AIRCRAFT NORMAL PARKING - MAINTENANCE PRACTICES

EFFECTIVITY: ALL

1. General

   A. This section gives the procedures for the aircraft normal parking and return to service.

   B. Normal parking includes overnight parking.

   C. The procedures in this section are given in the sequence below. The tasks identified with (♦) are part of the Scheduled Maintenance Requirements Document (SMRD).

TASK NUMBER	*DESCRIPTION*	*EFFECTIVITY*
10-10-01-500-801-A	AIRCRAFT NORMAL PARKING	ALL
10-10-01-500-802-A	AIRCRAFT RETURN TO SERVICE	ALL
10-10-01-500-803-A	AIRCRAFT NORMAL PARKING IN COLD WEATHER CONDITION	ALL
10-10-01-500-804-A	AIRCRAFT RETURN TO SERVICE IN COLD WEATHER CONDITION	ALL
10-10-01-500-805-A	AIRCRAFT PARKING IN VOLCANIC ASH CONDITION	ALL
10-10-01-500-806-A	AIRCRAFT RETURN TO SERVICE (PARKING IN VOLCANIC ASH CONDITION)	ALL

TASK 10-10-01-500-801-A
EFFECTIVITY: ALL

2. AIRCRAFT NORMAL PARKING

A. General

(1) This task gives the procedures for the aircraft normal parking.

(2) Make sure that there is a minimum distance between the parked aircraft to permit their movement. Make sure that there is a minimum distance of 4.5 meters between an operating APU exhaust port and an adjacent aircraft fuel-tank vent.

(3) The aircraft is made to be resistant to winds of less than 65 kt when it is moored. If the aircraft is submitted to On-Ground Gale-Force Winds (Winds greater than 50 kt for aircraft equipped with Mechanical Gust Lock and winds greater than 65 kt for aircraft equipped with Electromechanical Gust Lock) do the applicable inspection (AMM TASK 05-50-26-200-802-A/600).

B. References

REFERENCE	*DESIGNATION*
AMM TASK 05-50-26-200-802-A/600	ON-GROUND GALE-FORCE WINDS
AMM TASK 09-10-00-500-801-A/200	AIRCRAFT TOWING
AMM TASK 09-10-01-500-801-A/200	-
AMM TASK 09-20-00-500-801-A/200	-
AMM TASK 10-10-02-500-801-A/200	AIRCRAFT PROLONGED PARKING
AMM TASK 10-20-01-500-801-A/200	AIRCRAFT MOORING
AMM TASK 20-40-02-910-801-A/200	STATIC GROUNDING - STANDARD PRACTICES
AMM TASK 27-51-00-700-801-A/500	FLAP CONTROL SYSTEM - OPERATIONAL CHECK
AMM TASK 32-00-01-910-801-A/200	LG SAFETY PIN - INSTALLATION AND REMOVAL

C. Zones and Accesses

Not Applicable

D. Tools and Equipment

ITEM	*DESCRIPTION*	*PURPOSE*	*QTY*
GSE 011	Ice detector cover	Protection during parking	
GSE 012	Wheel chock	To install chocks to the aircraft	
GSE 279	Utility bag	Protection during parking	
GSE 280	Cover, APU Exhaust Duct (aircraft without APU Silencer)	Protection during parking	
GSE 281	Cover, APU Air Inlet (if applicable)	Protection during parking	
GSE 362	Cover, APU Air Inlet (if applicable)	Protection during parking	
GSE 388	Cover, APU Air Inlet (if applicable)	Protection during parking	
GSE 283	Cover, Air Intake/Exhaust Engine	Protection during parking	
GSE 284	Cover, Total Temperature Sensor	Protection during parking	

(Continued)

ITEM	DESCRIPTION	PURPOSE	QTY
GSE 285	Cover Pitot-Static	Protection during parking	
GSE 286	Cover Pitot	Protection during parking	
GSE 287	Cover APU Exhaust Duct (aircraft with APU Silencer)	Protection during parking	
GSE 288	Plug-Protection, Static Port	Protection during parking	
GSE 381	Cockpit Transparency Shade	Protection during parking	

E. Auxiliary Items

Not Applicable

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	On the aircraft

I. Preparation

SUBTASK 841-002-A

(1) Make sure that the control handle of the landing gear is at the down position.

WARNING: IF THE RELATED LANDING-GEAR SAFETY PINS ARE NOT INSTALLED, INJURY TO PERSONS AND DAMAGE TO MATERIAL CAN OCCUR.

(2) Make sure that the safety pins are installed to each landing gear (AMM TASK 32-00-01-910-801-A/200).

CAUTION: THE AIRCRAFT MUST BE SHELTERED IN THE HANGAR WHEN THERE ARE WIND VELOCITIES OF 65 Kt OR MORE. FOR WINDS OF MORE THAN 30 Kt, IT IS RECOMMENDED THAT, IF POSSIBLE, THE AIRCRAFT BE HEADED INTO THE WIND.

(3) Tow (AMM TASK 09-10-00-500-801-A/200 or AMM TASK 09-10-01-500-801-A/200) or taxi (AMM TASK 09-20-00-500-801-A/200) the aircraft into the position specified for parking.

NOTE: Before you park the aircraft, move it in a straight line for approximately three meters. This will remove all torsional stresses applied to the landing gear components and tires during a turn.

(4) Ground the aircraft (AMM TASK 20-40-02-910-801-A/200).

CAUTION: IF THE BRAKES ARE TOO HOT, STOP UNTIL THEY ARE COOLER TO SET THE PARKING BRAKE. IF NOT, THE BRAKE DISCS CAN BOND TOGETHER.

(5) Set the emergency/parking brake to the PARKING position.

NOTE: To prevent freezing of the brakes, do not apply the parking brakes in cold weather conditions.

(6) Retract the flaps if they are extended (AMM TASK 27-51-00-700-801-A/500).

(7) Set the gust lock lever to the locked position.

J. Normal Parking (Figure 201)

SUBTASK 580-002-A

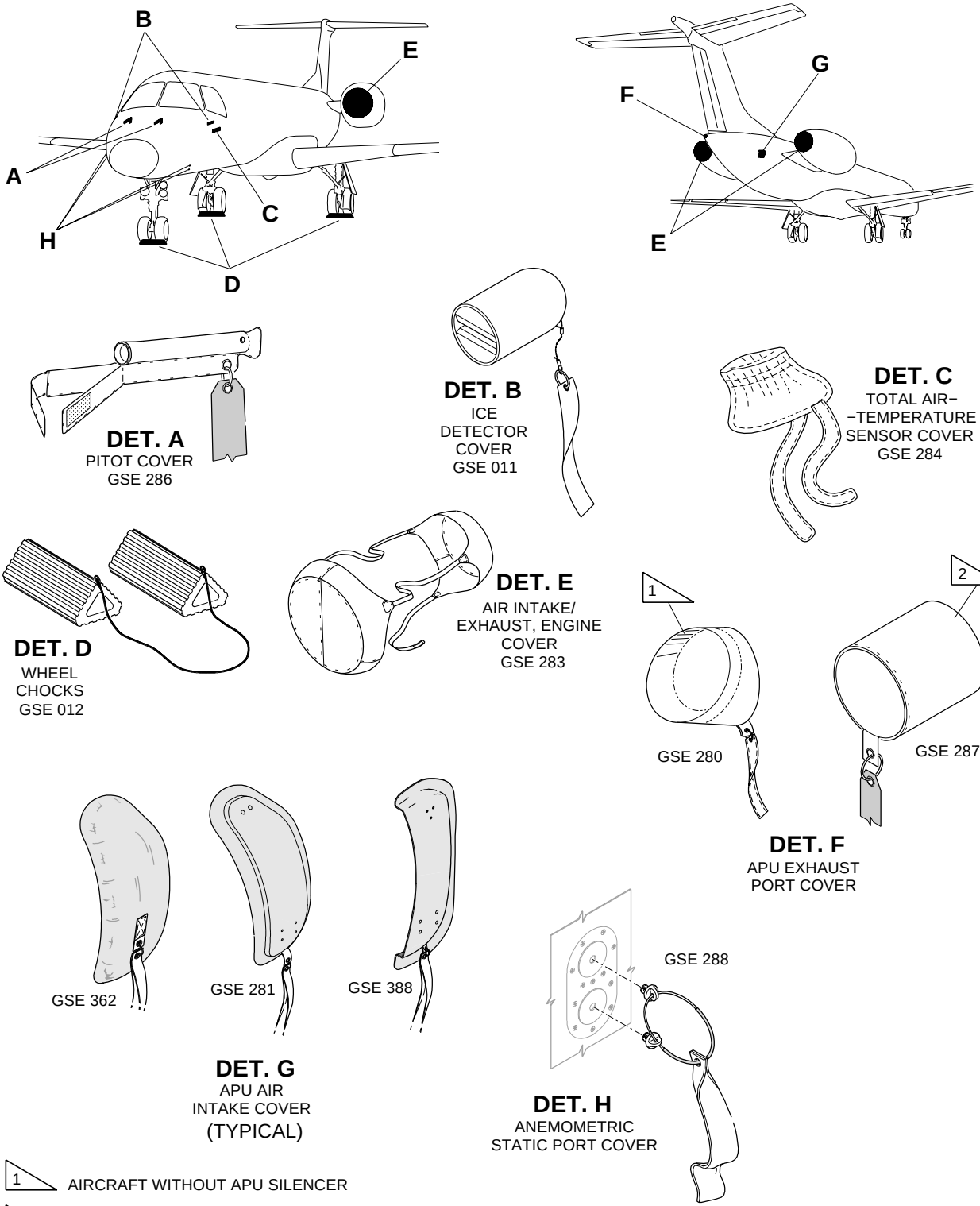
(1) Put the chocks against the landing gear wheels.

(2) If necessary, hold the aircraft to the ground (AMM TASK 10-20-01-500-801-A/200). Refer to table 201 of AMM TASK 10-10-02-500-801-A/200.

(3) Install the covers to the pitot tubes, total-air-temperature sensor, ice detector, engine/APU air intakes and exhaust nozzles, and anemometric static ports, and cockpit transparency shade kit.

EFFECTIVITY: ALL

Aircraft Normal Parking
Figure 201



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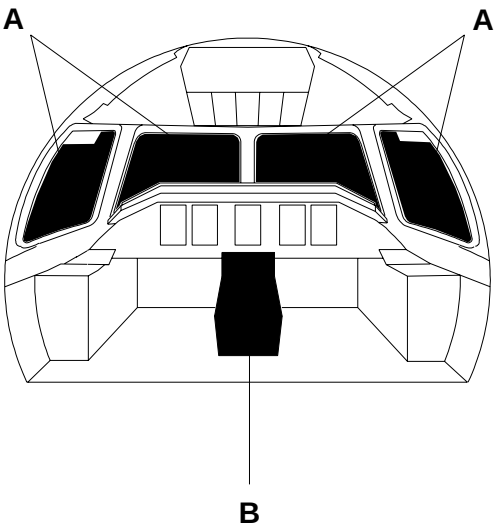
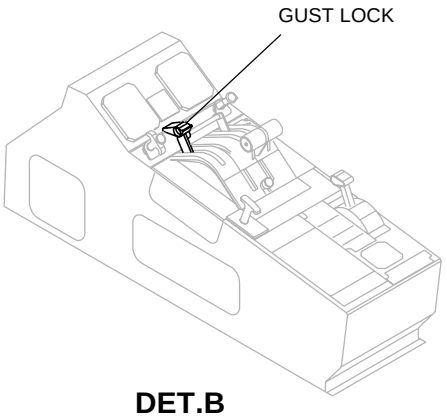
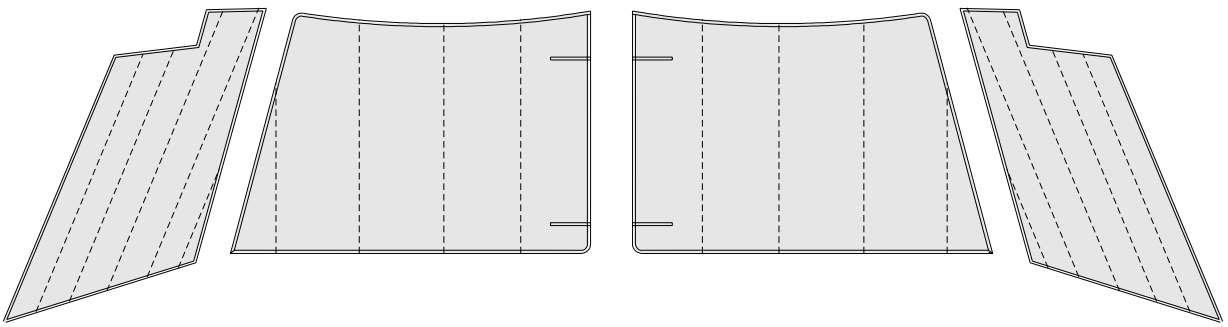
EFFECTIVITY: ALL
Aircraft Normal Parking
Figure 202





DET.B



DET.A

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TASK 10-10-01-500-802-A
EFFECTIVITY: ALL

3. AIRCRAFT RETURN TO SERVICE

A. General

(1) This task gives the procedures for the aircraft return to service.

B. References

REFERENCE	*DESIGNATION*
AMM TASK 09-10-00-500-801-A/200	AIRCRAFT TOWING
AMM TASK 09-10-01-500-801-A/200	-
AMM TASK 09-20-00-500-801-A/200	-
AMM TASK 20-40-02-910-801-A/200	STATIC GROUNDING - STANDARD PRACTICES
AMM TASK 32-00-01-910-801-A/200	LG SAFETY PIN - INSTALLATION AND REMOVAL
AMM TASK 34-13-00-200-801-A/600	PITOT/STATIC PORTS - INSPECTION

C. Zones and Accesses

Not Applicable

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

Not Applicable

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	*FUNCTION*	*PLACE*
1	Does the task	On the aircraft

I. Return to Service

SUBTASK 550-002-A

(1) Remove the chocks from the landing gear wheels.

(2) Remove the covers from the pitot tubes, total-air-temperature sensor, ice detector, engine/APU air intakes and exhaust nozzles, and anemometric static ports, and cockpit transparency shade kit. Figure 201 and Figure 202.

(3) Inspect the Pitot-Static system. Refer to AMM TASK 34-13-00-200-801-A/600.

(4) Make sure that the control handle of the landing gear is at the down position.

WARNING: IF THE RELATED LANDING-GEAR SAFETY PINS ARE NOT INSTALLED, INJURY TO PERSONS AND DAMAGE TO MATERIAL CAN OCCUR.

(5) Make sure that the safety pins are installed to each landing gear (AMM TASK 32-00-01-910-801-A/200).

(6) Unground the aircraft (AMM TASK 20-40-02-910-801-A/200).

(7) Release the emergency/parking brake.

(8) Release the gust lock lever.

(9) Tow (AMM TASK 09-10-00-500-801-A/200 or AMM TASK 09-10-01-500-801-A/200) or taxi (AMM TASK 09-20-00-500-801-A/200) the aircraft from the position specified for parking.

TASK 10-10-01-500-803-A
EFFECTIVITY: ALL

4. AIRCRAFT NORMAL PARKING IN COLD WEATHER CONDITION

A. General

(1) This task gives the procedures for the aircraft parking in cold weather condition.

(2) Normal parking includes overnight parking.

(3) Cold weather conditions is when the aircraft is parked in an ambient temperature lower than 0°C (32°F).

B. References

REFERENCE	*DESIGNATION*
AMM TASK 10-10-01-500-801-A/200	AIRCRAFT NORMAL PARKING
AMM TASK 24-36-01-000-801-A/400	MAIN BATTERY - REMOVAL
AMM TASK 38-30-00-600-801-A/300	-
TASK 12-15-01-680-801-A	-

C. Zones and Accesses

Not Applicable

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

Not Applicable

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	*FUNCTION*	*PLACE*
1	Does the task	On the aircraft

I. Cold Soak Procedure

SUBTASK 580-003-A

(1) Obey the procedures given in AMM TASK 10-10-01-500-801-A/200.

(2) Set pitch trim to FULL NOSE DOWN position.

(3) Drain the water system (TASK 12-15-01-680-801-A).

(4) Drain the waste tank (AMM TASK 38-30-00-600-801-A/300).

(5) Make sure that all galley liquids are drained.

(6) If the expected temperature is below - 15°C (5°F), remove the batteries (AMM TASK 24-36-01-000-801-A/400).

(7) Close all doors and windows.

TASK 10-10-01-500-804-A
EFFECTIVITY: ALL

5. AIRCRAFT RETURN TO SERVICE IN COLD WEATHER CONDITION

A. General

(1) This task gives the procedures for the aircraft return to service after cold weather condition.

B. References

REFERENCE	*DESIGNATION*
AMM MPP 12-30-01/200	- MAINTENANCE PRACTICES
AMM TASK 10-10-01-500-802-A/200	AIRCRAFT RETURN TO SERVICE
AMM TASK 12-15-01-600-801-A/300	WATER TANK - FILLING
AMM TASK 21-00-00-860-801-A/200	PROCEDURE TO TURN THE COOLING PACKS ON
AMM TASK 21-00-00-860-804-A/200	PROCEDURE TO TURN THE COOLING PACKS ON UNDER COLD SOAK CONDITIONS
AMM TASK 24-36-01-400-801-A/400	MAIN BATTERY - INSTALLATION
AMM TASK 29-10-00-860-802-A/200	HYDRAULIC SYSTEM - PRESSURIZATION WITH EMDP
AMM TASK 32-49-01-600-801-A/300	MLG WHEEL TIRE - CHECK AND CHARGE
AMM TASK 32-49-04-600-801-A/300	NLG WHEEL TIRE - CHECK AND CHARGING
AMM TASK 35-10-00-200-801-A/600	-
AMM TASK 49-10-00-910-802-A/200	APU - START
AMM TASK 49-13-00-910-802-A/200	APU - START
AMM TASK 49-96-00-200-801-A/600	OIL-LEVEL SIGHT GLASS - INSPECTION
AMM TASK 71-00-00-200-801-A/600	ENGINE STATIC CHECKS
AMM TASK 71-00-01-910-802-A/200	ENGINE START PROCEDURE (COLD WEATHER)
AMM TASK 80-10-01-600-801-A/300	AIR TURBINE STARTER - SERVICING

C. Zones and Accesses

Not Applicable

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

Not Applicable

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	*FUNCTION*	*PLACE*
1	Does the task	On the aircraft

I. Return to Service

SUBTASK 550-003-A

(1) Obey the procedures given in AMM TASK 10-10-01-500-802-A/200.

(2) Remove ice, frost, slush, or snow, from the aircraft surfaces (AMM MPP 12-30-01/200).

(3) Install the batteries (AMM TASK 24-36-01-400-801-A/400).

(4) Do a check of the APU oil level (AMM TASK 49-96-00-200-801-A/600).

(5) Do a check of the engine oil level (AMM TASK 71-00-00-200-801-A/600).

(6) Do a check of the ATS oil level (AMM TASK 80-10-01-600-801-A/300).

(7) Do a check of the oxygen cylinder pressure (AMM TASK 35-10-00-200-801-A/600).

(8) Do a pressure check of the main and nose landing gear tire pressure (AMM TASK 32-49-01-600-801-A/300 and AMM TASK 32-49-04-600-801-A/300).

(9) Obey the fuel and lubricating oil temperature limitations before the APU and the engine start:

- - 40°C (- 40°F) for fuel;
- - 40°C (- 40°F) for MIL-L-23699 oil;
- - 54°C (- 65.2°F) for MIL-L-7808 oil.

(10) Start the APU (AMM TASK 49-10-00-910-802-A/200 for APU T-62T-40C11 or AMM TASK 49-13-00-910-802-A/200 for APU T-62T-40C14, as applicable).

(11) Operate the air conditioning packs (AMM TASK 21-00-00-860-801-A/200).

NOTE: If the outside air temperature is below 16°C (60.8°F), refer to AMM TASK 21-00-00-860-804-A/200 for gradual warming of the cabin.

(12) Do the water tank servicing (AMM TASK 12-15-01-600-801-A/300).

(13) Pressurize the hydraulic system with the EMDP (AMM TASK 29-10-00-860-802-A/200).

(14) Cycle all flight controls (aileron, rudder, elevator, horizontal stabilizer, spoilers, flaps) and check free operation.

(15) Start the engines (AMM TASK 71-00-01-910-802-A/200).

TASK 10-10-01-500-805-A
EFFECTIVITY: ALL

6. AIRCRAFT PARKING IN VOLCANIC ASH CONDITION

A. General

(1) This task gives the procedure to park the aircraft in a volcanic ash condition, within an open area.

CAUTION: DO NOT ENERGIZE THE AIRCRAFT AND DO NOT MOVE THE FLIGHT CONTROL SYSTEM SURFACES WITH THE AIRCRAFT CONTAMINATED WITH VOLCANIC ASH. IF YOU DO NOT OBEY THIS PRECAUTION, DAMAGE TO THE COMPONENTS CAN OCCUR.

(2) Do this procedure before the volcanic ash fallout.

(3) A volcanic ash condition occurs when there is a volcanic ash fallout and the aircraft is parking/parked. A volcanic ash is a highly abrasive material that can corrode the contaminated surfaces.

(4) If the aircraft flies through a cloud of volcanic ash, land and/or takeoff or does ground operations (towing and taxiing) in a volcanic ash fallout condition, (AMM TASK 05-50-18-200-801-A/600) must be accomplished.

B. References

REFERENCE	*DESIGNATION*
AMM TASK 05-50-18-200-801-A/600	VOLCANIC ASH CONDITION
AMM TASK 10-10-01-500-801-A/200	AIRCRAFT NORMAL PARKING
AMM TASK 20-00-00-910-801-A/200	AIRCRAFT SAFE PROCEDURES FOR MAINTENANCE SERVICES - MAINTENANCE PRACTICES
AMM TASK 23-60-01-000-801-A/400	STATIC DISCHARGER BASE - REMOVAL

C. Zones and Accesses

Not Applicable

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

Not Applicable

F. Consumable Materials

SPECIFICATION (BRAND)	*DESCRIPTION*	*QTY*
ASTM-D740	Methyl Ethyl Ketone (MEK)	AR
MEP 18-005	Adhesive Masking Tape - 25 mm	AR
Commercially available	Wiper cloth, lint-free	AR
Commercially available	Orange vinyl streamer	AR

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	*FUNCTION*	*PLACE*
2	Does the task	On the aircraft

I. Preparation

SUBTASK 841-003-A

WARNING: MAKE SURE THAT THE AIRCRAFT IS IN A SAFE CONDITION BEFORE YOU DO THE MAINTENANCE PROCEDURES. THIS IS TO PREVENT INJURY TO PERSONS AND/OR DAMAGE TO THE EQUIPMENT.

(1) Do the procedure to make the aircraft safe for maintenance (AMM TASK 20-00-00-910-801-A/200).

(2) Obey the instructions given in the parking procedure (AMM TASK 10-10-01-500-801-A/200).

J. Aircraft Parking in Volcanic Ash Condition

SUBTASK 580-004-A

WARNING: WHEN THE HOLES, COMPONENTS AND/OR ACCESS PANELS ARE COVERED, MAKE SURE THAT THIS CONDITION IS VISIBLE FROM THE GROUND. ALSO, ATTACH A REMOVE-BEFORE-FLIGHT STREAMER TO THEM. IF YOU DO NOT OBEY THIS PRECAUTION, FAIL TO THE SYSTEMS CAN OCCUR, WHICH CAN CAUSE THE LOSS OF A SAFE FLIGHT CONDITION.

(1) Cover the holes, components and access panels below with plastic and fix them with adhesive tape or equivalent. Fix a red streamer with the REMOVE BEFORE FLIGHT inscription printed on it, with adhesive tape.

(a) Pitot/Static Sensor (1), ice detector sensors (2), AOA sensors (3), Pitot sensors (4), TAT sensors (5), windshield (6), the gap between radome/fuselage (7), on the forward fuselage. Refer to Figure 203.

NOTE: You can cover all the forward fuselage instead of the components separately.

(b) Sliding tube chromium plated area (1), on the MLG and NLG. Refer to Figure 204.

NOTE: You can cover all the MLG and NLG instead of the sliding tube separately.

(c) Ram air inlet (1) and the access panels, on the wing-to-fuselage area. Refer to Figure 205.

(d) Gap of the passenger, service, emergency and baggage doors. Refer to Figure 206.

NOTE: : Only adhesive tape is sufficient to cover the gap of the doors.

(e) Engine cowling air inlet (1), air outlets (2), generators air inlet (3), air outlet (4) and precooler outlet duct (5). Refer to Figure 207.

(f) APU air intake (1), APU exaust duct (2), rear electronic compartment door (3), APU compartment cooling air intake (4) and APU starter-generator cooling air intake (4). Refer to Figure 208.

WARNING: WHEN THE ANEMOMETRIC/PRESSURIZATION STATIC PORT IS COVERED, MAKE SURE THAT THIS CONDITION IS VISIBLE FROM THE GROUND. ALSO, ATTACH A REMOVE- BEFORE- FLIGHT TAG TO THE LEFT CONTROL YOKE IN THE COCKPIT. IF YOU DO NOT OBEY THIS PRECAUTION, FAIL TO THE SYSTEMS CAN OCCUR, WHICH CAN CAUSE LOSS OF SAFE FLIGHT CONDITION.

WARNING: DO NOT PLACE ADHESIVE TAPE OVER THE HOLES OF THE ANEMOMETRIC/PRESSURIZATION STATIC PORT. IF YOU DO NOT OBEY THIS PRECAUTION, FAIL TO THE SYSTEMS CAN OCCUR, WHICH CAN CAUSE LOSS OF SAFE FLIGHT CONDITION.

(2) Cover the anemometric/pressurization static ports with adhesive tape and an orange vinyl streamer, as follows: Refer to Figure 209 and Figure 210.

WARNING: ALWAYS OBEY THE MANUFACTURER'S HEALTH AND SAFETY PRECAUTIONS WHEN YOU USE METHYL ETHYL KETONE (MEK). DO NOT GET MEK ON YOUR SKIN, IN YOUR EYES OR MOUTH, AND DO NOT BREATHE ITS FUMES. KEEP MEK AWAY FROM SPARKS, FLAMES OR SOURCES OF HEAT. PUT ON APPROVED PROTECTIVE CLOTHING, GOGGLES AND GLOVES. MEK IS POISONOUS AND FLAMMABLE, AND IF YOU DO NOT OBEY THESE PRECAUTIONS, INJURIES CAN OCCUR.

(a) Clean the area around the static port with MEK or equivalent product and use a lint-free wiper cloth to apply the adhesive tape.

(b) Put the orange vinyl streamer on the static port, detail 2, and apply the adhesive tape to the top edge of the it, detail 3.

(c) Apply the adhesive tape to each vertical edge of orange vinyl streamer. Make an overlap of adhesive tape with the first strip, detail 4.

(d) Apply the adhesive tape horizontally on the orange vinyl streamer, under the static port holes. Make an overlap of adhesive tape with the vertical strips, detail 5.

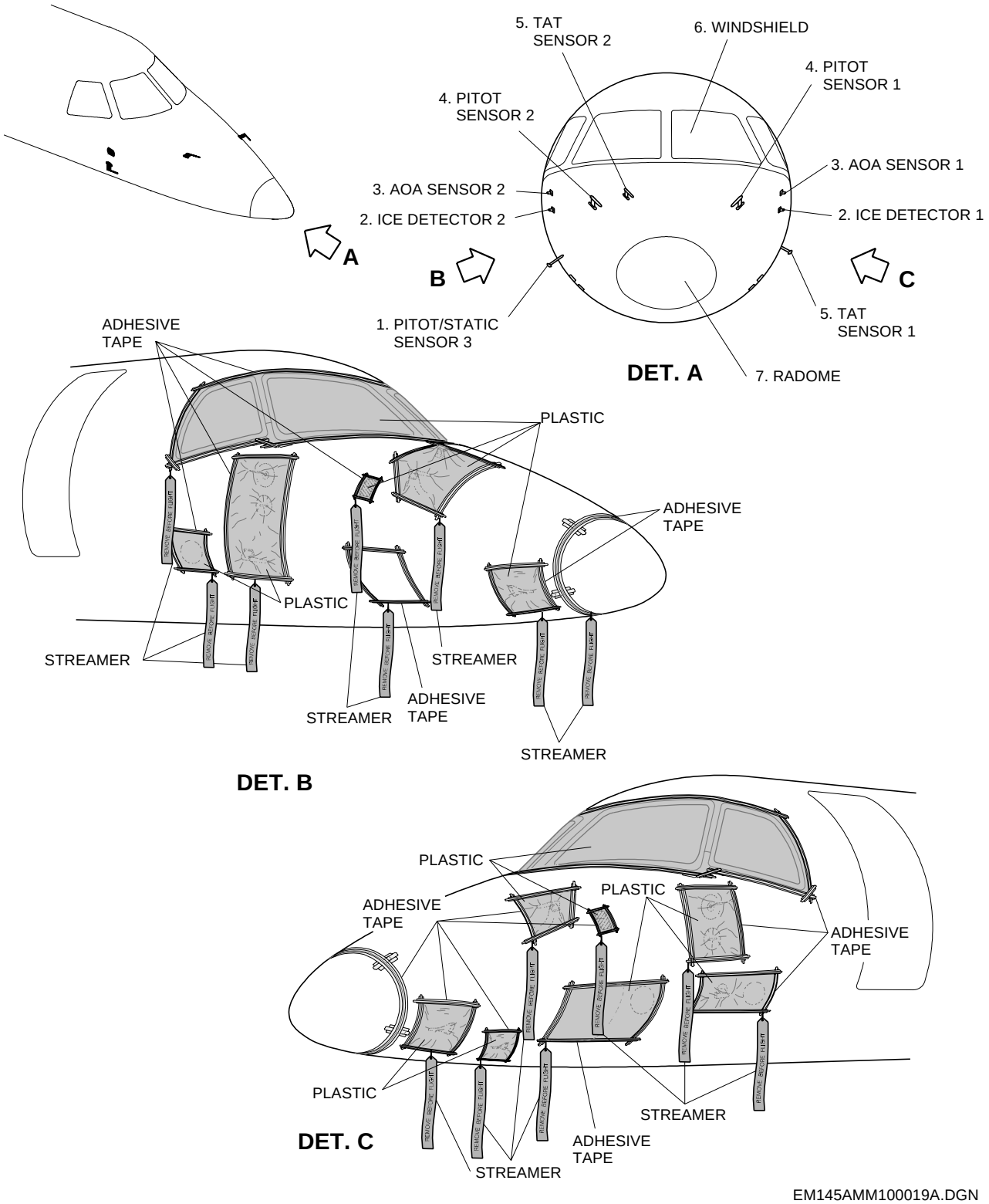
(e) Fix a red streamer with the REMOVE BEFORE FLIGHT inscription printed on it, with adhesive tape.

(3) Communication System:

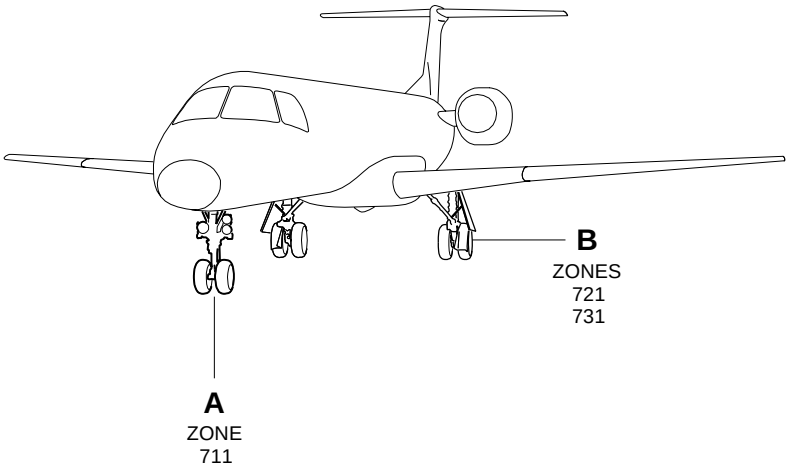
(a) Remove the static dischargers (AMM TASK 23-60-01-000-801-A/400).

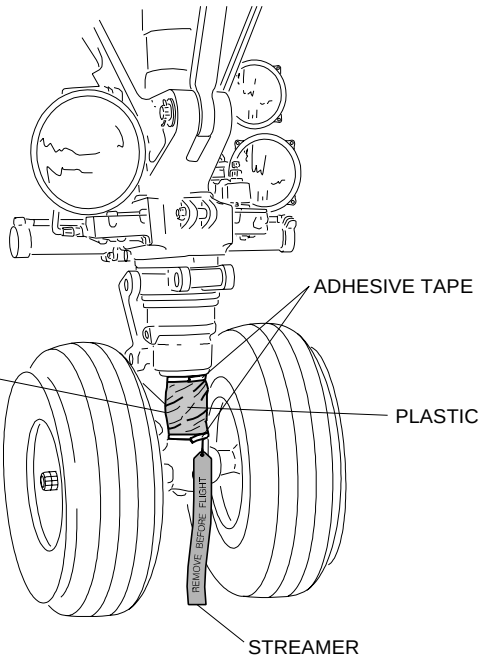
EFFECTIVITY: ALL

Windshield, Radome and Sensors - Covers
Figure 203

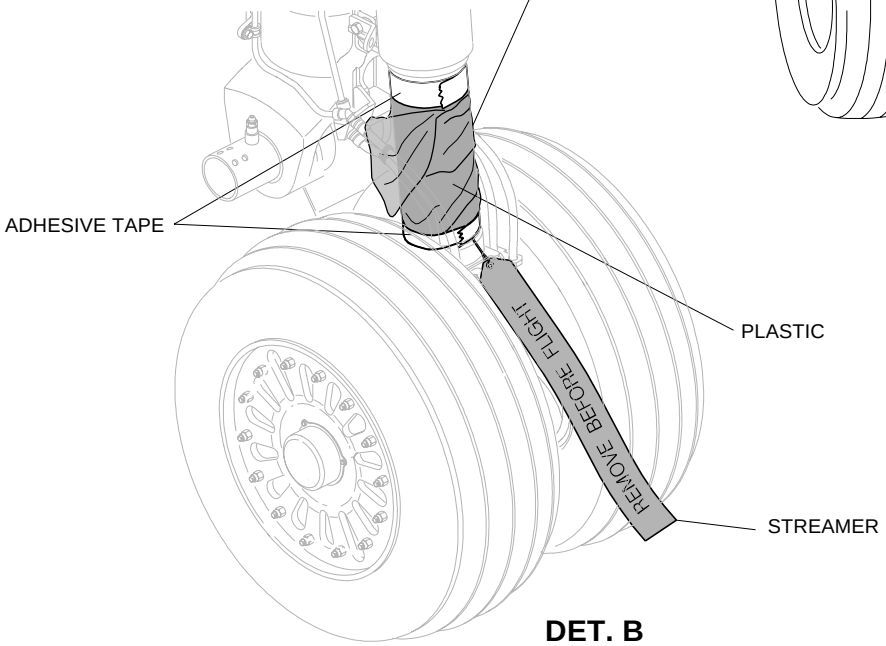


EFFECTIVITY: ALL
MLG and NLG Sliding tube - Cover
Figure 204





DET. A



DET. B

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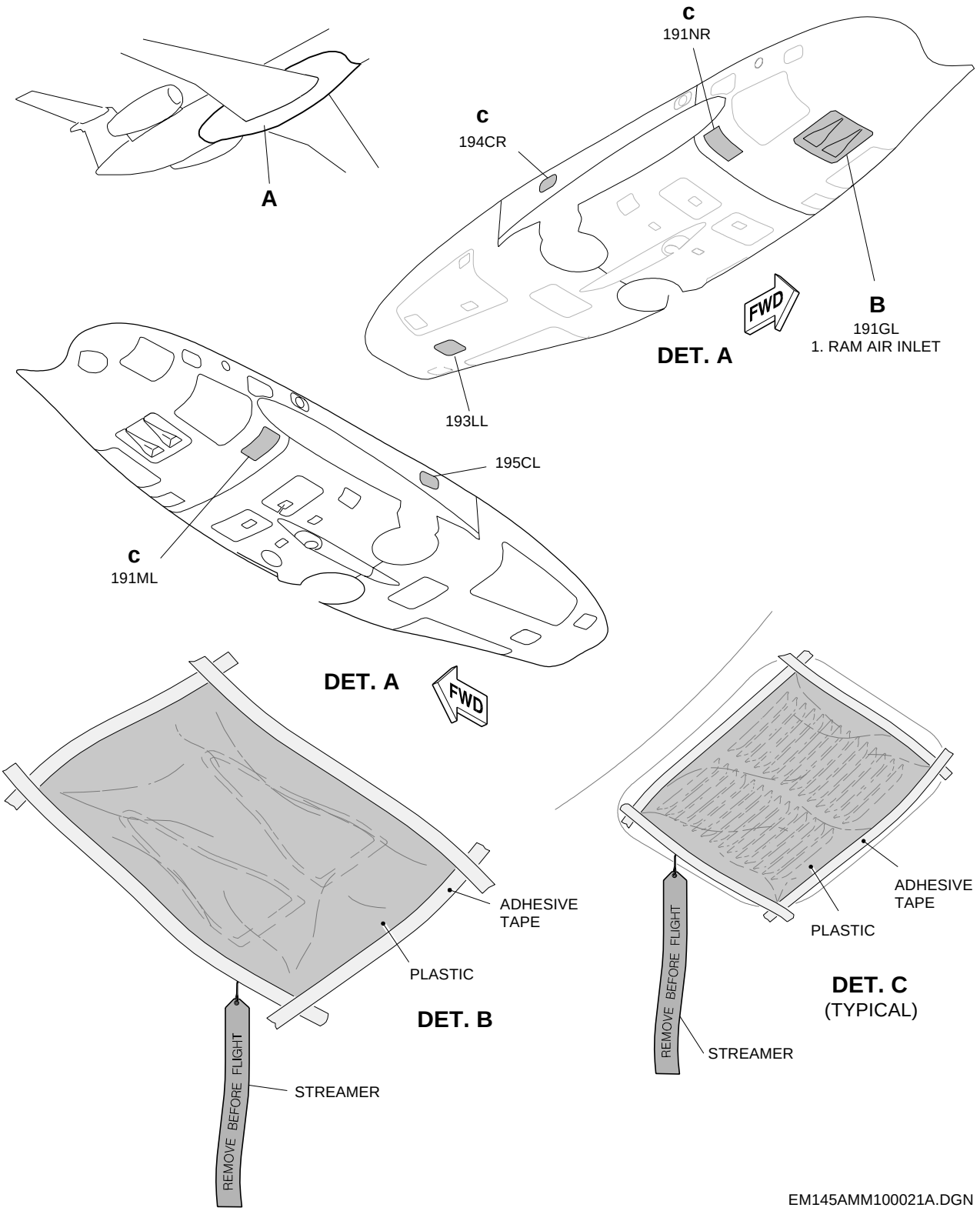
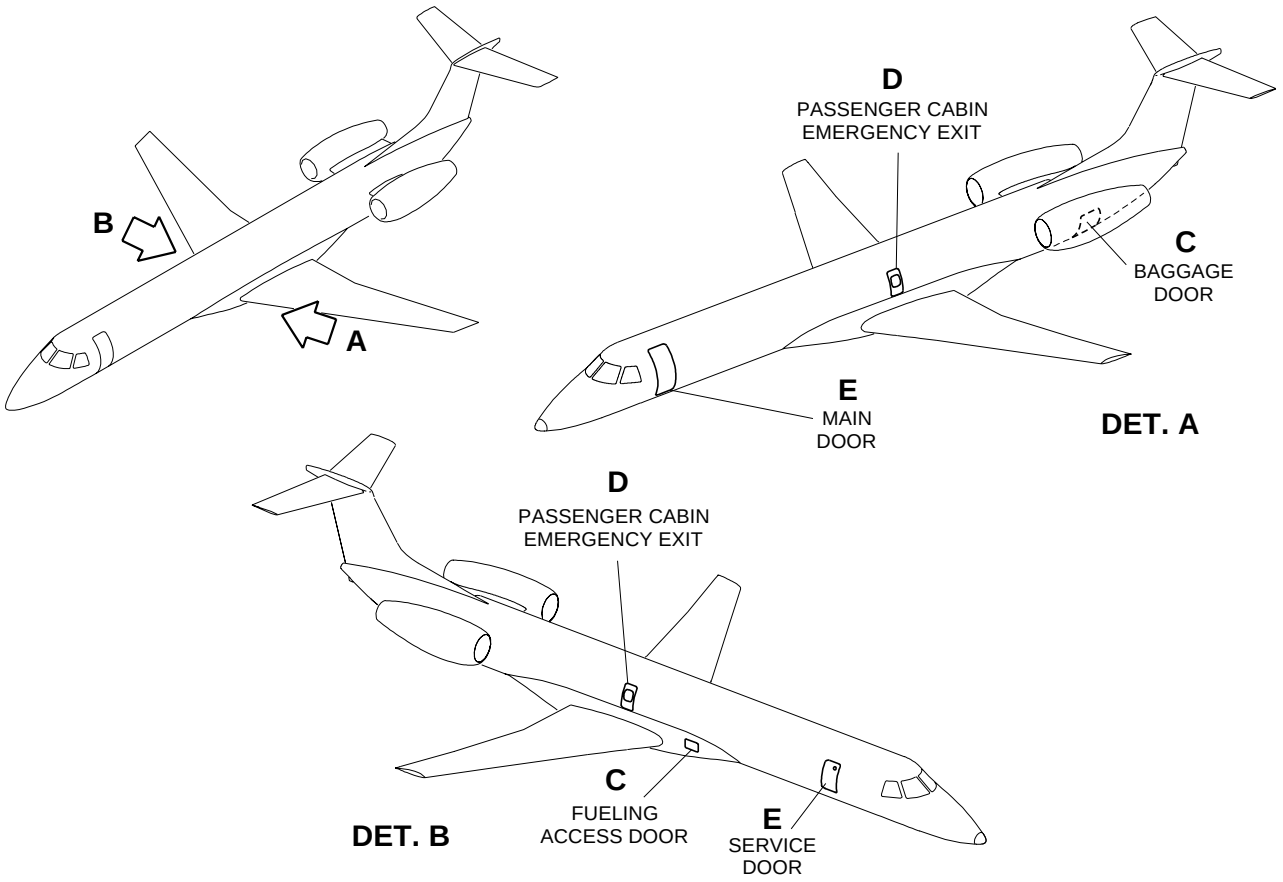
EFFECTIVITY: ALL

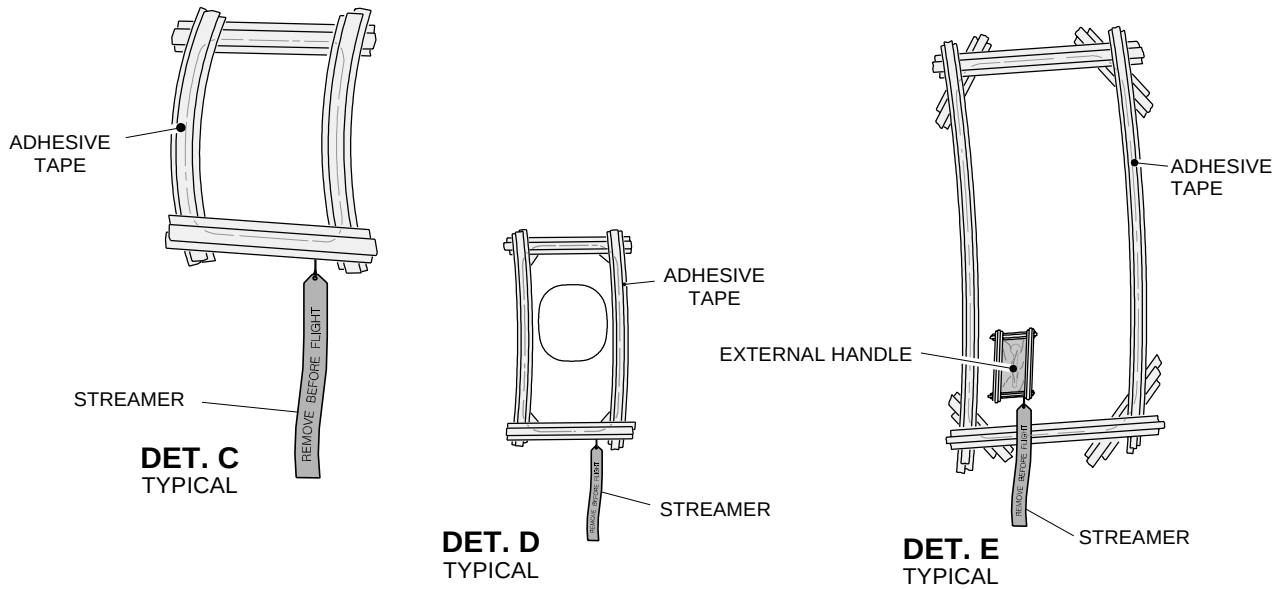
Wing-to-Fuselage Fairing Access Panels - Covers
Figure 205



EM145AMM100021A.DGN

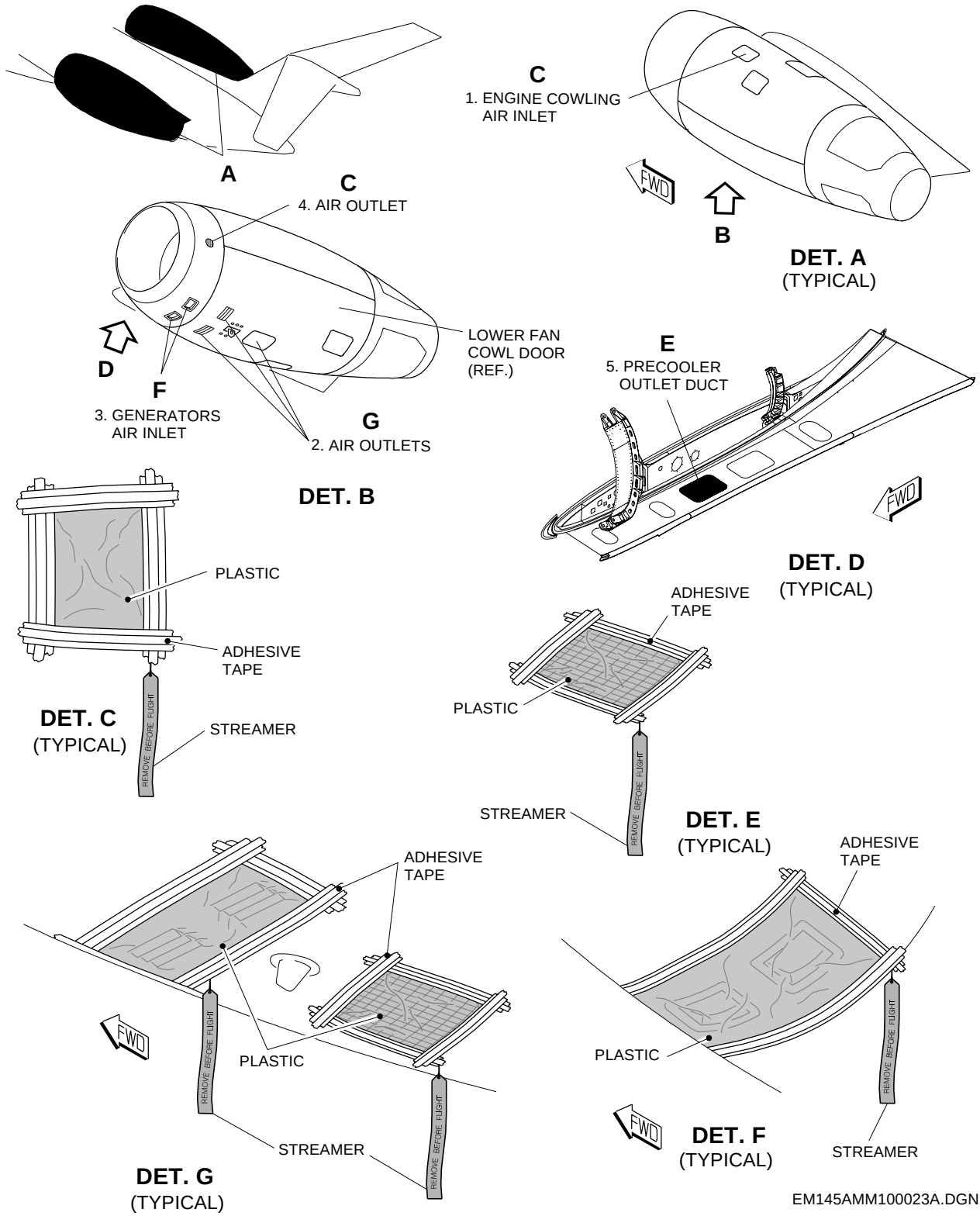
EFFECTIVITY: ALL
Doors - Covers
Figure 206



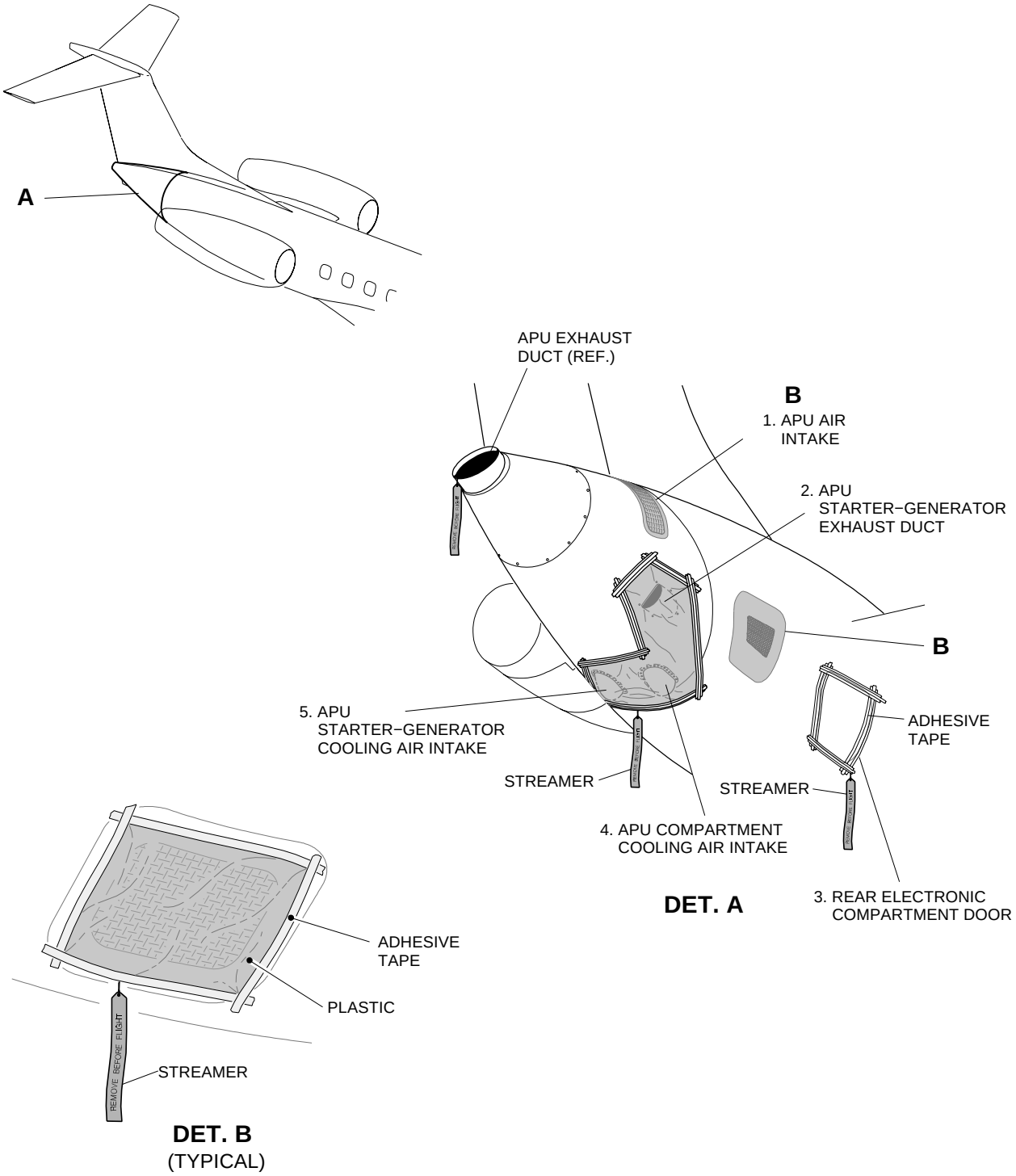


EM145AMM100022A.DGN

EFFECTIVITY: ALL
Engine/Pylon - Covers
Figure 207



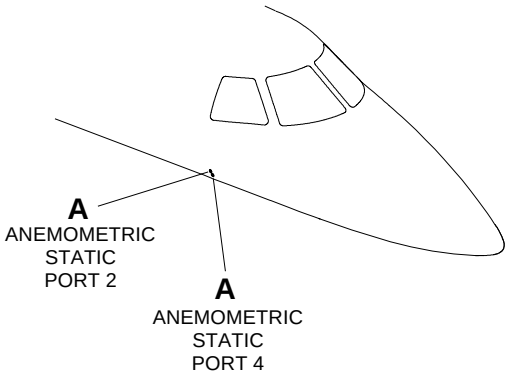
EFFECTIVITY: ALL
Tail Cone - Cover
Figure 208

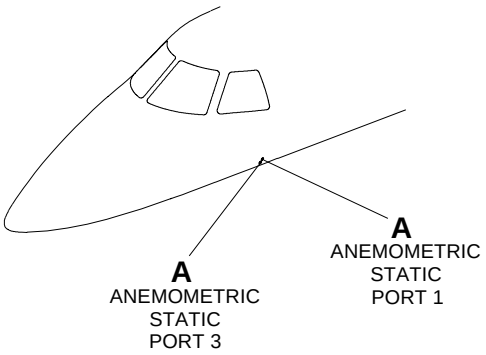


EM145AMM100025A.DGN

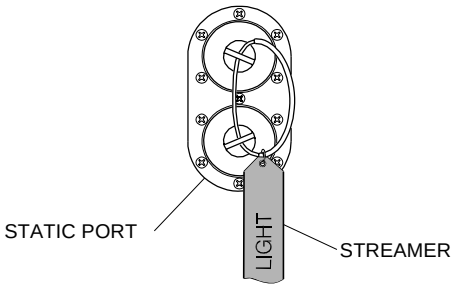
EFFECTIVITY: ALL

Anemometric Static Port - Cover
Figure 209





1



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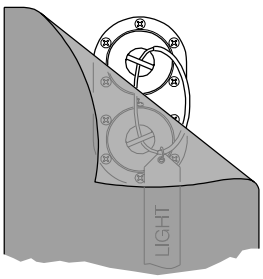
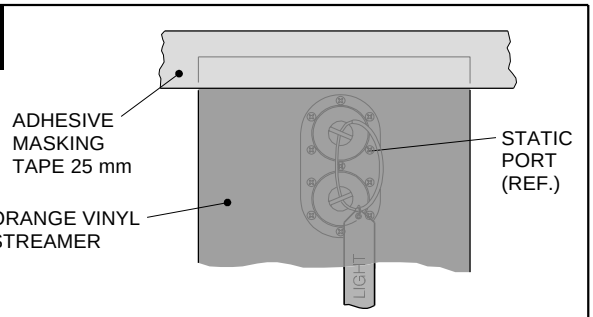


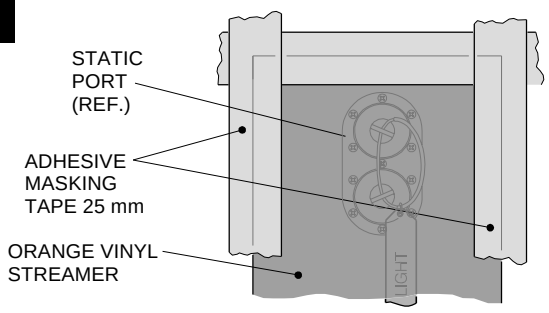
ATTACH THE ORANGE VINYL STREAMER TO THE STATIC PORT, TO COVER THE HOLES.

3



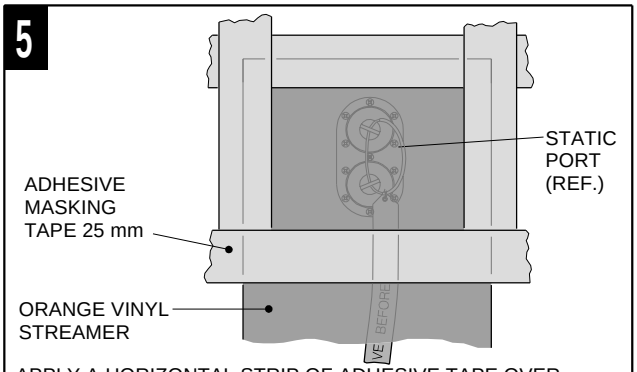
FIX THE TOP EDGE OF THE ORANGE VINYL STREAMER WITH ADHESIVE TAPE.

4



APPLY TWO STRIPS OF ADHESIVE TAPE OVER THE SIDES OF THE ORANGE VINYL STREAMER OVERLAPPING THE TOP STRIP OF ADHESIVE TAPE.

5



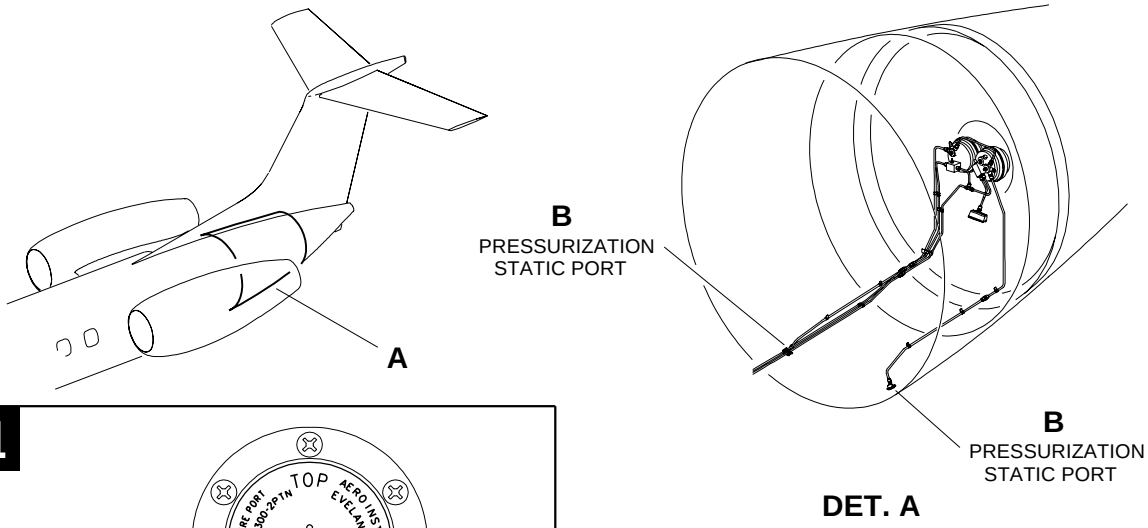
APPLY A HORIZONTAL STRIP OF ADHESIVE TAPE OVER THE ORANGE VINYL STREAMER BELLOW THE STATIC PORT HOLES OVERLAPPING THE TWO VERTICAL STRIPS.

DET. A

EM145AMM100026A.DGN

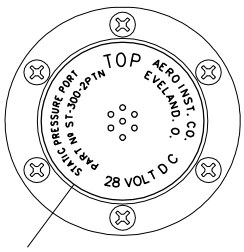
EFFECTIVITY: ALL

Pressurization Static Port - Cover
Figure 210

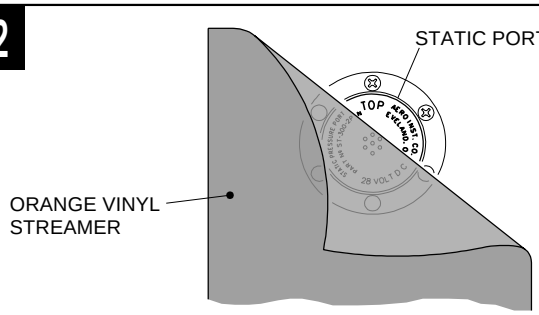


DET. A

1

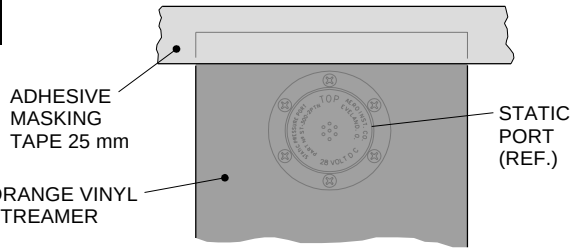


2



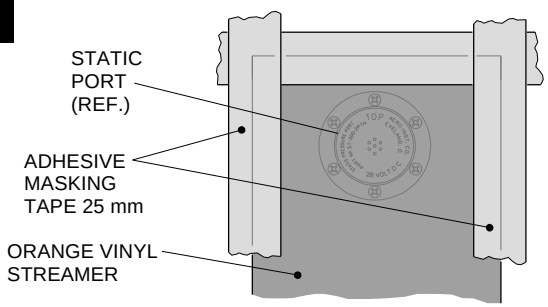
ATTACH THE ORANGE VINYL STREAMER TO THE STATIC PORT, TO COVER THE HOLES.

3



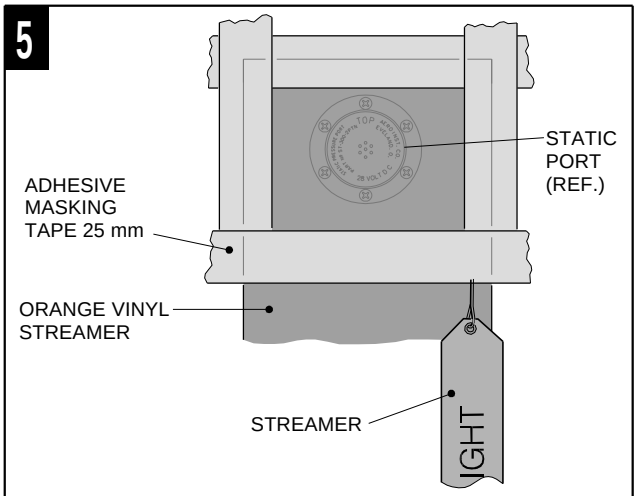
FIX THE TOP EDGE OF THE ORANGE VINYL STREAMER WITH ADHESIVE TAPE.

4



APPLY TWO STRIPS OF ADHESIVE TAPE OVER THE SIDES OF THE ORANGE VINYL STREAMER OVERLAPPING THE TOP STRIP OF ADHESIVE TAPE.

5



APPLY A HORIZONTAL STRIP OF ADHESIVE TAPE OVER THE ORANGE VINYL STREAMER BELLOW THE STATIC PORT HOLES OVERLAPPING THE TWO VERTICAL STRIPS.

DET. B

EM145AMM100027A.DGN

TASK 10-10-01-500-806-A
EFFECTIVITY: ALL

7. AIRCRAFT RETURN TO SERVICE (PARKING IN VOLCANIC ASH CONDITION)

A. General

(1) This task gives the procedure to do the aircraft return to service after it has been parked into a volcanic ash condition.

(2) A volcanic ash condition occurs when there is a volcanic ash fallout and the aircraft is parking/parked. A volcanic ash is a highly abrasive material that can corrode the contaminated surfaces.

(3) If the aircraft flies through a cloud of volcanic ash, land and/or takeoff or does ground operations (towing, taxiing) in a volcanic ash fallout condition, (AMM TASK 05-50-18-200-801-A/600) must be accomplished.

(4) When a specific cleaning procedure for a component or surface is not available, use these tools to remove/clean the volcanic ash contamination from the surfaces, compartments, piston of the actuators, or other components as applicable:

(a) vacuum cleaner

(b) lint-free wiper cloth

(c) soft bristle brush

(d) Broom

(5) The approved cleaning material to remove the adhesive tape residue from the aircraft fuselage are:

(a) Methyl Ethyl Ketone (MEK)

(b) Diestone Solvent - CONTEC EX420602

B. References

REFERENCE	*DESIGNATION*
AMM MPP 32-49-01/400	-
AMM MPP 32-49-04/400	-
AMM TASK 05-50-18-200-801-A/600	VOLCANIC ASH CONDITION
AMM TASK 10-10-01-500-802-A/200	AIRCRAFT RETURN TO SERVICE
AMM TASK 10-10-02-500-802-A/200	AIRCRAFT RETURN TO SERVICE
AMM TASK 12-11-03-600-801-A/300	FUEL TANK DRAINING - SERVICING
AMM TASK 12-12-01-600-801-A/300	ENGINE - SERVICING
AMM TASK 12-12-02-600-801-A/300	AUXILIARY-POWER-UNIT FILLING
AMM TASK 12-22-00-600-802-A/300	HEAVY DIRT - SERVICING
AMM TASK 12-22-00-600-803-A/300	LANDING GEAR COMPARTMENTS - SERVICING
AMM TASK 12-23-00-600-801-A/300	-

(Continued)

REFERENCE	*DESIGNATION*
AMM TASK 20-00-00-910-801-A/200	AIRCRAFT SAFE PROCEDURES FOR MAINTENANCE SERVICES - MAINTENANCE PRACTICES
AMM TASK 21-31-00-700-801-A/500	-
AMM TASK 21-31-00-700-802-A/500	-
AMM TASK 21-51-00-700-802-A/500	-
AMM TASK 21-60-00-700-801-A/500	TEMPERATURE CONTROL SYSTEM - OPERATIONAL CHECK
AMM TASK 23-60-01-400-801-A/400	STATIC DISCHARGER BASE - INSTALLATION
AMM TASK 27-12-01-200-802-A/600	AILERON PCA ROD ENDS/FITTING LUGS FOR INTEGRITY AND GENERAL CONDITION - GENERAL VISUAL INSPECTION
AMM TASK 27-22-02-200-801-A/600	RUDDER ACTUATORS - GENERAL VISUAL INSPECTION
AMM TASK 27-51-00-200-801-A/600	FLAP MECHANICAL LINE - GENERAL VISUAL INSPECTION
AMM TASK 27-51-00-600-801-A/300	FLAP SCREWJACK ACTUATOR (FSAS) - LUBRICATION
AMM TASK 27-62-00-200-801-A/600	SPOILER SURFACE HINGE POINTS - GENERAL VISUAL INSPECTION
AMM TASK 30-80-00-700-801-A/500	ICE DETECTION SYSTEM - OPERATIONAL TEST
AMM TASK 32-34-00-600-801-A/300	MLG AND NLG - LUBRICATION
AMM TASK 32-34-00-700-801-A/500	LG EMERGENCY EXTENSION - OPERATIONAL AND FUNCTIONAL CHECKS
AMM TASK 32-49-03-200-801-A/600	BRAKE ASSEMBLY - INSPECTION
AMM TASK 34-15-00-700-801-A/500	ADC SYSTEM - FUNCTIONAL CHECK
AMM TASK 56-10-01-100-801-A/700	COCKPIT WINDSHIELD - CLEANING

C. Zones and Accesses

Not Applicable

D. Tools and Equipment

ITEM	*DESCRIPTION*	*PURPOSE*	*QTY*
Commercially available	Soft Bristle Brush	remove/clean the volcanic ash contamination	
Commercially available	Vacuum Cleaner	remove/clean the volcanic ash contamination	

E. Auxiliary Items

Not Applicable

F. Consumable Materials

SPECIFICATION (BRAND)	*DESCRIPTION*	*QTY*
ASTM-D740	Methyl Ethyl Ketone (MEK)	AR
-	Diestone Solvent - CONTEC EX420602	AR
Commercially available	Wiper cloth, lint-free	AR

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	*FUNCTION*	*PLACE*
2	Does the task	On the aircraft

I. Preparation

SUBTASK 841-004-A

WARNING: MAKE SURE THAT THE AIRCRAFT IS IN A SAFE CONDITION BEFORE YOU DO THE MAINTENANCE PROCEDURES. THIS IS TO PREVENT INJURY TO PERSONS AND/OR DAMAGE TO THE EQUIPMENT.

CAUTION: DO NOT ENERGIZE THE AIRCRAFT AND DO NOT MOVE THE FLIGHT CONTROL SYSTEM SURFACES WITH THE AIRCRAFT CONTAMINATED WITH VOLCANIC ASH. IF YOU DO NOT OBEY THIS PRECAUTION, DAMAGE TO THE COMPONENTS CAN OCCUR.

(1) Do the procedure to make the aircraft safe for maintenance (AMM TASK 20-00-00-910-801-A/200).

J. Aircraft Return to Service

SUBTASK 580-005-A

CAUTION: DO NOT ENERGIZE THE AIRCRAFT AND DO NOT MOVE THE FLIGHT CONTROL SYSTEM SURFACES WITH THE AIRCRAFT CONTAMINATED WITH VOLCANIC ASH. IF YOU DO NOT OBEY THIS PRECAUTION, DAMAGE TO THE COMPONENTS CAN OCCUR.

(1) Clean the aircraft as follows:

(a) Remove the volcanic ash contamination from the external aircraft surface, including the MLG and NLG, and wash it (AMM TASK 12-22-00-600-802-A/300) and (AMM TASK 12-22-00-600-803-A/300).

(b) Clean the windshield with a large volume of low-pressure water on the exterior surfaces (AMM TASK 56-10-01-100-801-A/700).

(c) Do an inspection of the airframe drains for signs of volcanic ash contamination or blockage. Clean, as necessary (AMM TASK 12-23-00-600-801-A/300).

WARNING: REMOVE THE COVERS AND THE REMOVE-BEFORE-FLIGHT STREAMER FROM THE HOLES, COMPONENTS AND/OR ACCESS PANELS. IF YOU DO NOT OBEY THIS PRECAUTION, FAIL TO THE SYSTEMS CAN OCCUR, WHICH CAN CAUSE THE LOSS OF A SAFE FLIGHT CONDITION.

(2) Remove the streamer and the covers from the holes, components and access panels as follows:

(a) Pitot/Static Sensor (1), ice detector sensors (2), AOA sensors (3), Pitot sensors (4), TAT sensors (5), windshield (6), the gap between radome/fuselage (7), on the forward fuselage. Refer to Figure 203.

(b) Sliding tube chromium plated area (1), on the MLG and NLG. Refer to Figure 204.

(c) Ram air inlet (1) and the access panels, on the wing-to-fuselage area. Refer to Figure 205.

(d) Gap of the passengers, service, emergency and baggage doors. Refer to Figure 206.

(e) Engine cowling air inlet (1), air outlets (2), generators air inlet (3), air outlet (4) and precooler outlet duct (5). Refer to Figure 207.

(f) APU air intake (1), APU exaust duct (2), rear electronic compartment door (3), APU compartment cooling air intake (4) and APU starter-generator cooling air intake (4). Refer to Figure 208.

(g) Static ports. Refer to Figure 209 and Figure 210.

(3) Remove all GSEs covers from the aircraft. Refer to (AMM TASK 10-10-01-500-802-A/200).

(4) After you remove the covers from the aircraft, make sure that there are no signs of volcanic ash contamination behind them. If there are signs of volcanic ash contamination behind the covers, clean the respective component.

NOTE: If the Pitot/Static sensors, Pitot sensors, AOA sensors, TAT sensors and ice detector sensors show signs of volcanic ash contamination, replace them.

(5) Remove the residue of adhesive tape from the aircraft fuselage with the approved cleaning material.

SUBTASK 200-002-A

(6) Do an external general visual inspection on these aircraft parts:

(a) Fuselage, windows and doors

(b) Wings, pylons and engines

(c) Stabilizers and control surfaces

(d) Antennas

1 Make sure that the components show no signs of:

a Abrasion, erosion;

b Paint in damaged condition;

c Corrosion Inhibiting Compound layer in damaged condition. Apply it again as necessary CPM Part I (TASK 51-61-00).

(7) Do a general visual inspection on the external lights for signs of volcanic ash contamination or damage. Clean as necessary.

(a) Landing lights and taxi lights

(b) Navigation lights and Inspection lights

(c) Red beacon lights and strobe lights

CAUTION: DO NOT ENERGIZE THE AIRCRAFT AND DO NOT MOVE THE FLIGHT CONTROL SYSTEM SURFACES WITH THE AIRCRAFT CONTAMINATED WITH VOLCANIC ASH. IF YOU DO NOT OBEY THIS PRECAUTION, DAMAGE TO THE COMPONENTS CAN OCCUR.

(8) Flight Control System:

(a) Do a general visual inspection on the Flight Control System components for signs of ash contamination and clean them as necessary:

1 Aileron PCAs (AMM TASK 27-12-01-200-802-A/600).

2 Rudder actuators (AMM TASK 27-22-02-200-801-A/600).

3 Horizontal stabilizer actuator.

4 Flap screwjack actuators (AMM TASK 27-51-00-200-801-A/600).

5 Spoiler actuators (AMM TASK 27-62-00-200-801-A/600).

(9) Lubricate the Flap screwjack actuator if it was contaminated with ash (AMM TASK 27-51-00-600-801-A/300).

(10) Cycle all flight controls surfaces (aileron, rudder, elevator, horizontal stabilizer, flap and spoiler) and do a check for free operation.

(11) Landing Gear System:

(a) Clean the NLG and MLG uplock box.

(b) Clean the NLG and MLG bay.

(c) Clean the MLG and NLG sliding tube.

(d) Do a check of the MLG area between brake pistons and plate (AMM TASK 32-49-03-200-801-A/600). Clean it as necessary.

(e) Replace the NLG wheels, if the wheels were not rotated weekly (AMM MPP 32-49-04/400).

(f) Replace the MLG wheels, if the wheels were not rotated weekly (AMM MPP 32-49-01/400).

(g) Do the NLG and MLG mechanical system lubrication (AMM TASK 32-34-00-600-801-A/300).

NOTE: All joints, connections and bearing surfaces must be in a clean condition.

(h) Do the functional check of the landing-gear emergency extension with the free-fall lever (AMM TASK 32-34-00-700-801-A/500).

(12) Fuel System.

(a) Do a general visual inspection on the fuel system for signs of ash contamination and clean it as necessary:

1 Fuel drains and NACA air inlet.

2 Refueling/defueling control panel.

3 Pressure refueling/defueling adapter.

4 Gravity fill port.

(b) Drain the fuel tank (AMM TASK 12-11-03-600-801-A/300).

(13) Engine:

(a) If there are signs of ash contamination in the engine compressor inlet, inspect the engines according to (AMM TASK 05-50-18-200-801-A/600).

(b) Do the engines oil level check (AMM TASK 12-12-01-600-801-A/300).

(14) APU:

(a) If there are signs of ash contamination in the APU inlets, inspect the APU according to (AMM TASK 05-50-18-200-801-A/600).

(b) Do the APU oil level check (AMM TASK 12-12-02-600-801-A/300)

(15) AMS System:

(a) Do the operational test of the cooling pack system (AMM TASK 21-51-00-700-802-A/500).

(b) Do the operational test of the temperature control system (AMM TASK 21-60-00-700-801-A/500).

(c) Do the pressurization control system functional test in automatic mode (AMM TASK 21-31-00-700-802-A/500).

(d) Do the operational test in manual mode of the pressurization control system (AMM TASK 21-31-00-700-801-A/500).

(e) Do the operational test of the ice detector system (AMM TASK 30-80-00-700-801-A/500).

(16) Navigation System:

(a) Do the functional check of the Air Data Computer (ADC) system (AMM TASK 34-15-00-700-801-A/500).

(17) Communication System:

(a) Install the static discharger rods riveted-base (AMM TASK 23-60-01-400-801-A/400).

(18) Aircraft Interior:

(a) Open the window shades.

(b) Do a check on the cockpit and passenger cabin. Clean as necessary

(c) Clean the carpets.

(19) Do the additional return to service procedure according to the aircraft parking condition. Refer to (AMM TASK 10-10-01-500-802-A/200) or (AMM TASK 10-10-02-500-802-A/200), as applicable.