



EMB145 – EMB135

AIRCRAFT  
MAINTENANCE MANUAL

**WING ANTI-ICING VALVE COMMAND RELAY - ADJUSTMENT/TEST**

*EFFECTIVITY: ALL*

1. General

- A. This section gives the procedures to do the check of the anti-icing system messages on the EICAS display and an operational test of the wing anti-icing valve command relay.
- 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
30-11-15-700-801-A	WING ANTI-ICING VALVE COMMAND RELAY - OPERATIONAL CHECK	ALL



EMB145 - EMB135

AIRCRAFT  
MAINTENANCE MANUAL

TASK 30-11-15-700-801-A

EFFECTIVITY: ALL

2. WING ANTI-ICING VALVE COMMAND RELAY - OPERATIONAL CHECK

A. General

- (1) This test is done to make sure that the wing anti-icing valve command relay operates correctly.

B. References

REFERENCE	DESIGNATION
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

Not Applicable

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

Not Applicable

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	A - Does the task	Cockpit
1	B - Helps technician A	Cockpit

I. Preparation

SUBTASK 841-002-A

- (1) Start the engines ( [AMM TASK 71-00-01-910-801-A/200](#)).
- (2) Set these pushbuttons and knob as follows:
  - (a) BLEED 1 and 2 pushbuttons - ON.
  - (b) PACK 1 and PACK 2 pushbuttons - ON.
  - (c) XBLEED pushbutton - AUTO.
  - (d) WING pushbutton - ON.
  - (e) STAB pushbutton - OFF.
  - (f) ENGINE AIR INLET pushbuttons - ON.

J. Operationally Test Wing Anti-icing Valve Command Relay ([Figure 501](#))

**SUBTASK 710-002-A**

- (1) Set the thrust lever to minimum 83% of N2.
- (2) OVERRIDE switch - ALL.
  - The OPEN inscriptions in the engine anti-icing pushbuttons will come on.

**CAUTION:** • DO NOT HOLD THE ICE DETECTION/TEST SWITCH AT POSITIONS 1 OR 2 FOR MORE THAN 15 SECONDS.

- DO NOT DO THIS TEST MORE THAN TWO TIMES TO PREVENT AN OVERHEATING CONDITION AT THE WING AND EMPENNAGE LEADING EDGES. IF IT IS NECESSARY TO DO THE TEST AGAIN, STOP UNTIL THE LEADING EDGES GET THE AMBIENT TEMPERATURE AGAIN.

(3) Do the check as follows:

- (a) Set the TEST switch, on the overhead panel, to 1 and hold it for 15 seconds.

Make sure that:

Result:

- 1 The EICAS display shows these messages:

- BLD 1 LOW TEMP (caution).
- ICE DET 1 FAIL (caution).
- ICE CONDITION (advisory).

- 2 The OPEN inscriptions in the anti-icing pushbuttons are on, except the STAB pushbutton.

- (b) Push one of the master CAUTION lights.

Result:

- 1 The master CAUTION lights go off.

- (c) Release the TEST switch.

Result:

- 1 On the EICAS display, the messages go out of view.

- 2 The OPEN inscriptions in the anti-icing pushbuttons go off.

- (d) Set the TEST switch, on the overhead panel, to 2 and hold it for 15 seconds.

Make sure that:

Result:

- 1 The EICAS display shows these messages:

- BLD 2 LOW TEMP (caution).
- ICE DET 2 FAIL (caution).
- ICE CONDITION (advisory).

2 The OPEN inscriptions in the anti-icing pushbuttons are on, except the STAB pushbutton.

- (e) Push one of the master CAUTION lights.

Result:

1 The master CAUTION lights go off.

- (f) Release the TEST switch.

Result:

1 On the EICAS display, the messages go out of view.

2 The OPEN inscriptions in the wing and stab anti-icing pushbuttons go off.

- (g) OVERRIDE knob - AUTO.

Result:

1 The OPEN inscriptions in the engine anti-icing pushbuttons go off.

- (h) Set the engines to idle.

**K. Follow-on**

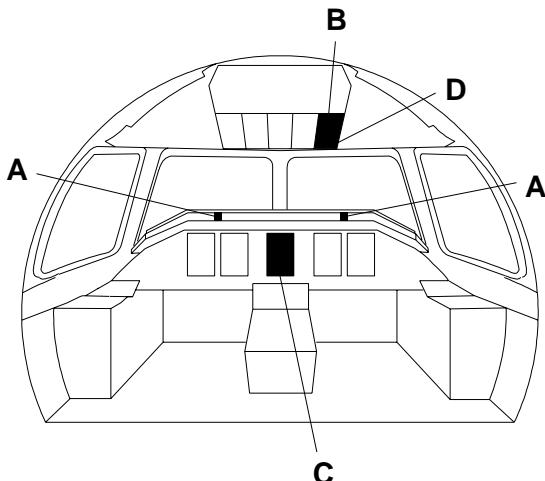
**SUBTASK 842-002-A**

- (1) Stop the engines ([AMM TASK 71-00-01-910-804-A/200](#)).

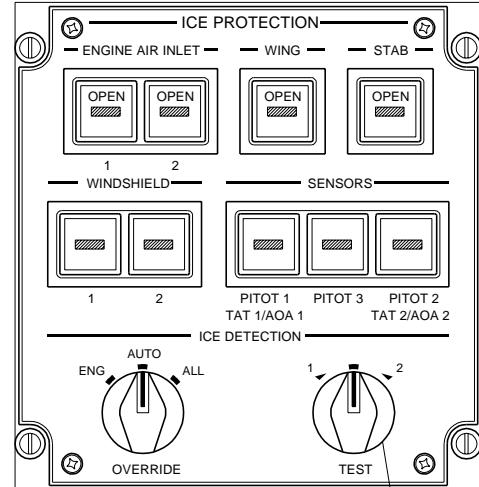
**EFFECTIVITY: ALL**

Wing Anti-icing Valve Command Relay - Operational Check

Figure 501

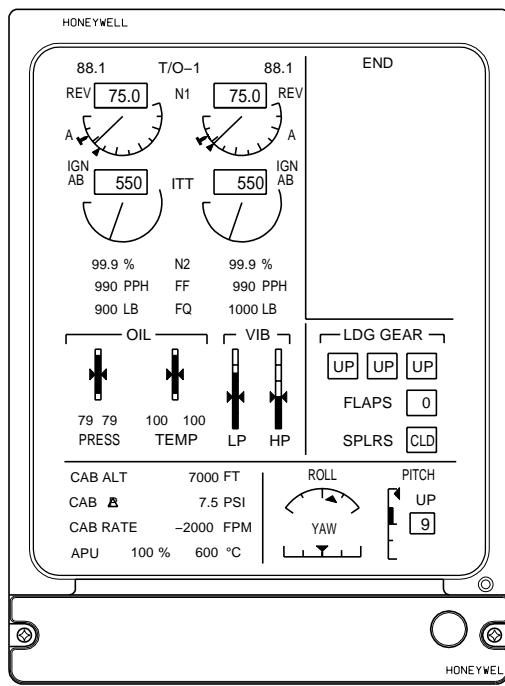


**DET. A**  
MASTER AND CAUTION  
LIGHTS

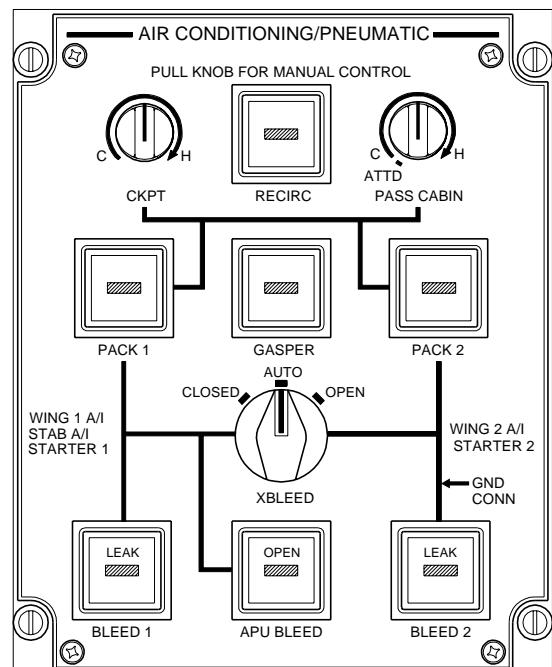


**DET. B**  
ICE PROTECTION  
PANEL

ICE DETECTION  
TEST SWITCH



**DET. C**  
EICAS DISPLAY



**DET. D**  
AIR CONDITIONING/PNEUMATIC  
PANEL

EM145AMM300401A.DGN

