, COM-1550, to the airplane structure within 1 in. (25 mm) of the joint being measured.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

2) Connect the second joint probe to the shield terminal lug on the connector backshell.

3) Record the resistance value.

28-AWL-04: CDCCL

(c) Make sure the electrical bonding resistance from the shield terminal lug on the connector backshell to airplane structure is the “MAX JOINT VALUE” or less listed in Table 603.

NOTE: CDCCL - Refer to the task: Airworthiness Limitation Precautions, TASK 05-00-00-910-802, for information on Critical Design Configuration Control Limitations (CDCCLs).

NOTE: This is applicable to Airworthiness Limitation 28-AWL-04.

(d) If the electrical bonding resistance from the shield terminal lug on the connector backshell to airplane structure is greater than the “MAX JOINT VALUE” listed in Table 603, repair the wiring (SWPM Chapter 20).

Table 603/05-55-54-993-805

WIRE BUNDLE NUMBER	FUNCTION	CONNECTOR	WDM	MAX JOINT VALUE (mOhm)
W1140	LEFT MAIN TANK	D39915	28-41-11	3.0
W1138	RIGHT MAIN TANK	D39916	28-41-11	3.0
W7580	CENTER MAIN TANK	D4850P	28-41-11	3.0

E. Put the Airplane Back to Its Usual Condition

28-AWL-04: CDCCL

SUBTASK 05-55-54-200-003

(1) If any FQIS out-tank wire bundle is replaced or the FQIS wire bundle's shield is splice, repaired, or re-connected, do this task: FQIS Wiring And Bonding - Inspection, TASK 05-55-54-200-801.

NOTE: CDCCL - Refer to the task: Airworthiness Limitation Precautions, TASK 05-00-00-910-802, for information on Critical Design Configuration Control Limitations (CDCCLs).

NOTE: This is applicable to Airworthiness Limitation 28-AWL-04.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

2247099 S0000503818_V2

FQIS - Out Tank Connectors
Figure 604/05-55-54-990-811 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

2247089 S0000503819_V2

FQIS - Out Tank Connectors
Figure 604/05-55-54-990-811 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

2247086 S0000503820_V3

FQIS - Out Tank Connectors
Figure 604/05-55-54-990-811 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-54-810-805

4. FQIS Wiring And Bonding - Fault Isolation

(Figure 605 or Figure 606 or Figure 607)

A. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

B. Location Zones

Zone	Area
133	Main Landing Gear Wheel Well, Body Station 663.75 to Body Station 727.00 - Left
510	Subzone - Left Wing: Leading Edge, Fwd of Front Spar, Inbd of Strut and Nacelle Gap Cover Area
610	Subzone - Right Wing: Leading Edge, Forward of Front Spar, Inboard of Nacelle Strut, Including Gap Cover Area

C. Access Panels

Number	Name/Location
511AT	Inboard Leading Edge, Strakelet Upper Panel
611AT	Inboard Leading Edge, Strakelet Upper Access Panel

D. Procedure

SUBTASK 05-55-54-940-002

(1) These panels must be opened to inspect/check the left and right wing FQIS wire bundle installations.

Number	Name/Location
511AT	Inboard Leading Edge, Strakelet Upper Panel
611AT	Inboard Leading Edge, Strakelet Upper Access Panel

SUBTASK 05-55-54-760-007

(2) To isolate a fault associated with the Loop Resistance Measurement of the FQIS system wire bundles, do the followings:

SUBTASK 05-55-54-760-009

(3) If the wire bundle shield loop resistance is GREATER than the MAX VALUE in (Table 601), do these tasks:

NOTE: The main current paths making up the bond at the fuel tank end of the bundle consist of three main parts: the bundle connector to the fuel tank receptacle; the receptacle to structure attachment itself; and the bondstrap from receptacle to structure.

(a) Measure the joint resistance (TASK 05-56-04-200-801 or TASK 05-56-05-200-801 from the ground terminal to primary structure.

1) Record the measurement value in the (Table 604).

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 604/05-55-54-993-807 FQIS Wiring and Bonding Fault Isolation - Data Sheet

PLANE:					
DATE:					
TECHNICIAN:					
BUNDLE NUMBER	**CONNECTOR NUMBER**	**MEASURED LOOP VALUE (mΩ)**	**MAX VALUE (mΩ)**	**PASS FAIL**	**RETEST MEASURED VALUE/COMMENTS**
JOINT RESISTANCE, GROUND TERMINAL TO BRACKET:					
W1140	GD-3950-ST		1.0		
W1138	GD-3952-ST		1.0		
W7580	GD-3774-ST		1.0		
JOINT RESISTANCE, BRACKET TO SPAR:					
W1140	GD-3950-ST		1.0		
W1138	GD-3952-ST		1.0		
W7580	GD-3774-ST		1.0		
JOINT RESISTANCE, BACKSHELL TO RECEPTACLE:					
W7580	D4850P		3.0		
JOINT RESISTANCE, BACKSHELL TO PLUG:					
W1140	D39915		2.5		
W1138	D39916		2.5		
W7580	D4850P		3.0		
JOINT RESISTANCE, PLUG TO RECEPTACLE:					
W1140	D39915		5.0		
W1138	D39916		5.0		
JOINT RESISTANCE, RECEPTACLE TO MATING SURFACE:					
W1140	D39915		2.5		
W1138	D39916		2.5		

2) If the joint value measured is GREATER than the MAX VALUE in the (Table 604), repair in accordance with the (SWPM Chapter 20).

3) If the joint value measured is LESS than the MAX VALUE in the (Table 604), move to the inboard end of that wire bundle and perform the step below:

(b) Measure the joint resistance (TASK 05-56-04-200-801 or TASK 05-56-05-200-801) from the backshell to primary structure at the inboard end of that wire bundle.

1) Record the measurement value in the (Table 604).

2) If the joint value measured is GREATER than the MAX VALUE in the (Table 604), repair in accordance with the (SWPM Chapter 20).

3) If the joint value measured is still LESS than the MAX VALUE in the (Table 604), repair the wire bundle shield termination in accordance with the (SWPM Chapter 20).

ECCN 9E991 BOEING PROPRIETARY - See title page for details

a) If the shield termination is good and does not require rework, the wire bundle itself has failure. Repair or replace the wire bundle in accordance with the (SWPM Chapter 20).

(c) After the shield termination or wire bundle is repaired or replaced, do this task: FQIS Wiring And Bonding - Inspection, TASK 05-55-54-200-801 on this wire bundle.

SUBTASK 05-55-54-760-008

(4) If the wire bundle shield resistance is LESS than the MIN VALUE in (Table 601), do the followings:

(a) Check the operation of the LRT or ExLRT. To check the LRT or ExLRT operation, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801 or ExLRT Standard Measurement, TASK 05-56-02-200-802.

(b) If no problem is found with the LRT, check the test setup. Make sure the couplers only be clamped around the wire bundle being measured and must be closed properly.

(c) If no problem is found, do a detailed visual inspection along the entire length of the wire bundle being measured. Look for signs of chafing or damage to the wire bundle that would result in the shielding shorting to structure somewhere along its length.

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

1) If a problem is found, repair or replace in accordance with the (SWPM Chapter 20).

2) If a problem was found and repaired, retest the wire bundle (FQIS Wiring And Bonding - Inspection, TASK 05-55-54-200-801).

(d) If no defects are found with the wire bundle and the loop resistance value is still LESS than the MIN VALUE, record this value and report this condition to Boeing for investigation and disposition.

SUBTASK 05-55-54-940-003

(5)

Close these access panels:

Number	Name/Location
511AT	Inboard Leading Edge, Strakelet Upper Panel
611AT	Inboard Leading Edge, Strakelet Upper Access Panel

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

LOOP RESISTANCE TESTER CONNECTIONS - JOINT TEST

J79870 S0000179418_V3

FQIS Wiring And Bonding - Inspection - Joint Resistance Test Connections
Figure 605/05-55-54-990-808

ECCN 9E991 BOEING PROPRIETARY - See title page for details

STRAKELET ACCESS PANEL REMOVED
(LEFT SIDE IS SHOWN, RIGHT SIDE IS OPPOSITE)

A

J86728 S0000182301_V2

FQIS Wiring And Bonding - Connectors - Strakelet Access
Figure 606/05-55-54-990-810

ECCN 9E991 BOEING PROPRIETARY - See title page for details

J86717 S0000182276_V2

FQIS Wiring And Bonding - Inspection - Connector Locations
Figure 607/05-55-54-990-809 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

J86723 S0000182279_V3

FQIS Wiring And Bonding - Inspection - Connector Locations
Figure 607/05-55-54-990-809 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

HIRF/LIGHTNING JOINT RESISTANCE MEASUREMENT - MAINTENANCE PRACTICES

1. General

A. This task contains instructions on how to use the Avtron Bond Resistance Tester intrinsically safe approved bonding meter, COM-1550 (Model T477W) or equivalent, to measure and evaluate the resistance across a built-up joint or individual electrical connections/joints.

TASK 05-56-01-760-801

2. Joint Resistance Measurement

(Figure 201)

A. References

Reference	Title
SWPM 20-14-11	Standard Wiring Practices Manual
SWPM Chapter 20	Standard Wiring Practices Manual

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-1550	Bonding Meter - Approved, Intrinsically Safe (Approved for use in Class I, Divisions I & II hazardous (classified) locations. Outside these hazardous locations, COM-614 can be used in lieu of COM-1550). Part #: 620LK Supplier: 1CRL2 Part #: M1 Supplier: 3AD17 Part #: M1B Supplier: 3AD17 Part #: T477W (C15292) Supplier: 06659

C. Procedure

SUBTASK 05-56-01-760-001

(1) Connect one intrinsically safe approved bonding meter, COM-1550 probe to one side of a complex joint build-up (structure, LRU, receptacle, bracket, or connector backshell for example) within 1 inch of the joint being measured.

NOTE: A joint may have several electrical connections. For example, a connector mounted on a bracket which is mounted to structure can provide five connections between the bundle shield and "ground": The shield is (1) connected to the connector backshell which is (2) connected to the connector itself which (3) connects to the receptacle which (4) is mounted on the bracket which is (5) connected to structure.

(a) Several kinds of possible measurement connections are shown in (Figure 201).

SUBTASK 05-56-01-760-002

(2) Connect the second joint probe to the other side of the joint being measured, within 1 inch of the joint/connector.

NOTE: It may be necessary to wiggle the probes in order to make electrical contact through surface coatings.

SUBTASK 05-56-01-760-003

(3) Record the resistance value of this joint from the Bond Meter display.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(a) The following resistance values (Table 201) are maximum joint resistance values for common electrical connections/joints.

Table 201/05-56-01-993-802

TYPE OF JOINT	MAXIMUM RESISTANCE (ALUMINUM CONNECTORS) (MILLIOHMS)	MAXIMUM RESISTANCE (STAINLESS CONNECTORS) (MILLIOHMS)
BACKSHELL-TO-RECEPTACLE	2.5	5.0
BACKSHELL-TO-PLUG BODY	2.5	5.0
PLUG-TO-RECEPTACLE	5.0	12.5
FEEDTHROUGH-TO-STRUCTURE/SKIN	10.0	N/A
RECEPTACLE-TO-BRACKET	2.5	5.0
BRACKET-TO-BOND STRAP	1.0	1.0
BOND STRAP-TO-STRUCTURE	1.0	1.0
BRACKET-TO-STRUCTURE	1.0	1.0
RIVETED BRACKET-TO-STRUCTURE	1.0	1.0
OTHER FAY SURFACE BONDS	1.0	1.0

(b) To calculate the maximum allowable resistance for a built-up joint, do the following:

1) Determine what type of electrical connections/joints and how many of each are contained within the built-up joint.

2) Find the maximum allowable resistance for each type of electrical connection/joint (Table 201) contained within the built-up joint.

3) Sum the individual maximum allowable resistances for each electrical connection/joint contained within the built-up joint. This sum is the calculated maximum allowable resistance for the built-up joint.

NOTE: For example, the maximum resistance from a backshell to structure could be the sum of the following values: Backshell-to-Receptacle + Receptacle-to-Bracket + Bracket-to-Structure. Adding up the values in (Table 201) (for an aluminum connector) of 2.5+2.5+1 milliohms each, totals 6 milliohms as a maximum value.

(c) If the measured built-up joint resistance is higher than the calculated maximum allowable resistance, then do a joint resistance measurement across each individual connection/joint to isolate the specific high resistance connection/joint.

1) If an individual connection/joint resistance exceeds the maximum allowable resistance (Table 201) for that type of connection/joint, then repair the faulty connection/joint.

NOTE: Loose connectors and backshells or pigtails can cause an out of tolerance resistance reading.

a) If the resistance of the BACKSHELL-TO-RECEPTACLE is not within limits, do the following task: (SWPM 20-14-11) for connector replacement or repair due to corrosion or fretting between connectors.

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b) If the resistance of the RECEPTACLE-TO-BRACKET is not within limits, do the following task: (SWPM Chapter 20) for procedures to repair corrosion between surfaces.

c) If the resistance of the BRACKET-TO-STRUCTURE is not within limits, do the following task: (SWPM Chapter 20) for procedures to repair corrosion between surfaces of a critical bond.

2) After you complete the joint repair, repeat the Joint Buildup Resistance Measurement to verify the repair.

(d) If the measured joint resistance is less than the calculated maximum allowable resistance for the built-up joint, then do the Joint Buildup Resistance Measurement on the next joint, if any, to be tested.

(e) If all of the built-up joints/connections for a particular wire bundle have been measured and joint resistances are less than the calculated maximum allowable resistance for the built-up joints, then the Joint Buildup Resistance Measurement Task is complete.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

CIRCULAR CONNECTORS

L08163 S0006558220_V4

Bond Meter General Connections for Joint Build-up Test High Intensity Radiated Field (HIRF) Inspection
Figure 201/05-56-01-990-801 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

RECTANGULAR CONNECTORS

409647 S0000136100_V2

Bond Meter General Connections for Joint Build-up Test High Intensity Radiated Field (HIRF) Inspection
Figure 201/05-56-01-990-801 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

HIRF/LIGHTNING - LOOP RESISTANCE TESTER (LRT)/EXLRT - MAINTENANCE PRACTICES

1. General

A. This procedure has these tasks:

(1) A Lid Standard Measurement of the Loop Resistance Tester (LRT)

(2) A standard measurement of the MK Loop Resistance Tester (ExLRT).

B. The LRT and ExLRT are the specialized pieces of test equipment, that are used to make non-intrusive wire bundle and coax cable shield resistance measurements. The LRT and ExLRT can also be used to make resistance measurements across a built-up joint or individual electrical connections/joints.

TASK 05-56-02-200-801

2. LRT Lid Standard Measurement

A. General

(1) This task contains the procedure for performing a Lid Standard Measurement with the LRT. The Lid Standard Measurement is a check of the Loop Resistance Tester (LRT) that should be performed whenever the LRT does not appear to be operating correctly. Measurement of the standard resistances on the LRT storage lid provides a quick indication of proper LRT operation. The Lid Standard Measurement consists of the following two parts:

(a) Loop Mode, that makes a check of the loop resistance measurement function

(b) Joint Mode, that makes a check of the joint resistance measurement function.

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2

C. Procedure

SUBTASK 05-56-02-820-001

(1) Loop Mode

(a) The various components of the loop resistance tester, SPL-1636 are illustrated in Figure 201.

(b) Open the loop resistance tester, SPL-1636(LRT) assembly and slide the lid aside to separate it from the base.

(c) Open the lid and remove the Sense/Drive couplers and the Joint Probe assembly.

(d) Connect the blue-coded Sense coupler cable to the blue-coded Sense Coupler connector on the LRT.

(e) Connect the red-coded Drive coupler cable to the red-coded Drive Coupler connector on the LRT.

(f) Connect the Joint Probe assembly to the Joint Probe connector on the LRT.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(g) Lift the safety cover and set the RUN-OFF/CHARGE switch to the RUN position.

(h) Set the MODE switch to the LOOP position.

(i) Push and hold the ON/OFF push-button switch on the BITE module until "Testing Hardware" shows on the BITE display, then release the ON/OFF switch. A four character symbol will move around the BITE display during the hardware self-test.

NOTE: To conserve the battery, the LRT will automatically power down after 10 minutes of inactivity. To re-apply power, press the “ON” button.

(j) When the "Press Start" indication shows on the BITE display, make sure the LED on each Sense/Drive coupler control box is red.

(k) Connect the Sense/Drive couplers to the cutout in the Reference Standard, built into the storage lid of the LRT.

1) Position the couplers at each end of the cutout, near the Sense/Drive coupler alignment marks (Figure 201) Sheet 3.

(l) Begin the Lid Standard Test by pushing the START push-button switch on either of the Sense/Drive coupler control boxes.

(m) Make sure the LED on each of the Sense/Drive coupler control boxes is green.

1) If either LED is red and a "DRV Coup Is Open" or "SNS Coup Is Open" message shows on the BITE display, then the couplers should be checked for proper connection.

a) Gently squeeze and release the coupler handles to improve the connection of the couplers to the Lid Standard. If adjusting the couplers does not change the LEDs to green, replace the LRT.

b) If "Press Start" shows on the BITE display, then push the START push-button on either of the Sense/Drive coupler control boxes and begin the Lid Standard Test again.

2) If either LED is red and a "DRV Coup Is Open" or "SNS Coup Is Open" message does not show on the BITE display, replace the LRT.

3) If the LED on one or both couplers flashes red, then re-connect the couplers to the lid after the "Press Start" message shows on the BITE display.

a) Push the START push-button on either of the Sense/Drive coupler control boxes and begin the Lid Standard Test again.

4) If the message "UNSTABLE" shows on the BITE display and does not clear, set the MODE switch to the JOINT position.

a) When the message "CONNECT PROBES" shows on the BITE display, set the MODE switch back to the LOOP position.

b) Push the START push-button on either of the Sense/Drive coupler control boxes and begin the Lid Standard Test again.

c) If the "UNSTABLE" message continues to show, replace the LRT.

(n) When the Sense/Drive coupler control box LEDs flash green, note the measured resistance value which shows on the BITE display.

1) Make sure the displayed resistance value is 0.5 - 1.0 milliohm.

2) If the displayed resistance value is not 0.5 - 1.0 milliohm, replace the LRT.

SUBTASK 05-56-02-820-002

(2) Joint Mode

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(a) With the Sense/Drive couplers still connected to the Lid Reference Standard, change the MODE switch to the JOINT position.

(b) Make sure the Joint Probe LEDs are red (Figure 201) Sheet 2.

(c) Place the tip of one Joint Probe on the first Joint Probe reference mark on the lid Reference Standard (Figure 201) Sheet 3.

(d) Place the tip of the other Joint Probe on the second Joint Probe reference mark.

NOTE: The LRT will start the Joint Test when the LEDs on both Joint Probes are green.

(e) When the LED on either Joint Probe flashes green, the measurement shows, in milliohms, on the bottom line of the BITE display.

NOTE: The loop resistance from the previous loop measurement is displayed on the top line of the BITE display during a joint mode measurement.

(f) Note the joint resistance value.

(g) Keep the first Joint Probe in place on the first Joint Probe reference mark and move the second Joint Probe to the next Joint Probe reference mark.

(h) Repeat the above steps until a resistance value has been measured for each Joint Probe reference mark, 2 through 6.

(i) Compare the measured resistance values with the acceptable resistance values listed below:

Table 201/05-56-02-993-801

Measurement Points (Referenced to First Joint Probe Mark)	Resistance Measurement Acceptable Values
Second Joint Probe Reference Mark	0.01 - 0.06 milliohms
Third Joint Probe Reference Mark	0.04 - 0.11 milliohms
Fourth Joint Probe Reference Mark	0.07 - 0.16 milliohms
Fifth Joint Probe Reference Mark	0.10 - 0.21 milliohms
Sixth Joint Probe Reference Mark	0.12 - 0.26 milliohms

1) If all five resistance measurements taken above are within the range of Acceptable Values from (Table 201), then this task is complete and the LRT is operational.

2) If any of the five resistance measurements taken above are outside the range of Acceptable Values from the table, then replace the LRT.

(j) Change the MODE switch to LOOP.

(k) Disconnect the Sense/Drive couplers from the Lid Reference Standard.

(l) This completes the LRT Lid Standard Measurement.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

J82030 S0000129254_V1

High Intensity Radiated Fields (HIRF) Inspection - Loop Resistance Tester (LRT) - Maintenance Practices
Figure 201/05-56-02-990-801 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

J82035 S0000129255_V1

High Intensity Radiated Fields (HIRF) Inspection - Loop Resistance Tester (LRT) - Maintenance Practices
Figure 201/05-56-02-990-801 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

J82040 S0000129256_V1

High Intensity Radiated Fields (HIRF) Inspection - Loop Resistance Tester (LRT) - Maintenance Practices
Figure 201/05-56-02-990-801 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-56-02-200-802

3. ExLRT Standard Measurement

(Figure 202)

A. General

(1) This task contains the procedure for performing a Standard Handle Measurement with the ExLRT. The Standard handle Measurement is a check of the Loop Resistance Tester (ExLRT) that should be performed whenever the ExLRT does not appear to be operating correctly. Measurement of the standard resistances on the LRT Handle provides a quick indication of proper ExLRT operation. The Standard Handle Measurement consists of the following two parts:

(a) Loop Measurement, that makes a check of the loop resistance measurement function

(b) Joint Measurement, that makes a check of the joint resistance measurement function.

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

C. Prepare for the Measurement

SUBTASK 05-56-02-820-003

(1) Prepare the MK loop resistance tester, SPL-18565, for the measurement (Figure 202).

(a) Remove the ExLRT assembly from it's box.

(b) Connect the loop cable [4] to the loop connector [2].

(c) Connect the joint cable [5] to the joint connector [3].

(d) To power on, push the power on button [1] on the rear of the front panel.

NOTE: The LCD display will show the unit information.

1) If the ExLRT does not turn on, do these steps:

a) Open the battery compartment.

b) Remove the battery.

c) Put the charged battery into the unit.

d) Close the battery compartment.

2) If necessary, refer to the ExLRT user’s guide and contact the device manufacturer.

SUBTASK 05-56-02-820-005

(2) Configure the ExLRT, as follows:

(a) Make sure that LCD display shows 'Manual (continuous)'.

1) If it is not displayed, push the select button [9].

2) Use the scroll up button [7] and scroll down button [8] to select 'Continuous (Default)'.

3) Push the select button [9].

4) Push the stop measurement button [10] to back to Main menu.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

5) Select “Manual (Continuous)”.
6) Push the select button [9].
7) Select “Continuous (Default)”.
8) Push the select button [9].

D. ExLRT Standard Measurement

SUBTASK 05-56-02-820-006

(1) Do the self-test of the ExLRT, as follows:
(a) Clamp the couplers of the loop cable [4] to the self-test handle of ExLRT.
(b) Push the start measurement button [6].
(c) Make sure that the loop status indicator is amber.
(d) Record the value of the Loop resistance.

NOTE: The loop measurements are displayed as a number with two decimal places on left top of LCD screen.

1) If either the loop status indicator is red and “Drive coupler is open” or “Sense Coupler is Open” message shows on the LCD display, do these steps:
a) Gently squeeze and release the coupler handles to improve the connection of the coupler around the wire bundle being measured.
b) If adjusting the couplers does not change the loop status indicator to amber, use a different set of calibrated loop couplers.
c) If error message disappears and loop status indicator is flashing green, push the start measurement button [6].
2) If the loop status indicator is red and “Loop Unstable” message shows on the LCD display, contact the manufacturer.

(e) Attach the one pin of the joint cable [5] on the joint probe reference mark 1 on self-test handle of ExLRT.
(f) Attach the second pin of the joint cable [5] on the joint probe reference mark 4.
(g) Record the value of the Joint 1 resistance.

NOTE: The joint measurement will be displayed as a number with two decimal places on right top of LCD screen.

1) If joint status indicator is red, check the LCD display for an error message.
2) If necessary, refer to the ExLRT user’s guide for corrective action based on display error message.

(h) Attach the one pin of the joint cable [5] on the joint probe reference mark 2.
(i) Attach the second pin of the joint cable [5] on the joint probe reference mark 3.
(j) Record the value of the Joint 2 resistance.

NOTE: The joint measurement will be displayed as a number with two decimal places on right top of LCD screen.

1) If joint status indicator is red, check the LCD display for an error message.
2) If necessary, refer to the ExLRT user’s guide for corrective action based on display error message.

SUBTASK 05-56-02-820-007

(2) If unable to complete the joint resistance measurement, do the steps that follows:

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(a) If the joint status indicator is red, check the LCD display for an error message.

1) If the message on the LCD displays "Joint Intermittent", do the following:

a) Push the stop measurement button [10] and remove the joint probes from the connector to stop the measurement.

b) Push the start measurement button [6] and re-position probes to correct locations to start measurement.

c) If this fails to clear the "Joint Intermittent" message, contact the manufacturer.

2) If the message on the LCD displays a “Probes not connected to UUT", do the following:

a) Push the stop measurement button [10] and remove the joint probes from the connector to stop the measurement.

b) Push the start measurement button [6] and re-position probes to correct locations to start measurement.

3) If this fails to clear the message, then use a different set of calibrated probes.

4) If another set of calibrated probes isn't available or doesn't resolve the error message, contact the manufacturer.

SUBTASK 05-56-02-820-008

(3) Compare the measured resistance values with the acceptable resistance values (Table 202).

Table 202/05-56-02-993-802

Measurement Types	Resistant Measurement Acceptable value
Loop Resistance	9.0–10.0 Milioms
Joint 1 Resistance	7.5–8.5 Milioms
Joint 2 Resistance	0.1–0.3 Milioms

(a) If either the loop or joint resistance values are not in the acceptable range, contact the manufacturer.

(b) If all resistance measurements are in the acceptable range, then this task is completed and the ExLRT is operational.

(c) Remove the couplers from the self-test handle of the ExLRT.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

MK LOOP RESISTANCE TESTER (ExLRT)
(FRONT VIEW)

MK LOOP RESISTANCE TESTER (ExLRT)
(TOP VIEW)

2921508 S0000703398_V1

Loop Resistance Tester
Figure 202/05-56-02-990-802 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

2921509 S0000703401_V1

Loop Resistance Tester
Figure 202/05-56-02-990-802 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

HIRF/LIGHTNING LOOP RESISTANCE MEASUREMENT - MAINTENANCE PRACTICES

1. General

A. The loop resistance tester, SPL-1636 (LRT) is a specialized piece of test equipment which is used to make non-intrusive wire bundle and coax cable shield resistance measurements. The LRT can also be used to make resistance measurements across a built-up joint or individual electrical connections/joints.

(1) This task contains the procedure for performing a Lid Standard Measurement with the LRT. The Lid Standard Measurement is a check of the Loop Resistance Tester (LRT) that should be performed whenever the LRT does not appear to be operating correctly. Measurement of the standard resistances on the LRT storage lid provides a quick indication of proper LRT operation. The Lid Standard Measurement consists of the following two parts:

(a) Loop Mode, which makes a check of the loop resistance measurement function

(b) Joint Mode, which makes a check of the joint resistance measurement function

TASK 05-56-03-200-801

2. Loop Resistance Measurement

A. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
24-22-00-860-812	Remove Electrical Power (P/B 201)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2

C. Prepare for the Loop Resistance Measurement

SUBTASK 05-56-03-860-001

> **WARNING** REMOVE ELECTRICAL POWER. THIS IS A HIGH-VOLTAGE AND HIGH-CURRENT CONNECTION. ELECTRICAL SHOCK CAN CAUSE INJURIES AND KILL YOU.

(1) Do this task: Remove Electrical Power, TASK 24-22-00-860-812.

SUBTASK 05-56-03-940-001

(2) Prepare the loop resistance tester, SPL-1636, for use (Figure 201).

(a) Open the loop resistance tester, SPL-1636 (LRT), assembly and slide the lid aside to remove it from the base.

(b) Open the lid and remove the Sense/Drive couplers and the joint probe assembly.

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(c) Connect the blue-coded Sense coupler cable to the blue-coded Sense Coupler connector on the LRT.

(d) Connect the red-coded Drive coupler cable to the red-coded Drive Coupler connector on the LRT.

(e) Connect the Joint Probe assembly to the Joint Probe connector on the LRT.

(f) Lift the safety cover and set the RUN-OFF/CHARGE switch to the RUN position.

(g) Set the LRT MODE switch to the LOOP position.

(h) Push and hold the ON/OFF pushbutton switch on the BITE module until "Testing Hardware" shows on the BITE display, then release the ON/OFF switch. A four character symbol will move around the BITE display during the hardware self-test.

NOTE: To conserve the battery, the LRT will automatically power down after 10 minutes of inactivity. To re-apply power, do the above steps again.

(i) When the "Press Start" indication shows on the BITE display, make sure the LED on each Sense/Drive coupler control box is red.

D. Loop Resistance Measurement

SUBTASK 05-56-03-760-001

(1) Connect the couplers.

(a) For a normal loop resistance tester, SPL-1636 (Figure 202):

1) Clamp both of the LRT couplers around the wire bundle to be measured.

a) If there are ground wires, such as shield pigtail connections, at the point of measurement on the measured bundle, make sure that such wiring is NOT included within either coupler.

b) Make sure that there is at least four inches separation between the two couplers. If such separation is impossible to maintain, use the Mu-Metal shields (P/N 906-10249-9) provided with the LRT to obtain the necessary isolation.

NOTE: In the case of multiple wire bundles going to/from a connector, make sure the coupler is only around the desired bundle. This may require removing (and replacing) wire ties to separate the bundles enough for coupler connection.

(b) For a Modified Loop Resistance Measurement (Figure 203):

1) Clamp the Drive coupler around the ground return jumper cable.

2) Clamp the Sense coupler around the bundle to be tested.

NOTE: A minimum separation of four inches between the couplers should still be maintained.

a) If there are ground wires, such as shield pigtail connections, at the point of measurement on the bundle, make sure that such wiring is NOT included within the Sense coupler.

SUBTASK 05-56-03-760-002

(2) Initiate a Loop Resistance Measurement by pushing the START pushbutton on either of the Sense/Drive Coupler Control Boxes, causing the LEDs on both boxes to turn green.

(a) When the LEDs flash green, note the loop resistance value shown on the LRT BITE display.

(b) This completes the Loop Resistance measurement.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-56-03-810-001

(3) If you are unable to complete the Loop Resistance Measurement, do the steps that follow:

(a) If either LED is red and a "DRV Coup Is Open" or "SNS Coup Is Open" message shows on the BITE display, then the couplers should be checked for proper connection.

1) Gently squeeze and release the coupler handles to improve the connection of the couplers around the wire bundle being measured.

a) If adjusting the couplers does not change the LEDs to green, replace the LRT.

2) If "Press Start" shows on the BITE display, then push the START pushbutton on either of the Sense/Drive coupler control boxes and begin the Loop Resistance Measurement again.

(b) If either LED is red and a "DRV Coup Is Open" or "SNS Coup Is Open" message does not show on the BITE display, replace the LRT.

(c) If the LED on one or both couplers flashes red, then re-connect the couplers to the wire bundle being measured after the "Press Start" message shows on the BITE display.

1) Push the START pushbutton on either coupler control box and begin the Loop Resistance Measurement again.

(d) If the message "UNSTABLE" is displayed and does not clear, set the MODE switch to the JOINT position.

1) When the message "Connect Probes" shows on the BITE display, set the MODE switch back to the LOOP position.

2) When the "Press Start" message appears, push the Start pushbutton on either of the coupler control boxes and begin the Loop Resistance Measurement again.

3) If this fails to clear the "UNSTABLE" message, then there is a problem with the wire bundle being measured or with the LRT.

NOTE: The "UNSTABLE" message is caused by the LRT detecting a varying resistance. This varying resistance can be caused by a loose connection, a corroded or intermittent electrical joint, a faulty Transorb adapter, or a faulty LRT.

a) Make sure that the LRT is operating correctly, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801.

b) If the LRT is operating correctly, then the wire bundle or a connection/joint is faulty and must be repaired or replaced before continuing the measurement.

<1> Check each electrical connection in the circuit being measured to isolate the faulty connection/joint, do this task: Joint Resistance Measurement, TASK 05-56-04-200-801.

(e) If the BITE display shows "Joint V TooBig" (Dash-2 LRT only), "Loop I TooBig" or "Loop V TooBig", then stray currents may be circulating through the shield of the wire bundle being measured.

1) If power is applied to any of the equipment attached to this bundle, remove power from the equipment.

2) Any on-board electrical equipment that does not need to be ON should be turned OFF.

3) Make sure that no other sources of current or voltage are connected on or near the bundle being tested.

4) In extreme cases, all power may need to be removed from the airplane.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-56-03-810-002

(4) For a Dash-2 or -3 LRT, the following BITE display messages may also appear:

(a) Joint TooSmall:

1) This indication is displayed when the Joint Value is too small compared to the Loop Value to give an accurate Joint reading. This condition exceeds the operating capabilities of the LRT.

(b) LNoise V TooBig:

1) This indication is displayed when excessive noise voltage on the wire bundle shield interferes with the LRTs ability to read accurately during Loop Mode. Stray signals on the wire shield may be produced by motors, electronic equipment, or adjacent electronic circuits. This condition can be alleviated by de-energizing equipment in the vicinity of the circuit being tested.

(c) LNoise I TooBig:

1) This indication is displayed when excessive noise current on the wire bundle shield interferes with the LRTs ability to read accurately during Loop Mode. Stray signals on the wire shield may be produced by motors, electronic equipment, or adjacent electronic circuits. This condition can be alleviated by de-energizing equipment in the vicinity of the circuit being tested.

(d) JNoise V TooBig:

1) This indication is displayed when excessive noise voltage on the wire bundle shield interferes with the LRTs ability to read accurately during Joint Mode. Stray signals on the wire shield may be produced by motors, electronic equipment, or adjacent electronic circuits. This condition can be alleviated by de-energizing equipment in the vicinity of the circuit being tested.

(e) JNoise I TooBig:

1) This indication is displayed when excessive noise current on the wire bundle shield interferes with the LRTs ability to read accurately during Joint Mode. Stray signals on the wire shield may be produced by motors, electronic equipment, or adjacent electronic circuits. This condition can be alleviated by de-energizing equipment in the vicinity of the circuit being tested.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

J82052 S0000179924_V2

High Intensity Radiated Fields (HIRF) Inspection Loop Resistance Tester Maintenance Practices
Figure 201/05-56-03-990-801 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

B

J82055 S0000179926_V2

High Intensity Radiated Fields (HIRF) Inspection Loop Resistance Tester Maintenance Practices
Figure 201/05-56-03-990-801 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

J82063 S0000179923_V2

Typical Loop Resistance Tester (LRT) Hookup for Loop Resistance Measurement
Figure 202/05-56-03-990-802

ECCN 9E991 BOEING PROPRIETARY - See title page for details

J82058 S0000179927_V2

Typical Loop Resistance Tester (LRT) Hookup for Modified Loop Resistance Measurement
Figure 203/05-56-03-990-803

ECCN 9E991 BOEING PROPRIETARY - See title page for details

HIRF/LIGHTNING - JOINT RESISTANCE MEASUREMENT - MAINTENANCE PRACTICES

1. General

A. This task contains instructions on how to use the Loop Resistance Tester (LRT) to measure the resistance across a built-up joint or individual electrical connections/joints.

(1) The direct contact voltage and current measurement capabilities of the LRT Joint Probes are used to perform a Joint Resistance Measurement.

(2) The connections/joints to be measured must be contained within the shielding system being measured in the Loop Resistance Mode (the loop current must flow through these joints/connections).

B. In some cases, the current path to structure may include a subassembly. An example would be one of the connectors mounted to an FSEU Gearbox. In such a case, the bonding of the subassembly-to-structure may also need to be measured. If an out-of-spec joint reading is found, refer to the AMM chapter associated with that particular subsystem for component bonding requirements.

TASK 05-56-04-200-801

2. Joint Resistance Measurement

A. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
SWPM 20-20-00	ELECTRICAL BONDING PROCESSES
SWPM 20-25-11	Overbraid Shields on Wire Bundles

B. Procedure

SUBTASK 05-56-04-760-001

(1) To establish an electrical current flow in the wire bundle, joints/connections and bonding straps being measured, do this task: Loop Resistance Measurement, TASK 05-56-03-200-801 before starting the Joint Resistance Measurement.

NOTE: Before a Joint Resistance measurement can be performed, a Loop measurement must have been completed on the wire bundle associated with the joint being measured. If this is a modified loop formed with a ground return jumper cable, then the LRT Sense/Drive couplers must be connected as shown for a modified loop resistance measurement. The LRT continues to monitor the loop resistance of the wire bundle while the joint measurement is being made. If the loop resistance changes by too large an amount, the LEDs on both joint probes will blink red and the message "REDO LOOP" will appear on the BITE display. This message cannot be erased without switching the LRT back to the Loop mode and doing a loop resistance measurement again.

SUBTASK 05-56-04-760-002

(2) Set the Mode Selector switch on the LRT to the Joint position.

SUBTASK 05-56-04-760-003

(3) Make sure the LEDs on both Joint Probes are red.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-56-04-760-004

(4) Connect one joint probe to one side of a complex joint build-up (structure, LRU, receptacle, bracket, or connector backshell for example) within 1 inch of the joint being measured (Figure 201) or (Figure 202).

NOTE: A joint may have several electrical connections. For example, a connector mounted on a bracket which is mounted to structure can provide five connections between the bundle shield and "ground": The shield is (1) connected to the connector backshell which is (2) connected to the connector itself which (3) connects to the receptacle which (4) is mounted on the bracket which is (5) connected to structure.

SUBTASK 05-56-04-760-005

(5) Connect the second joint probe to the other side of the joint being measured, within 1 inch of the joint/connector.

NOTE: The LRT will start the Joint Resistance Measurement when the LEDs on both Joint Probes are green. The LEDs change from red to green when electrical continuity is established between the probes. It may be necessary to wiggle the probes in order to make electrical contact through surface coatings.

(a) If the Joint Probes appear to be making good electrical contact and the Joint Probe LEDs do not change to green and no error messages are displayed on the LRT, then, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801.

(b) If the BITE display shows "Joint V Too Big", then stray currents may be circulating through the shield of the wire bundle being measured.

1) If power is applied to any of the equipment attached to this bundle, remove power from the equipment.

2) Any on-board electrical equipment that does not need to be ON should be turned OFF.

3) Make sure no other sources of current or voltage are connected on or near the bundle being tested.

4) In extreme cases, all power may need to be removed from the airplane.

SUBTASK 05-56-04-760-006

(6) When the LEDs on the probes flash green, record the resistance value of this joint from the bottom line of the BITE display.

(a) The following resistance values (Table 201) are maximum joint resistance values for common electrical connections/joints.

Table 201/05-56-04-993-801

TYPE OF JOINT	MAXIMUM ALLOWABLE RESISTANCE (ALUMINUM CONNECTORS) IN MILLIOHMS	MAXIMUM ALLOWABLE RESISTANCE (STAINLESS/ STEEL) IN MILLIOHMS
BACKSHELL-TO-RECEPTACLE	2.5	5.0
BACKSHELL-TO-PLUG BODY	2.5	5.0
PLUG-TO-RECEPTACLE	5.0	12.5
RECEPTACLE-TO-BRACKET	2.5	5.0
BRACKET-TO-BOND STRAP	1.0	1.0
BOND STRAP-TO-STRUCTURE	1.0	1.0

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Table 201/05-56-04-993-801 (Continued)

TYPE OF JOINT	MAXIMUM ALLOWABLE RESISTANCE (ALUMINUM CONNECTORS) IN MILLIOHMS	MAXIMUM ALLOWABLE RESISTANCE (STAINLESS/ STEEL) IN MILLIOHMS
BRACKET-TO-STRUCTURE	1.0	1.0
RIVETED BRACKET-TO-STRUCTURE	1.0	1.0
OTHER FAY SURFACE BONDS	1.0	1.0

(b) To calculate the maximum allowable resistance for a built-up joint, do the following:

1) Determine what type of electrical connections/joints and how many of each are contained within the built-up joint.

2) Find the maximum allowable resistance for each type of electrical connection/joint (Table 201) contained within the built-up joint.

3) Sum the individual maximum allowable resistances for each electrical connection/joint contained within the built-up joint. This sum is the calculated maximum allowable resistance for the built-up joint.

(c) If the measured built-up joint resistance is higher than the calculated maximum allowable resistance, then do a joint resistance measurement across each individual connection/joint to isolate the specific high resistance connection/joint.

1) If an individual connection/joint resistance exceeds the maximum allowable resistance (Table 201) for that type of connection/joint, then repair the faulty connection/joint.

NOTE: Loose connectors and backshells or pigtails can cause an out of tolerance resistance reading.

a) Do the following task: (SWPM 20-20-00) or (SWPM 20-25-11).

2) After you complete the joint repair, repeat the Joint Buildup Resistance Measurement to verify the repair.

(d) If the measured joint resistance is less than the calculated maximum allowable resistance for the built-up joint, then do the Joint Buildup Resistance Measurement on the next joint in the wire bundle.

(e) If all of the built-up joints/connections for a particular wire bundle have been measured and joint resistances are less than the calculated maximum allowable resistance for the built-up joints, then the Joint Buildup Resistance Measurement Task is complete.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

J82064 S0000179936_V2

Typical Loop Resistance Tester (LRT) Hookup for Joint Buildup Test
Figure 201/05-56-04-990-801

ECCN 9E991 BOEING PROPRIETARY - See title page for details

J82067 S0000179938_V2

Typical Loop Resistance Tester (LRT) Hookup for Modified Joint Buildup Test
Figure 202/05-56-04-990-802

ECCN 9E991 BOEING PROPRIETARY - See title page for details

HIRF/LIGHTNING LOOP RESISTANCE MEASUREMENT AND JOINT RESISTANCE MEASUREMENT - MAINTENANCE PRACTICES

1. General

A. The MK loop resistance tester, SPL-18565 (ExLRT), is a specialized piece of test equipment that is used to make non-intrusive wire bundle and coax cable shield resistance measurements. The ExLRT can also be used to make resistance measurements across a built-up joint or individual electrical connections/joints.

B. This task contains instructions on how to use ExLRT to measure the loop resistance of a wire bundle or coax cable shield and how to measure resistance across a built-up joint or individual electrical connections/joints.

(1) The connections/joints to be measured must be contained within the shielding system being measured in loop resistance mode (the loop current must flow through these joints/connections).

(2) The direct contact voltage and current measurement capabilities of the ExLRT joint probes used to perform a joint resistance measurement.

C. In some cases, the current path to structure may include a subassembly. An example would be of the connectors mounted to an FSEU gearbox. In such a case, the bonding of the subassembly to structure may also need to be measured. If an out of spec joint reading is found, refer to AMM chapter associated with that particular subsystem for component bonding requirements.

TASK 05-56-05-200-801

2. Loop Resistance and Joint Resistance Measurement

(Figure 201, Figure 202, Figure 203, Figure 204, Figure 205)

A. References

Reference	Title
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
SWPM 20-20-00	ELECTRICAL BONDING PROCESSES
SWPM 20-25-11	Overbraid Shields on Wire Bundles

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

C. Prepare for the Measurement

SUBTASK 05-56-05-820-005

(1) Prepare the MK loop resistance tester, SPL-18565 (ExLRT), for measurement (Figure 201).

(a) Remove the ExLRT assembly from its box.

(b) Connect the loop cable [4] to the loop connector [2].

(c) Connect the joint cable [5] to the joint connector [3].

(d) Push the power-on button [1] on the rear of the front panel.

NOTE: The LCD display will show the unit information.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

1) If ExLRT will not turn on, do these steps:
   a) Change the battery:
      <1> Open the battery compartment.
      <2> Remove the battery.
      <3> Put a charged battery into the unit.
      <4> Close the battery compartment.
   b) If necessary, refer to ExLRT user's guide and contact the device manufacturer.

D. Loop Resistance Measurement

SUBTASK 05-56-05-760-001

(1) For a normal loop resistance measurement (Figure 202):
   (a) Clamp two couplers around the wire bundle.
      1) Make sure that ground wires, such as shield pigtail connections, at the point of measurement on the measured bundle are not included within either coupler.
      2) Make sure that there is minimum 4 in. (102 mm) separation between the two couplers.
         a) If necessary, skew the couplers 45 degrees.
      3) Make sure that the coupler is only around the desired bundle.
         a) If necessary, remove (and replace) wire ties to separate the bundles enough for coupler connection.
      4) Push the start measurement button [6] or green button on the loop controller to start a loop resistance measurement.

         NOTE: The loop status indicator will flash green when the unit is ready to take a loop resistance measurement.
      5) When the loop status indicator is amber, the loop resistance measurement is displayed as a number with two decimal places on top left of LCD display.

SUBTASK 05-56-05-760-002

(2) For a modified loop resistance measurement (Figure 203):
   (a) Connect the ground return test cable to an electrically conductive point of the Line Replaceable Unit (LRU).
   (b) Attach the other end to a grounding point that connects to airplane structure.
   (c) Clamp the drive coupler around the ground return jumper cable.
   (d) Clamp the sense coupler around the bundle.
      1) Make sure that ground wires, such as shield pigtail connections, at the point of measurement on the measured bundle are not included within either coupler.
      2) Make sure that there is minimum 4 in. (102 mm) separation between the two couplers.
         a) If necessary, skew the couplers 45 degrees.
      3) Make sure that the coupler is only around the desired bundle.
         a) If necessary, remove (and replace) wire ties to separate the bundles enough for coupler connection.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-56-05-810-001

(3) If either the loop status indicator is red and “Drive coupler is open” or “Sense Coupler is Open” message shows on the LCD display, do these steps:

(a) Gently squeeze and release the coupler handles to improve the connection of the coupler around the wire bundle being measured.

(b) If adjusting the couplers does not change the loop status indicator to amber, do this task: ExLRT Standard Measurement, TASK 05-56-02-200-802.

(c) If error message disappears and loop status indicator is flashing green, push the start measurement button [6] to begin loop resistance measurement again.

SUBTASK 05-56-05-810-002

(4) If the loop status indicator is red, do these steps:

(a) Push the stop measurement button [10] to stop the measurement.

(b) Re-connect the couplers to the wire bundle.

(c) Push the start measurement button [6] to start new measurement.

SUBTASK 05-56-05-810-003

(5) If the loop status indicator is red and a “Loop Unstable” message shows on the LCD display, do these steps:

(a) Push the stop measurement button [10] to stop the measurement.

(b) If performing a modified loop measurement, re-connect the ground return test cable.

(c) Push the start measurement button [6] to start new measurement.

SUBTASK 05-56-05-810-004

(6) If this fails to clear the “Loop Unstable” message, then there is a problem with the wire bundle being measured or with the ExLRT.

NOTE: The "Loop Unstable" message is caused by the ExLRT detecting a varying resistance. This varying resistance can be caused by a loose connection, a corroded or intermittent electrical joint, a faulty transorb adapter, or a faulty ExLRT.

(a) Make sure that the ExLRT is operating correctly (TASK 05-56-02-200-802).

(b) If the ExLRT is operating correctly, then the wire bundle or a connection/joint is faulty and must be repaired or replaced before continuing the measurement.

1) Check each electrical connection in the circuit being measured to isolate the faulty connection/joint.

SUBTASK 05-56-05-810-005

(7) If the loop status indicator is red and “Loop Resistance Low” message displays, do these steps:

(a) Make sure that ground wires, such as shield pigtail connections, at the point of measurement on the measured bundle are not included within either coupler.

(b) Make sure that there is minimum 4 in. (102 mm) separation between the two couplers.

1) If necessary, skew the couplers 45 degrees.

(c) Make sure that the coupler is only around the desired bundle.

1) If necessary, remove (and replace) wire ties to separate the bundles enough for coupler connection.

(d) Make sure that the ExLRT is operating correctly (TASK 05-56-02-200-802).

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-56-05-810-006

(8) If the loop status indicator is red and a "Loop Resistance High" message displays, do these steps:

(a) Make sure that the placement of couplers are correct on bundles under test.

(b) Make sure that the ExLRT is operating correctly (TASK 05-56-02-200-802).

SUBTASK 05-56-05-810-007

(9) If the ExLRT is operating correctly, then the wire bundle or a connection/joint is faulty.

(a) Repair or replace the wire bundle or a connection/joint before continuing the measurement.

(b) Check each electrical connection in the circuit being measured to isolate the faulty connection/joint.

E. Joint Resistance Measurement

SUBTASK 05-56-05-760-003

(1) Complete the loop measurement on the wire bundle associated with the joint being measured.

NOTE: The ExLRT continues to monitor the loop resistance of the wire bundle while the joint measurement is being made.

NOTE: Keep couplers in the same configuration.

SUBTASK 05-56-05-760-004

(2) Make sure that the joint status indicator is flashing green.

SUBTASK 05-56-05-760-005

(3) Connect one joint probe to one side of a complex joint build-up (structure, LRU, receptacle, bracket, or connector backshell for example) within 1 in. (25 mm) of the joint being measured (Figure 204 or Figure 205).

NOTE: A joint may have several electrical connections. For example, a connector mounted on a bracket that is mounted to structure can provide five connections between the bundle shield and "ground": The shield is (1) connected to the connector backshell that is (2) connected to the connector itself that (3) connects to the receptacle that (4) is mounted on the bracket that is (5) connected to structure.

SUBTASK 05-56-05-760-006

(4) Connect the second joint probe to the other side of the joint being measured, within 1 in. (25 mm) of the joint/connector.

(a) Make sure that the joint status indicator turn amber.

(b) Make sure that the joint measurement is displayed in the top right of the LCD display.

(c) If necessary, shake the probes to make electrical contact through surface coatings.

(d) If the joint probes appear to be making good electrical contact and the joint probe LED indicator does not change to amber and no error messages are displayed, do this task: ExLRT Standard Measurement, TASK 05-56-02-200-802.

(e) If the joint probe LED indicator is red and the LCD display shows "Joint Low vs Loop", do these steps:

1) Attach one end of the ground return test cable to the shield termination point of the electrical connector under test.

2) Thread the ground return test cable and wire bundle under test through both loop couplers.

3) Connect the other end of the ground return test cable to structure.

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4) Push the start measurement button [6] to start a new measurement, the loop resistance should be much lower than it was previously.
   a) If the loop resistance is not lower, check the connection of the ground return test cable.
5) Connect one joint probe to one side of a complex joint build-up (structure, LRU, receptacle, bracket, or connector backshell for example) within 1 in. (25 mm) of the joint being measured (Figure 204 or Figure 205).
6) Connect the second joint probe to the other side of the joint being measured, within 1 in. (25 mm) of the joint/connector.
   a) Make sure that the joint status indicator turn amber.
   b) Make sure that the joint measurement is displayed in the top right of the LCD display.

SUBTASK 05-56-05-810-008

(5) If the joint probe LED indicator is red and the LCD display shows “Joint Intermittent”, do these steps:
   (a) Push the stop measurement button [10] and remove joint probes from the connector to stop the measurement.
   (b) Push the start measurement button [6] and re-position probes to correct locations to start measurement.
   (c) If this fails to clear the “Joint Intermittent” message, then there is a problem with the wire bundle being measured or with the ExLRT.
   (d) Make sure that the ExLRT is operating correctly, do this task: ExLRT Standard Measurement, TASK 05-56-02-200-802.
   (e) If the ExLRT is operating correctly, then there is a problem with the connection/joint and it must be repaired or replaced before continuing the measurement.

SUBTASK 05-56-05-760-007

(6) When the LED is amber, record the resistance value of the joint shown in the top right of the LCD display.
   (a) The following resistance values (Table 201) are maximum joint resistance values for common electrical connections/joints.

Table 201/05-56-05-993-802

TYPE OF JOINT	MAXIMUM ALLOWABLE RESISTANCE (ALUMINUM CONNECTORS) IN MILLIOHMS	MAXIMUM ALLOWABLE RESISTANCE (STAINLESS/ STEEL) IN MILLIOHMS
BACKSHELL-TO-RECEPTACLE	2.5	5.0
BACKSHELL-TO-PLUG BODY	2.5	5.0
PLUG-TO-RECEPTACLE	5.0	12.5
RECEPTACLE-TO-BRACKET	2.5	5.0
BRACKET-TO-BOND STRAP	1.0	1.0
BOND STRAP-TO-STRUCTURE	1.0	1.0
BRACKET-TO-STRUCTURE	1.0	1.0
RIVETED BRACKET-TO-STRUCTURE	1.0	1.0

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Table 201/05-56-05-993-802 (Continued)

TYPE OF JOINT	MAXIMUM ALLOWABLE RESISTANCE (ALUMINUM CONNECTORS) IN MILLIOHMS	MAXIMUM ALLOWABLE RESISTANCE (STAINLESS/ STEEL) IN MILLIOHMS
OTHER FAY SURFACE BONDS	1.0	1.0

(b) Calculate the maximum allowable resistance for a built-up joint.

1) Determine what type of electrical connections/joints and how many of each are contained within the built-up joint.

2) Find the maximum allowable resistance for each type of electrical connection/joint (Table 201) contained within the built-up joint.

3) Sum the individual maximum allowable resistances for each electrical connection/joint contained within the built-up joint.

NOTE: This sum is the calculated maximum allowable resistance for the built-up joint.

(c) If the measured built-up joint resistance is higher than the calculated maximum allowable resistance, then do a joint resistance measurement across each individual connection/joint to isolate the specific high resistance connection/joint.

1) If an individual connection/joint resistance exceeds the maximum allowable resistance (Table 201) for that type of connection/joint, then repair the faulty connection/joint.

NOTE: Loose connectors and backshells or pigtails can cause an out of tolerance resistance reading.

a) Do the following task: (SWPM 20-20-00) or (SWPM 20-25-11).

2) After you complete the joint repair, repeat the joint buildup resistance measurement to verify the repair.

(d) If the measured joint resistance is less than the calculated maximum allowable resistance for the built-up joint, then do the joint buildup resistance measurement on the next joint in the wire bundle.

(e) If all of the built-up joints/connections for a particular wire bundle have been measured and joint resistances are less than the calculated maximum allowable resistance for the built-up joints, then the joint buildup resistance measurement task is complete.

END OF TASK

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MK LOOP RESISTANCE TESTER (ExLRT)
(FRONT VIEW)

MK LOOP RESISTANCE TESTER (ExLRT)
(TOP VIEW)

2921508 S0000703398_V1

Loop Resistance Tester
Figure 201/05-56-05-990-802 (Sheet 1 of 2)

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2921509 S0000703401_V1

Loop Resistance Tester
Figure 201/05-56-05-990-802 (Sheet 2 of 2)

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2926308 S0000706691_V1

Typical Loop Resistance Tester (ExLRT) Hookup for Loop Resistance Measurement
Figure 202/05-56-05-990-803

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2926311 S0000706690_V1

Typical Loop Resistance Tester (ExLRT) Hookup for Modified Loop Resistance Measurement
Figure 203/05-56-05-990-804

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2926320 S0000706692_V1

Typical Loop Resistance Tester (ExLRT) Hookup for Joint Buildup Test
Figure 204/05-56-05-990-805

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2926322 S0000706693_V1

Typical Loop Resistance Tester (ExLRT) Hookup for Modified Joint Buildup Test
Figure 205/05-56-05-990-806

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