FUEL-FEED-LINE SHROUD - ADJUSTMENT/TEST

EFFECTIVITY: ACFT MODEL(S) EMB-135

1. General

A. This section gives the procedures to do a test on the engine fuel-feed-line shroud for leakage.

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*
28-21-10-700-802-A ♦	ENGINE FUEL-FEED-LINE SHROUD - OPERATIONAL TEST	ACFT MODEL(S) EMB-135

TASK 28-21-10-700-802-A
EFFECTIVITY: ACFT MODEL(S) EMB-135

2. ENGINE FUEL-FEED-LINE SHROUD - OPERATIONAL TEST

A. General

(1) The function of this test is to make sure that there is no leak at the fittings of the engine fuel-feed-line shroud.

B. References

REFERENCE	*DESIGNATION*
AMM MPP 06-41-01/100	-
AMM MPP 06-41-02/100	-
AMM MPP 06-43-00/100	- COMPONENT LOCATION
AMM MPP 28-00-00/200	- MAINTENANCE PRACTICES
AMM MPP 28-00-01/400	- REMOVAL/INSTALLATION

C. Zones and Accesses

ZONE	*PANEL/DOOR*	*LOCATION*
155	155FZ	LH wing stub
156	156FZ	RH wing stub
155	155GZ	LH wing stub
156	156GZ	RH wing stub
414	414BB	LH pylon underside
424	424BB	RH pylon underside

D. Tools and Equipment

ITEM	*DESCRIPTION*	*PURPOSE*	*QTY*
GSE 080	Box, leakage test	To pressurize the engine fuel-feed-line shroud	
GSE 115	Hose assembly	To connect the leakage test box to the engine fuel-feed-line shroud drain	
GSE 116	Hose assembly	To connect the leakage test box to the engine fuel-feed-line shroud drain	

E. Auxiliary Items

ITEM	*DESCRIPTION*	*PURPOSE*	*QTY*
Commercially available	Brush	To apply leak detection fluid	1
Commercially available	Plug, AS 5168D16 or equivalent	To close the engine fuel-feed line	1
Commercially available	Rubber hose - 50.8 mm (2 in) in diameter/500 mm (20 in) in length	To close the engine fuel-feed-line shroud	1

(Continued)

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Union, AN 815 - 4D, or equivalent	To connect the pressure line	1
Commercially available	Sleeve, MS 20819 - 4D, or equivalent	To connect the pressure line	1
Commercially available	Tee, AN 824 - 4D, or equivalent	To connect the pressure line	1
Commercially available	Flared tube, AL 5052 - 6.35 mm (1/4 in) in diameter/101 mm (4 in) in length	To connect the pressure line	1
Commercially available	Nut, AN 818 - 4D, or equivalent	To connect the pressure line	1
Commercially available	Clamp NAS 1922-0100-1H or similar	To attach the hose to the engine shroud	2
Available in the operator's inventories	Cap	To close the hose	1
Commercially available	Plug	Close the APU fuel-feed line	1

F. Consumable Materials

SPECIFICATION (BRAND)	DESCRIPTION	QTY
Leak Tec No. 16	MIL-L-25567 or equivalent	AR

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Wing stub/passenger cabin/baggage compartment/pylon

I. Preparation

SUBTASK 841-012-A

(1) Remove access panels 155FZ, 155GZ, 156FZ and 156GZ (AMM MPP 06-41-01/100) to get access to the engine fuel-feed-line shroud drain fittings.

WARNING: BEFORE YOU DO THE TASK, OBEY THE SAFETY PRECAUTIONS GIVEN IN AMM MPP 28-00-00/200 TO PREVENT INJURY TO PERSONS AND DAMAGE TO THE MATERIAL.

(2) Open access panels 414BB/424BB (AMM MPP 06-43-00/100) to get access to the engine-fuel-feed line in the pylon.

(3) On the circuit breaker panel, open the circuit breakers below and attach a DO-NOT-CLOSE tag to them:

- FIRE EXTG BTL A 1/2.
- FIRE EXTG BTL B 1/2.

(4) Disconnect the engine fuel-feed line (1) from the pylon and install the plug (2) to close the engine fuel-feed line.

(5) Close the line shroud with the hose (4), plug (3), and clamps (5).

(6) Release the clamp (9) and remove the engine fuel-feed-line drain hose in the wing stub.

(7) Before you connect the leakage test box to the engine line shroud, do these steps to adjust the leakage test box (Figure 501):

(a) Make sure that there is no moisture and no foreign matter in the inlet filter of the leakage test box.

(b) Install a hose to connect the AIR OUTLET coupling to the MANOMETRIC PRESSURE coupling on the LH side of the leakage test box.

(c) Turn the pressure regulator knob fully counterclockwise (-).

(d) Keep the pressure source selector in the CLOSE position.

CAUTION: MAKE SURE THAT THE REGULATOR KNOB IS FULLY CLOSED IN THE COUNTERCLOCKWISE POSITION BEFORE YOU CONNECT THE SHOP-AIR/BOTTLE INLET. IF YOU DO NOT OBEY THIS PROCEDURE DAMAGE TO THE EQUIPMENT CAN OCCUR.

(e) Connect a source of compressed air to AIR INLET coupling on the leakage test box.

(f) Turn the pressure source selector to the AIR position.

(g) Move the operation selector lever to the PRESSURE position and turn the pressure regulator knob clockwise (+) until you get an indication of 1.5 psi on the pressure gauge.

(h) Turn the pressure source selector to the CLOSE position.

(i) Push the operation selector lever to the ESCAPE position, until the pressure gauge shows zero.

(j) Remove the hose that connect the AIR OUTLET coupling to the MANOMETRIC PRESSURE coupling.

(8) Install the hoses (6) and (7) and connect the leakage test box to the engine fuel-line-shroud drain. See Figure 502 to install the hoses.

J. Operationally Check Fuel-Feed-Line Shroud (Figure 502)

SUBTASK 710-007-B

CAUTION: TOO MUCH PRESSURE CAN CAUSE STRUCTURAL DAMAGE TO THE SHROUD. USE ONLY THE SPECIFIED PRESSURE VALUE (1.5 PSI) TO DO THE TEST.

(1) On the leakage test box, turn the pressure source selector to the AIR position.

(2) Move the selector lever of the leakage test box to the PRESSURE position and turn the pressure regulator knob clockwise, until the pressure is at 1.5 psi.

(3) When the pressure becomes stable at 1.5 psi, release the test box lever and turn the source selector to the CLOSE position.

(4) Monitor the pressure value for the next 10 (ten) min. The pressure value must be stable. Use a chronometer if necessary.

(5) If, during the check, the pressure does not stay at the test value, do the steps from (a) to (h) to repair the leakage:

(a) Move the test box lever to the ESCAPE position, until the pressure gauge shows zero.

(b) Remove these access panels to get access to the engine fuel-feed-line shroud:

1 Passenger cabin:

- 251HF/252DF/261DF/262BF/262CF (AMM MPP 06-41-02/100).

2 Baggage compartment:

- 271AF/272AF (AMM MPP 06-41-02/100).

(c) Move the selector lever of the leakage test box to the PRESSURE position and apply pressure into the shroud line until you have the test value.

(d) Use a brush to apply the leak detection fluid to the shroud fittings and examine them for leakage.

(e) If there are leaks, identify the related area(s).

(f) Move the test box lever to the ESCAPE position, until the pressure gauge shows zero.

(g) Repair the shroud as necessary to remove the leak(s).

Do the check again and make sure that there is no leak.

(h) Install all the panels (AMM MPP 06-41-01/100) removed in step (b).

(6) Move the test box lever to the ESCAPE position, until the pressure gauge shows zero.

K. Follow-on

SUBTASK 842-012-A

(1) On the test box turn the pressure regulator knob fully counterclockwise (-).

(2) Remove the hoses (6) and (7) and disconnect the leakage test box from the engine-fuel-line shroud drain.

(3) Remove the source of compressed air from the AIR INLET coupling of the leakage test box.

(4) Install the drain hose of the engine-fuel-line shroud to the wing stub.

(5) Remove the hose (4), plug (3), and clamps (5) from the engine fuel-feed-line shroud.

(6) Remove the plug (2) from the engine fuel-feed line.

(7) Connect the engine fuel line to the pylon (AMM MPP 28-00-01/400).

(8) On the circuit breaker panel, close these circuit breakers and remove the tag from them:

- FIRE EXTG BTL A 1/2.
- FIRE EXTG BTL B 1/2.

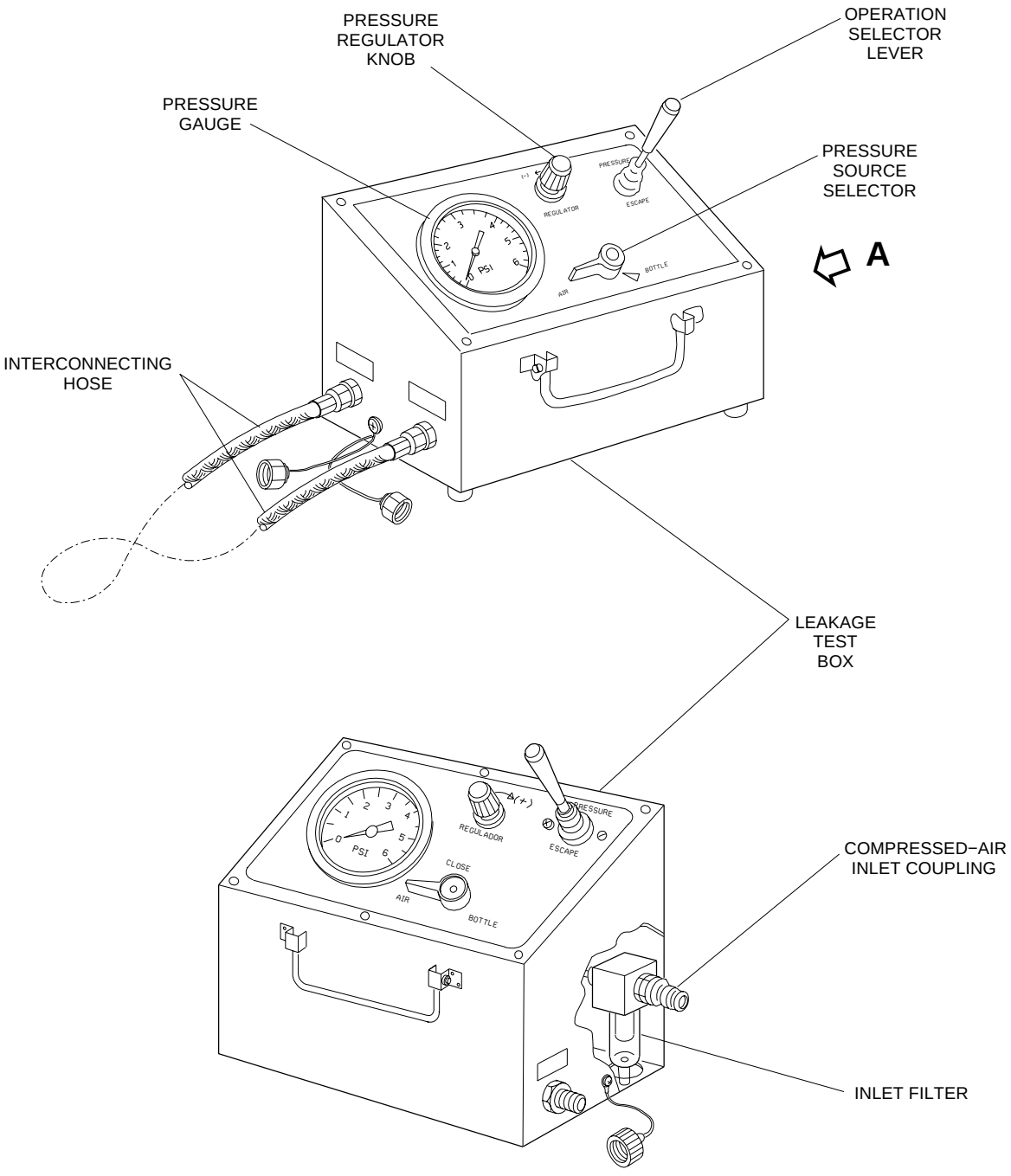
(9) Set the applicable fuel pump to on and do a check for leaks at the fuel hose.

(10) Set the applicable fuel pump to off.

(11) Install access panels 155FZ, 155GZ, 156FZ and 156GZ (AMM MPP 06-41-01/100).

(12) Install access panels 414BB/424BB (AMM MPP 06-43-00/100).

EFFECTIVITY: ACFT MODEL(S) EMB-135
Leakage Test Box
Figure 501



VIEW A

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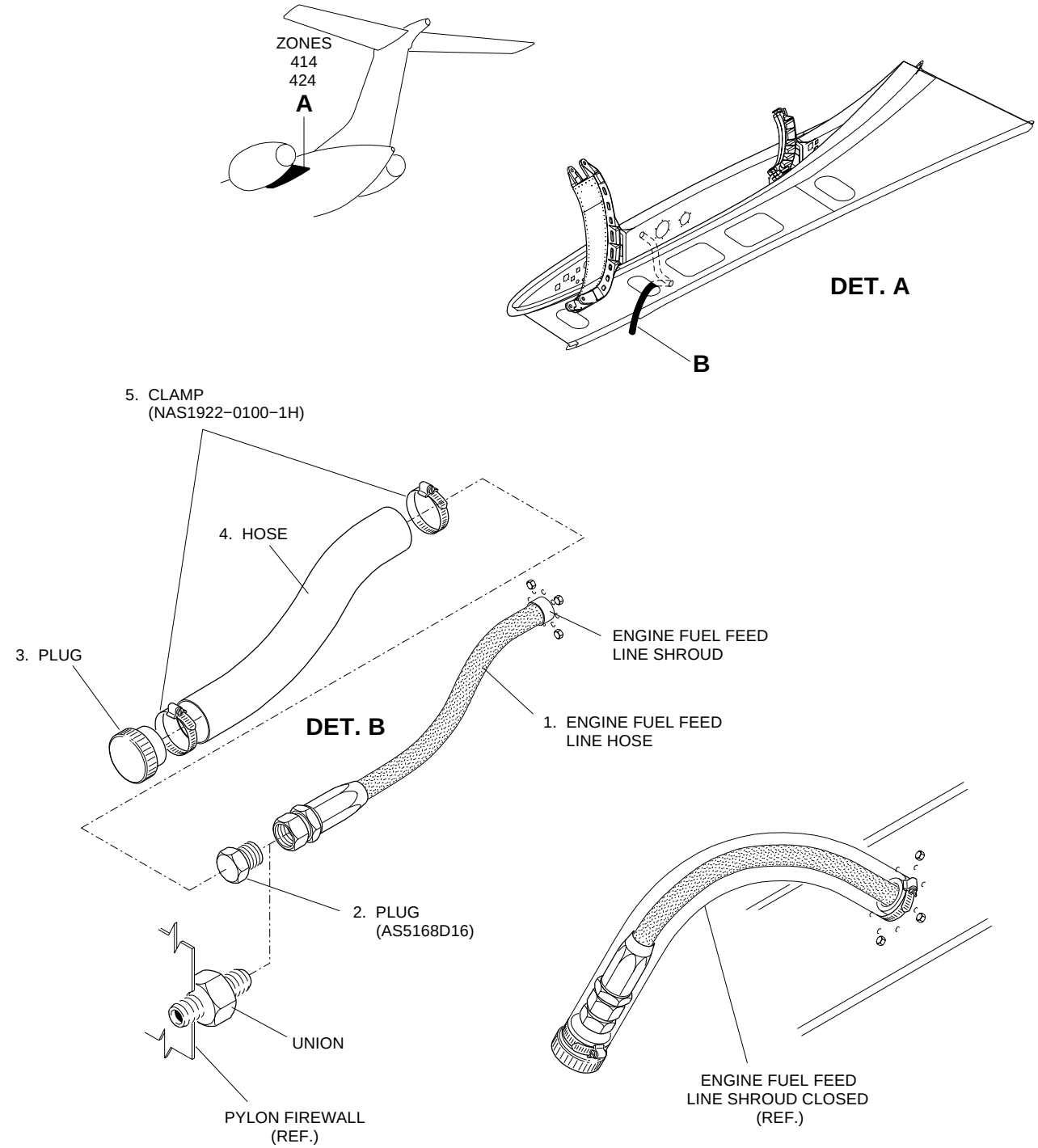
EFFECTIVITY: ACFT MODEL(S) EMB-135

Engine Fuel-Feed-Line Shroud - Component Locations

Figure 502 - Sheet 1



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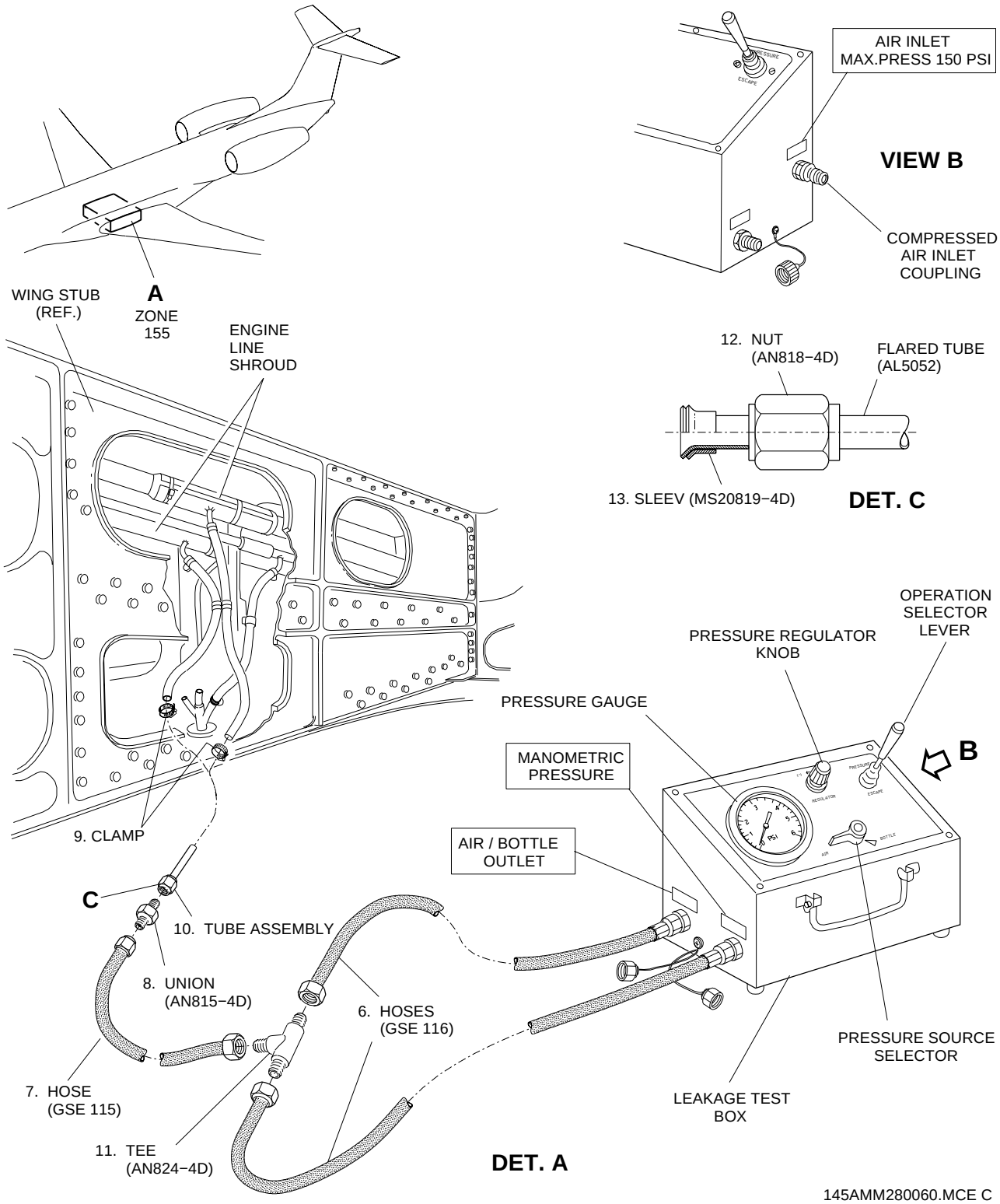
EFFECTIVITY: ACFT MODEL(S) EMB-135

Engine Fuel-Feed-Line Shroud - Component Locations
Figure 502 - Sheet 2



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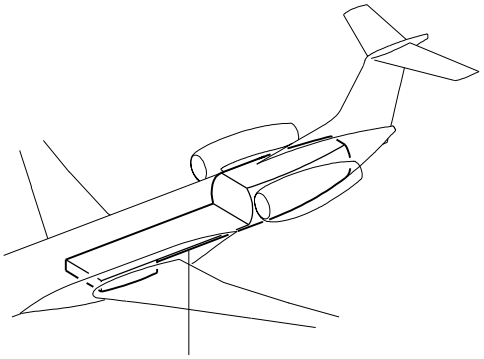
EFFECTIVITY: ACFT MODEL(S) EMB-135

Engine Fuel-Feed-Line Shroud - Component Locations
Figure 502 - Sheet 3



A
ZONES
153−154
155−156
161−162
171−172
271−272

1 IF APPLICABLE TO THE AIRCRAFT CONFIGURATION

ENGINE FUEL FEED
LINE SHROUD

B

B

DET. A

SEALANT

LOCKING WIRES 1

SEALANT

CLAMPS 1

DET. B
JUNCTION (TYPICAL)

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