P U B L I C A T I O N T R A N S M I T T A L

International Aero Engines

400 MAIN STREET, MAIL STOP 121-10
EAST HARTFORD, CT 06108, USA.
TELEPHONE:- 860 565 5515
FAX:- 860 565 0600

P.O. BOX 31, DERBY
TELEGRAMS - 'ROYCAR' DERBY
TELEX - 37645
TELEPHONE:- 44 (0) 1332 242424
FAX:- 44 (0) 1332 249936

DATE: Jan.29/07

V2500-A1 SERIES PROPULSION SYSTEMS NON-MODIFICATION SERVICE BULLETIN

This document transmits the Initial Issue of Service Bulletin EV2500-72-0539

Bulletin Initial Issue

Remove	Incorporate	Reason for change
	Pages 1 to 9 of the Service Bulletin	Initial Issue

V2500-ENG-72-0539

CHECK THAT ALL PREVIOUS TRANSMITTALS HAVE BEEN INCORPORATED
If any have not been received please advise Customer Data Services, Rolls-Royce plc, Derby, England

LIST OF EFFECTIVE PAGES

The effective pages to this Service Bulletin are as follows:

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International Aero Engines

SERVICE BULLETIN

ENGINE - LP COMPRESSOR - TAPPING INSPECTION OF FRONT ANTI ICE IMPACT PANELS OF PRE SB V2500-ENG-72-0103 STANDARD FAN CASE ASSEMBLY - NON-MODIFICATION SERVICE BULLETIN

1. Planning Information

A. Effectivity

(1) Airbus A320

(a) V2500-A1 Engines to pre SB V2500-ENG-72-0103 standard.

B. Reason

(1) Problem

There have been occurrences of disbonding at the front anti ice impact panels on the fan case assembly (pre SB V2500-ENG-72-0103 standard, P/N 5W0069, 5W0072, 5W0081, 5W0093, 5W0094, 5W0100, 5W0184, 5W0186, 5W0187, 5W0188, 5W0189, 5W0190, 5W0199, 5W0200, 5W0201, 5W0202, 5W0203, 5W0204, 5W0205, 5W0209, 5W0210, 5W0211, 5W0212 and 5W0213). The disbond of the panels could propagate and potentially cause the release of a panel from the fan case assembly and result in engine and/or nacelle damage.

(2) Background

A report from within the V2500-A1 fleet of disbond of the front anti ice impact panels was received. Consequently, an inspection of anti ice impact panels of pre SB V2500-ENG-72-0103 standard is required to check for disbond to avoid any further potential liberation of the panels in the fleet.

(3) Objective

This Non-Modification Service Bulletin provides a tapping procedure for a one time inspection of the front anti ice impact panels of the fan case assembly for disbonding. Compliance with the Accomplishment Instructions of this Non-Modification Service Bulletin is required to prevent a release of the panels, which could cause further engine or nacelle damage. Panels with significant disbond must be repaired in accordance with the relevant repair scheme using polysulphide sealant.

C. Compliance

In-Service Engines

Airbus Aircraft

Category Code 3

On-wing inspection detail in Section 3.A. to be accomplished within 600 flight hours or 750 flight cycles from receipt of this Non-Modification Service Bulletin, whichever occurs first.

In Overhaul Shop Engines

Category Code 4

Accomplish at first shop visit on an engine or module to an maintenance base capable of compliance with the accomplishment instruction regardless of planned maintenance action.

D. Approval

The compliance statement at 1.C. and the procedures in Section 3. of this Non-Modification Service Bulletin comply with the Federal Aviation Regulations and are FAA approved for the engine models listed.

E. Manpower

Estimate of man-hours necessary to embody this Non-Modification Service Bulletin in full:

(1) In Service

(a) Time to gain access

10 minutes

(b) Time to inspect

30 minutes

(c) Time to restore to serviceable condition should any ice impact panel require replacement

15 hours

NOTE: Time to restore the actual front anti ice impact panels having been replaced from the fan case assembly with polysulphide sealant.

(d) Total

15 hours 40 minutes

(2) At Overhaul - Scheduled removal

NOTE: It is possible to get access to the parts affected by this Non-Modification Service Bulletin at overhaul.

(a) Time to inspect

30 minutes

(b) Time to restore to serviceable condition should any ice impact panel require replacement

15 hours

NOTE: Time to restore the actual front anti ice impact panels having been replaced from the fan case assembly with polysulphide sealant.

(c) Total

15 hours 30 minutes

F. Tooling Availability

Tapping tool - IAE tool number IAE1N20444 is recommended by IAE. Alternatively use a metallic coin (not less than 1.0 in. (25,4 mm)) or a small metal rod with a ball end.

G. References

(1) Internal Reference No. - 06VJ713.

(2) ATA Locator - 72-32-85

(3) V2500 Engine Manual, E-V2500-1IA, Chapter/Section 72-32-85-200-001-A00, Inspection/Check 01.

(4) V2500 Engine Manual, E-V2500-1IA, Chapter/Section 72-32-85-300-014, Repair 004 (VRS1952).

(5) V2500 Engine Manual, E-V2500-1IA, Chapter/Section 72-32-85-300-014, Repair 014 (VRS1959).

(6) Airbus A320 Aircraft Maintenance Manual (AMM), Chapter Section 72-32-85-200-010, Inspection/Check.

(7) Airbus A320 Aircraft Maintenance Manual (AMM), Chapter Section 72-32-85-350-021, Approved Repair (VRS1572).

(8) Airbus A320 Aircraft Maintenance Manual (AMM), Chapter Section 72-32-85-300-041, Approved Repair (VRS1574).

(9) IAE V2500 Service Bulletin:

ENG-72-0103: ENGINE - LP COMPRESSOR - PROVIDE NEW WEIGHT REDUCED FAN CASE ASSEMBLY.

2. Material Information

None.

3. Accomplishment Instructions

A. On-wing condition - Inspection of the front anti ice impact panels on an installed engine.

(1) Safety Precautions

(a) On the center pedestal, on the ENG panel 115VU:

(i) Put a warning notice to tell persons not to start the engine.

(b) Make sure that the engine 1(2) shutdown occurred not less than 5 minutes before you do this procedure.

(c) On the overhead maintenance panel 50VU:

(i) Make sure that the ON legend of the ENG/FADEC GND PWR/1(2) push button switch is off.

(ii) Put a warning notice to tell persons not to energize the FADEC 1(2).

(2) Put the support equipment into position

(a) Put the access platform into position to give access to the engine for the inspection task.

(b) Put the workmat into position in the intake cowl.

NOTE: Make sure that the workmat has sufficient dimensions to give full protection to the lower half of the intake cowl surface.

(3) Examine the front anti ice impact panels

NOTE: Check the front anti ice impact panel for disbond by tap testing. The anti ice impact panel is tapped or hit lightly with a metallic coin (not less than 1.0 in. (25,4 mm)) or a small metal rod with a ball end or TOOL-TAPPING (IAE1N20444). If the disbond is present directly below the point of impact, a change in pitch (hollow sound) will be emitted from the front anti ice impact panel. Plot the result of the tap test, refer to figure 1.

(a) Disbond on the front anti ice impact panels is acceptable, if the limits that follow are not exceeded:

(i) The disbond area(s) are less than 20 percent of each front anti ice impact panel.

(b) The panel shall be repaired within 10 flight hours or 5 flight cycles whichever is the sooner - repair to VRS1572 (Refer to AMM TASK 72-32-85-350-021).

(c) Damage more than the limits in (a) - repair, refer to VRS1572 (Refer to AMM TASK 72-32-85-350-021).

(d) If the repaired area with VRS1572 in step (a) and (b) or previous repair is less than 30 percent of each front anti ice impact panel, then no further action is required.

(e) If the repaired area is more than 30 percent of the area on the front anti ice impact panels, replace within 1500 flight hours or 600 flight cycles whichever comes first - repair to VRS1574 (Refer to AMM TASK 72-32-85-300-041).

(4) Close Access

(a) Make sure that the work area is clean and clear of tool(s) and other items.

(b) Remove the support equipment

(i) Remove the workmat from the intake cowl.

(ii) Remove the access platform(s).

(c) Remove the warning notice(s).

B. Overhaul condition - Inspection of the front anti ice impact panels on the fan case assembly.

(1) Examine the front anti ice impact panels

NOTE: Check the front anti ice impact panel for disbond by tap testing. The anti ice impact panel is tapped or hit lightly with a metallic coin (not less than 1.0 in. (25,4 mm)) or a small metal rod with a ball end or TOOL-TAPPING (IAE1N20444). If the disbond is present directly below the point of impact, a change in pitch (hollow sound) will be emitted from the front anti ice impact panel. Plot the result of the tap test, refer to figure 1.

(a) Disbond on the front anti ice impact panels is acceptable, if the limits that follow are not exceeded:

(i) The disbond area(s) are less than 20 percent of each front anti ice impact panel.

(ii) The panel shall be repaired with VRS1952 (Refer to EM TASK 72-32-85-300-004).

(b) If the repaired area is more than the limits in B.(1)(a)(i) on the front anti ice impact panels - repair to VRS1959 (Refer to EM TASK 72-32-85-300-014).

C. Recording Instructions

(1) A record of accomplishment is necessary.

(2) When the accomplishment instructions are completed, tell the IAE representative that this Non-Modification Service Bulletin has been accomplished, the inspection record sheet, Figure 1 can be used for this purpose.

AIRLINE _____ DATE _____

ENGINE NUMBER _____ HOURS _____ CYCLES _____

PREVIOUS PANEL REPAIR?: Y/N

SINCE PREVIOUS REPAIR: FILLING/REPLACEMENT

HOURS _____

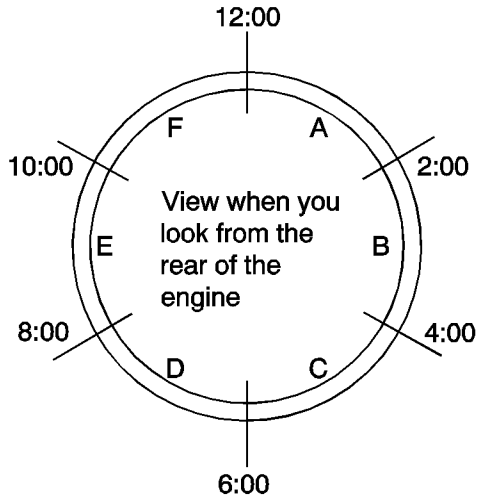
CYCLES _____

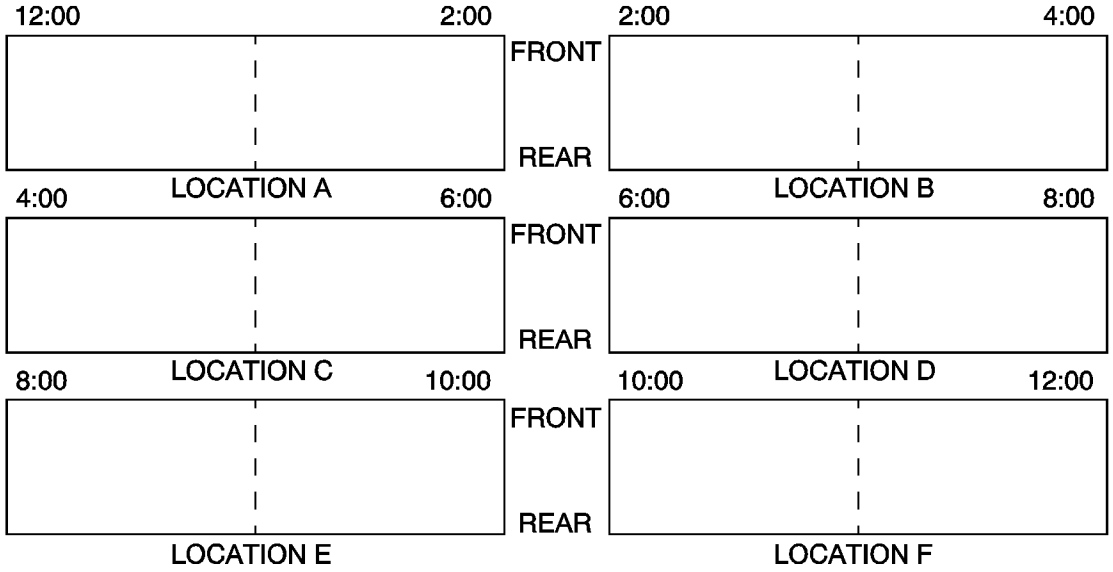
FRONT PANELS DISBONDED?: Y/N

REPAIR APPLIED: NONE

FILLING: VRS1572 (AMM)
VRS1952 (EM)

REPLACEMENT: VRS1574 (AMM)
VRS1959 (EM)





NO SCALE

Mark unbonded areas by shading

bmi0000142

Damage Map for Front Anti Ice Impact Panel
Figure 1