PNEUMATIC - ADJUSTMENT/TEST

EFFECTIVITY: ALL

1. General

A. This section gives the procedures to do the leakage test in the LH and RH air bleed system ducts independently and to do the operational check of the air bleed system.

B. 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*
36-00-00-700-801-A	LH AIR BLEED SYSTEM DUCTS - LEAKAGE TEST	ALL
36-00-00-700-802-A	RH AIR BLEED SYSTEM DUCTS - LEAKAGE TEST	ALL
36-00-00-700-803-A	AIR BLEED SYSTEM - OPERATIONAL TEST	ALL
36-00-00-700-804-A	LH FUSELAGE AIR BLEED DUCTS - LEAKAGE TEST	ALL
36-00-00-700-805-A	RH FUSELAGE AIR BLEED DUCTS - LEAKAGE TEST	ALL
36-00-00-700-806-A	AIR BLEED SYSTEM - OPERATIONAL TEST	ALL

TASK 36-00-00-700-801-A
EFFECTIVITY: ALL

2. LH AIR BLEED SYSTEM DUCTS - LEAKAGE TEST

A. General

(1) This leakage test is applicable to the LH air bleed system ducts.

B. References

REFERENCE	*DESIGNATION*
AMM MPP 06-41-01/100	-
AMM MPP 06-43-00/100	- COMPONENT LOCATION
AMM TASK 21-51-01-000-801-A/400	PACK VALVE - REMOVAL
AMM TASK 21-51-01-400-801-A/400	PACK VALVE - INSTALLATION
AMM TASK 30-11-01-000-801-A/400	WING ANTI-ICING VALVE - REMOVAL
AMM TASK 30-11-01-400-801-A/400	WING ANTI-ICING VALVE - INSTALLATION
AMM TASK 36-11-05-000-801-A/400	ENGINE BLEED VALVE - REMOVAL
AMM TASK 36-11-05-400-801-A/400	ENGINE BLEED VALVE - INSTALLATION
AMM TASK 49-11-00-000-801-A/400	APU COWLING - REMOVAL
AMM TASK 49-11-00-400-801-A/400	APU COWLING - INSTALLATION
AMM TASK 52-44-01-000-801-A/400	REAR ELECTRONIC-COMPARTMENT DOOR - REMOVAL
AMM TASK 52-44-01-400-801-A/400	REAR ELECTRONIC-COMPARTMENT DOOR - INSTALLATION
AMM TASK 71-11-01-000-801-A/400	ENGINE UPPER COWLING - REMOVAL
AMM TASK 71-11-01-400-801-A/400	ENGINE UPPER COWLING - INSTALLATION
AMM TASK 71-12-01-000-801-A/400	ENGINE LOWER COWLING - OPENING
AMM TASK 71-12-01-400-801-A/400	ENGINE LOWER COWLING - CLOSING
AMM TASK 80-10-02-000-801-A/400	STARTER CONTROL VALVE - REMOVAL
AMM TASK 80-10-02-400-801-A/400	STARTER CONTROL VALVE - INSTALLATION
S.B.145-30-0022	-
S.B.145-36-0028	-
SB145-36-0028	-

C. Zones and Accesses

ZONE	*PANEL/DOOR*	*LOCATION*
191	191EL	LH side of the forward wing-to-fuselage fairing
191	191KL	LH side of the forward wing-to-fuselage fairing
272	272DR	RH side of rear fuselage II
313	313	APU cowling
413	412	Upper cowling of LH engine

(Continued)

ZONE	PANEL/DOOR	LOCATION
413	413	Lower cowling of LH engine
414	414DB	LH pylon

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
GSE 133	Kit - Leak Test, Anti-Ice/Bleed Line	To do the leakage test (PRE-MOD. SB145-36-0028)	
GSE 007	Kit - Leak Test, Anti-Ice/Bleed Line	To do the leakage test (POST-MOD. SB145-36-0028)	
GSE 028	Nitrogen Service Regulator	To regulate the pressure supplied to the system	
Commercially available	Stopwatch	To measure the time of leakage	
Commercially available	Nitrogen cylinder - To supply as much as 250 psi	To pressurize the bleed air line	
Commercially available	Pressure Gage 0 to 600 psi	To measure the pressure drop	

E. Auxiliary Items

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Ladder	To get access to the work area	2

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	A - Does the task	Inside and outside the aircraft
1	B - Helps technician A	Inside and outside the aircraft

I. Preparation

SUBTASK 841-002-A

(1) On the overhead circuit breaker panel, open these circuit breakers and attach DO-NOT-CLOSE tags to them:

- CROSS BLEED (Location tip: ESSENTIAL DC BUS 2 / PNEU / CROSS BLEED).
- PACK 1 (Location tip: DC BUS 1 / AIR COND/PNEU / PACK 1).
- STAB

(PRE-MOD. S.B.145-30-0022):
- STAB: (Location Tip: DC BUS 2/ICE AND RAIN PROTECTION/STAB).
(POST-MOD. S.B.145-30-0022):
- STAB: (Location Tip: DC BUS 2/ICE AND RAIN PROTECTION/STAB).
- STAB A/I IND: (Location Tip: DC BUS 1/ICE AND RAIN PROTECTION/STAB A/I IND).

- WING (Location tip: DC BUS 1 / ICE AND RAIN PROTECTION / WING).
- EBV 1 (Location tip: ESSENTIAL DC BUS 1 / AIR COND/PNEU / EBV 1).
- CONTROL (Location tip: ESSENTIAL DC BUS 2 / APU / CONTROL).
- FUEL SOV (Location tip: ESSENTIAL DC BUS 2 / APU / FUEL SOV).
- START 1 (Location tip: ESSENTIAL DC BUS 1 / POWERPLANT / START 1).

(2) Remove access panels 191EL and 191KL (AMM MPP 06-41-01/100), and 414DB (AMM MPP 06-43-00/100).

(3) Remove rear electronic compartment door 272DR (AMM MPP 06-41-01/100 and AMM TASK 52-44-01-000-801-A/400).

(4) Remove the APU cowling (AMM TASK 49-11-00-000-801-A/400).

(5) Remove access panel 414DB (AMM MPP 06-43-00/100).

(6) Open the lower cowling of the LH engine (AMM TASK 71-12-01-000-801-A/400).

(7) Remove the upper cowling of the LH engine (AMM TASK 71-11-01-000-801-A/400).

J. Leakage Test of the LH Air Bleed System Ducts (Figure 501)

SUBTASK 790-002-A

WARNING: DO NOT TOUCH THE DUCTS OR COMPONENTS OF THE AIR BLEED SYSTEM IMMEDIATELY AFTER THE SYSTEM IS TURNED OFF. THE HIGH AIR TEMPERATURE CAN CAUSE INJURY TO YOU.

(1) Remove the clamp (2) and disconnect the bleed duct from the stabilizer anti-icing duct. Refer to Figure 501, sheet 1.

(2) Install the seal (1) and plug (3) to the bleed duct with cap AN929-4 (4) and attach them with a clamp (2). Tighten the clamp (2) to the torque shown in Figure 501, sheet 1.

(3) Remove the LH engine bleed valve (AMM TASK 36-11-05-000-801-A/400).

(4) Install the seals (6) and dummy tube (7) and attach them with a clamp (5). Tighten the clamp (5) to the torque shown in Figure 501, sheet 2.

(5) For aircraft POST-MOD. S.B.145-36-0028, install the cap (28) on T- fitting (REF.).

(6) Disconnect the pneumatic line upstream of the LH engine pylon. Refer to Figure 501, sheet 3.

(7) Install the seal (8) and plug (10), and attach them with a clamp (9). Tighten the clamp (9) to the torque shown in Figure 501, sheet 3.

(8) Remove the starter control valve (AMM TASK 80-10-02-000-801-A/400).

(9) Install the seal (12) and plug (13), and attach them with a clamp (11). Tighten the clamp (11) to the torque shown in Figure 501, sheet 4.

(10) For aircraft PRE-MOD. S.B.145-36-0028, connect the hose with a pressure gage to the tube downstream of the pre-cooler. Refer to Figure 501, sheet 5.

(11) For aircraft POST-MOD. S.B.145-36-0028, connect the hose with a pressure gage to the T- fitting (REF.). Refer to Figure 501, sheet 5.

(12) Remove the LH pack valve (AMM TASK 21-51-01-000-801-A/400).

(13) Install the seal (16) and plug (17), and attach them with a clamp (15). Tighten the clamp (15) to the torque shown in Figure 501, sheet 6.

(14) Install two plugs AN929-4 (14) at the pressure feedback point and vacuum pump feedback line. Refer to Figure 501, sheet 6.

(15) Remove the LH wing anti-icing valve (AMM TASK 30-11-01-000-801-A/400).

(16) Install the seal (19) and plug (20), and attach them with a clamp (18). Tighten the clamp (18) to the torque shown in Figure 501, sheet 7.

(17) For aircraft with APU T-62T-40C14 (APU 500 R), do as follows:

(a) Remove the clamp (22), clamp (27), and bleed duct (23). Refer to Figure 501, sheet 9.

(b) Remove and discard the packing (21).

(c) Install the seal (26) and plug (25), and attach them with a clamp (27). Tighten the clamp (27) to the torque shown in Figure 501, sheet 9.

(d) Connect nitrogen service regulator GSE 028 to the nitrogen cylinder.

(e) Connect the adapter (24) to the nipple of the plug (25).

(f) Connect the end of the hose of GSE 028 to the nipple of the adapter (24) in the APU compartment.

(g) Go to step (19).

(18) Apply pressure to the LH air bleed ducts and stop when the pressure stabilizes at 250 psi.

(19) Stop the supply of nitrogen.

(20) After 15 seconds, see the value of the pressure on the pressure gage installed in item (9).

NOTE:
- If the pressure decreases more than 73 psi, release the pressure in the bleed air ducts, make sure that the fittings are correctly installed, and repair as necessary.
- Do the leakage test again after the repair.

(21) Depressurize the LH bleed air ducts.

(22) For aircraft with APU T-62T-40C14 (APU 500 R), do as follows:

(a) Disconnect the end of the hose of GSE 028 from the nipple of the adapter (24) in the APU compartment. Refer to Figure 501, sheet 9.

(b) Disconnect the adapter (24) from the nipple of the plug (25).

(c) Disconnect nitrogen service regulator GSE 028 from the nitrogen cylinder.

(d) Remove the plug (25) and seal (26).

(e) Install new packing (21).

(f) Install the bleed duct (23), clamp (22), and clamp (27). Tighten the clamp (22) and (27) to the torque shown in Figure 501, sheet 9.

(g) Go to step (25).

(23) Remove the plug (20) and seal (19). Refer to Figure 501, sheet 7.

(24) Install the LH wing anti-icing valve (AMM TASK 30-11-01-400-801-A/400).

(25) Remove the plug (17) and seal (16). Refer to Figure 501, sheet 6.

(26) Remove two plugs AN929-4 (14) and install the pressure feedback point and vacuum pump feedback line. Refer to Figure 501, sheet 6.

(27) Install the LH pack valve (AMM TASK 21-51-01-400-801-A/400).

(28) Remove the plug (13) and seal (12). Refer to Figure 501, sheet 4.

(29) Install the starter control valve (AMM TASK 80-10-02-400-801-A/400).

(30) Remove the plug (10) and seal (8). Refer to Figure 501, sheet 3.

(31) Connect the pneumatic line upstream of the LH engine pylon. Tighten the clamp (9) to the torque shown in Figure 501, sheet 3.

(32) Remove the dummy tube (7) and seals (6). Refer to Figure 501, sheet 2.

(33) For aircraft POST-MOD. S.B.145-36-0028, remove the cap (28) from the T- fitting (REF.). Refer to Figure 501, sheet 2.

(34) Install the LH engine bleed valve (AMM TASK 36-11-05-400-801-A/400).

(35) Remove the hose with a pressure gage from the tube downstream of the pre-cooler. Refer to Figure 501, sheet 5.

(36) Remove the seal (1) and plug (3) with cap AN929-4 (4) from the bleed duct. Refer to Figure 501, sheet 1.

(37) Install the clamp (2) and connect the bleed duct to the stabilizer anti-icing duct. Tighten the clamp (2) to the torque shown in Figure 501, sheet 1.

K. Follow-on

SUBTASK 842-002-A

(1) Install the upper cowling of the LH engine (AMM TASK 71-11-01-400-801-A/400).

(2) Close the lower cowling of the LH engine (AMM TASK 71-12-01-400-801-A/400).

(3) Install access panel 414DB (AMM MPP 06-43-00/100).

(4) Install the APU cowling (AMM TASK 49-11-00-400-801-A/400).

(5) Install access panels 191EL and 191KL (AMM MPP 06-41-01/100), and 414DB (AMM MPP 06-43-00/100).

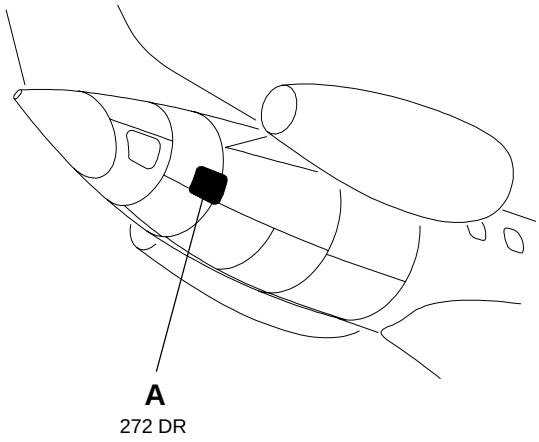
(6) Install rear electronic compartment door 272DR (AMM MPP 06-41-01/100 and AMM TASK 52-44-01-400-801-A/400).

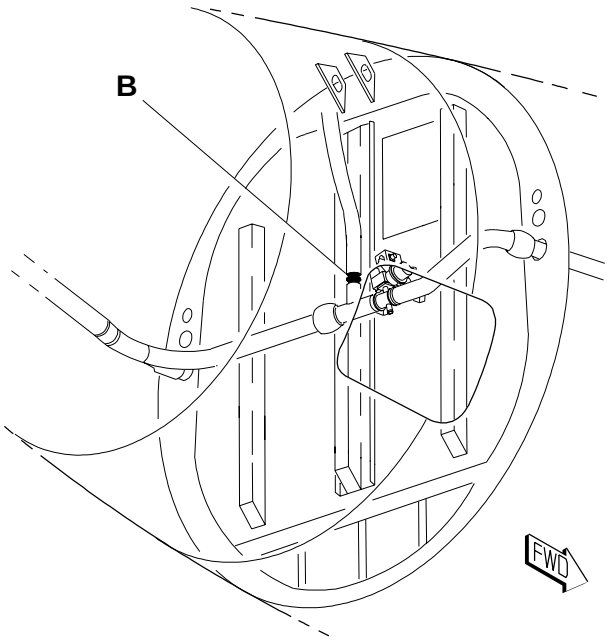
(7) On the overhead circuit breaker panel, close these circuit breakers and remove the DO-NOT-CLOSE tags from them:

- CROSS BLEED (Location tip: ESSENTIAL DC BUS 2 / PNEU / CROSS BLEED).
- PACK 1 (Location tip: DC BUS 1 / AIR COND/PNEU / PACK 1).
- STAB
  (PRE-MOD. S.B.145-30-0022):
  - STAB: (Location Tip: DC BUS 2/ICE AND RAIN PROTECTION/STAB).
  (POST-MOD. S.B.145-30-0022):
  - STAB: (Location Tip: DC BUS 2/ICE AND RAIN PROTECTION/STAB).
  - STAB A/I IND: (Location Tip: DC BUS 1/ICE AND RAIN PROTECTION/STAB A/I IND).
- WING (Location tip: DC BUS 1 / ICE AND RAIN PROTECTION / WING).
- EBV 1 (Location tip: ESSENTIAL DC BUS 1 / AIR COND/PNEU / EBV 1).
- CONTROL (Location tip: ESSENTIAL DC BUS 2 / APU / CONTROL).
- FUEL SOV (Location tip: ESSENTIAL DC BUS 2 / APU / FUEL SOV).
- START 1 (Location tip: ESSENTIAL DC BUS 1 / POWERPLANT / START 1).

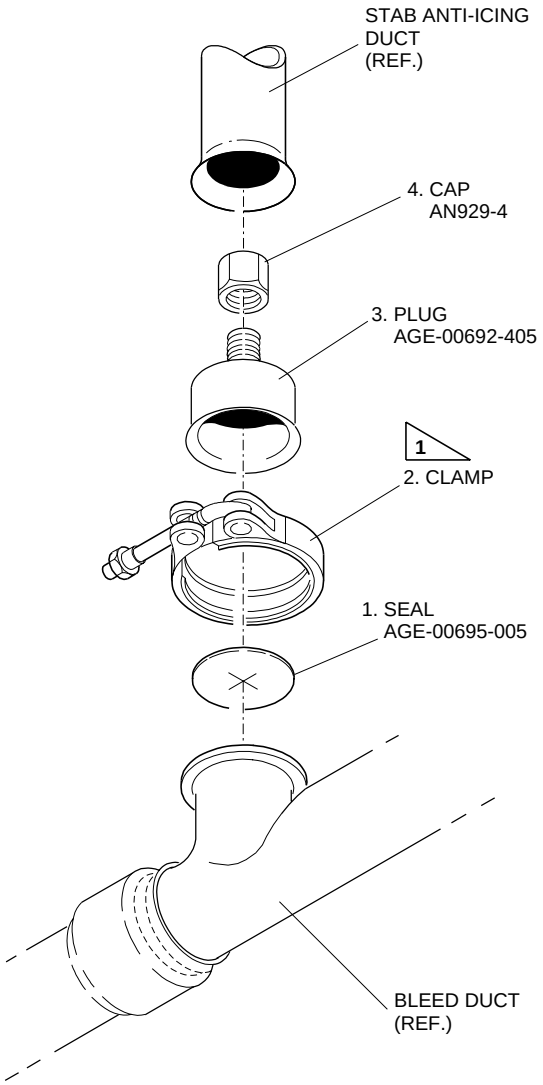
EFFECTIVITY: ALL

LH Air Bleed System Ducts - Leakage Test
Figure 501 - Sheet 1





DET. A



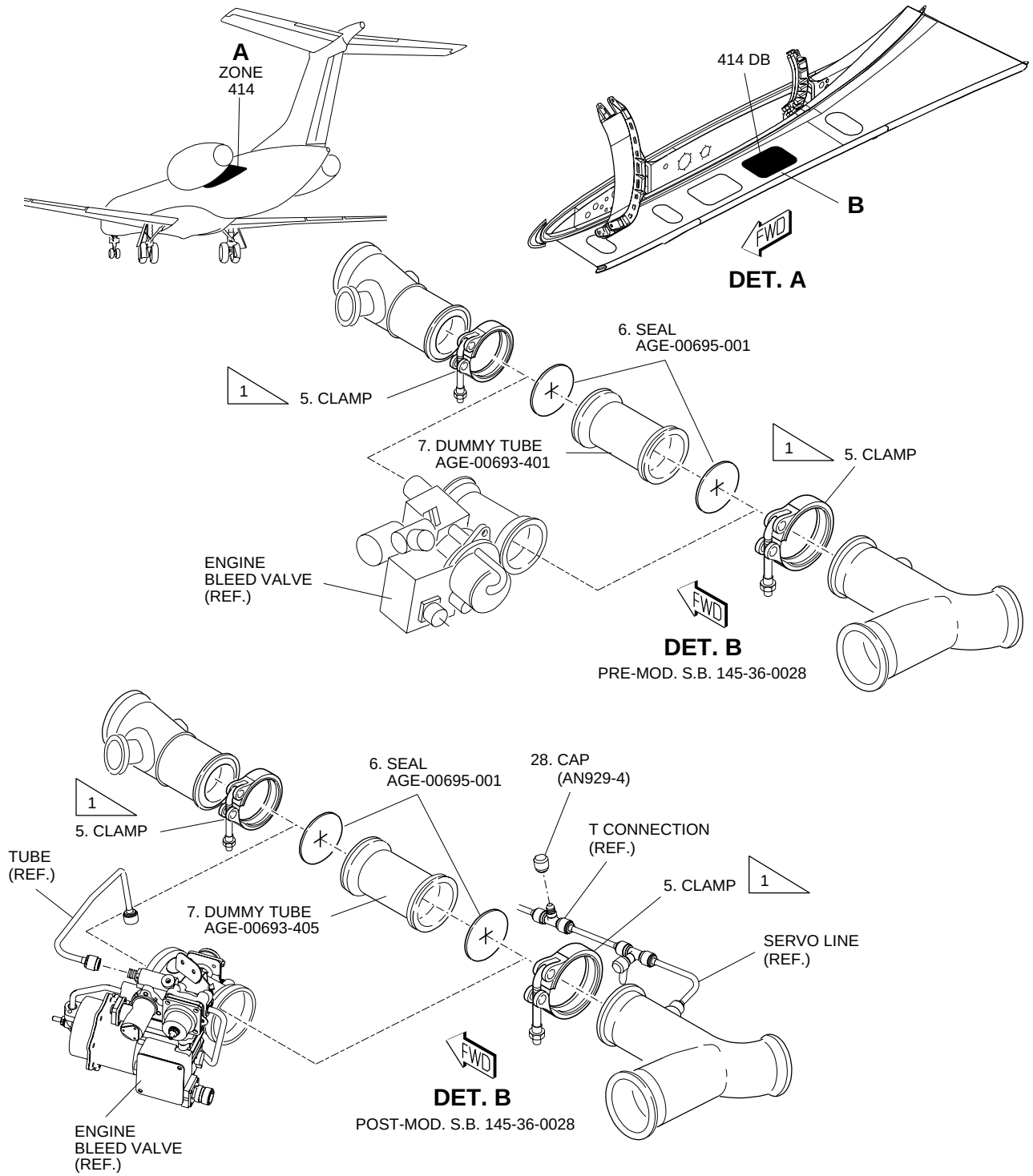
DET. B

1 TORQUE: 4.0 - 5.1 Nm (35 - 45 lb.in).
REFER TO TASK 20-10-10-910-801- A FOR CORRECT INSTALLATION OF V-CLAMP.

145AMM360059.MCE B

EFFECTIVITY: ALL

LH Air Bleed System Ducts - Leakage Test
Figure 501 - Sheet 2

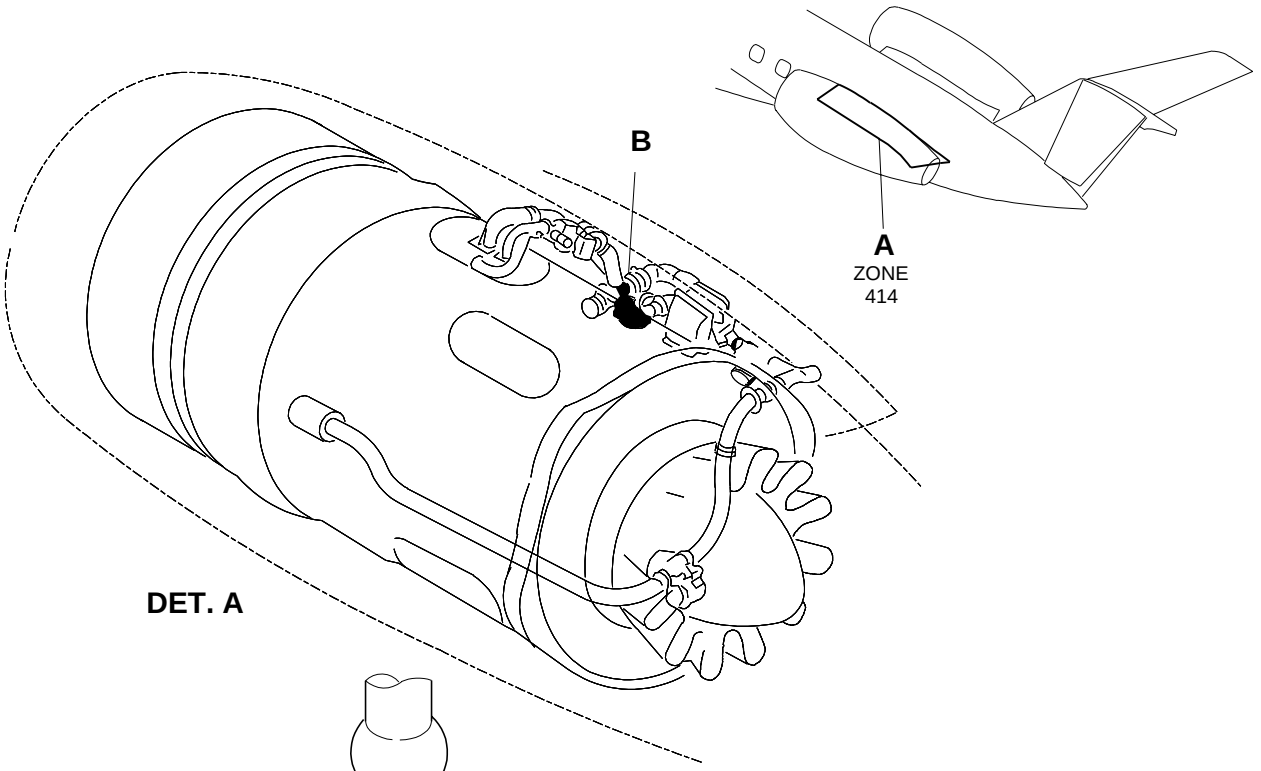


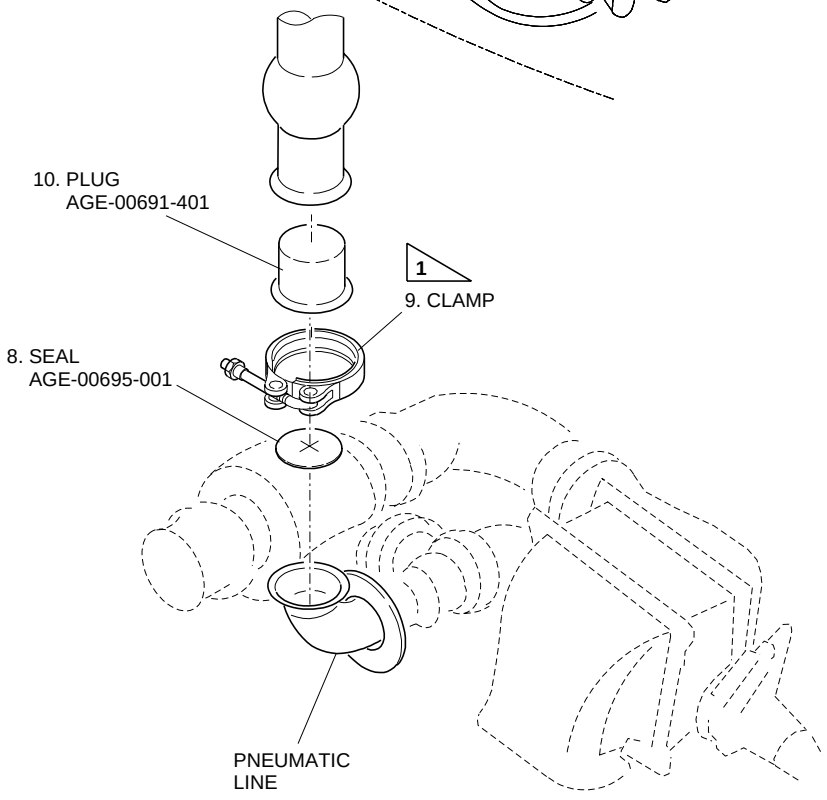
1 TORQUE: 4.5 - 5.7 N.m (40 - 50 lb.in)
REFER TO TASK 20-10-10-910-801- A FOR CORRECT INSTALLATION OF V-CLAMP

145AMM360055.MCE C

EFFECTIVITY: ALL

LH Air Bleed System Ducts - Leakage Test
Figure 501 - Sheet 3



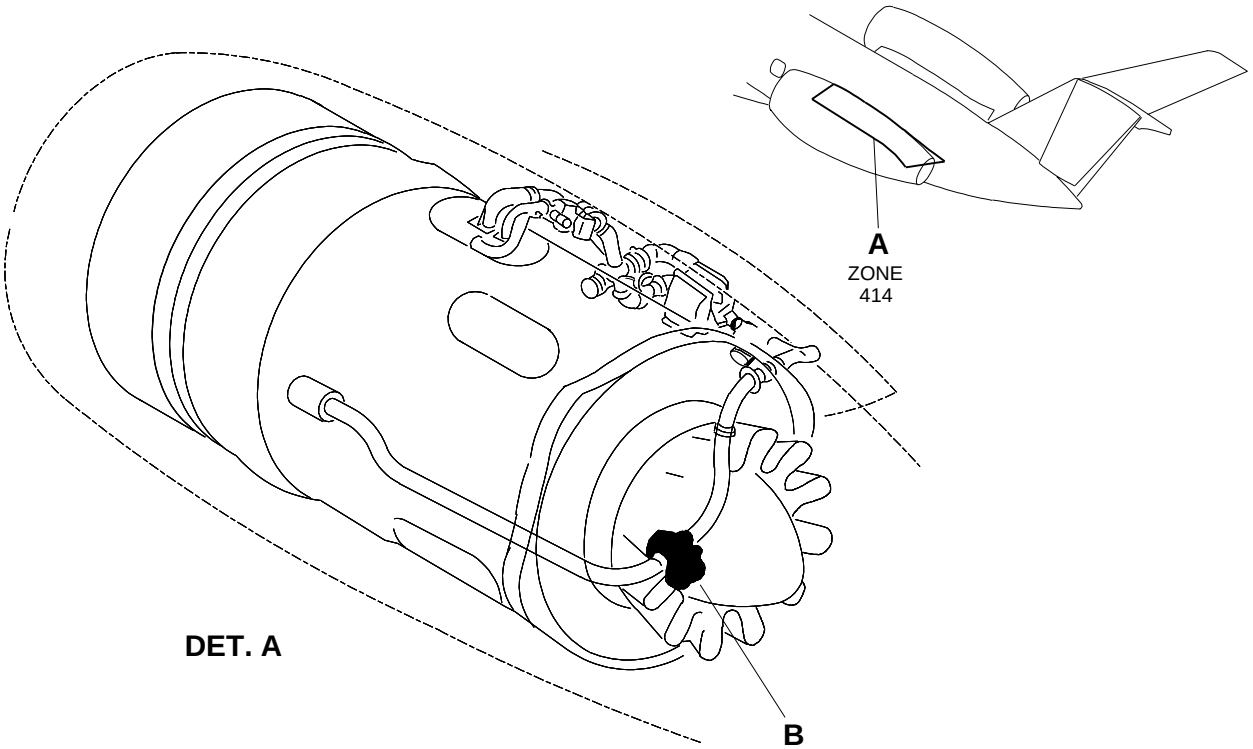


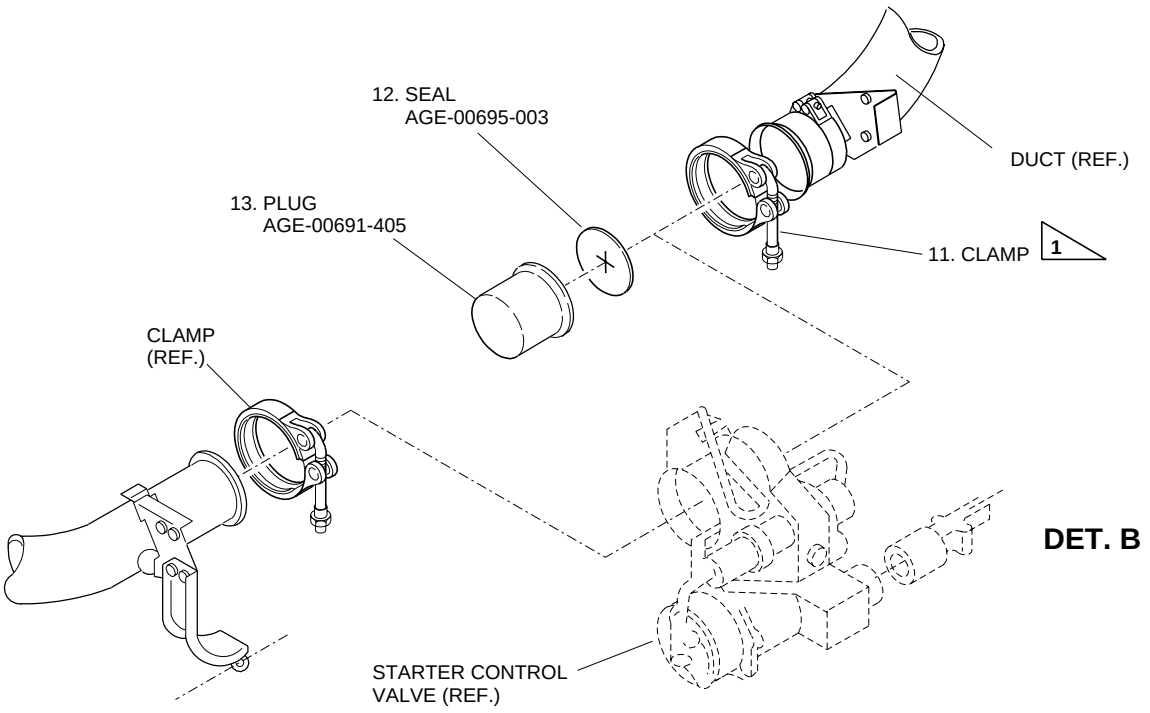
1 TORQUE: 4.5 - 5.7 Nm (40 - 50 lb.in).
REFER TO TASK 20-10-10-910-801- A FOR CORRECT INSTALLATION OF V-CLAMP.

145AMM360058.MCE B

EFFECTIVITY: ALL

LH Air Bleed System Ducts - Leakage Test
Figure 501 - Sheet 4



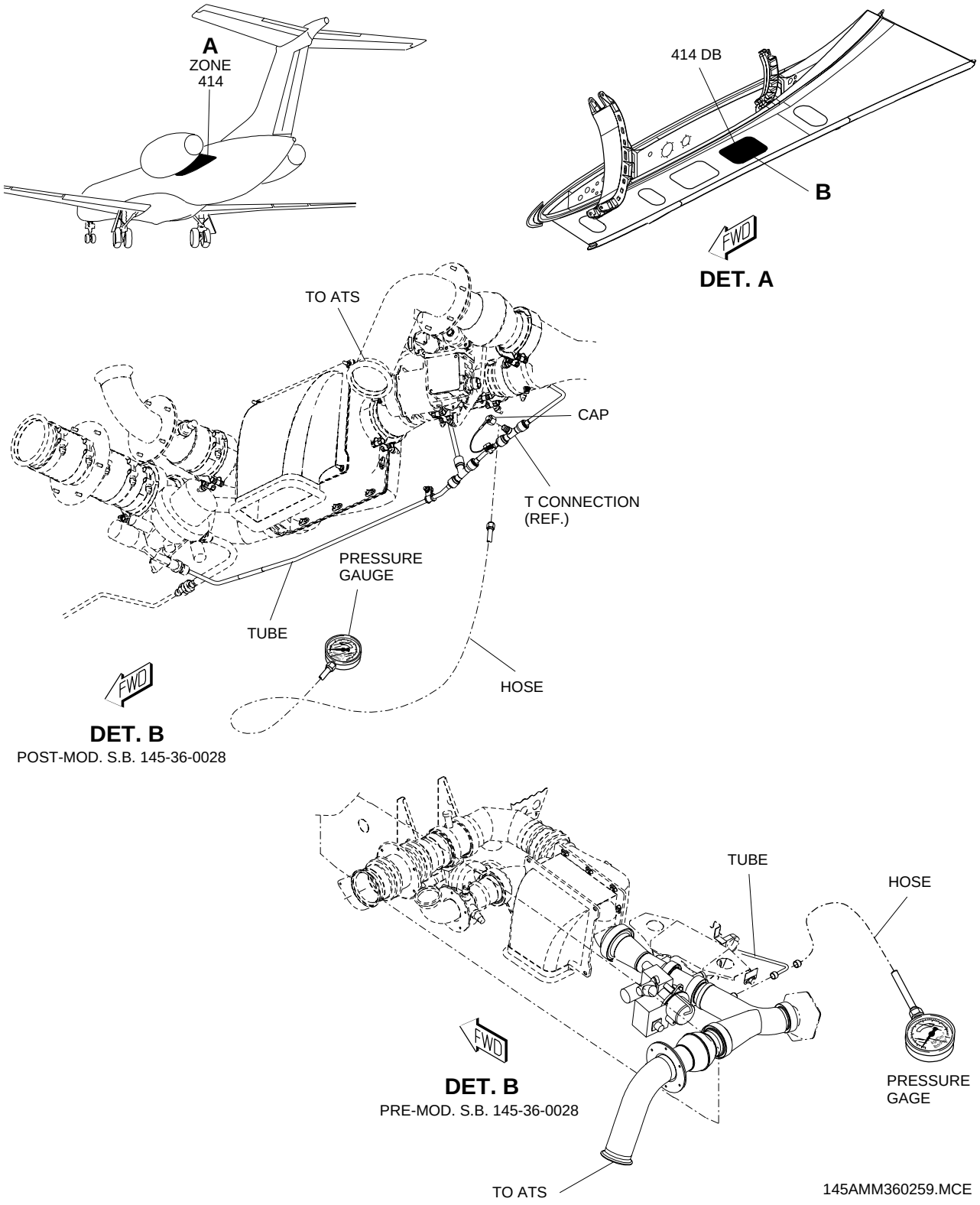


1 TORQUE: 4.5 - 5.7 N.m (40 - 50 lb.in).
REFER TO TASK 20-10-10-910-801- A FOR CORRECT INSTALLATION OF V-CLAMP.

145AMM360057.MCE C

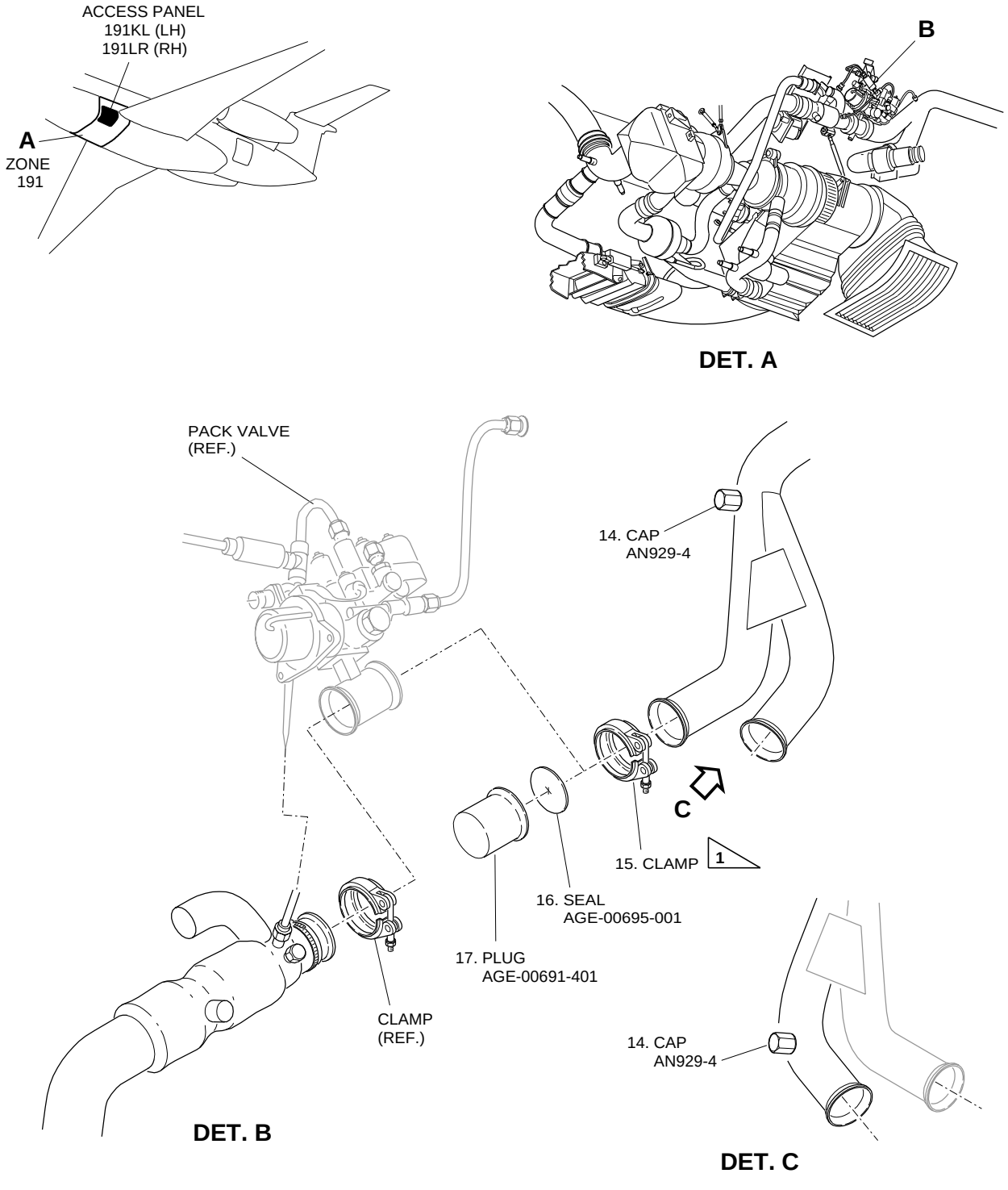
EFFECTIVITY: ALL

LH Air Bleed System Ducts - Leakage Test
Figure 501 - Sheet 5



EFFECTIVITY: ALL

LH Air Bleed System Ducts - Leakage Test
Figure 501 - Sheet 6

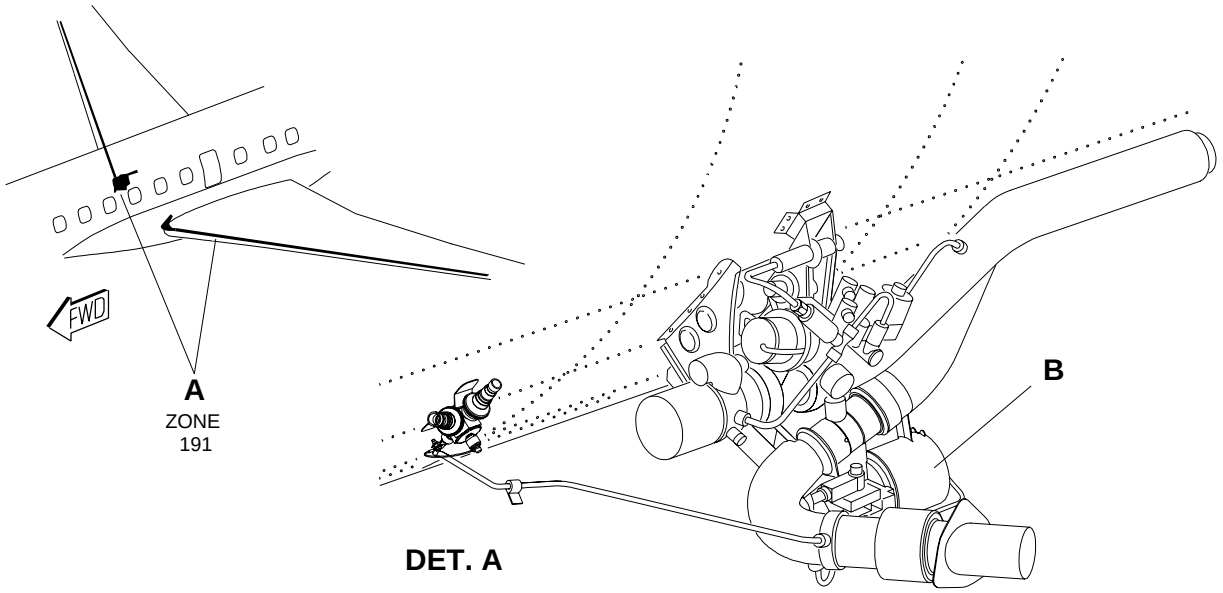


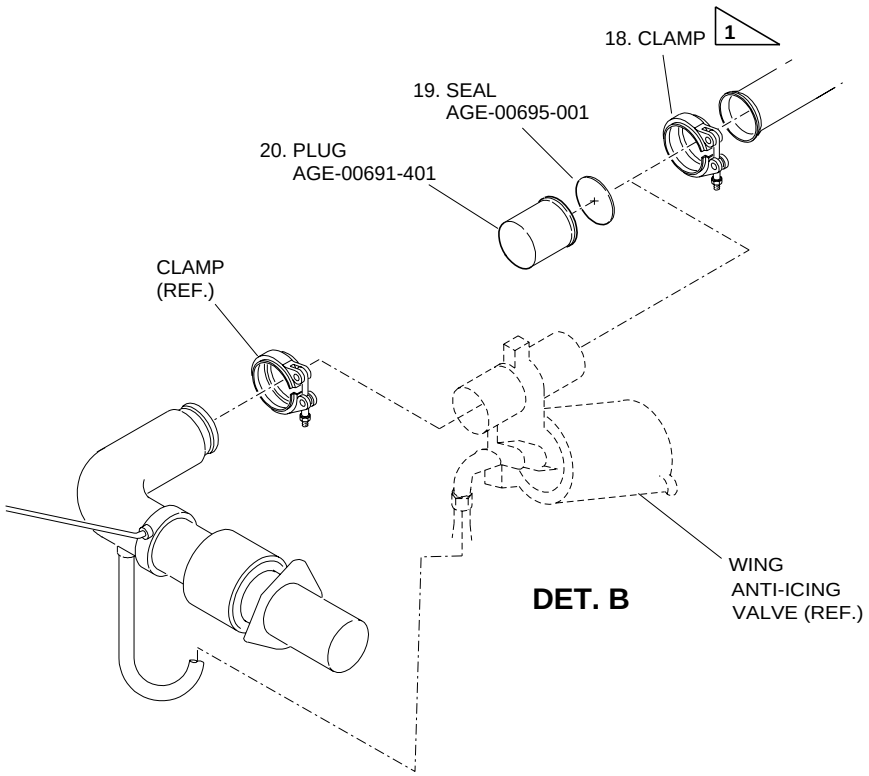
1 TORQUE: 4.5 - 5.7 Nm (40 - 50 lb.in).
REFER TO TASK 20-10-10-910-801- A FOR CORRECT INSTALLATION OF V-CLAMP.

145AMM360052.MCE D

EFFECTIVITY: ALL

LH Air Bleed System Ducts - Leakage Test
Figure 501 - Sheet 7



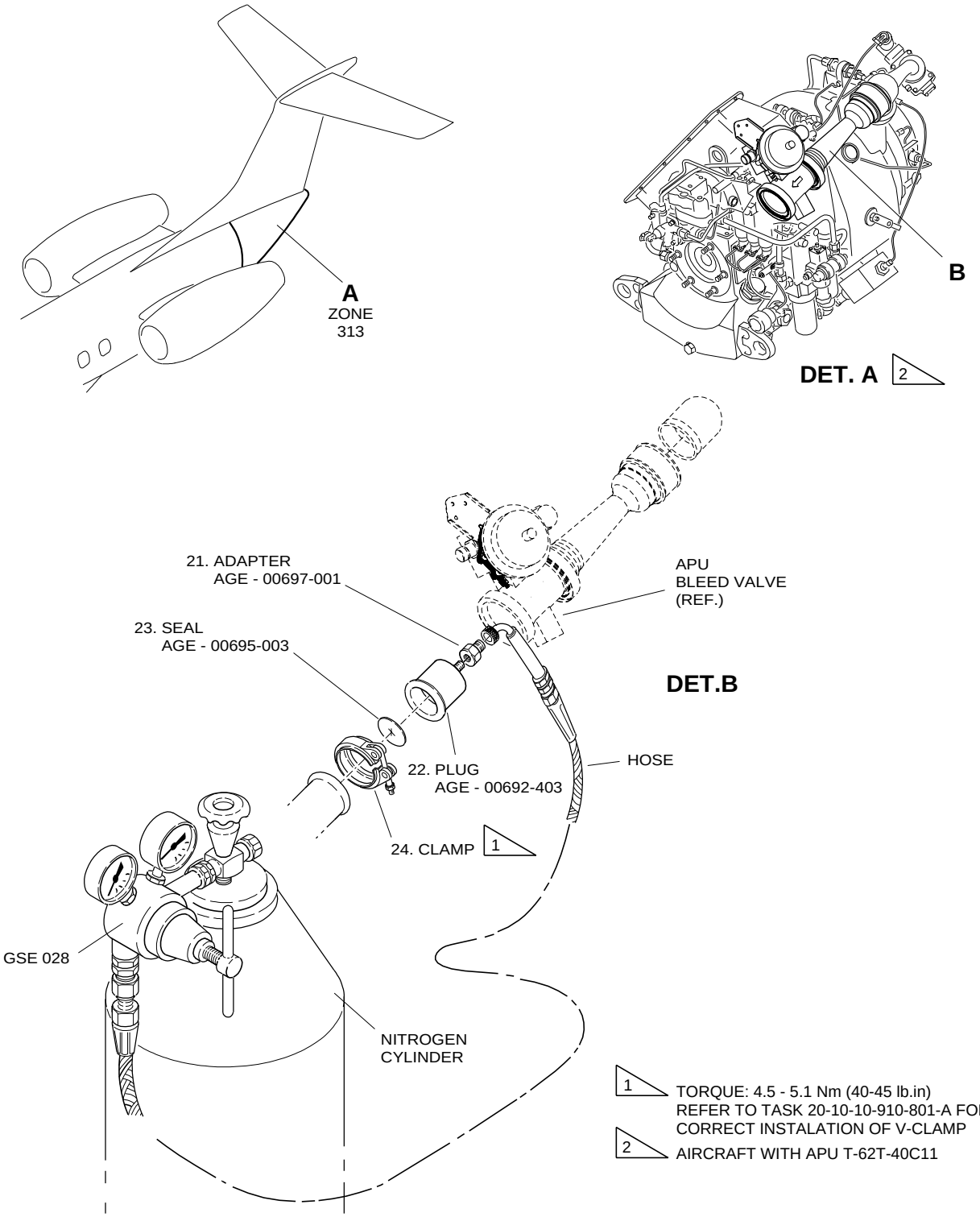


1 TORQUE: 4.5 - 5.7 N.m (40 - 50 lb.in).
REFER TO TASK 20-10-10-910-801- A FOR CORRECT INSTALLATION OF V-CLAMP.

145AMM360207.MCE

EFFECTIVITY: ALL

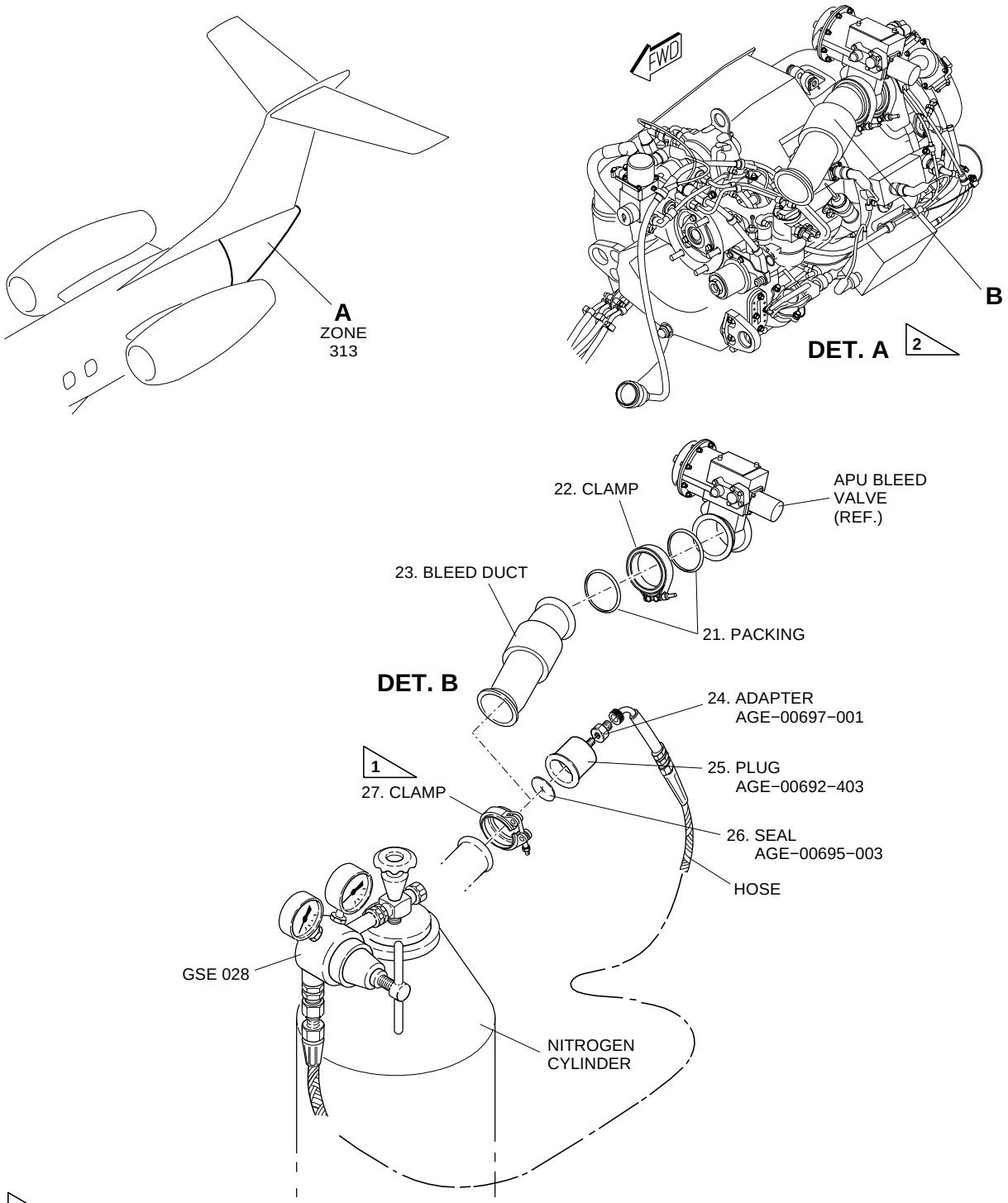
LH Air Bleed System Ducts - Leakage Test
Figure 501 - Sheet 8



145AMM360210.MCE B

EFFECTIVITY: ALL

LH Air Bleed System Ducts - Leakage Test
Figure 501 - Sheet 9



1 TORQUE: 4.5 − 5.1 N.m (40 − 45 lb.in).
REFER TO TASK 20−10−10−910−801− A FOR CORRECT INSTALLATION OF V−CLAMP.

2 AIRCRAFT WITH APU T−62T−40C14

EM145AMM360617A.DGN

TASK 36-00-00-700-802-A
EFFECTIVITY: ALL

3. RH AIR BLEED SYSTEM DUCTS - LEAKAGE TEST

A. General

(1) This leakage test is applicable to the RH air bleed system ducts.

B. References

REFERENCE	*DESIGNATION*
AMM MPP 06-41-01/100	-
AMM MPP 06-43-00/100	- COMPONENT LOCATION
AMM TASK 20-40-01-860-801-A/200	ENERGIZATION OF THE AIRCRAFT WITH AN EXTERNAL POWER SOURCE
AMM TASK 21-51-01-000-801-A/400	PACK VALVE - REMOVAL
AMM TASK 21-51-01-400-801-A/400	PACK VALVE - INSTALLATION
AMM TASK 30-11-01-000-801-A/400	WING ANTI-ICING VALVE - REMOVAL
AMM TASK 30-11-01-400-801-A/400	WING ANTI-ICING VALVE - INSTALLATION
AMM TASK 36-00-00-700-803-A/500	AIR BLEED SYSTEM - OPERATIONAL TEST
AMM TASK 36-11-09-000-802-A/400	ENGINE DUCT - TYPICAL REMOVAL
AMM TASK 36-11-09-400-802-A/400	ENGINE DUCT - TYPICAL INSTALLATION
AMM TASK 71-11-01-000-801-A/400	ENGINE UPPER COWLING - REMOVAL
AMM TASK 71-11-01-400-801-A/400	ENGINE UPPER COWLING - INSTALLATION
AMM TASK 71-12-01-000-801-A/400	ENGINE LOWER COWLING - OPENING
AMM TASK 71-12-01-400-801-A/400	ENGINE LOWER COWLING - CLOSING
AMM TASK 80-10-02-000-801-A/400	STARTER CONTROL VALVE - REMOVAL
AMM TASK 80-10-02-400-801-A/400	STARTER CONTROL VALVE - INSTALLATION
S.B.145-36-0028	-

C. Zones and Accesses

ZONE	*PANEL/DOOR*	*LOCATION*
191	191FR	RH side of the forward wing-to-fuselage fairing
191	191LR	RH side of the forward wing-to-fuselage fairing
423	422	Upper cowling of RH engine
423	423	Lower cowling of RH engine
424	424DB	RH pylon

D. Tools and Equipment

ITEM	*DESCRIPTION*	*PURPOSE*	*QTY*
GSE 133	Kit - Leak Test, Anti-Ice/Bleed Line	To do the leakage test (PRE-MOD. S.B. 145-36-0028)	
GSE 007	Kit - Leak Test, Anti-Ice/Bleed Line	To do the leakage test (POST-MOD. S.B. 145-36-0028)	
GSE 028	Nitrogen Service Regulator	To regulate the pressure supplied to the system	
Commercially available	Stopwatch	To measure the time of leakage	
Commercially available	Nitrogen cylinder - To supply as much as 250 psi	To pressurize the bleed air line	
Commercially available	Pressure Gage - 0 to 600 psi	To measure the pressure drop	

E. Auxiliary Items

ITEM	*DESCRIPTION*	*PURPOSE*	*QTY*
Commercially available	Ladder	To get access to the work area	1

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	*FUNCTION*	*PLACE*
1	A - Does the task	Inside and outside the aircraft
1	B - Helps technician A	Inside and outside the aircraft

I. Preparation

SUBTASK 841-003-A

(1) On the RH electrical-power control/distribution box, open the PITOT HTG 3 and the HEATING/PITOT 2 circuit breakers and attach a DO-NOT-OPEN tag to it.

(2) On the LH electrical-power control/distribution box, open the HEATING/PITOT 1 circuit breaker and attach a DO-NOT-CLOSE tag to it.

(3) On the overhead circuit breaker panel, open these circuit breakers and attach DO-NOT-CLOSE tags to them:

- CROSS BLEED (Location tip: ESSENTIAL DC BUS 2 / PNEU / CROSS BLEED).
- PACK 2 (Location tip: DC BUS 2 / AIR COND/PNEU / PACK 2).
- WING (Location tip: DC BUS 1 / ICE AND RAIN PROTECTION / WING).

- N2 SIGNAL 2A (Location tip: ESSENTIAL DC BUS 1 / POWERPLANT / N2 SIGNAL 2A).
- N2 SIGNAL 2B (Location tip: ESSENTIAL DC BUS 2 / POWERPLANT / N2 SIGNAL 2B).
- EBV 2 (Location Tip: DC BUS 2/PNEU/EBV 2).
- Engine Start 2.

(4) Remove access panels 191FR and 191LR (AMM MPP 06-41-01/100) and 424DB (AMM MPP 06-43-00/100).

(5) Open the lower cowling of the RH engine (AMM TASK 71-12-01-000-801-A/400).

(6) Remove the upper cowling of the RH engine (AMM TASK 71-11-01-000-801-A/400).

J. Leakage Test of the RH Air Bleed System Ducts (Figure 502)

SUBTASK 790-003-A

WARNING: DO NOT TOUCH THE DUCTS OR COMPONENTS OF THE AIR BLEED SYSTEM IMMEDIATELY AFTER THE SYSTEM IS TURNED OFF. THE HIGH AIR TEMPERATURE CAN CAUSE INJURY TO PERSONS.

(1) Remove the RH pack valve (AMM TASK 21-51-01-000-801-A/400).

(2) Install the seal (3) and plug (1), and attach them with a clamp (2). Tighten the clamp (2) to the torque shown in Figure 502, sheet 1.

(3) Install two plugs (4) at the pressure feedback point and vacuum feedback pressure line. Refer to Figure 502, sheet 1.

(4) Remove the RH wing anti-icing valve (AMM TASK 30-11-01-000-801-A/400).

(5) Install the seal (6) and plug (5) on the pneumatic duct (ref.), and attach them with a clamp (7). Tighten the clamp (7) to the torque shown in Figure 502, sheet 2.

(6) Remove the RH starter control valve (AMM TASK 80-10-02-000-801-A/400).

(7) Install the seal (9) and plug (10) on the pneumatic duct (ref.), and attach them with a clamp (8). Tighten the clamp (8) to the torque shown in Figure 502, sheet 3.

(8) Disconnect the pneumatic line duct (Ref.) upstream of the RH engine pylon (AMM TASK 36-11-09-000-802-A/400). Refer to Figure 502, sheet 4.

(9) Install the seal (11) and plug (13), and attach them with a clamp (12). Tighten the clamp (12) to the torque shown in Figure 502, sheet 4.

(10) Connect nitrogen service regulator GSE 028 to the nitrogen cylinder (15).

(11) Connect the adapter (14) to the nipple of the plug (13).

(12) Connect the end of the hose of GSE 028 to the nipple of adapter (14).

(13) Connect the hose (17) with a pressure gage (16) to the tube (18) downstream of the pre-cooler. Refer to Figure 502, sheet 5.

(14) Energize the aircraft (AMM TASK 20-40-01-860-801-A/200).

(15) Set the BLEED 2 push button to ON.

(16) NOTE: Make sure that the circuit breaker EBV 2 is open.

Apply pressure to the RH air bleed ducts and stop when the pressure stabilizes at 250 psi.

(17) Stop the supply of nitrogen.

(18) After 15 seconds, see the value of the pressure on the pressure gage installed in item (13).

NOTE:
- If the pressure decreases more than 73 psi, release the pressure in the bleed air ducts.
- Make sure that the fittings are correctly installed, and repair as necessary.
- Do the leakage test again after the repair.

(19) Depressurize the RH bleed air ducts.

(20) De-energize the aircraft (AMM TASK 20-40-01-860-801-A/200).

(21) Disconnect the end of the hose of GSE 028 from the nipple of the adapter (14). Refer to Figure 502, sheet 4.

(22) Disconnect the adapter (14) from the nipple of the plug (13).

(23) Disconnect nitrogen service regulator GSE 028 from the nitrogen cylinder (15).

(24) Remove the plug (13) and seal (11).

(25) Connect the pneumatic line duct (Ref.) upstream of the RH engine pylon (AMM TASK 36-11-09-400-802-A/400). Tighten the clamp (12) to the torque shown in Figure 502, sheet 4.

(26) Remove the hose (17) with a pressure gage (16) from the tube (18) downstream of the pre-cooler. Refer to Figure 502, sheet 5.

(27) Remove the plug (10) and seal (9) from pneumatic duct (ref.). Refer to Figure 502, sheet 3.

(28) Install the RH starter control valve (AMM TASK 80-10-02-400-801-A/400).

(29) Remove the plug (5) and seal (6) from pneumatic duct (ref.). Refer to Figure 502, sheet 2.

(30) Install the RH wing anti-icing valve (AMM TASK 30-11-01-400-801-A/400).

(31) Remove the plug (1) and seal (3). Refer to Figure 502, sheet 1.

(32) Install the RH pack valve (AMM TASK 21-51-01-400-801-A/400).

(33) Remove two plugs AN929-4 (4) and install the pressure feedback point and vacuum pump feedback line. Refer to Figure 502, sheet 1.

K. Follow-on

SUBTASK 842-003-A

(1) Install the upper cowling of the RH engine (AMM TASK 71-11-01-400-801-A/400).

(2) Close the lower cowling of the RH engine (AMM TASK 71-12-01-400-801-A/400).

(3) Install access panels 191FR and 191LR (AMM MPP 06-41-01/100), and 424DB (AMM MPP 06-43-00/100).

(4) On the overhead circuit breaker panel, close these circuit breakers and remove the DO-NOT-CLOSE tags from them:

- CROSS BLEED (Location tip: ESSENTIAL DC BUS 2 / PNEU / CROSS BLEED).
- PACK 2 (Location tip: DC BUS 2 / AIR COND/PNEU / PACK 2).
- WING (Location tip: DC BUS 1 / ICE AND RAIN PROTECTION / WING).
- N2 SIGNAL 2A (Location tip: ESSENTIAL DC BUS 1 / POWERPLANT / N2 SIGNAL 2A).
- N2 SIGNAL 2B (Location tip: ESSENTIAL DC BUS 2 / POWERPLANT / N2 SIGNAL 2B).
- EBV 2 (Location Tip: DC BUS 2/PNEU/EBV 2).
- Engine Start 2.

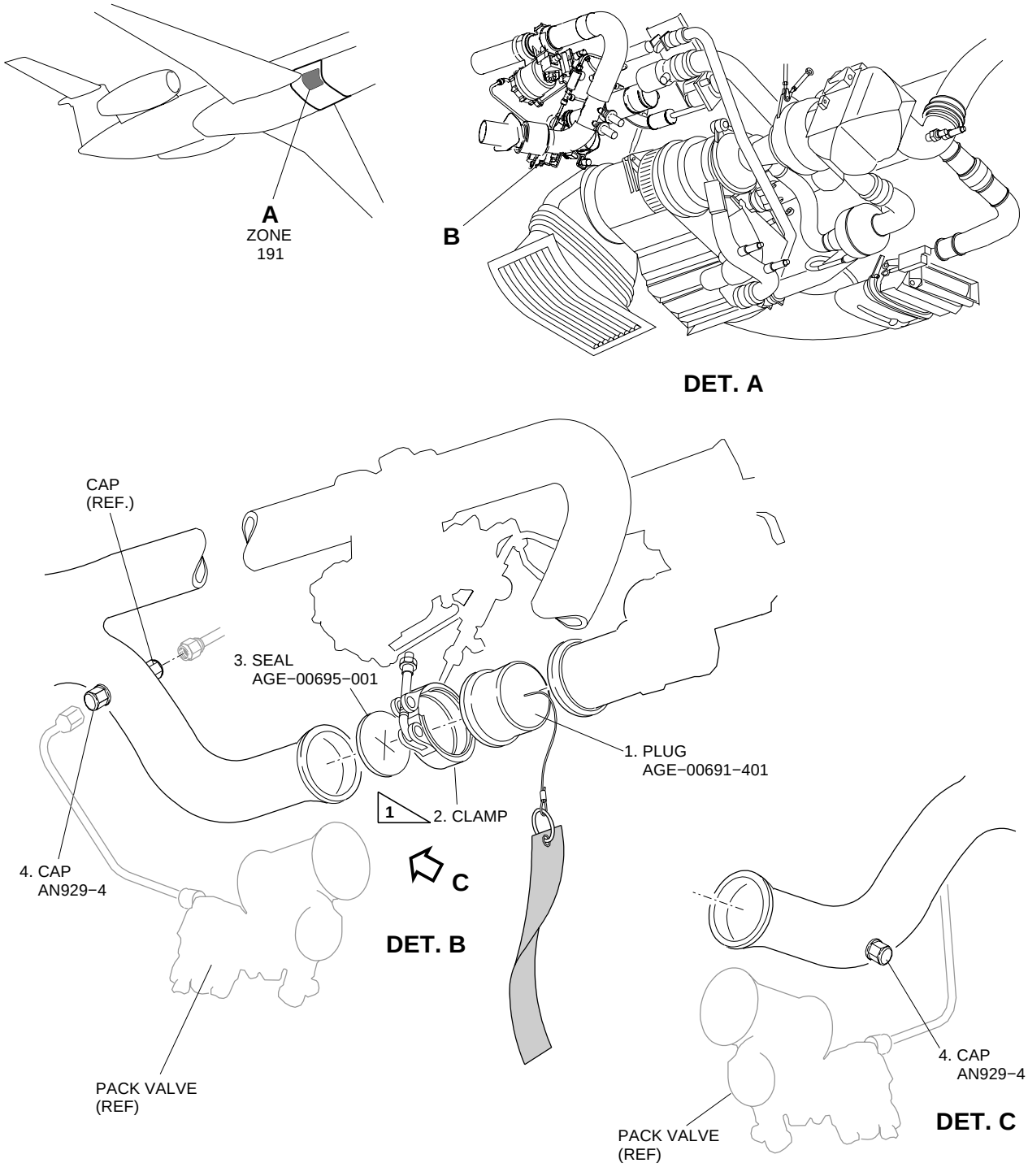
(5) On the RH electrical-power control/distribution box, close the PITOT HTG 3 and the HEATING/PITOT 2 circuit breakers and remove the DO-NOT-OPEN tag from it.

(6) On the LH electrical-power control/distribution box, close the HEATING/PITOT 1 circuit breaker and remove the DO-NOT-CLOSE tag from it.

(7) Do the air bleed operational test (AMM TASK 36-00-00-700-803-A/500).

EFFECTIVITY: ALL

RH Air Bleed System Ducts - Leakage Test
Figure 502 - Sheet 1



1 TORQUE: 4.5 − 5.7 N.m (40 − 50 lb.in).
REFER TO TASK 20−10−10−910−801− A FOR CORRECT INSTALLATION OF V−CLAMP.

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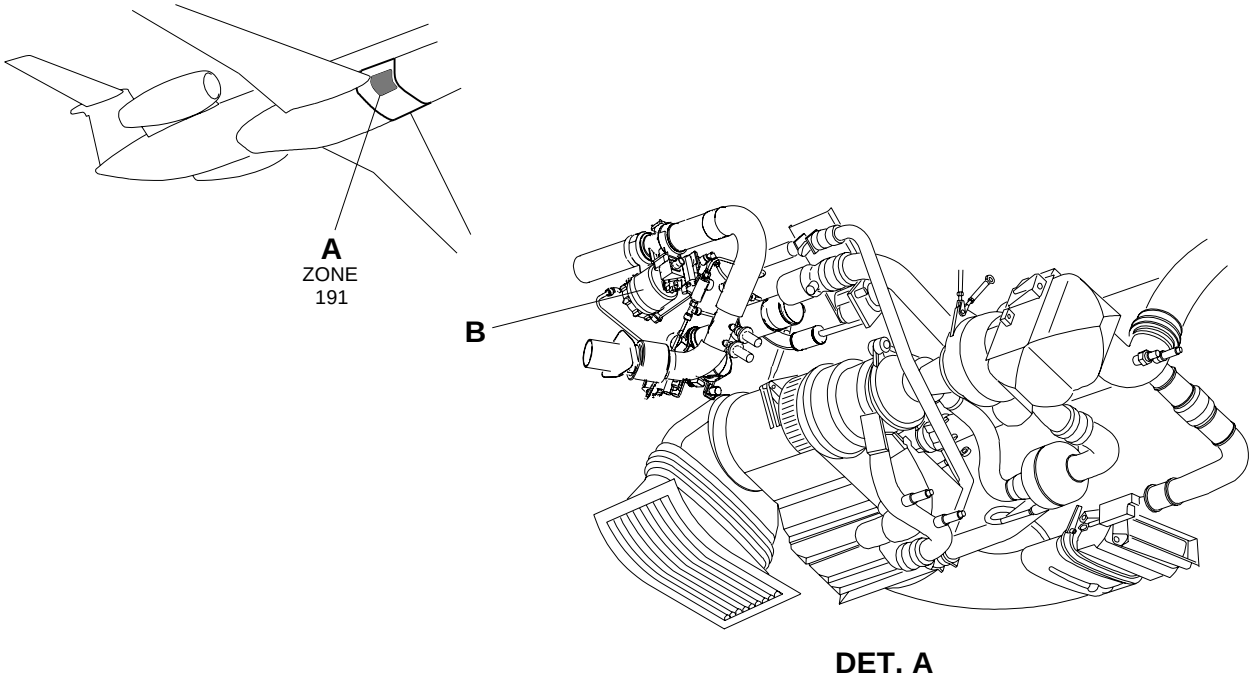
EFFECTIVITY: ALL

RH Air Bleed System Ducts - Leakage Test
Figure 502 - Sheet 2



1 TORQUE: 4.5 − 5.7 N.m (40 − 50 lb.in).
REFER TO TASK 20−10−10−910−801− A FOR CORRECT INSTALLATION OF V−CLAMP.

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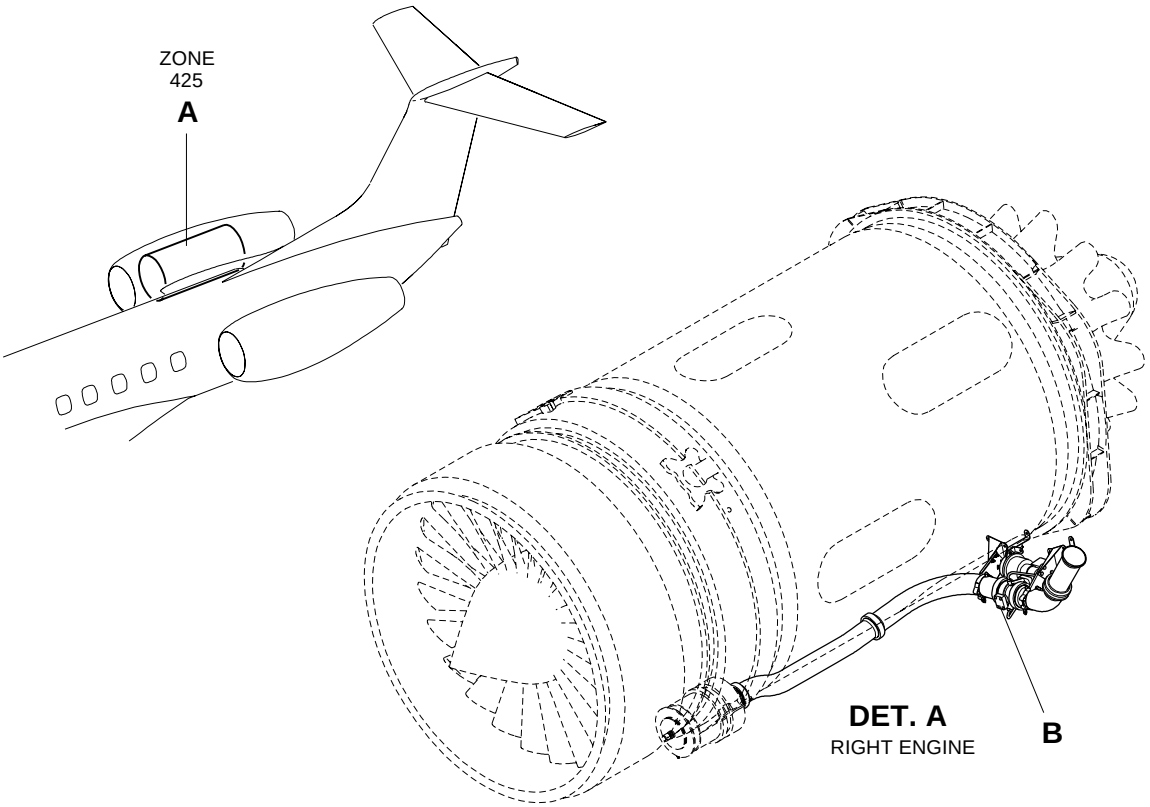
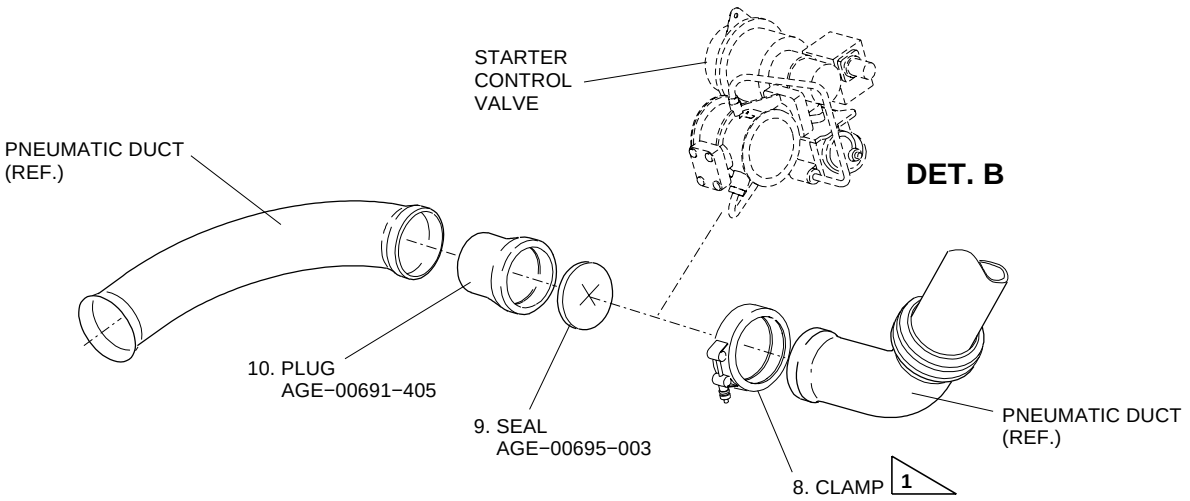
EFFECTIVITY: ALL

RH Air Bleed System Ducts - Leakage Test
Figure 502 - Sheet 3





1 TORQUE: 4.5 − 5.7 N.m (40 − 50 lb.in).
REFER TO TASK 20−10−10−910−801− A FOR CORRECT INSTALLATION OF V−CLAMP.

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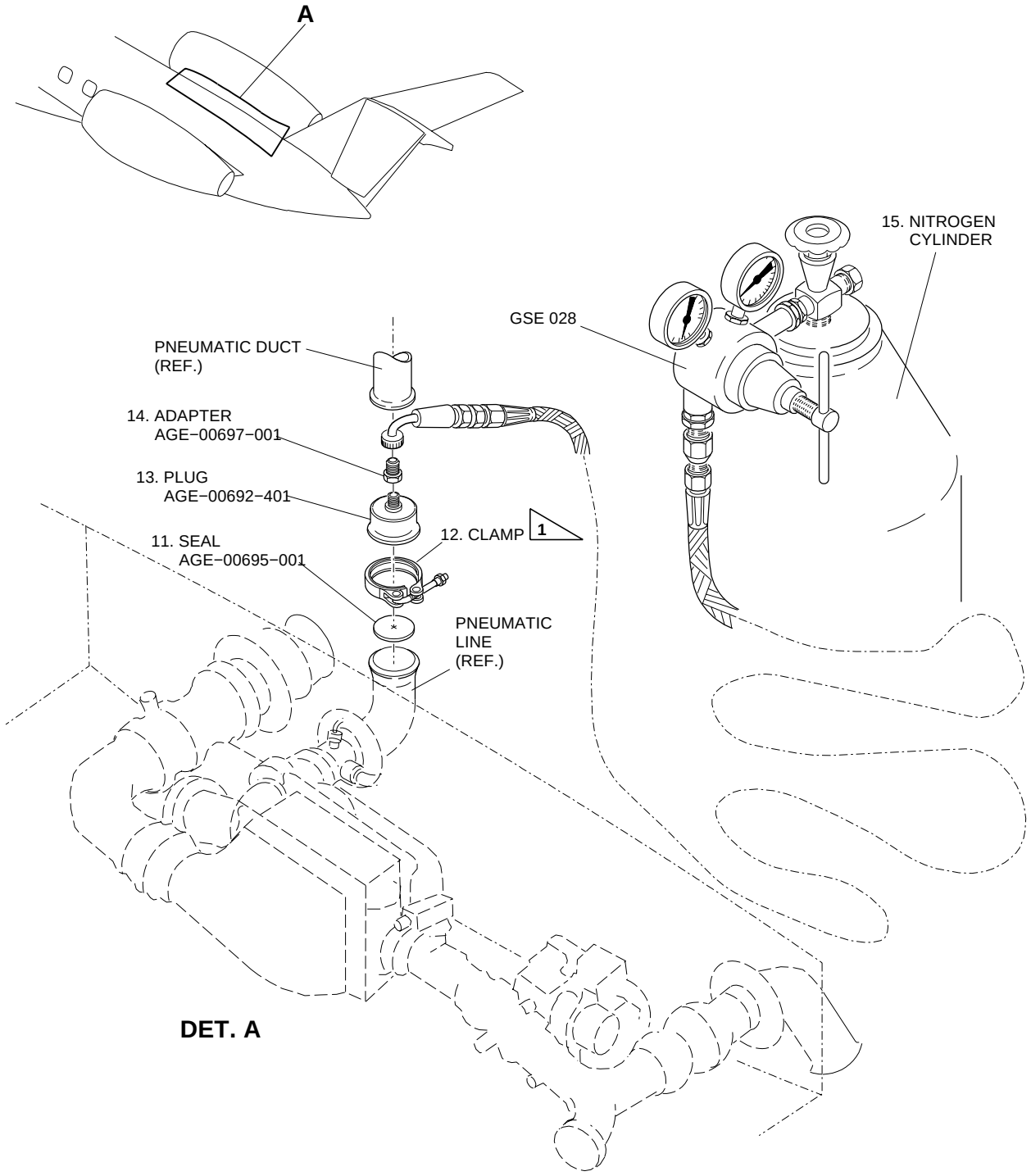
EFFECTIVITY: ALL

RH Air Bleed System Ducts - Leakage Test
Figure 502 - Sheet 4



1 TORQUE: 4.5 − 5.7 N.m (40 − 50 lb.in).
REFER TO TASK 20−10−10−910−801− A FOR CORRECT INSTALLATION OF V−CLAMP.

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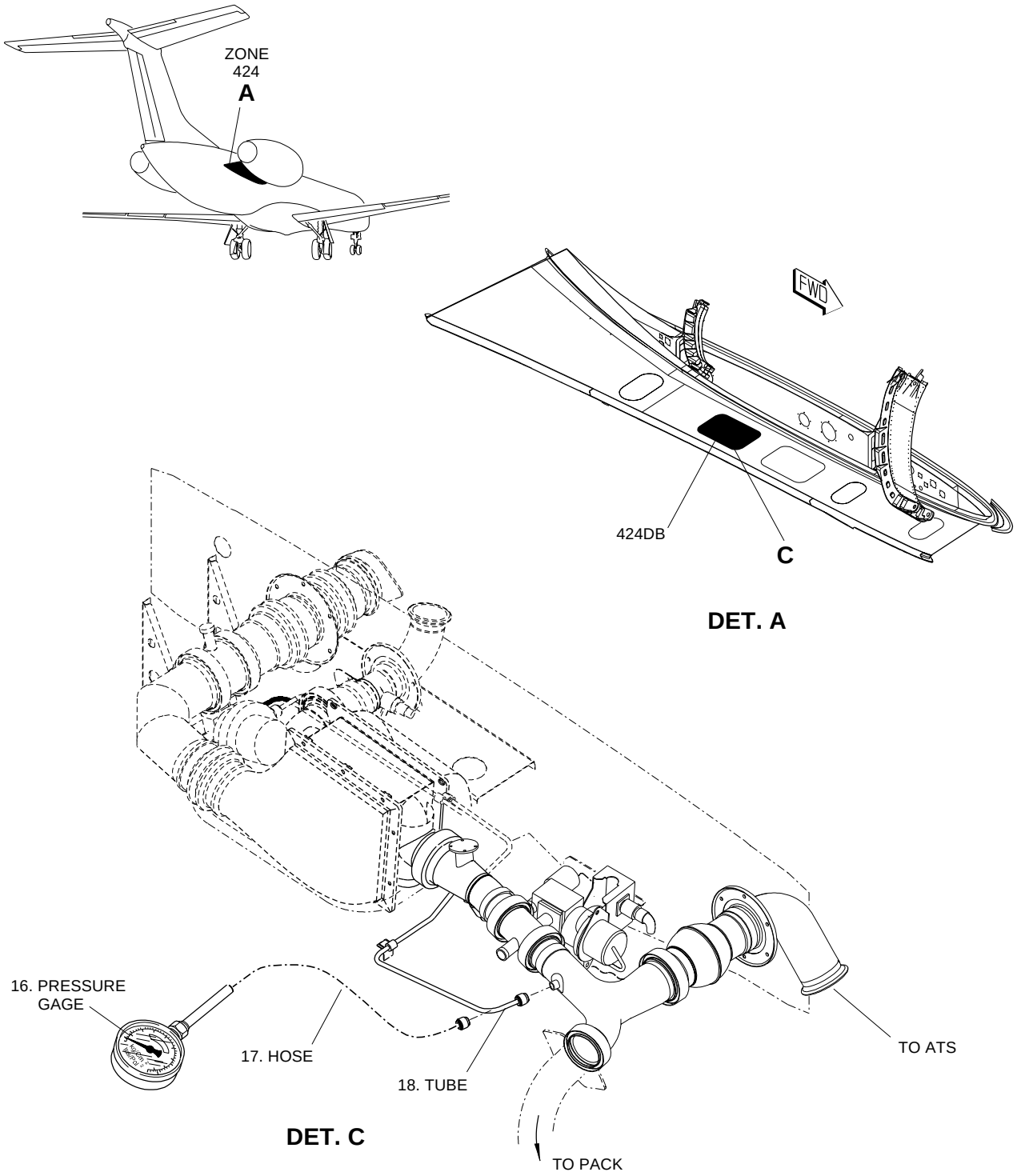
EFFECTIVITY: ALL

RH Air Bleed System Ducts - Leakage Test
Figure 502 - Sheet 5



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TASK 36-00-00-700-803-A
EFFECTIVITY: ALL

4. AIR BLEED SYSTEM - OPERATIONAL TEST

A. General

(1) This operational test is applicable to the LH and RH air bleed systems.

B. References

REFERENCE	*DESIGNATION*
AMM MPP 06-43-00/100	- COMPONENT LOCATION
AMM TASK 20-13-02-000-801-A/400	RELAYS - REMOVAL (TYPICAL)
AMM TASK 20-13-02-400-801-A/400	RELAYS - INSTALLATION (TYPICAL)
AMM TASK 20-40-01-860-801-A/200	ENERGIZATION OF THE AIRCRAFT WITH AN EXTERNAL POWER SOURCE
AMM TASK 25-12-08-000-801-A/400	-
AMM TASK 25-12-08-400-801-A/400	-
AMM TASK 30-11-15-700-801-A/500	WING ANTI-ICING VALVE COMMAND RELAY - OPERATIONAL CHECK
AMM TASK 36-11-07-000-801-A/400	HIGH-STAGE PRESSURE SWITCH - REMOVAL
AMM TASK 36-11-07-400-801-A/400	HIGH-STAGE PRESSURE SWITCH - INSTALLATION
AMM TASK 71-00-01-910-801-A/200	ENGINE START PROCEDURE (NORMAL)
AMM TASK 71-00-01-910-804-A/200	ENGINE STOP PROCEDURE

C. Zones and Accesses

ZONE	*PANEL/DOOR*	*LOCATION*
224	224ERW	RH Complement Console
412	412BT	LH engine upper cowling
422	422BT	RH engine upper cowling

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

ITEM	*DESCRIPTION*	*PURPOSE*	*QTY*
Commercially available	Ladder	To get access to the work area	1

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	*FUNCTION*	*PLACE*
2	Do the task	In the cockpit and outside the aircraft in the two engines

I. Preparation

SUBTASK 841-004-A

NOTE: Make a jump on the engine or in the relay box. Refer to steps (1) or (2) as applicable.

(1) If you make a jump on the engine; do as follows: Refer to Figure 503, Sheet 2.

(a) Remove access panels 412BT and 422BT (AMM MPP 06-43-00/100).

(b) Disconnect the electrical connectors at the high-stage pressure switch (AMM TASK 36-11-07-000-801-A/400).

(c) Put a jumper between pins B and C of the electrical connector of the aircraft electrical harness, disconnected in step (b).

(d) Energize the aircraft (AMM TASK 20-40-01-860-801-A/200).

(e) Make sure that the WING pushbutton is set to OFF.

(f) Make sure that the OVERRIDE knob is set to AUTO.

CAUTION: DO NOT USE THE ANTI-ICING SYSTEM DURING THE OPERATIONAL TEST OF THE AIR BLEED SYSTEM (SUBTASK 36-00-00-710-001-A00), DAMAGE CAN OCCUR IF THE WING A/I VLV CMD RELAY IS REMOVED.

(g) Make sure that the MFD is on and set the ECS page.

(h) Go to step (3).

(2) If you make a jump in the relay box, do as follows: Refer to Figure 503, Sheet 3 and Sheet 4.

WARNING: AFTER THE JUMPERS ARE INSTALLED AND WHILE THE AIRCRAFT IS ENERGIZED, DO NOT TOUCH THE RH AUXILIARY RELAY SUPPORT. IT CAN CAUSE INJURY TO PERSONS.

(a) Remove the RH complement console referred to as panel 224ERW (AMM TASK 25-12-08-000-801-A/400 RH Complement Console - Removal).

(b) On the ICE AND RAIN PROTECTION control panel, on the overhead panel, open the WING circuit breaker.

(c) Remove relay K0528 (WING A/I VLV CMD) installed on the RH auxiliary relay support (AMM TASK 20-13-02-000-801-A/400 Relays - Removal, AWM 30-10-50).

(d) Put a jumper between contact pins A2 and A1 of socket relay XK0528.

(e) Put a jumper between contact pins C2 and C3 of socket relay XK0528.

(f) Put a jumper between contact pins D2 and D1 of socket relay XK0528.

(g) On the ICE AND RAIN PROTECTION control panel, on the overhead panel, close the WING circuit breaker.

(h) Energize the aircraft (AMM TASK 20-40-01-860-801-A/200).

(i) Make sure that the WING pushbutton is set to OFF.

(j) Make sure that the OVERRIDE knob is set to AUTO.

CAUTION: DO NOT USE THE ANTI-ICING SYSTEM DURING THE OPERATIONAL TEST OF THE AIR BLEED SYSTEM (SUBTASK 36-00-00-710-001-A00), DAMAGE CAN OCCUR IF THE WING A/I VLV CMD RELAY IS REMOVED.

(k) Make sure that the MFD is on and set the ECS page.

(3) Do the engine start procedure (AMM TASK 71-00-01-910-801-A/200).

(4) On the overhead circuit breaker panel, open these circuit breakers and attach DO-NOT-CLOSE tags to them:

- AIR/GND A (Location tip: DC BUS 1 / LDG GEAR / AIR/GND A).
- AIR/GND B (Location tip: ESSENTIAL DC BUS 1 / LDG GEAR / AIR/GND B).
- AIR/GND C (Location tip: DC BUS 2 / LDG GEAR / AIR/GND C).
- AIR/GND D (Location tip: ESSENTIAL DC BUS 2 / LDG GEAR / AIR/GND D).

J. Operational Test of the Air Bleed System

SUBTASK 710-002-A

(1) Do the test as follows: Refer to Figure 503, Sheet 1.

(a) On the AIR CONDITIONING/PNEUMATIC control panel on the overhead panel, push the PACK 1 and PACK 2 push buttons.

Result:

1 The PACK 1 and PACK 2 push buttons lights go off.

(b) On the AIR CONDITIONING/PNEUMATIC control panel on the overhead panel, move the XBLEED rotary switch to the OPEN position.

(c) On the AIR CONDITIONING/PNEUMATIC control panel on the overhead panel, push the BLEED 1 push button.

Result:

1 The BLEED 1 push button light goes off.

(d) On the AIR CONDITIONING/PNEUMATIC control panel on the overhead panel, make sure that the BLEED 2 push button is released (striped bar light on).

(e) Move the LH thrust lever (LH engine) to 90% N2 and observe the engine indications on the EICAS.

(f) Wait for 2 minutes and look at the Bleed Temp indicator on the MFD.

Result:

1 The Bleed Temp Indicator on the MFD must be at the green scale (system operational).

(g) Wait 3 minutes more and look at the EICAS display.

Result:

1 The BLD 1/2 LEAK warning message must not come into view on the EICAS.

(h) If the bleed system is not operational and the BLD 1/2 LEAK message comes into view, refer to the related procedure in the Fault Isolation Manual (FIM).

(i) Move the LH thrust lever (LH engine) to the idle position.

(j) On the AIR CONDITIONING/PNEUMATIC control panel on, the overhead panel, release the BLEED 1 push button.

Result:

1 The BLEED 1 push button light comes on.

(k) On the AIR CONDITIONING/PNEUMATIC control panel, on the overhead panel, push the BLEED 2 push button.

Result:

1 The BLEED 2 push button light goes off.

(l) On the AIR CONDITIONING/PNEUMATIC control panel, on the overhead panel, make sure that the XBLEED rotary switch is in the OPEN position.

(m) On the AIR CONDITIONING/PNEUMATIC control panel, on the overhead panel, make sure that the PACK 1 and PACK 2 lights stay off.

(n) Move the RH thrust lever (RH engine) to 90% N2 and observe the engine indications on the EICAS.

(o) Wait for 2 minutes and look at the Bleed Temp indicator, on the MFD.

Result:

1 The Bleed Temp Indicator, on the MFD, must be at the green scale (system operational).

(p) Wait 3 minutes more and look at the EICAS display.

Result:

1 The BLD 1/2 LEAK warning message, on the EICAS, must not come into view on the EICAS.

(q) If the bleed system is not operational and the BLD 1/2 LEAK message comes into view, refer to the related procedure in the Fault Isolation Manual (FIM).

(r) Move the RH thrust lever (RH engine) to the idle position.

(s) On the AIR CONDITIONING/PNEUMATIC control panel on the overhead panel, release the PACK 1 and PACK 2 push buttons.

Result:

1 The PACK 1 and PACK 2 push button lights come on.

(t) On the AIR CONDITIONING/PNEUMATIC control panel, on the overhead panel, move the XBLEED rotary switch to the AUTO position.

(u) On the AIR CONDITIONING/PNEUMATIC control panel, on the overhead panel, release the BLEED 2 push button.

Result:

1 The BLEED 2 push button light comes on.

K. Follow-on

SUBTASK 842-004-A

(1) Stop the engine (AMM TASK 71-00-01-910-804-A/200).

(2) On the overhead circuit breaker panel, close these circuit breakers and remove the DO-NOT-CLOSE tags from them:

- AIR/GND A (Location tip: DC BUS 1 / LDG GEAR / AIR/GND A).
- AIR/GND B (Location tip: ESSENTIAL DC BUS 1 / LDG GEAR / AIR/GND B).
- AIR/GND C (Location tip: DC BUS 2 / LDG GEAR / AIR/GND C).
- AIR/GND D (Location tip: ESSENTIAL DC BUS 2 / LDG GEAR / AIR/GND D).

(3) If you made a jump on the engine, remove it. Refer to Figure 503, Sheet 2.

WARNING: DO NOT TOUCH THE DUCTS OR COMPONENTS OF THE AIR BLEED SYSTEM IMMEDIATELY AFTER THE SYSTEM IS TURNED OFF. THE HIGH AIR TEMPERATURE CAN CAUSE INJURY TO YOU.

(a) Remove the jumper from pins B and C of the electric connector of the aircraft electrical harness.

(b) Connect the electrical connectors to the High-Stage Pressure Switch (AMM TASK 36-11-07-400-801-A/400).

(c) Install access panels 412BT and 422BT (AMM MPP 06-43-00/100).

(4) If you made a jump in the relay box, remove it. Refer to Figure 503, Sheet 3 and Sheet 4.

WARNING: BEFORE YOU REMOVE THE JUMPERS AND INSTALL THE WING A/I VLV CMD RELAY, DEENERGIZE THE AIRCRAFT. THIS IS TO PREVENT INJURY TO PERSONS AND/OR DAMAGE TO THE RH AUXILIARY RELAY SUPPORT.

(a) On the ICE AND RAIN PROTECTION control panel, on the overhead panel, open the WING circuit breaker.

(b) Remove the jumper installed between contact pins A2 and A1, the jumper installed between pins C2 and C3, and the jumper installed between contact D2 and D1 of socket relay XK0528.

(c) Install relay K0528, WING A/I VLV CMD, on the RH auxiliary relay support (AMM TASK 20-13-02-400-801-A/400 Relays - Installation, AWM 30-10-50).

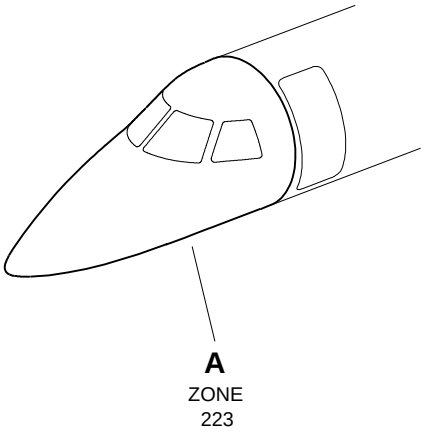
(d) On the ICE AND RAIN PROTECTION control panel, on the overhead panel, close the WING circuit breaker.

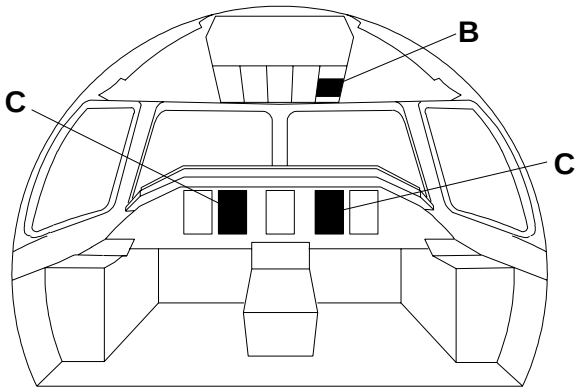
(e) Install the RH complement console, panel 224ERW (AMM TASK 25-12-08-400-801-A/400 RH Complement Console - Installation).

(f) Do an operational test of the Wing Thermal Anti-Icing System (AMM TASK 30-11-15-700-801-A/500).

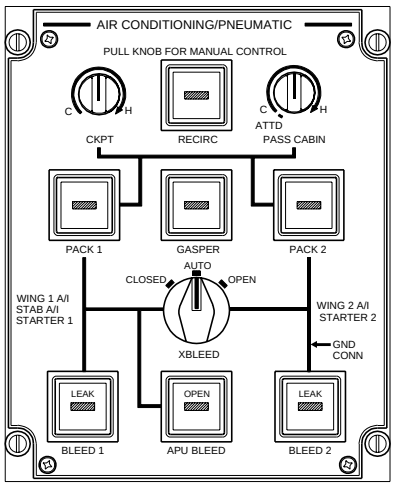
EFFECTIVITY: ALL

Operational Test of the Air Bleed System
Figure 503 - Sheet 1

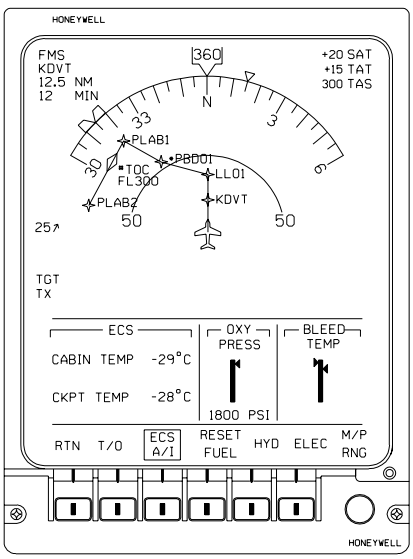




DET. A



DET. B



DET. C

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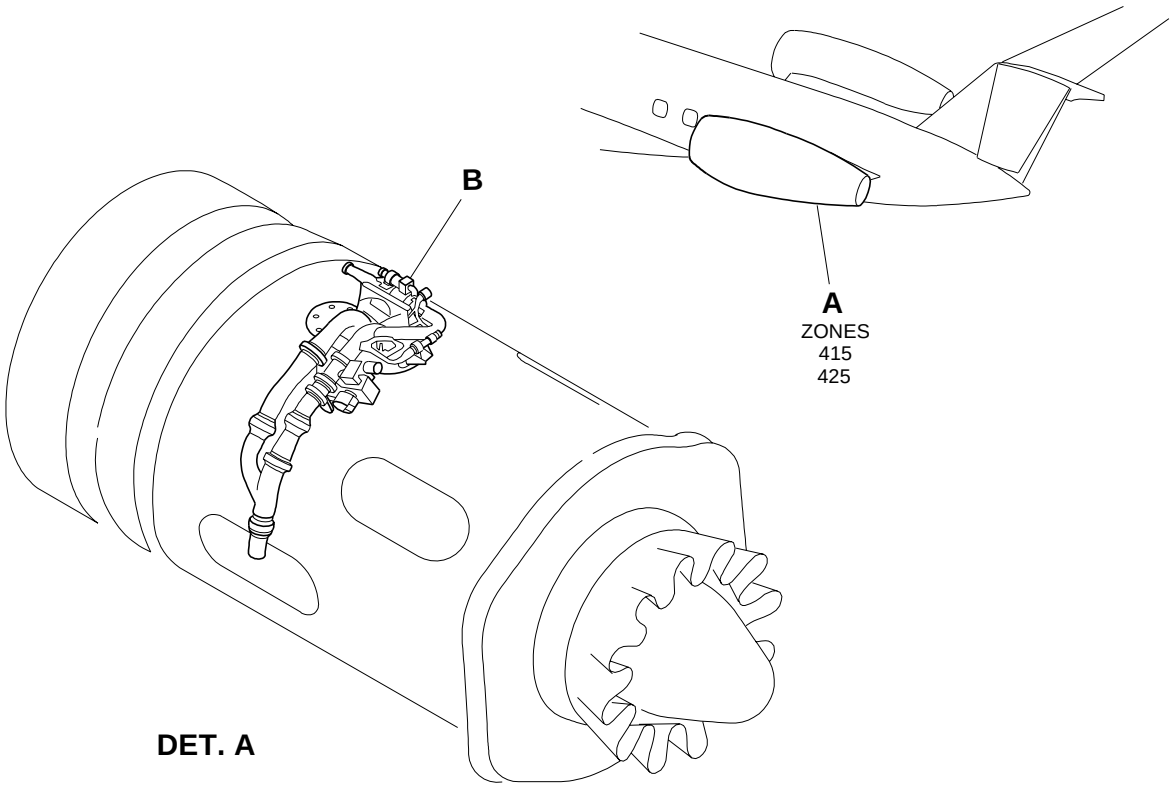
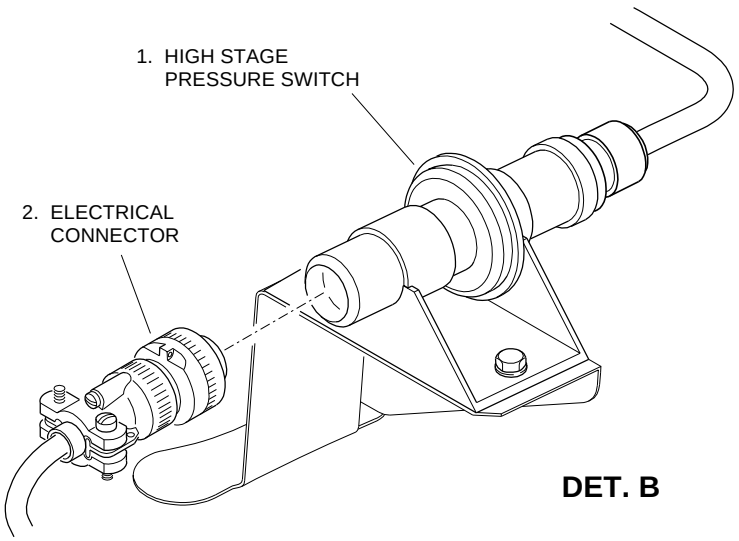
EFFECTIVITY: ALL
Operational Test of the Air Bleed System
Figure 503 - Sheet 2





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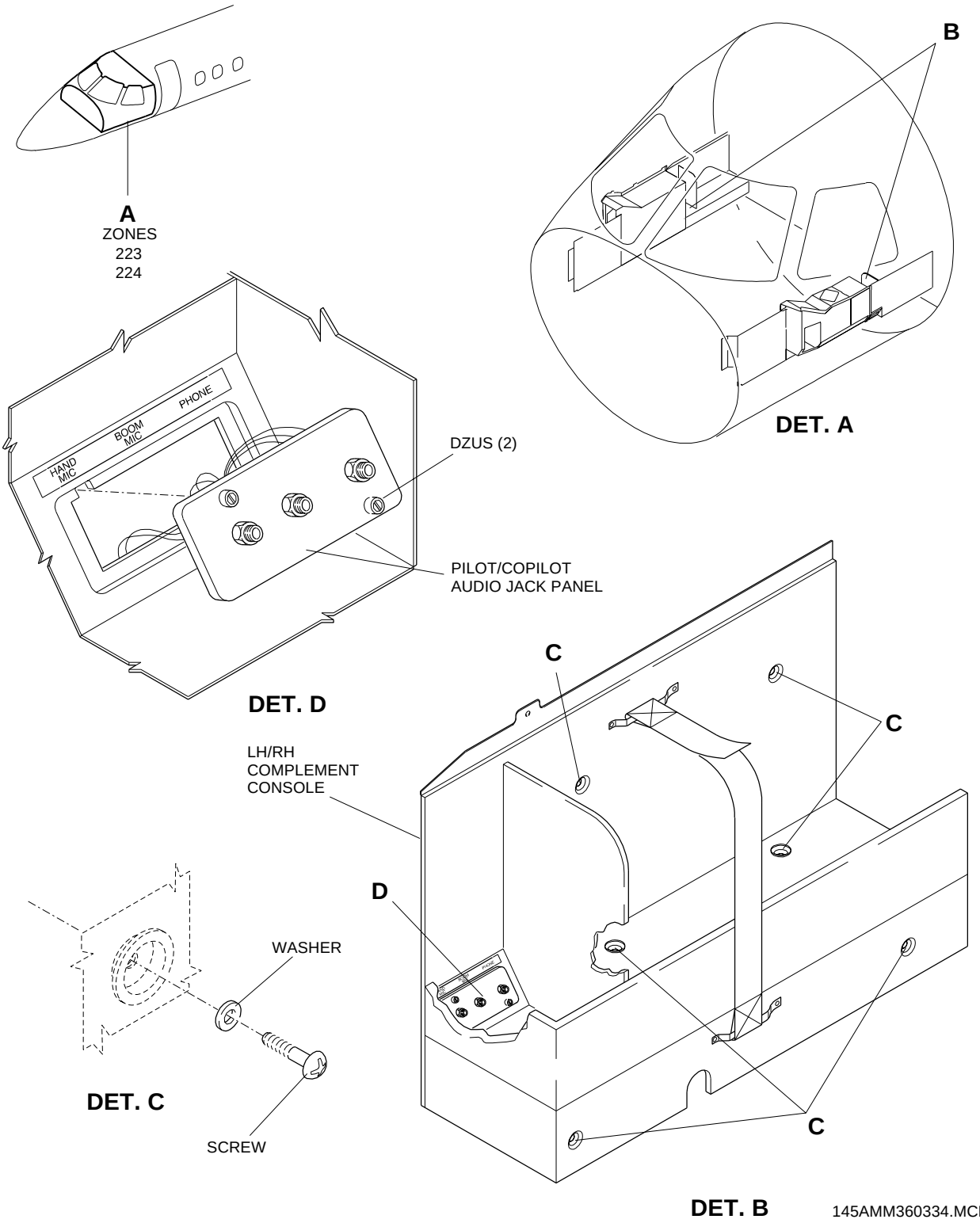
EFFECTIVITY: ALL

Operational Test of the Air Bleed System
Figure 503 - Sheet 3



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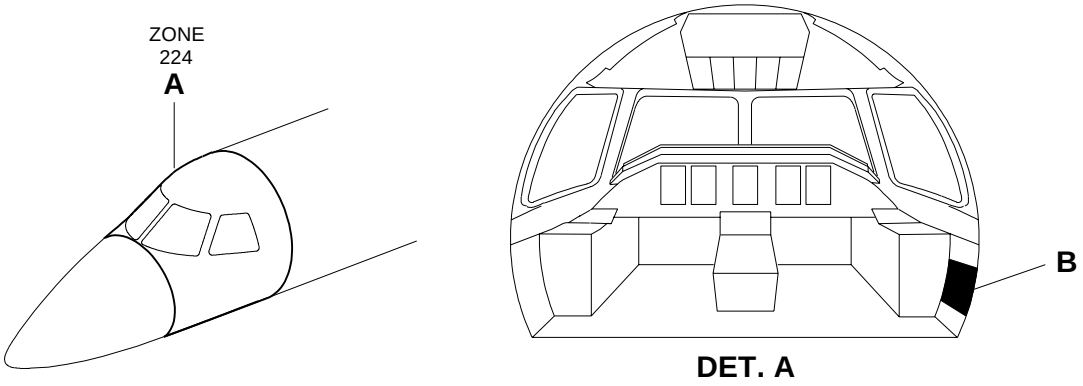
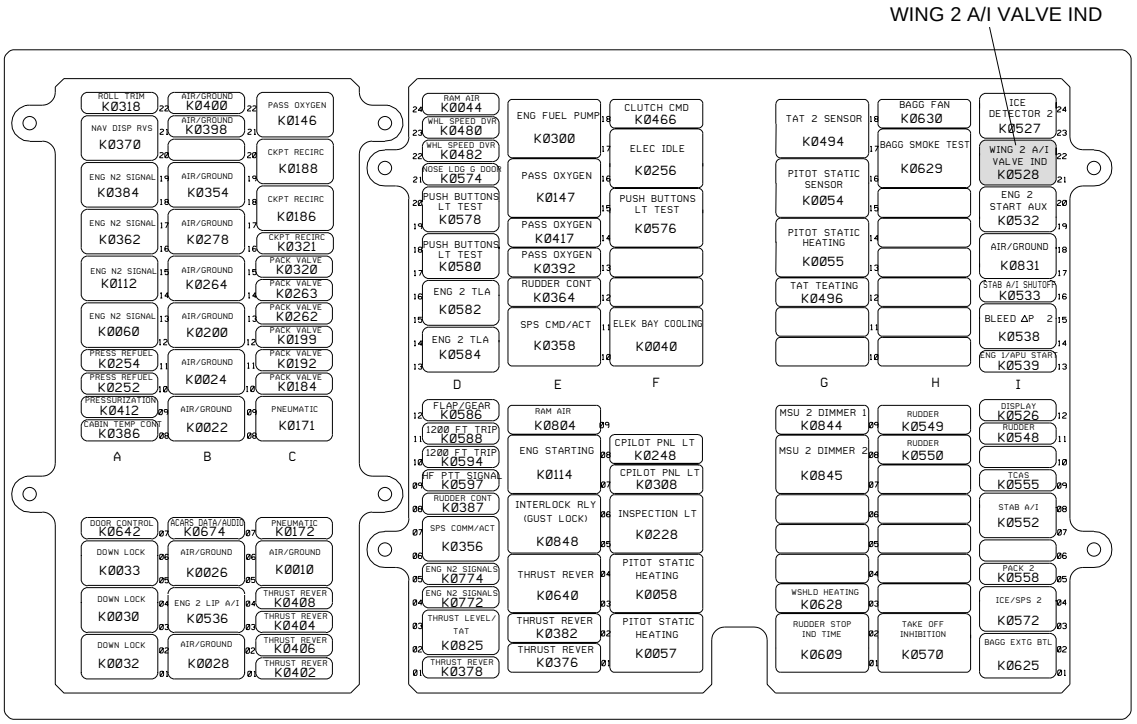
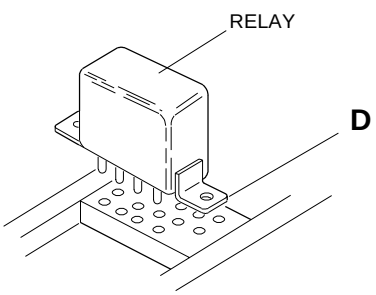
EFFECTIVITY: ALL

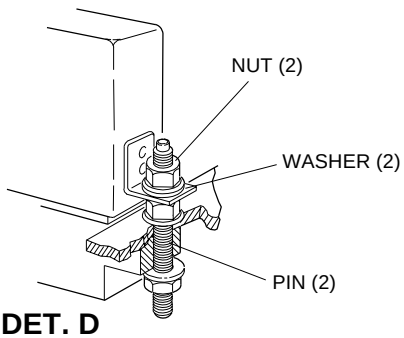
Operational Test of the Air Bleed System
Figure 503 - Sheet 4





RIGHT RELAY
SUPPORT





145AMM360335.MCE

TASK 36-00-00-700-804-A
EFFECTIVITY: ALL

5. LH FUSELAGE AIR BLEED DUCTS - LEAKAGE TEST

A. General

(1) This leakage test is applicable to ducts installed on the LH fuselage air bleed system.

B. References

REFERENCE	*DESIGNATION*
AMM MPP 06-41-01/100	-
AMM MPP 06-43-00/100	- COMPONENT LOCATION
AMM TASK 21-51-01-000-801-A/400	PACK VALVE - REMOVAL
AMM TASK 21-51-01-400-801-A/400	PACK VALVE - INSTALLATION
AMM TASK 30-11-01-000-801-A/400	WING ANTI-ICING VALVE - REMOVAL
AMM TASK 30-11-01-400-801-A/400	WING ANTI-ICING VALVE - INSTALLATION
AMM TASK 36-12-01-000-801-A/400	APU BLEED VALVE AND FLOW-LIMITING VENTURI - REMOVAL
AMM TASK 36-12-01-400-801-A/400	APU BLEED VALVE AND FLOW-LIMITING VENTURI - INSTALLATION
AMM TASK 49-11-00-000-801-A/400	APU COWLING - REMOVAL
AMM TASK 49-11-00-400-801-A/400	APU COWLING - INSTALLATION
AMM TASK 52-44-01-000-801-A/400	REAR ELECTRONIC-COMPARTMENT DOOR - REMOVAL
AMM TASK 52-44-01-400-801-A/400	REAR ELECTRONIC-COMPARTMENT DOOR - INSTALLATION
S.B.145-30-0022	-
S.B.145-36-0028	-

C. Zones and Accesses

ZONE	*PANEL/DOOR*	*LOCATION*
191	191KL	LH side of the forward wing-to-fuselage fairing
191	191EL	LH side of the forward wing-to-fuselage fairing
272	272DR	RH side of rear fuselage II
313	313	Tailcone fairing (APU)
414	414DB	LH pylon

D. Tools and Equipment

ITEM	*DESCRIPTION*	*PURPOSE*	*QTY*
GSE 133	Kit - Leak Test, Anti-Ice/Bleed Line	To do the leakage test (PRE-MOD. S.B. 145-36-0028)	

(Continued)

ITEM	DESCRIPTION	PURPOSE	QTY
GSE 007	Kit - Leak Test, Anti-Ice/Bleed Line	To do the leakage test (POST-MOD. S.B. 145-36-0028)	
GSE 028	Nitrogen Service Regulator	To regulate the pressure supplied to the system	
Commercially available	Stopwatch	To measure the time of leakage	
Commercially available	Nitrogen cylinder - To supply as much as 250 psi	To pressurize the bleed air line	
Commercially available	Pressure Gage 0 to 600 psi	To measure the pressure drop	

E. Auxiliary Items

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Ladder	To get access to the work area	2

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	A - Does the task	Inside and outside the aircraft
1	B - Helps technician A	Inside and outside the aircraft

I. Preparation

SUBTASK 841-005-A

(1) On the overhead circuit breaker panel, open these circuit breakers and attach DO-NOT-CLOSE tags to them:

- CROSS BLEED (Location tip: ESSENTIAL DC BUS 2 / PNEU / CROSS BLEED).
- PACK 1 (Location tip: DC BUS 1 / AIR COND/PNEU / PACK 1).
- STAB
  (PRE-MOD. S.B.145-30-0022):
  - STAB: (Location Tip: DC BUS 2/ICE AND RAIN PROTECTION/STAB).
  (POST-MOD. S.B.145-30-0022):
  - STAB: (Location Tip: DC BUS 2/ICE AND RAIN PROTECTION/STAB).
  - STAB A/I IND: (Location Tip: DC BUS 1/ICE AND RAIN PROTECTION/STAB A/I IND).
- WING (Location tip: DC BUS 1 / ICE AND RAIN PROTECTION / WING).
- EBV 1 (Location tip: ESSENTIAL DC BUS 1 / AIR COND/PNEU / EBV 1).

- CONTROL (Location tip: ESSENTIAL DC BUS 2 / APU / CONTROL).
- FUEL SOV (Location tip: ESSENTIAL DC BUS 2 / APU / FUEL SOV).
- START 1 (Location tip: ESSENTIAL DC BUS 1 / POWERPLANT / START 1).

(2) Remove access panels 191EL and 191KL (AMM MPP 06-41-01/100), and 414DB (AMM MPP 06-43-00/100).

(3) Remove rear electronic compartment door 272DR (AMM MPP 06-41-01/100 and AMM TASK 52-44-01-000-801-A/400).

(4) Remove the APU cowling (AMM TASK 49-11-00-000-801-A/400).

J. Leakage Test of the LH Fuselage Air Bleed Ducts (Figure 504)

SUBTASK 790-004-A

WARNING: DO NOT TOUCH THE DUCTS OR COMPONENTS OF THE AIR BLEED SYSTEM IMMEDIATELY AFTER THE SYSTEM IS TURNED OFF. THE HIGH AIR TEMPERATURE CAN CAUSE INJURY TO YOU.

(1) Remove the clamp (2) and disconnect the bleed duct from the stabilizer anti-icing duct. Refer to Figure 504, sheet 1.

(2) Install the seal (1) and plug (3) to the bleed duct with cap AN929-4 (4) and attach them with a clamp (2). Tighten the clamp (2) to the torque shown in Figure 504, sheet 1.

(3) Remove the clamps (8), (10) and (12), fittings (7) and duct (9) . Refer to Figure 504, sheet 2.

(4) Install the seal (6) and plug (5), and attach them with a clamp (8). Tighten the clamp (8) to the torque shown in Figure 504, sheet 2.

(5) Connect the hose with a pressure gage to the nipple of the plug (5).

(6) Remove the LH pack valve (AMM TASK 21-51-01-000-801-A/400).

(7) Install the seal (15) and plug (16), and attach them with a clamp (14). Tighten the clamp (14) to the torque shown in Figure 504, sheet 3.

(8) Install two plugs AN929-4 (13) at the pressure feedback point and vacuum pump feedback line. Refer to Figure 504, sheet 3.

(9) Remove the LH wing anti-icing valve (AMM TASK 30-11-01-000-801-A/400).

(10) Install the seal (18) and plug (19), and attach them with a clamp (17). Tighten the clamp (17) to the torque shown in Figure 504, sheet 4.

(11) For aircraft with APU T-62T-40C11 (APU 500), do as follows:

(a) Remove the APU bleed valve and flow limiting venture (AMM TASK 36-12-01-000-801-A/400).

(b) Install the seal (22) and plug (21), and attach them with a clamp (23). Tighten the clamp (23) to the torque shown in Figure 504, sheet 5.

(c) Connect nitrogen service regulator GSE 028 to the nitrogen cylinder.

(d) Connect the adapter (20) to the nipple of the plug (21).

(e) Connect the end of the hose of GSE 028 to the nipple of the adapter (20) in the APU compartment.

(f) Go to step (13).

(12) For aircraft with APU T-62T-40C14 (APU 500 R), do as follows:

(a) Remove the clamp (21), clamp (26), and bleed duct (22). Refer to Figure 504, sheet 6.

(b) Remove and discard the packing (20).

(c) Install the seal (25) and plug (24), and attach them with a clamp (26). Tighten the clamp (26) to the torque shown in Figure 504, sheet 6.

(d) Connect nitrogen service regulator GSE 028 to the nitrogen cylinder.

(e) Connect the adapter (23) to the nipple of the plug (24).

(f) Connect the end of the hose of GSE 028 to the nipple of the adapter (23) in the APU compartment.

(g) Go to step (13).

(13) Apply pressure to the LH air bleed ducts and stop when the pressure stabilizes at 250 psi.

(14) Stop the supply of nitrogen.

(15) After 15 seconds, see the value of the pressure on the pressure gage installed in item (5).

NOTE:
- If the pressure decreases more than 73 psi, release the pressure in the bleed air ducts, make sure that the fittings are correctly installed, and repair as necessary.
- Do the leakage test again after the repair.

(16) Depressurize the LH bleed air ducts.

(17) For aircraft with APU T-62T-40C11 (APU 500), do as follows:

(a) Disconnect the end of the hose of GSE 028 from the nipple of the adapter (20) in the APU compartment. Refer to Figure 504, sheet 5.

(b) Disconnect the adapter (20) from the nipple of the plug (21).

(c) Disconnect nitrogen service regulator GSE 028 from the nitrogen cylinder.

(d) Remove the plug (21) and seal (22).

(e) Install the APU bleed valve (AMM TASK 36-12-01-400-801-A/400).

(f) Go to step (19).

(18) For aircraft with APU T-62T-40C14 (APU 500 R), do as follows:

(a) Disconnect the end of the hose of GSE 028 from the nipple of the adapter (23) in the APU compartment. Refer to Figure 504, sheet 6.

(b) Disconnect the adapter (23) from the nipple of the plug (24).

(c) Disconnect nitrogen service regulator GSE 028 from the nitrogen cylinder.

(d) Remove the plug (24) and seal (25).

(e) Install new packing (20).

(f) Install the bleed duct (22), clamps (21) and (26). Tighten the clamps (21) and (26) to the torque shown in Figure 504, sheet 6.

(g) Go to step (19).

(19) Remove the plug (19) and seal (18). Refer to Figure 504, sheet 4.

(20) Install the LH wing anti-icing valve (AMM TASK 30-11-01-400-801-A/400).

(21) Remove the plug (16) and seal (15). Refer to Figure 504, sheet 3.

(22) Install the LH pack valve (AMM TASK 21-51-01-400-801-A/400).

(23) Remove two plugs AN 929-4 (13) and install the pressure feedback point and vacuum pump feedback line. Refer to Figure 504, sheet 3.

(24) Remove the hose with the pressure gage from the nipple of the plug (5). Refer to Figure 504, sheet 2.

(25) Remove the seal (6) and plug (5).

(26) Install the duct (9), clamps (8), (10) and (12), and fittings (7). Tighten the clamp (8), (10) and (12) to the torque shown in Figure 504, sheet 2.

(27) Remove the seal (1) and plug (3) with the cap (4) from the bleed duct. Refer to Figure 504, sheet 1

(28) Install the clamp (2) and connect the bleed duct to the stabilizer anti-icing duct. Tighten the clamp (2) to the torque shown in Figure 504, sheet 1.

K. Follow-on

SUBTASK 842-005-A

(1) Install the APU cowling (AMM TASK 49-11-00-400-801-A/400).

(2) Install access panels 191EL and 191KL (AMM MPP 06-41-01/100), and 414DB (AMM MPP 06-43-00/100).

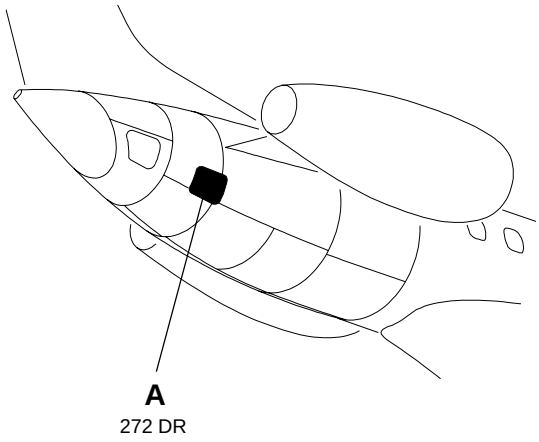
(3) Install rear electronic compartment door 272DR (AMM MPP 06-41-01/100 and AMM TASK 52-44-01-400-801-A/400).

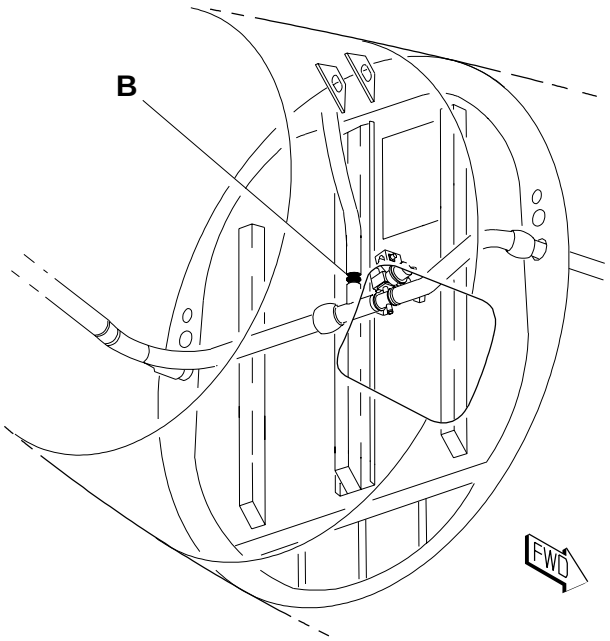
(4) On the overhead circuit breaker panel, close these circuit breakers and remove the DO-NOT-CLOSE tags from them:

- CROSS BLEED (Location tip: ESSENTIAL DC BUS 2 / PNEU / CROSS BLEED).
- PACK 1 (Location tip: DC BUS 1 / AIR COND/PNEU / PACK 1).
- STAB
  (PRE-MOD. S.B.145-30-0022):
  - STAB: (Location Tip: DC BUS 2/ICE AND RAIN PROTECTION/STAB).
  (POST-MOD. S.B.145-30-0022):
  - STAB: (Location Tip: DC BUS 2/ICE AND RAIN PROTECTION/STAB).
  - STAB A/I IND: (Location Tip: DC BUS 1/ICE AND RAIN PROTECTION/STAB A/I IND).
- WING (Location tip: DC BUS 1 / ICE AND RAIN PROTECTION / WING).
- EBV 1 (Location tip: ESSENTIAL DC BUS 1 / AIR COND/PNEU / EBV 1).
- CONTROL (Location tip: ESSENTIAL DC BUS 2 / APU / CONTROL).
- FUEL SOV (Location tip: ESSENTIAL DC BUS 2 / APU / FUEL SOV).
- START 1 (Location tip: ESSENTIAL DC BUS 1 / POWERPLANT / START 1).

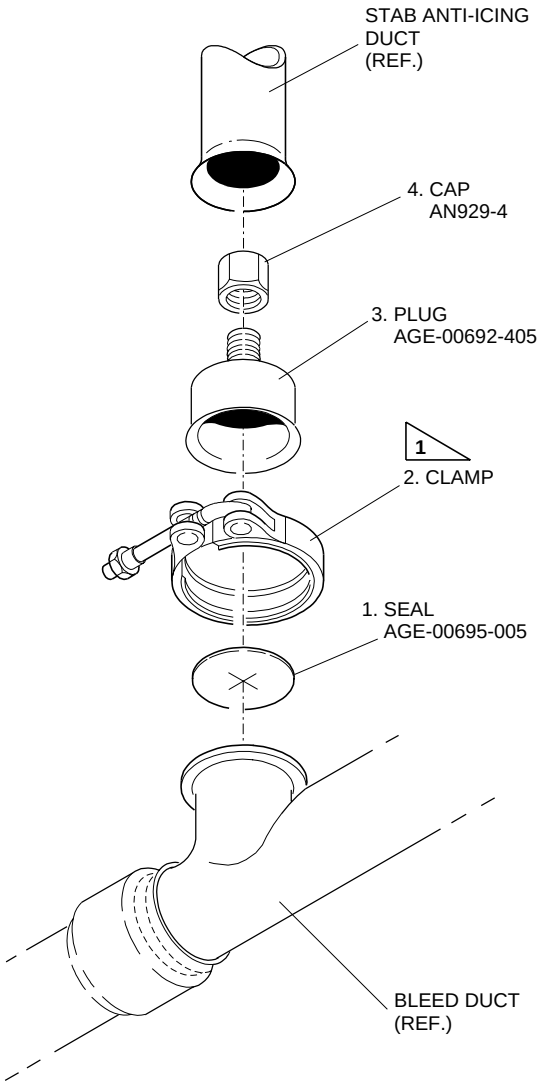
EFFECTIVITY: ALL

LH Fuselage Air Bleed Ducts - Leakage Test
Figure 504 - Sheet 1





DET. A



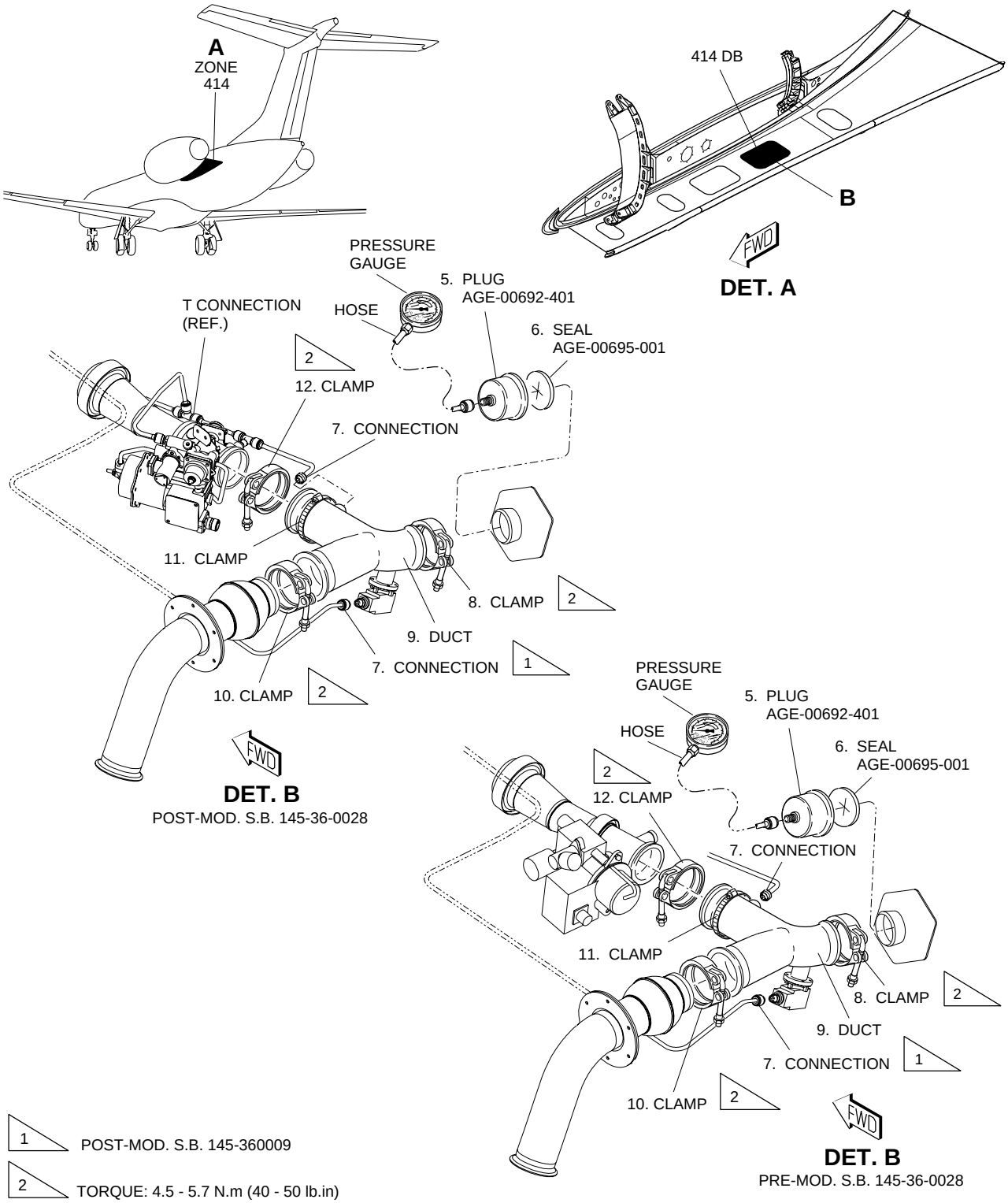
DET. B

1 TORQUE: 4.0 - 5.1 Nm (35 - 45 lb.in).
REFER TO TASK 20-10-10-910-801- A FOR CORRECT INSTALLATION OF V-CLAMP.

145AMM360059.MCE B

EFFECTIVITY: ALL

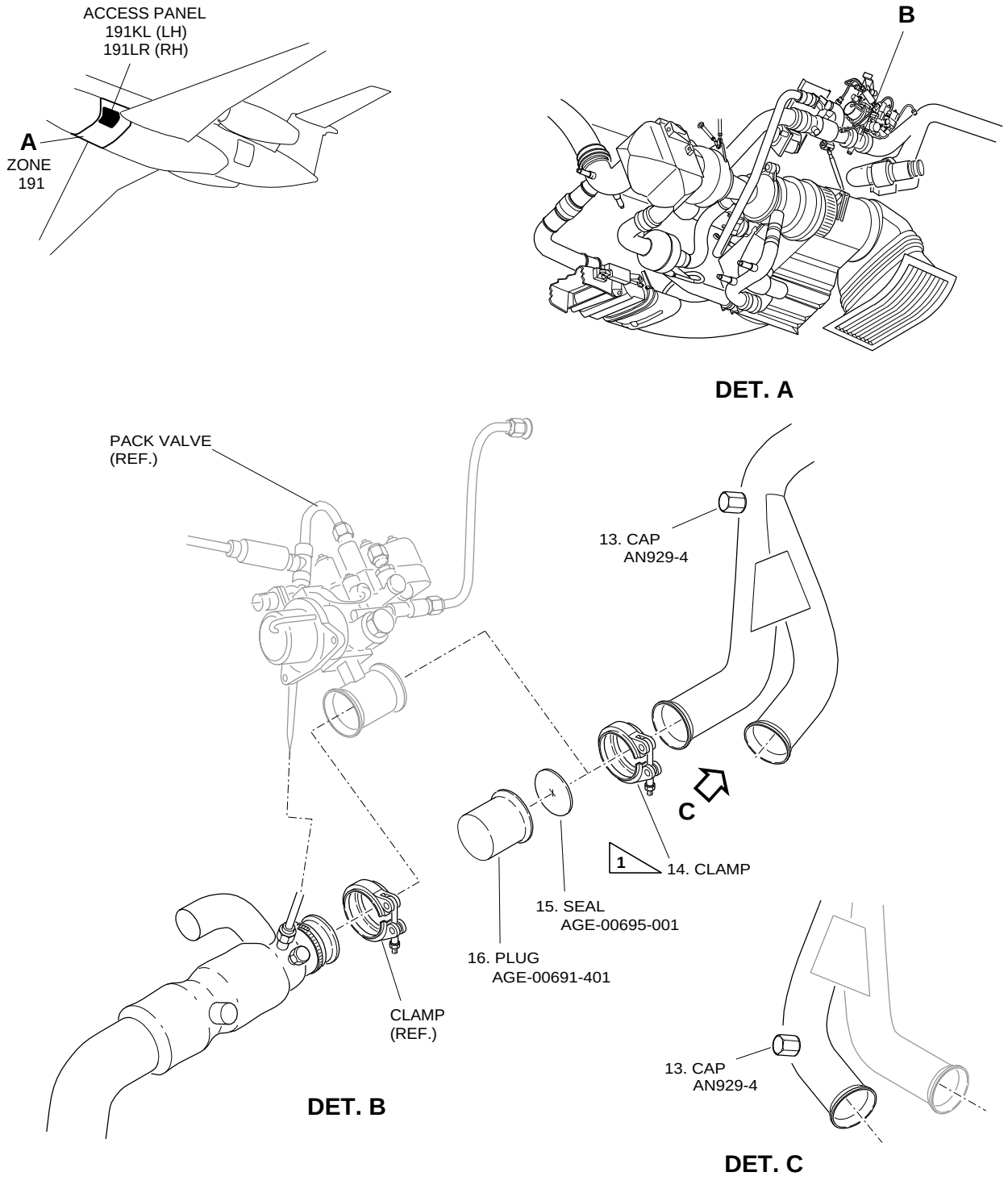
LH Fuselage Air Bleed Ducts - Leakage Test
Figure 504 - Sheet 2



145AMM360184.MCE A

EFFECTIVITY: ALL

LH Fuselage Air Bleed Ducts - Leakage Test
Figure 504 - Sheet 3

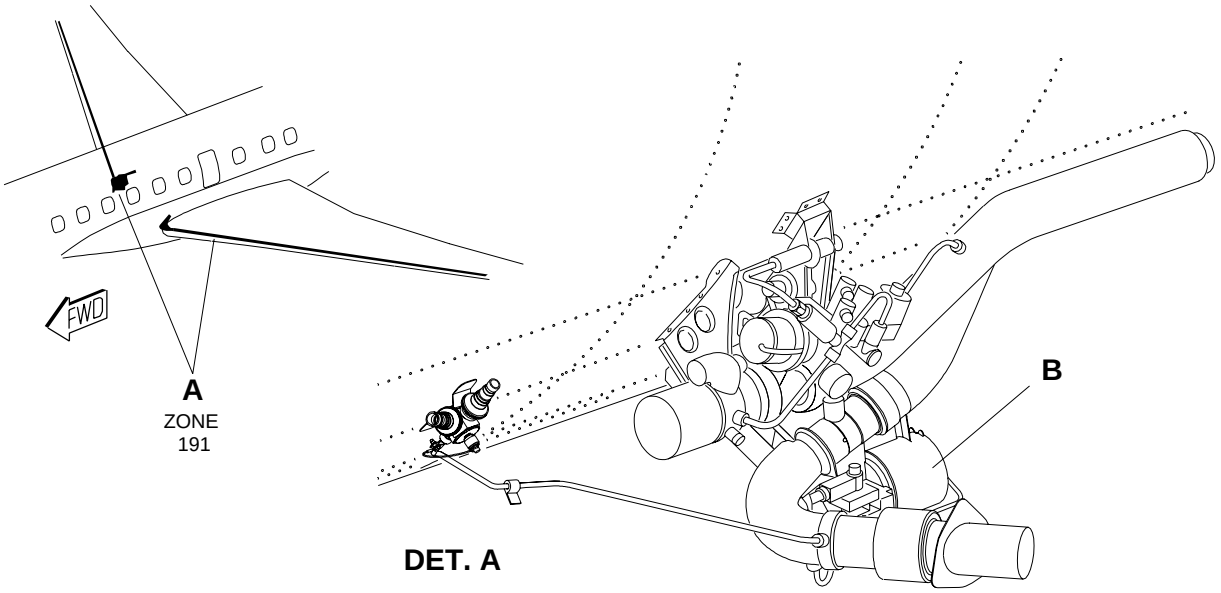


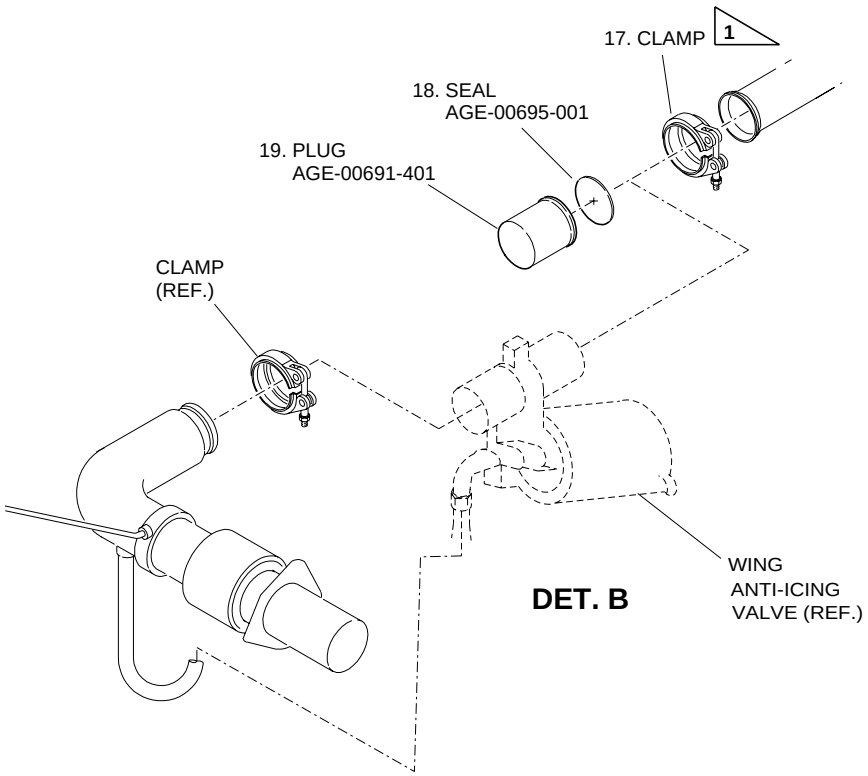
1 TORQUE: 4.5 - 5.7 Nm (40 - 50 lb.in).
REFER TO TASK 20-10-10-910-801- A FOR CORRECT INSTALLATION OF V-CLAMP.

145AMM360104.MCE A

EFFECTIVITY: ALL

LH Fuselage Air Bleed Ducts - Leakage Test
Figure 504 - Sheet 4



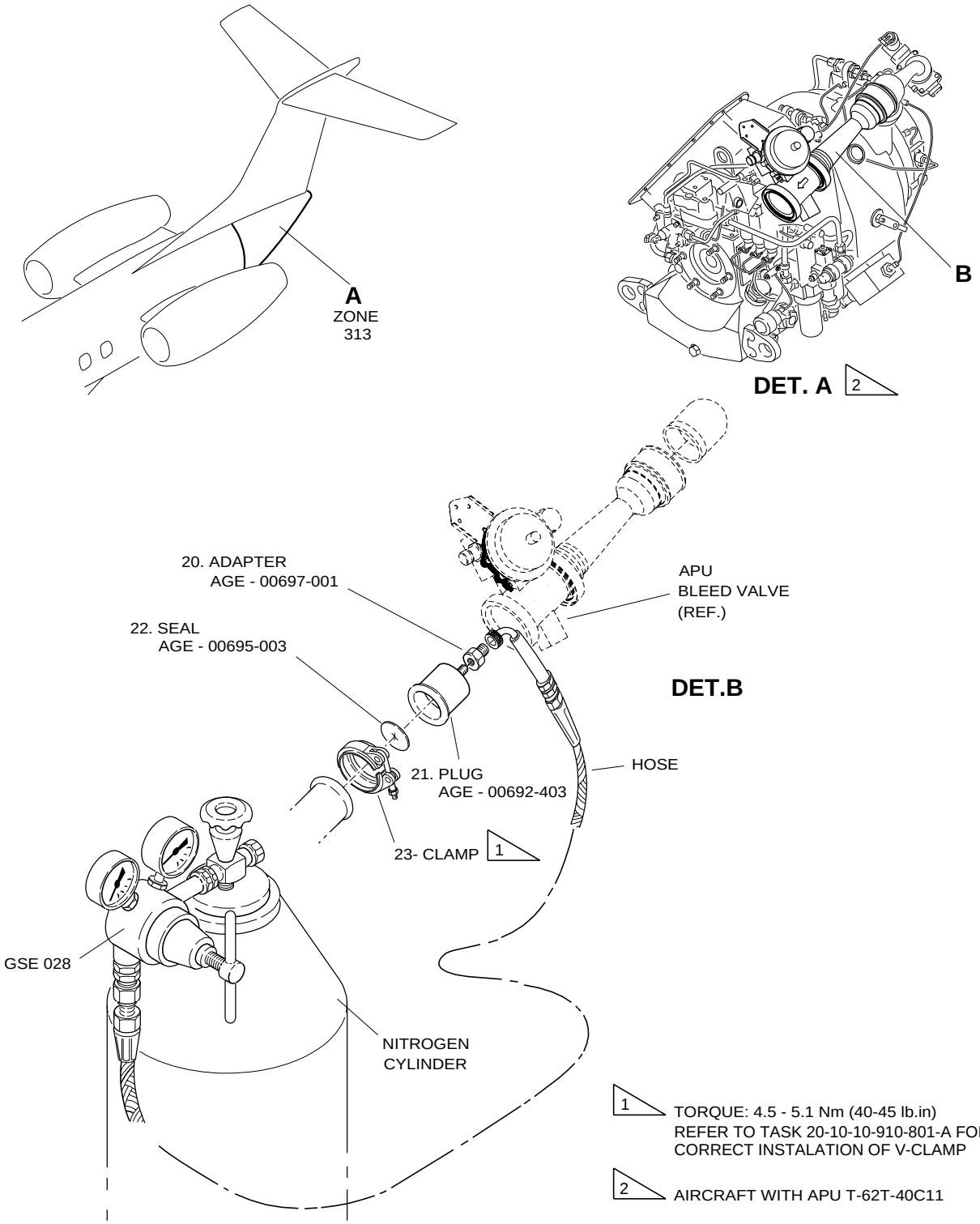


1 TORQUE: 4.5 - 5.7 N.m (40 - 50 lb.in).
REFER TO TASK 20-10-10-910-801- A FOR CORRECT INSTALLATION OF V-CLAMP.

145AMM360208.MCE

EFFECTIVITY: ALL

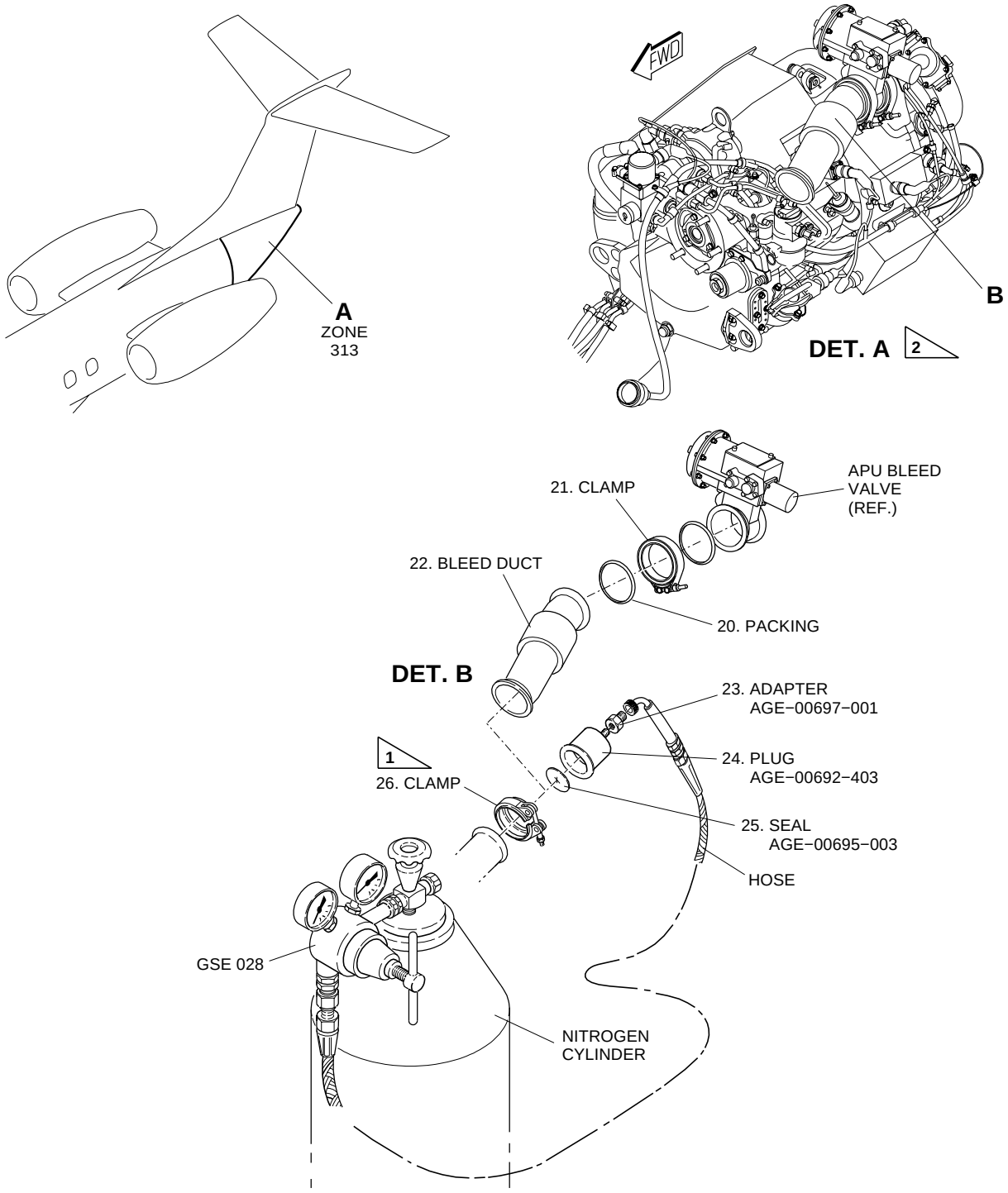
LH Fuselage Air Bleed Ducts - Leakage Test
Figure 504 - Sheet 5



145AMM360050.MCE E

EFFECTIVITY: ALL

LH Fuselage Air Bleed Ducts - Leakage Test
Figure 504 - Sheet 6



1 TORQUE: 4.5 − 5.7 N.m (40 − 50 lb.in).
REFER TO TASK 20−10−10−910−801− A FOR CORRECT INSTALLATION OF V−CLAMP.

2 AIRCRAFT WITH APU T−62T−40C14

EM145AMM360618A.DGN

TASK 36-00-00-700-805-A
EFFECTIVITY: ALL

6. RH FUSELAGE AIR BLEED DUCTS - LEAKAGE TEST

A. General

(1) This leakage test is applicable to the ducts installed in the RH fuselage air bleed system.

B. References

REFERENCE	*DESIGNATION*
AMM MPP 06-41-01/100	-
AMM MPP 06-43-00/100	- COMPONENT LOCATION
AMM TASK 20-40-01-860-801-A/200	ENERGIZATION OF THE AIRCRAFT WITH AN EXTERNAL POWER SOURCE
AMM TASK 21-51-01-000-801-A/400	PACK VALVE - REMOVAL
AMM TASK 21-51-01-400-801-A/400	PACK VALVE - INSTALLATION
AMM TASK 30-11-01-000-801-A/400	WING ANTI-ICING VALVE - REMOVAL
AMM TASK 30-11-01-400-801-A/400	WING ANTI-ICING VALVE - INSTALLATION
S.B.145-36-0028	-

C. Zones and Accesses

ZONE	*PANEL/DOOR*	*LOCATION*
191	191FR	RH side of the forward wing-to-fuselage fairing
191	191LR	RH side of the forward wing-to-fuselage fairing
424	424DB	RH pylon

D. Tools and Equipment

ITEM	*DESCRIPTION*	*PURPOSE*	*QTY*
GSE 133	Kit - Leak Test, Anti-Ice/Bleed Line	To do the leakage test (PRE-MOD. S.B. 145-36-0028)	
GSE 007	Kit - Leak Test, Anti-Ice/Bleed Line	To do the leakage test (POST-MOD. S.B. 145-36-0028)	
GSE 028	Nitrogen Service Regulator	To regulate the pressure supplied to the system	
Commercially available	Stopwatch	To measure the time of leakage	
Commercially available	Nitrogen cylinder - To supply as much as 250 psi	To pressurize the bleed air line	
Commercially available	Pressure Gage 0 to 600 psi	To measure the pressure drop	

E. Auxiliary Items

ITEM	*DESCRIPTION*	*PURPOSE*	*QTY*
Commercially available	Ladder	To get access to the work area	1

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	*FUNCTION*	*PLACE*
1	A - Does the task	Inside and outside the aircraft
1	B - Helps technician A	Inside and outside the aircraft

I. Preparation

SUBTASK 841-006-A

(1) On the RH electrical-power control/distribution box, open the PITOT HTG 3 and the HEATING/PITOT 2 circuit breakers and attach a DO-NOT-OPEN tag to it.

(2) On the LH electrical-power control/distribution box, open the HEATING/PITOT 1 circuit breaker and attach a DO-NOT-CLOSE tag to it.

(3) On the overhead circuit breaker panel, open these circuit breakers and attach DO-NOT-CLOSE tags to them:

- CROSS BLEED (Location tip: ESSENTIAL DC BUS 2 / PNEU / CROSS BLEED).
- PACK 2 (Location tip: DC BUS 2 / AIR COND/PNEU / PACK 2).
- WING (Location tip: DC BUS 1 / ICE AND RAIN PROTECTION / WING).
- N2 SIGNAL 2A (Location tip: ESSENTIAL DC BUS 1 / POWERPLANT / N2 SIGNAL 2A).
- N2 SIGNAL 2B (Location tip: ESSENTIAL DC BUS 2 / POWERPLANT / N2 SIGNAL 2B).

(4) Remove access panels 191FR and 191LR (AMM MPP 06-41-01/100), and 424DB (AMM MPP 06-43-00/100).

J. Leakage Test of the RH Fuselage Air Bleed Ducts (Figure 505)

SUBTASK 790-005-A

WARNING: DO NOT TOUCH THE DUCTS OR COMPONENTS OF THE AIR BLEED SYSTEM IMMEDIATELY AFTER THE SYSTEM IS TURNED OFF. THE HIGH AIR TEMPERATURE CAN CAUSE INJURY TO YOU.

(1) Remove the RH pack valve (AMM TASK 21-51-01-000-801-A/400).

(2) Install the seal (2) and plug (4), and attach them with a clamp (3). Tighten the clamp (3) to the torque shown in Figure 505, sheet 1.

(3) Install two plugs AN 929-4 (1) at the pressure feedback point and vacuum pump feedback line. Refer to Figure 505, sheet 1.

(4) Remove the RH wing anti-icing valve (AMM TASK 30-11-01-000-801-A/400).

(5) Install the seal (6) and plug (5), and attach them with a clamp (7). Tighten the clamp (7) to the torque shown in Figure 505, sheet 2.

(6) Connect the hose with a pressure gage to the nipple of the plug (5).

(7) Remove the clamps (9), (15) and (17), fittings (10), and duct (8). Refer to Figure 505, sheet 3.

(8) Install the seal (14) and plug (13), and attach them with a clamp (15). Tighten the clamp (15) to the torque shown in Figure 505, sheet 3.

(9) Connect nitrogen service regulator GSE 028 to the nitrogen cylinder (11).

(10) Connect the adapter (12) to the nipple of the plug (13).

(11) Connect the end of the hose of GSE 028 to the nipple of the adapter (12).

(12) Energize the aircraft (AMM TASK 20-40-01-860-801-A/200).

(13) Set the BLEED 2 switch to ON.

(14) Make sure that the circuit breaker EBV 2 is closed.

(15) Apply pressure to the RH air bleed ducts and stop when the pressure stabilizes at 250 psi.

(16) Stop the supply of nitrogen.

(17) After 15 seconds, see the value of the pressure on the pressure gage installed in item (6).

NOTE:
- If the pressure decreases more than 73 psi, release the pressure in the bleed air ducts, make sure that the fittings are correctly installed, and repair as necessary.
- Do the leakage test again after the repair.

(18) Depressurize the RH bleed air ducts.

(19) De-energize the aircraft (AMM TASK 20-40-01-860-801-A/200).

(20) Disconnect the end of the hose of GSE 028 from the nipple of the adapter (12). Refer to Figure 505, sheet 3.

(21) Disconnect the adapter (12) from the nipple of the plug (13).

(22) Disconnect nitrogen service regulator GSE 028 from the nitrogen cylinder (11).

(23) Remove the plug (13) and seal (14).

(24) Install the duct (8), clamps (9), (15) and (17), and fittings (10). Tighten the clamp (9), (15), and (17) to the torque shown in Figure 505, sheet 3.

(25) Remove the plug (5) and seal (6). Refer to Figure 505, sheet 2.

(26) Install the RH wing anti-icing valve (AMM TASK 30-11-01-400-801-A/400).

(27) Remove the plug (4) and seal (2). Refer to Figure 505, sheet 1.

(28) Install the RH pack valve (AMM TASK 21-51-01-400-801-A/400).

(29) Remove two plugs AN929-4 (1) and install the pressure feedback point and vacuum pump feedback line. Refer to Figure 505, sheet 1.

K. Follow-on

SUBTASK 842-006-A

(1) Install access panels 191FR and 191LR (AMM MPP 06-41-01/100), and 424DB (AMM MPP 06-43-00/100).

(2) On the overhead circuit breaker panel, close these circuit breakers and remove the DO-NOT-CLOSE tags from them:

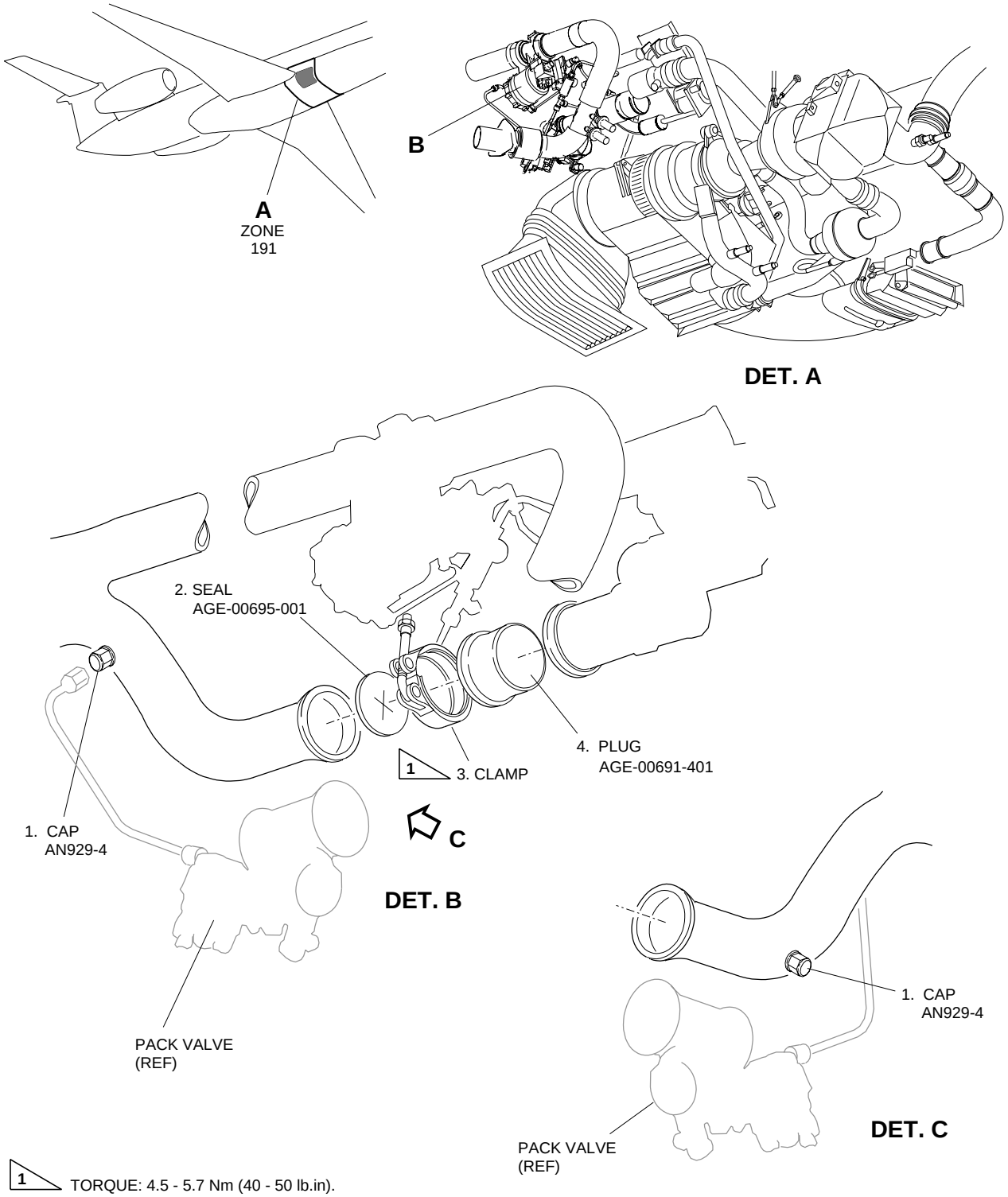
- CROSS BLEED (Location tip: ESSENTIAL DC BUS 2 / PNEU / CROSS BLEED).
- PACK 2 (Location tip: DC BUS 2 / AIR COND/PNEU / PACK 2).
- WING (Location tip: DC BUS 1 / ICE AND RAIN PROTECTION / WING).
- N2 SIGNAL 2A (Location tip: ESSENTIAL DC BUS 1 / POWERPLANT / N2 SIGNAL 2A).
- N2 SIGNAL 2B (Location tip: ESSENTIAL DC BUS 2 / POWERPLANT / N2 SIGNAL 2B).

(3) On the RH electrical-power control/distribution box, close the PITOT HTG 3 and the HEATING/PITOT 2 circuit breakers and remove the DO-NOT-OPEN tag from it.

(4) On the LH electrical-power control/distribution box, close the HEATING/PITOT 1 circuit breaker and remove the DO-NOT-CLOSE tag from it.

EFFECTIVITY: ALL

RH Fuselage Air Bleed Ducts - Leakage Test
Figure 505 - Sheet 1

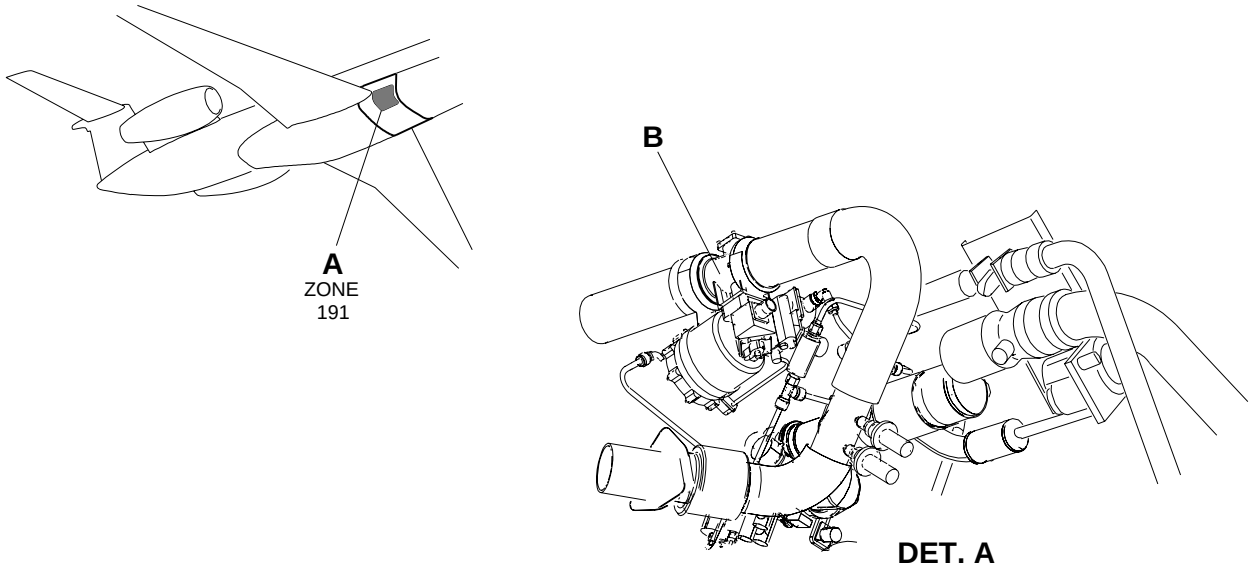


1 TORQUE: 4.5 - 5.7 Nm (40 - 50 lb.in).
REFER TO TASK 20-10-10-910-801- A FOR CORRECT INSTALLATION OF V-CLAMP.

145AMM360105.MCE A

EFFECTIVITY: ALL

RH Fuselage Air Bleed Ducts - Leakage Test
Figure 505 - Sheet 2

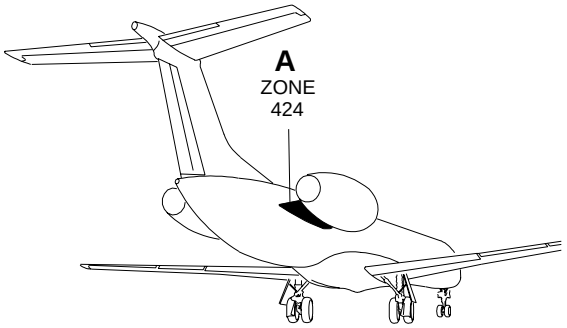


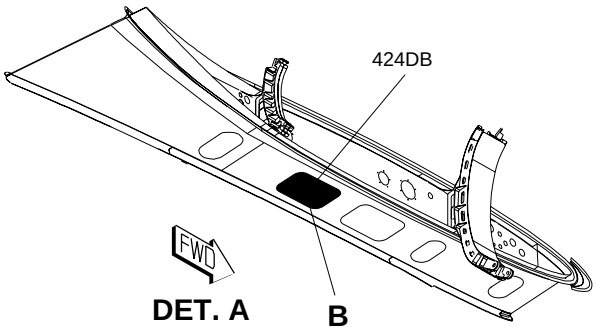
1 TORQUE: 4.5 - 5.7 N.m (40 - 50 lb.in).
REFER TO TASK 20-10-10-910-801- A FOR CORRECT INSTALLATION OF V-CLAMP.

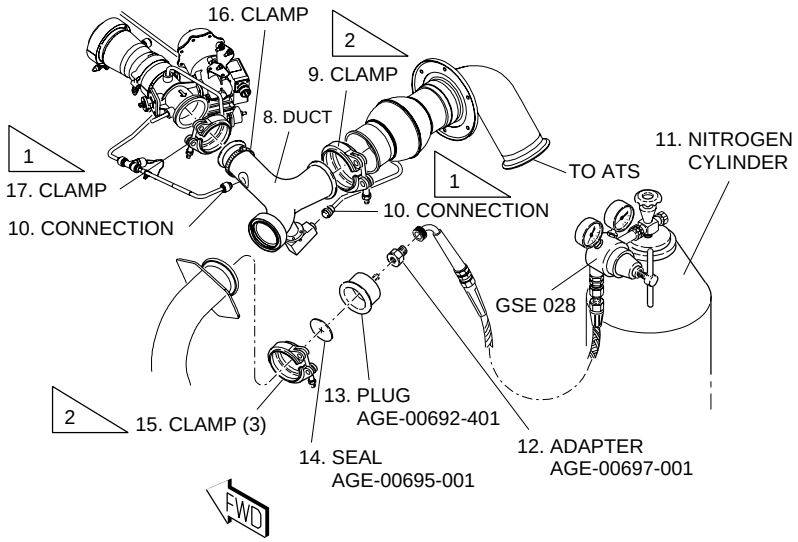
145AMM360186.MCE

EFFECTIVITY: ALL

RH Fuselage Air Bleed Ducts - Leakage Test
Figure 505 - Sheet 3

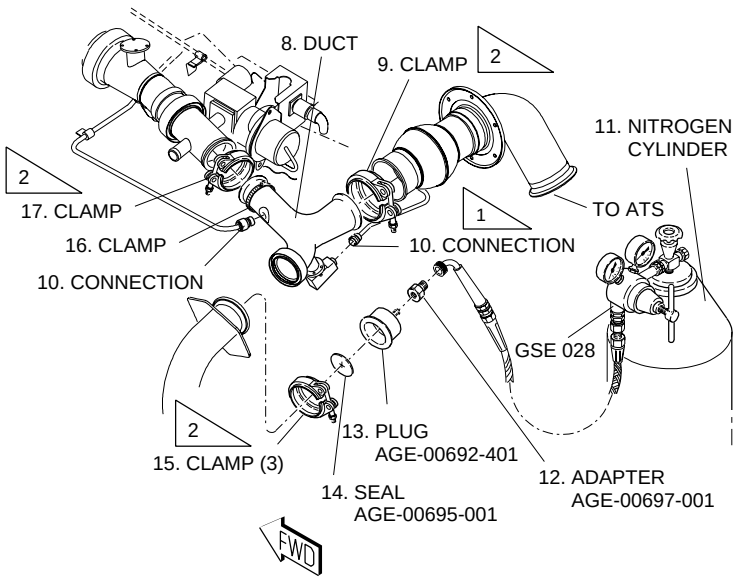






DET. B

POST-MOD. S.B. 145-36-0028



DET. B

PRE-MOD. S.B. 145-36-0028

1 POST-MOD. S.B. 145-36-0009

2 TORQUE: 4.5 - 5.7 N.m (40 - 50 lb.in)
REFER TO TASK 20-10-10-910-801 - A
FOR CORRECT INSTALATION OF V-CLAMP

145AMM360183.MCE A

TASK 36-00-00-700-806-A
EFFECTIVITY: ALL

7. AIR BLEED SYSTEM - OPERATIONAL TEST

A. General

(1) This task gives the procedures to do the operational test when the BLD LOW TEMP message comes into view on the EICAS, and to make sure that the air bleed system is operational.

B. References

REFERENCE	*DESIGNATION*
AMM MPP 06-43-00/100	- COMPONENT LOCATION
AMM TASK 20-13-02-000-801-A/400	RELAYS - REMOVAL (TYPICAL)
AMM TASK 20-13-02-400-801-A/400	RELAYS - INSTALLATION (TYPICAL)
AMM TASK 20-40-01-860-801-A/200	ENERGIZATION OF THE AIRCRAFT WITH AN EXTERNAL POWER SOURCE
AMM TASK 25-12-08-000-801-A/400	-
AMM TASK 25-12-08-400-801-A/400	-
AMM TASK 30-11-15-700-801-A/500	WING ANTI-ICING VALVE COMMAND RELAY - OPERATIONAL CHECK
AMM TASK 36-11-07-000-801-A/400	HIGH-STAGE PRESSURE SWITCH - REMOVAL
AMM TASK 36-11-07-400-801-A/400	HIGH-STAGE PRESSURE SWITCH - INSTALLATION
AMM TASK 71-00-01-910-801-A/200	ENGINE START PROCEDURE (NORMAL)
AMM TASK 71-00-01-910-804-A/200	ENGINE STOP PROCEDURE

C. Zones and Accesses

ZONE	*PANEL/DOOR*	*LOCATION*
412	412BT	LH engine upper cowling
422	422BT	RH engine upper cowling

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	In the cockpit, and outside the aircraft in the two engines

I. Preparation

SUBTASK 841-007-A

NOTE: Make a jump in the engine or in the relay box. Refer to steps (1) or (2) as applicable.

(1) If you make a jump in the engine; do as follows: Refer to Figure 506, Sheet 2.

(a) Remove access panels 412BT and 422BT (AMM MPP 06-43-00/100).

(b) Disconnect the electrical connectors at the high-stage pressure switch (AMM TASK 36-11-07-000-801-A/400).

(c) Put a jumper between pins B and C of the electric connector of the aircraft electrical harness, disconnected in step (b).

(d) Energize the aircraft (AMM TASK 20-40-01-860-801-A/200).

CAUTION: DO NOT DO THE ANTI-ICING SYSTEM TEST DURING THE OPERATIONAL TEST OF THE AIR BLEED SYSTEM (SUBTASK 36-00-00-710-001-A00), DAMAGE CAN OCCUR BECAUSE THE WING A/I VLV CMD RELAY IS REMOVED.

(e) Make sure that the MFD is on and set the ECS page.

(f) Go to step (3).

(2) If you make a jump in the relay box, do as follows: Refer to Figure 506, Sheet 3 and Sheet 4.

WARNING: AFTER THE JUMPERS ARE INSTALLED AND WHILE THE AIRCRAFT IS ENERGIZED, DO NOT TOUCH THE RH AUXILIARY RELAY SUPPORT. IT CAN CAUSE INJURY TO PERSONS.

(a) Remove the RH complement console referred to as panel 224ERW (AMM TASK 25-12-08-000-801-A/400 RH Complementing Console - Removal).

(b) On the ICE AND RAIN PROTECTION control panel, on the overhead panel, open the WING circuit breaker.

(c) Remove relay K0528 (WING A/I VLV CMD) installed on the RH auxiliary relay support (AMM TASK 20-13-02-000-801-A/400 Relays - Removal, AWM 30-10-50).

(d) Put a jumper between contact pins A2 and A1 of socket relay XK0528.

(e) Put a jumper between contact pins C2 and C3 of socket relay XK0528.

(f) Put a jumper between contact pins D2 and D1 of socket relay XK0528.

(g) On the ICE AND RAIN PROTECTION control panel, on the overhead panel, close the WING circuit breaker.

(h) Energize the aircraft (AMM TASK 20-40-01-860-801-A/200).

CAUTION: DO NOT DO THE ANTI-ICING SYSTEM TEST DURING THE OPERATIONAL TEST OF THE AIR BLEED SYSTEM (SUBTASK 36-00-00-710-001-A00), DAMAGE CAN OCCUR BECAUSE THE WING A/I VLV CMD RELAY IS REMOVED.

(i) Make sure that the MFD is on and set the ECS page.

(3) Do the engine start procedure (AMM TASK 71-00-01-910-801-A/200).

(4) On the overhead circuit breaker panel, open these circuit breakers and attach DO-NOT-CLOSE tags to them:

- AIR/GND A (Location tip: DC BUS 1 / LDG GEAR / AIR/GND A).
- AIR/GND B (Location tip: ESSENTIAL DC BUS 1 / LDG GEAR / AIR/GND B).
- AIR/GND C (Location tip: DC BUS 2 / LDG GEAR / AIR/GND C).
- AIR/GND D (Location tip: ESSENTIAL DC BUS 2 / LDG GEAR / AIR/GND D).

J. Bleed Low Temp Operational Test (Figure 506)

SUBTASK 710-003-A

(1) Do this test for the LH air bleed system, as follows:

(a) Set the LH and RH thrust levers to the idle position.

(b) On the AIR CONDITIONING/PNEUMATIC control panel, on the overhead panel, move the XBLEED rotary switch to the CLOSED position.

(c) On the AIR CONDITIONING/PNEUMATIC control panel, on the overhead panel, push the PACK 1 and PACK 2 push buttons.

Result:

1 The PACK 1 and PACK 2 push button lights go off.

(d) On the AIR CONDITIONING/PNEUMATIC control panel, on the overhead panel, release the APU BLEED push button.

Result:

1 The APU BLEED push button light goes off.

(e) On the AIR CONDITIONING/PNEUMATIC control panel, on the overhead panel, release the BLEED 2 push button.

Result:

1 The BLEED 2 push button light comes on.

(f) On the AIR CONDITIONING/PNEUMATIC control panel, on the overhead panel, push the BLEED 1 push button.

Result:

1 The BLEED 1 push button light goes off.

(g) Slowly increase the angle of the LH thrust lever until the LH Bleed Temp indicator on the MFD reaches the upper end of the white scale. Refer to Figure 506, DET. E.

NOTE: Make sure that the LH Bleed Temp indicator, on the MFD, is stable for 2 minutes, and not at the green scale.

(h) On the overhead circuit breaker panel, open the WING circuit breaker.

Result:

1 The WG A/ICE FAIL message comes into view on the EICAS after 15 seconds.

2 The BLD 1 LOW TEMP message comes into view on the EICAS after 35 seconds. (20 seconds after the first message).

(i) On the AIR CONDITIONING/PNEUMATIC control panel, on the overhead panel, push the BLEED 2 push button.

Result:

1 The BLEED 2 push button light goes off.

(j) If the BLD 1 LOW TEMP message goes out of view, the system is operational.

NOTE:
- If the message BLD 1 LOW TEMP does not go out of view on the EICAS, you may reduce the thrust-lever-angle (TLA) "SLOWLY" until the message disappears.
- The message BLD 2 LOW TEMP can come into view on the EICAS 35 seconds after you push BLEED 2, if the WING circuit breaker is open.

(k) On the ICE AND RAIN PROTECTION control panel, on the overhead panel, close the WING circuit breaker.

Result:

1 The WG A/ICE FAIL message goes out of view on the EICAS.

(l) Move the LH thrust lever back to the idle position.

(2) Do this test for the RH air bleed system, as follows:

(a) Set the LH and RH thrust levers to the idle position.

(b) On the AIR CONDITIONING/PNEUMATIC control panel, on the overhead panel, move the XBLEED rotary switch to the CLOSED position.

(c) On the AIR CONDITIONING/PNEUMATIC control panel, on the overhead panel, push the PACK 1 and PACK 2 push buttons.

Result:

1 The PACK 1 and PACK 2 push button lights go off.

(d) On the AIR CONDITIONING/PNEUMATIC control panel, on the overhead panel, release the APU BLEED push button.

Result:

1 The APU BLEED push button light goes off.

(e) On the AIR CONDITIONING/PNEUMATIC control panel, on the overhead panel, release the BLEED 1 push button.

Result:

1 The BLEED 1 push button light comes on.

(f) On the AIR CONDITIONING/PNEUMATIC control panel, on the overhead panel, push the BLEED 2 push button.

Result:

1 The BLEED 2 push button light goes off.

(g) Slowly increase the angle of the RH thrust lever until the RH Bleed Temp indicator on the MFD reaches the upper limit of white scale.

NOTE: Make sure that the RH Bleed Temp indicator, on the MFD, is stable for 2 minutes, and not at the green scale.

(h) On the overhead circuit breaker panel, open the WING circuit breaker.

Result:

1 The WG A/ICE FAIL message comes into view on the EICAS after 15 seconds.

2 The BLD 2 LOW TEMP message comes into view on the EICAS after 35 seconds. (20 seconds after the first message)

(i) On the AIR CONDITIONING/PNEUMATIC control panel, on the overhead panel, push the BLEED 1 push button.

Result:

1 The BLEED 1 push button light goes off.

(j) If the BLD 2 LOW TEMP message goes out of view, the system is operational.

NOTE:
- If the message BLD 2 LOW TEMP does not goes out of view on the EICAS, you may reduce the thrust-lever-angle (TLA) "SLOWLY" until the message disappears.
- The message BLD 1 LOW TEMP can come into view on the EICAS 35 seconds after you push BLEED 1, if the WING circuit breaker is open.

(k) On the ICE AND RAIN PROTECTION control panel, on the overhead panel, close the WING circuit breaker.

Result:

1 The WG A/ICE FAIL message goes out of view on the EICAS.

(l) Move the RH thrust lever back to the idle position.

K. Follow-on

SUBTASK 842-007-A

(1) Stop the engine (AMM TASK 71-00-01-910-804-A/200).

(2) On the overhead circuit breaker panel, close these circuit breakers and remove the DO-NOT-CLOSE tags from them:

- AIR/GND A (Location tip: DC BUS 1 / LDG GEAR / AIR/GND A).
- AIR/GND B (Location tip: ESSENTIAL DC BUS 1 / LDG GEAR / AIR/GND B).
- AIR/GND C (Location tip: DC BUS 2 / LDG GEAR / AIR/GND C).
- AIR/GND D (Location tip: ESSENTIAL DC BUS 2 / LDG GEAR / AIR/GND D).

(3) If you made the jump on the engine, remove it. Refer to Figure 506, Sheet 2.

WARNING: DO NOT TOUCH THE DUCTS OR COMPONENTS OF THE AIR BLEED SYSTEM IMMEDIATELY AFTER THE SYSTEM IS TURNED OFF. THE HIGH AIR TEMPERATURE CAN CAUSE INJURY TO YOU.

(a) Remove the jumper from pins B and C of the electric connector of the aircraft electrical harness.

(b) Connect the electric connectors to the High-Stage Pressure Switch (AMM TASK 36-11-07-400-801-A/400).

(c) Install access panels 412BT and 422BT (AMM MPP 06-43-00/100).

(4) If you made the jump in the the relay box, remove it. Refer to Figure 506, Sheet 3 and Sheet 4.

WARNING: BEFORE YOU REMOVE THE JUMPERS AND INSTALL THE WING A/I VLV CMD RELAY, DEENERGIZE THE AIRCRAFT. THIS IS TO PREVENT INJURY TO PERSONS AND/OR DAMAGE TO THE RH AUXILIARY RELAY SUPPORT.

(a) On the ICE AND RAIN PROTECTION control panel, on the overhead panel, open the WING circuit breaker.

(b) Remove the jumper installed between contact pins A2 and A1, the jumper installed between pins C2 and C3, and the jumper installed between contact D2 and D1 of socket relay XK0528.

(c) Install relay K0528, WING A/I VLV CMD, on the RH auxiliary relay support (AMM TASK 20-13-02-400-801-A/400 Relays - Installation, AWM 30-10-50).

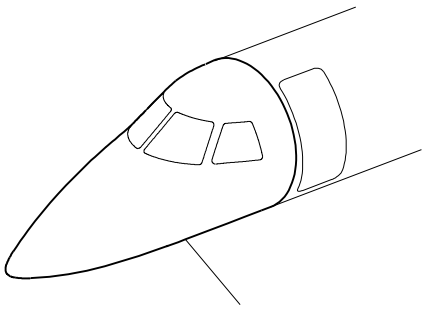
(d) On the ICE AND RAIN PROTECTION control panel, on the overhead panel, close the WING circuit breaker.

(e) Install the RH complementing console, panel 224ERW (AMM TASK 25-12-08-400-801-A/400 RH Complementing Console - Installation).

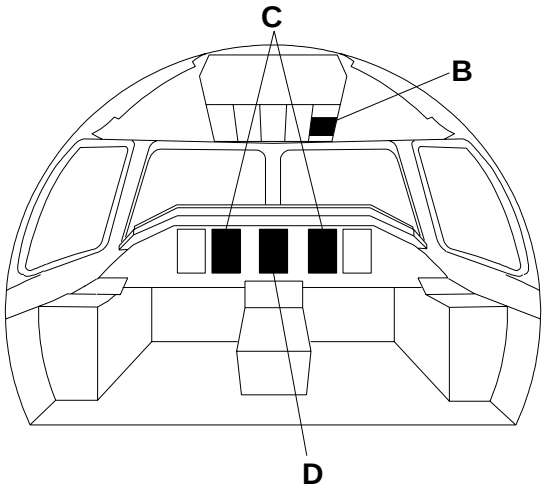
(f) Do an operational test of the Wing Thermal Anti-Icing System (AMM TASK 30-11-15-700-801-A/500).

EFFECTIVITY: ALL

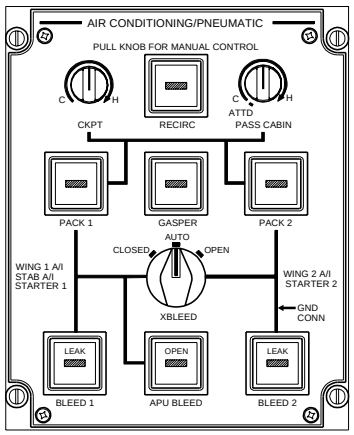
BLD LOW TEMP Messages on the EICAS
Figure 506 - Sheet 1



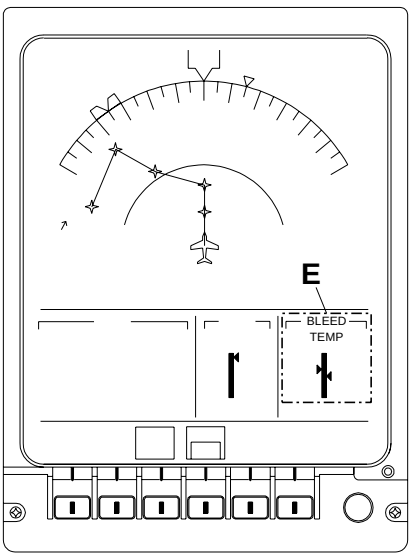
A
ZONE
223



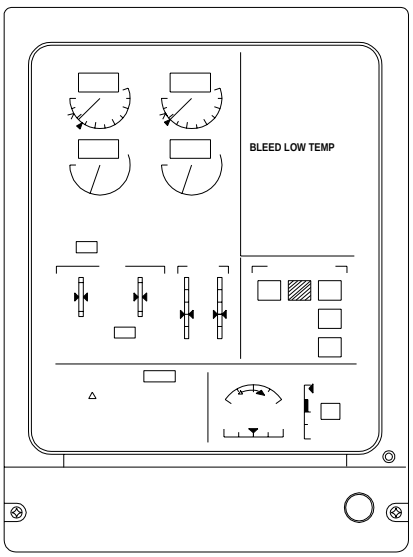
DET. A



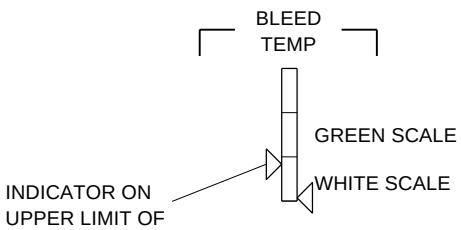
DET. B



DET. C



DET. D

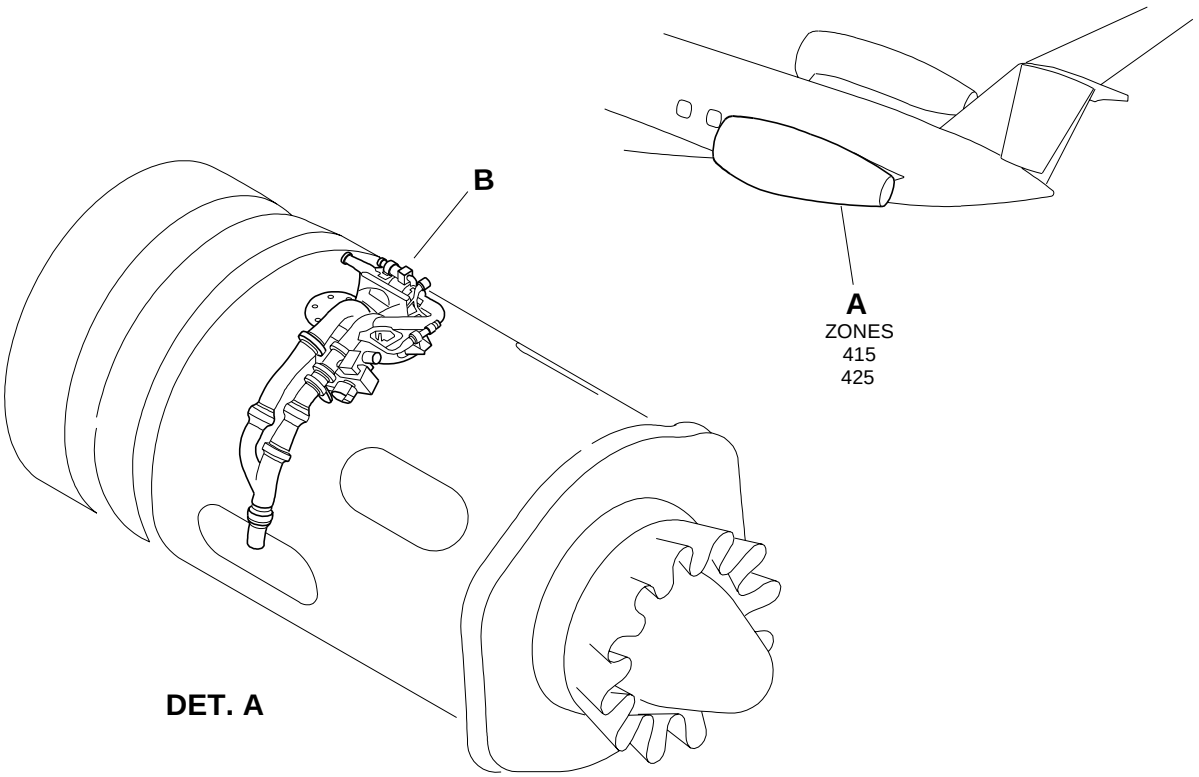


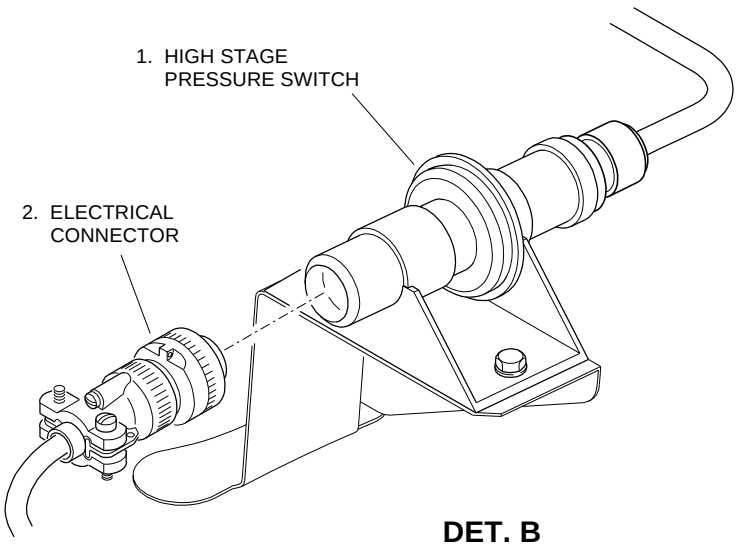
DET. E

145AMM360297.MCE A

EFFECTIVITY: ALL

BLD LOW TEMP Messages on the EICAS
Figure 506 - Sheet 2

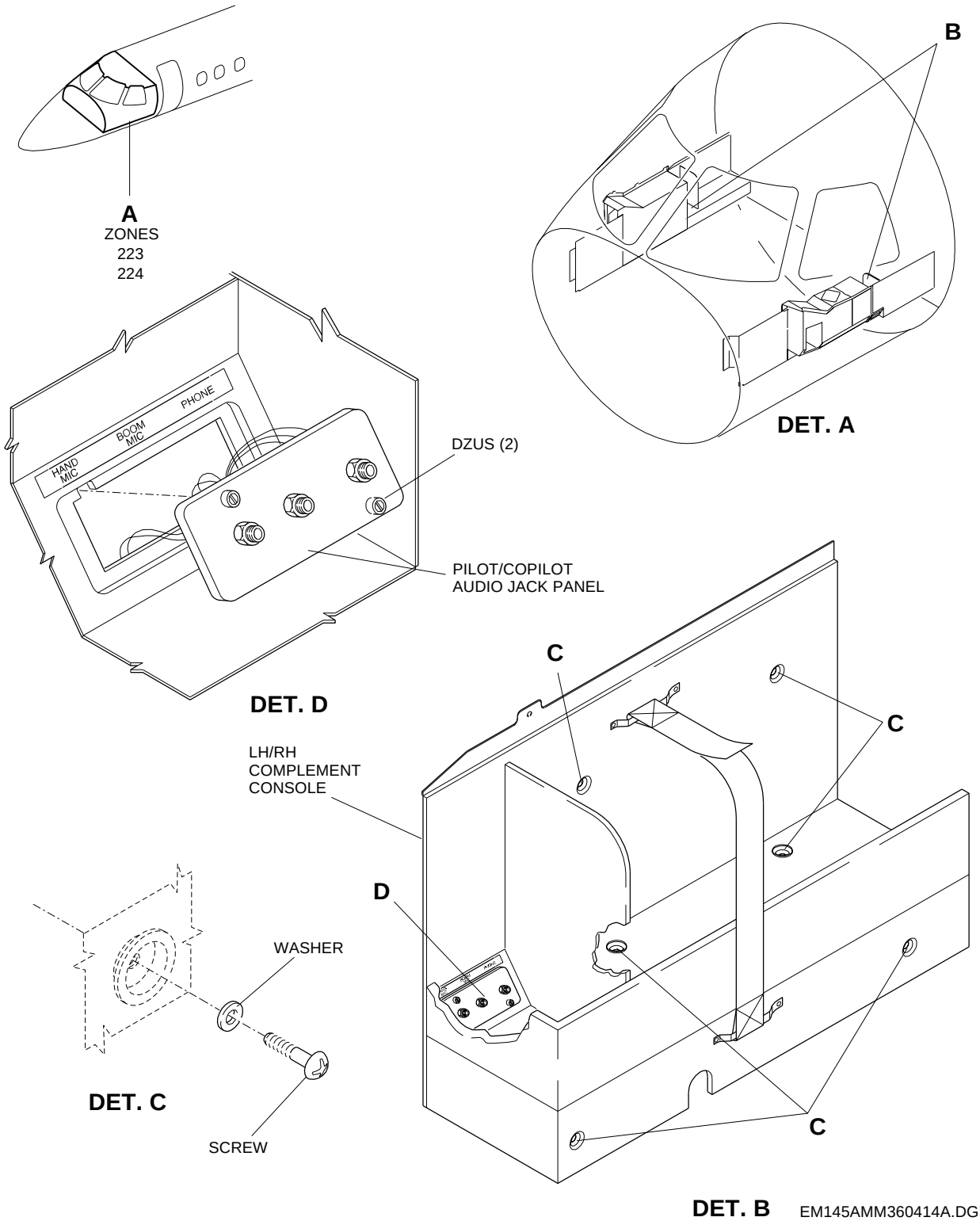




EM145AMM360646A.DGN

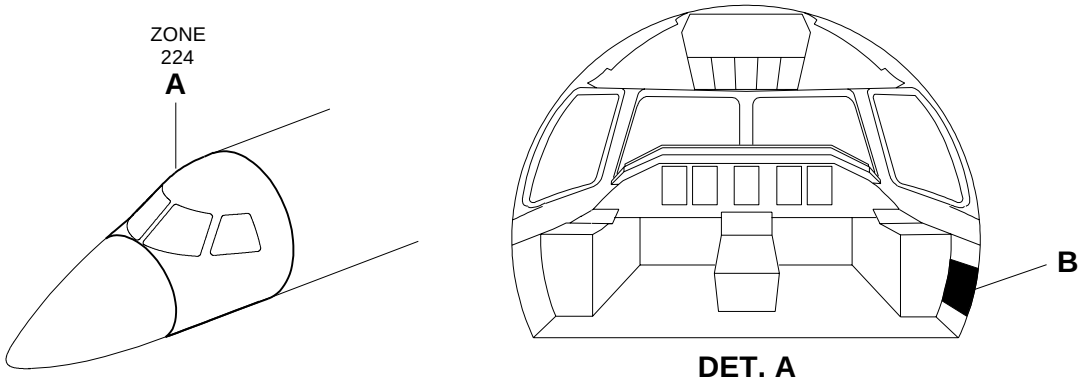
EFFECTIVITY: ALL

BLD LOW TEMP Messages on the EICAS
Figure 506 - Sheet 3

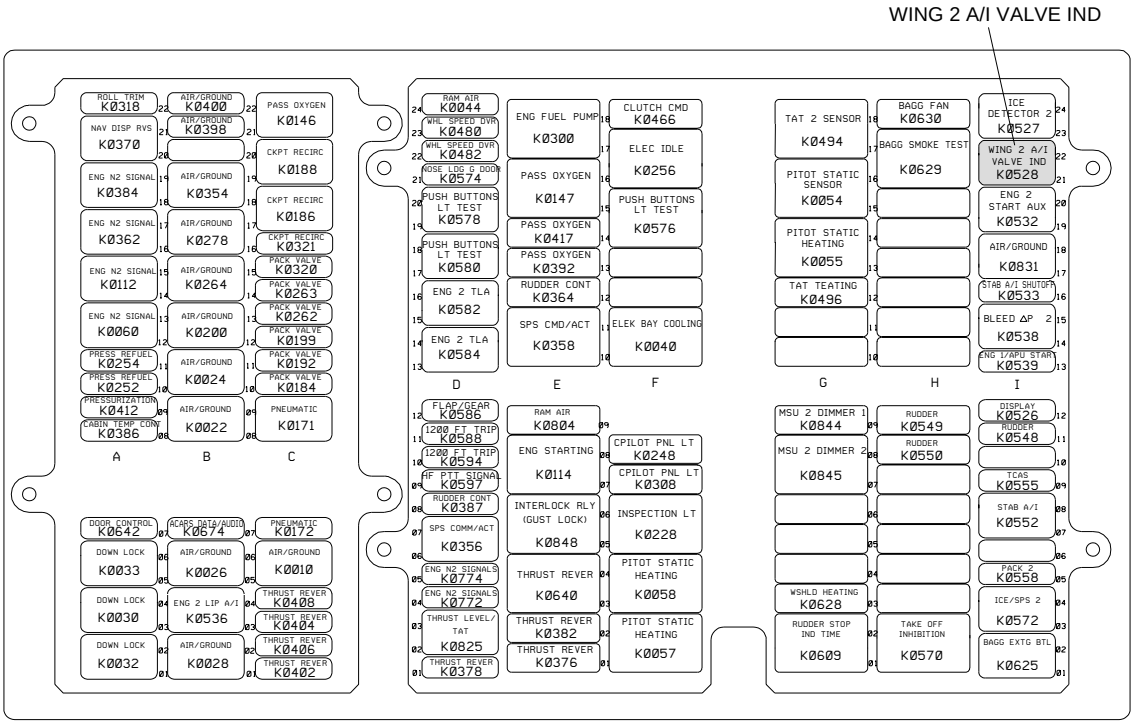


EFFECTIVITY: ALL

BLD LOW TEMP Messages on the EICAS
Figure 506 - Sheet 4

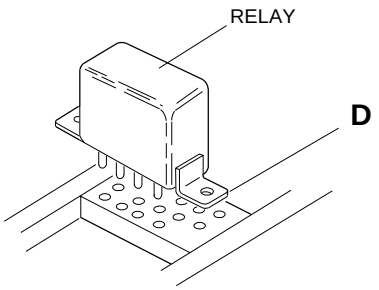


DET. A

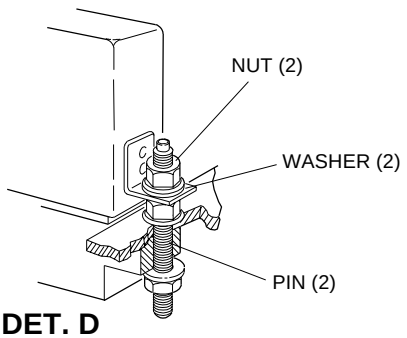


DET. B

RIGHT RELAY
SUPPORT



DET. C



DET. D

EM145AMM360415A.DGN