



## AIRCRAFT MAINTENANCE MANUAL

### HIGH-STAGE PRESSURE SWITCH - ADJUSTMENT/TEST

EFFECTIVITY: ALL

#### 1. General

- A. This section gives the procedure to do the functional test of the high stage pressure switch of the LH and RH bleed systems.
- 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
36-11-07-700-801-A	HIGH STAGE PRESSURE SWITCH - FUNCTIONAL TEST	ALL



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TASK 36-11-07-700-801-A

EFFECTIVITY: ALL

2. HIGH STAGE PRESSURE SWITCH - FUNCTIONAL TEST

A. General

- (1) This task gives the procedure to do the functional test of the high stage pressure switch of the LH and RH bleed systems.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-43-00/100	- COMPONENT LOCATION
AMM MPP 71-00-00/200	- MAINTENANCE PRACTICES
AMM TASK 20-40-01-860-801-A/200	ENERGIZATION OF THE AIRCRAFT WITH AN EXTERNAL POWER SOURCE
AMM TASK 49-10-00-910-803-A/200	APU - SHUTDOWN
AMM TASK 49-13-00-910-803-A/200	APU - SHUTDOWN
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
SB145-36-0045	-

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
412	412BT - Upper Cowling	LH Engine
422	422BT - Upper Cowling	RH Engine

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
1	Does the task	LH and RH engines and in the cockpit



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I. Preparation

SUBTASK 841-002-A

- (1) Remove the upper cowling access panel 412BT (LH Engine) or 422BT (RH Engine) ([AMM MPP 06-43-00/100](#)).
- (2) Disconnect the electrical connector (1) from the LH/RH High Stage Valve (2), as shown on [Figure 501](#) for PRE-MOD [SB145-36-0045](#) or [Figure 502](#) for POST-MOD [SB145-36-0045](#).
  - (a) Energize the aircraft ([AMM TASK 20-40-01-860-801-A/200](#)).  
Result:
    - 1 The HS VLV 1/2 FAIL caution message must come into view on EICAS display.

**WARNING: USE PRECAUTIONS AND OBEY OPERATION LIMITATIONS FOR THE ENGINE GROUND OPERATION DURING THE AIRCRAFT MAINTENANCE ( AMM MPP 71-00-00/200).**

- (3) Do the engine start procedure ([AMM TASK 71-00-01-910-801-A/200](#)).
- (4) Make sure that the MFD is on and set the ECS page.
- (5) Make sure that the thrust rating mode messages ALT T/O-1 show on the EICAS display.
- (6) On the AIR CONDITIONING/PNEUMATIC control panel, release the APU BLEED pushbutton (light goes off).
  - (a) On the AIR CONDITIONING/PNEUMATIC control panel, set the XBLEED selector knob to the AUTO position.
  - (b) Make sure that the PACK 1 and PACK 2 pushbuttons, on the AIR CONDITIONING/PNEUMATIC control panel, on the overhead panel, are released (pushbutton light on).
  - (c) Make sure that the BLEED 1 and BLEED 2 pushbuttons, on the AIR CONDITIONING/PNEUMATIC control panel, on the overhead panel, are released (pushbutton light on).
  - (d) Make sure that the thrust levers are in the IDLE position.
- (7) Make sure that these pushbuttons and knob on the ICE PROTECTION control panel, on the overhead panel, are set as follows:
  - (a) WING pushbutton - OFF.
  - (b) STAB pushbutton - OFF.
  - (c) OVERRIDE knob - AUTO.

J. High Stage Pressure Switch - Functional Test

SUBTASK 710-002-A

- (1) Do the functional test of the High Stage Pressure Switch as follows:
  - (a) On the AIR CONDITIONING/PNEUMATIC control panel, on the overhead panel, push the BLEED 1 and PACK 1 pushbuttons.

Result:

- 1 The BLEED 1 pushbutton light goes off.
- 2 The PACK 1 pushbutton light goes off.
- 3 The HS VLV 1 FAIL message goes out of view.

(b) Set the LH thrust lever (LH engine) to  $\pm 75\%$  N2 ( $54^\circ$ ).

Result:

- 1 The HS VLV 1 FAIL caution message comes into view.

(c) Set the LH thrust lever (LH engine) to idle position.

Result:

- 1 The HS VLV 1 FAIL caution message goes out of view.

(d) If the HS VLV 1 FAIL message goes out of view, it shows that the High Stage Pressure Switch is functional in the system.

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

Result:

- 1 The BLEED 1 pushbutton light comes on.

(f) On the AIR CONDITIONING/PNEUMATIC control panel on the overhead panel, release the PACK 1 pushbutton.

Result:

- 1 The PACK 1 pushbutton light comes on.

(g) On the AIR CONDITIONING/PNEUMATIC control panel, on the overhead panel, push the BLEED 2 and PACK 2 pushbuttons.

Result:

- 1 The BLEED 2 pushbutton light goes off.

- 2 The PACK 2 pushbutton light goes off.

- 3 The HS VLV 2 FAIL message goes out of view.

(h) Set the RH thrust lever (RH engine) to  $\pm 75\%$  N2 ( $54^\circ$ ).

Result:

- 1 The HS VLV 2 FAIL caution message comes into view.

(i) Set the RH thrust lever (RH engine) to idle position.

Result:

- 1 The HS VLV 2 FAIL caution message goes out of view.

(j) If the HS VLV 2 FAIL message goes out of view, the High Stage Pressure Switch is functional in the system.

(k) On the AIR CONDITIONING/PNEUMATIC control panel, on the overhead panel, release the PACK 2 and BLEED 2 pushbuttons.

Result:

- 1 The PACK 2 and BLEED 2 pushbutton lights come on.

(l) On the AIR CONDITIONING/PNEUMATIC control panel, release the APU BLEED pushbutton.



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Result:

- 1 The APU BLEED pushbutton light goes off.

K. Follow-on

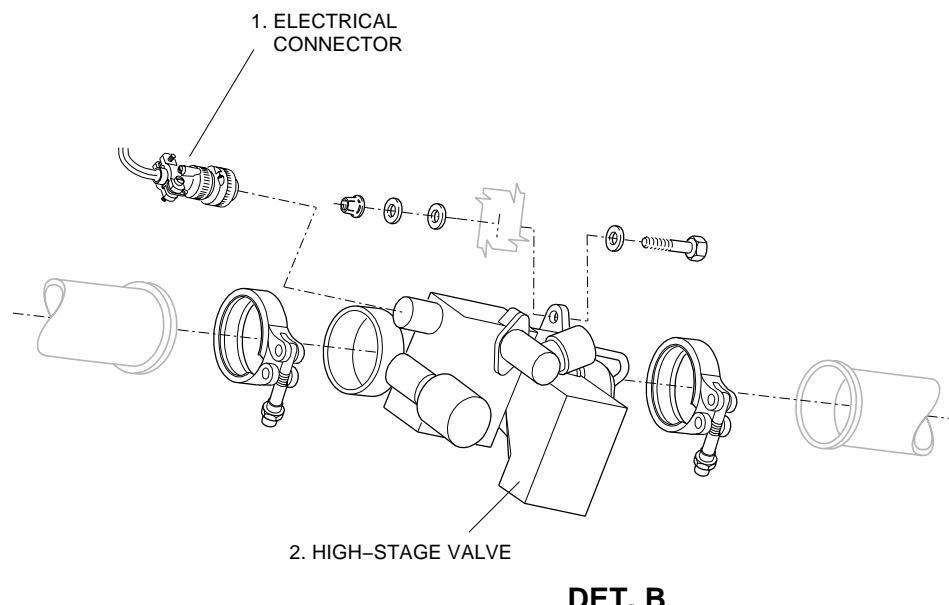
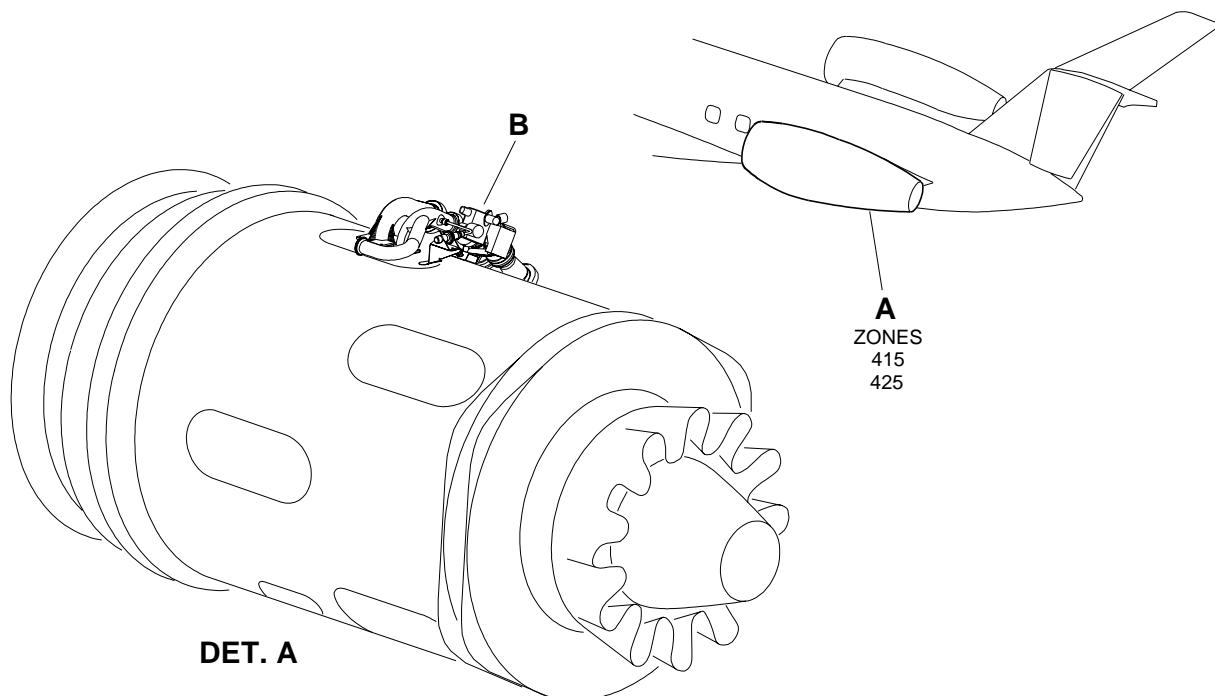
SUBTASK 842-002-A

- (1) Do the engine stop procedure ([AMM TASK 71-00-01-910-804-A/200](#)).
- (2) On the AIR CONDITIONING/PNEUMATIC control panel, set the XBLEED selector knob to the CLOSED position.
- (3) On the AIR CONDITIONING/PNEUMATIC control panel, release the APU BLEED pushbutton (light goes on).
- (4) Stop the APU ([AMM TASK 49-10-00-910-803-A/200](#) for APU T-62T-40C11 or [AMM TASK 49-13-00-910-803-A/200](#) for APU T-62T-40C14).
- (5) De-energize the aircraft ([AMM TASK 20-40-01-860-801-A/200](#)).
- (6) Connect the electrical connector (1) to the LH/RH High Stage Valve (2). Refer to [Figure 501](#) for PRE-MOD SB145-36-0045 or [Figure 502](#) for POST-MOD SB145-36-0045.
- (7) Close the upper cowling access panel 412BT (LH Engine) or 422BT (RH Engine) ([AMM MPP 06-43-00/100](#)).

*EFFECTIVITY: PRE-MOD SB145-36-0045*

Electrical Connector - High Stage Valve

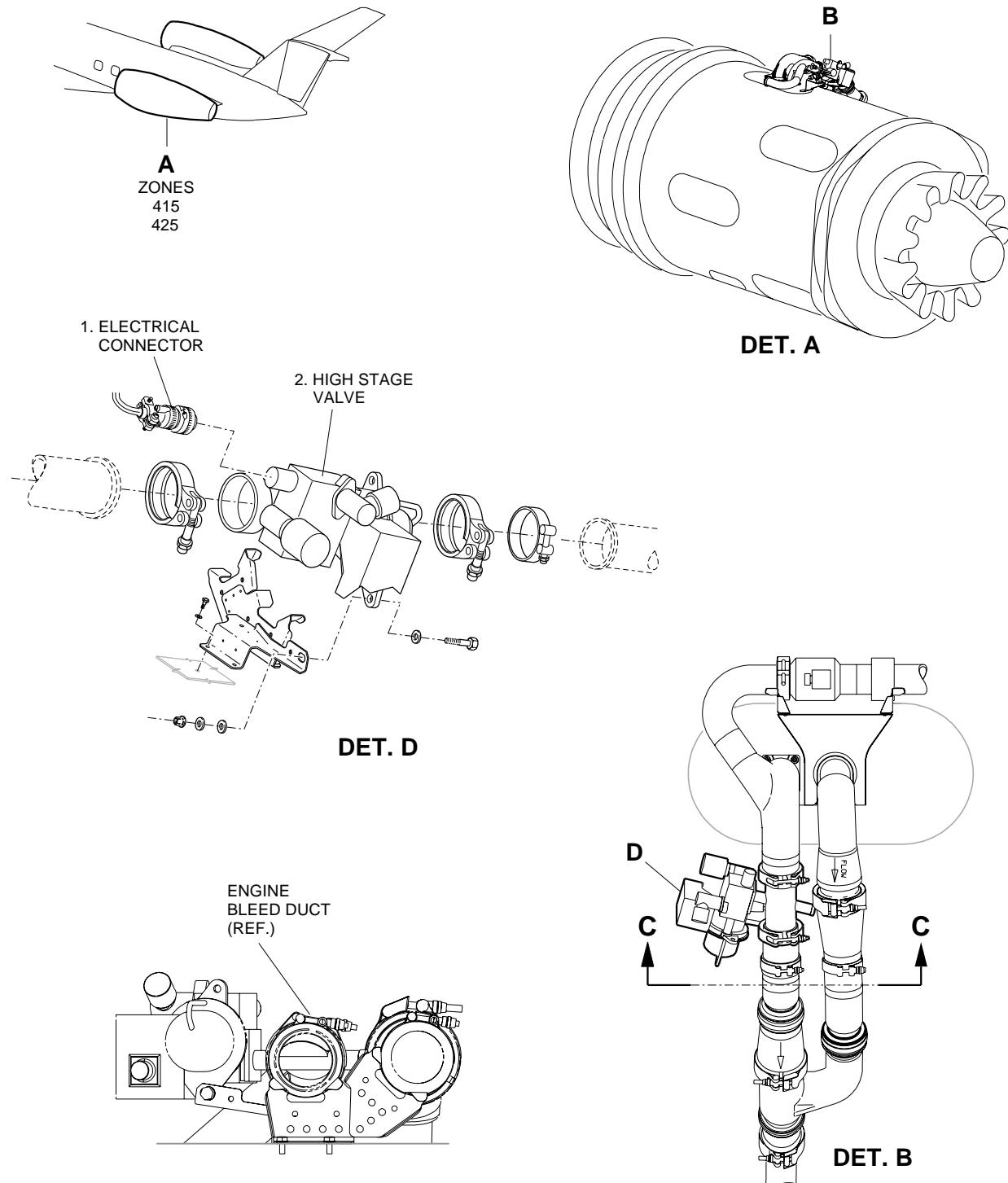
Figure 501



**DET. B**

EM145AMM360373B.DGN

**EFFECTIVITY: POST-MOD SB145-36-0045**  
 Electrical Connector - High Stage Valve  
 Figure 502



EM145AMM360408B.DGN

