

International Aero Engines

SERVICE BULLETIN

<u>ENGINE - LP COMPRESSOR - REPLACE THE FAN CASE ASSEMBLY NO.1 RUBBER SEAL ASSEMBLY - CATEGORY CODE 6 - MOD.ENG-72-0156</u>

1. Planning Information

A. Effectivity

(1) Aircraft: (a) Airbus A320

(b) Airbus A321

(2) Engine: (a) V2500-A1 Engines Serial Number V0204 through V0337.

(b) V2527-A5 Engines prior to Serial Number V10020

(c) V2530-A5 Engines prior to Serial Number V10020

B. Concurrent Requirements

For the V2500-A1 Service Bulletins V2500-ENG-72-0103 and V2500-ENG-72-0105 must be incorporated prior to this bulletin.

C. Reason

(1) Condition

Interference may occur between the No.1 panel rubber seal and pressure boss on the No.1 strut. This may result in difficulty removing the rubber seal.

(2) Background

This condition has been observed during disassembly of the development engines.

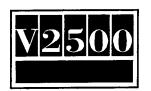
(3) Objective

To make disassembly procedure easier by locally cutting the No.1 panel rubber seal.

(4) Substantiation

Substantiation analysis has been completed.

(5) Effects of bulletin on workshop procedures:



International Aero Engines

SERVICE BULLETIN

Removal/Installation

Disassembly/Assembly

Cleaning Inspection/Check Repair Testing Affected
(See Supplemental Information)
Affected
(See Supplemental Information)
Not affected
Not affected
Not affected
Not affected

- (6) Supplemental Information
 - (a) Removal/Installation and Disassembly/Assembly will be revised due to new configuration of the No.1 panel rubber seal.

D. <u>Description</u>

- (1) The changes introduced by this Service Bulletin are as follows:
 - (a) The existing 5A0819, No.1 panel rubber seal on No.1 strut with screws of the LP Compressor/Intermediate Case Module is replaced with the 5A1601, No.1 panel rubber seal with sealant in to the clearance AA (See Figure 1).
 - (b) Local cut of interference area on the existing No.1 panel rubber seal and put the sealant in to the clearance AA when assembled (See Figure 1 and 2).
- (2) Existing 5A0819, No.1 panel rubber seal can be reworked to the new configuration (See Figure 2).
- (3) For the V2500-A1 Service Bulletins V2500-ENG-72-0103 and V2500-ENG-72-0105 must be incorporated prior to this bulletin.

E. Approval

The Part Number changes and part modifications described in Sections 2 and 3 of this Service Bulletin have been shown to comply with the applicable Federal Aviation Regulations and are FAA-APPROVED for the Engine Model listed.

F. Compliance

Category Code 6

Accomplish when the subassembly(i.e. Modules, Accessories, Components, Build groups) is disassembled sufficiently to afford access to the affected part and to all affected spare parts.

G. Manpower

Estimated Manhours to incorporate the full intent of this Bulletin:



International Aero Engines

SERVICE BULLETIN

Venue Estimated Manhours

(1) In service Not applicable

(2) At overhaul

(a) Rework the No.1 panel

rubber seal 18 minutes

TOTAL 18 minutes

NOTE: The parts are accessible at overhaul

H. Material - Price and Availability

Modification kit is not required.

I. Tooling - Price and Availability

Special tools are not required.

J. Weight and Balance

(1) Weight change None

(2) Moment arm No effect

(3) Datum Engine front mount centerline (Power Plant Station (P.P.S.)

100)

K. Electrical Load Data

This Service Bulletin has no effect on the aircraft electrical load.

L. References

(1) Internal Reference No.

EC92VJ109

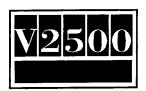
(2) Other References

V2500 Engine Illustrated Parts Catalog.

V2500 Engine Manual.

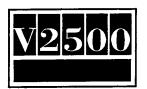
V2500 Facility Equipment Manual.

V2500 Standard Practices/Processes Manual.



M. Other Publications Affected

- (1) V2500 Engine Illustrated Parts Catalog, Chapter/Section 72-32-87.
- (2) V2500 Engine Manual, Chapter/Section 72-32-00, Disassembly-4 Config-2 and Config-3, Assembly-12 Config-2 and Config-3.
- (3) V2500 Engine Maintenance Manual, Chapter/Section 72-32-87, Removal/Installation Config-2.



2. Accomplishment Instructions

A. Rework Instructions

(1) Do a modification to the 5A0819, No.1 panel rubber seal and identify as follows (Refer to Figure 2):

Procedure

Supplementary Information

- (a) Prepare the Hand Grinder equipped small cutter which diameter is less than 0.197in(5,00mm).
- Hand Grinder and cutter are facility equipment tools, and see Reference (3), RB010 and RB012 respectively.
- (b) Make a temporary mark of the slot profile to be cut on the leading edge of fillet on the No.1 panel rubber seal using pencil or crayon.

See Reference (4), Control No./TASK No. 70-09-01-400-501.

(c) Remove the unwanted material from marked area (See step (b)) on the No.1 panel rubber seal using Hand Grinder. Refer to Figure 2.

(d) Remove burrs from the leading edge of fillet on the No.1 panel rubber seal. Use the knife.

(e) Make the material countours smooth. Use the file.

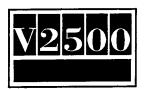
(f) Examine the reworked No.1 panel rubber seal.

The leading edge of fillet of part must have no cracks.

(g) Make a mark of the new part number adjacent to the existing part number. Make two lines (===) on existing part number to erase it. Old part No. New part No. 5A0819 5A1601

Refer to Figure 1, and Reference (4) Control No./ TASK No. 70-09-00-400-501.

- B. Assembly Instructions
 - (1) For V2500-A1, V2527-A5 and V2530-A5 Engines



- (a) Install the 5A16O1, No.1 panel rubber seal on to the LP Compressor/Intermediate Case Module in accordance with following procedures (Refer to Figure 1):
 - 1 Attach the 5A16O1, No.1 panel rubber seal to the fan case and safety the seal with existing six screws (Refer to Figure 1).
- (b) Torque the screws to 75 to 85 lbfin (8,50 to 9,60 Nm).
- (c) Fill the clearances between the No.1 strut and the rubber seal with silicone rubber compound in accordance with following procedures (Refer to Figure 1):
 - 1 Use a clean cloth or a soft brush made moist with CoMat O1-076, Methylethylketone to clean clearance AA between the No.1 strut and the front end of the No.1 rubber seal.
 - 2 Apply a thin layer of CoMat 08-014 primer to the areas with a soft brush. Air dry for 30 minutes minimum.

NOTE: Apply the primer in less than eight hours after the areas are cleaned.

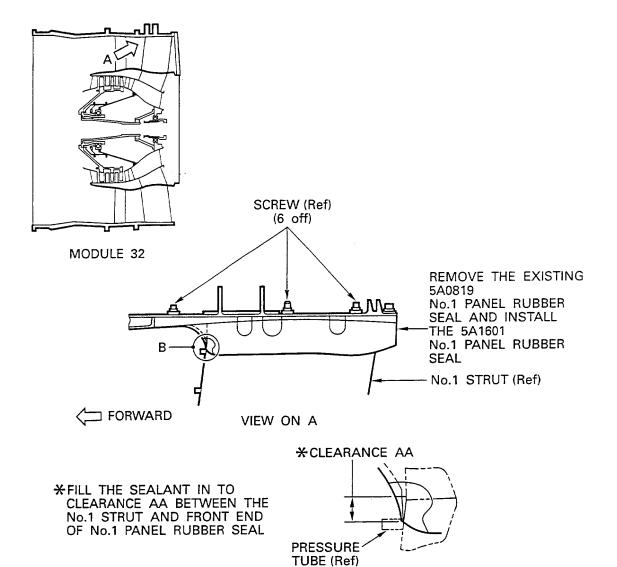
CAUTION: CAREFULLY DO STEP 3 SO THAT YOU DO NOT PUT SILICONE RUBBER COMPOUND IN TO THE PRESSURE TUBE. THE SILICONE RUBBER COMPOUND CAUSES LOSS OF PRESSURE TUBE FUNCTION.

- 3 Fill the CoMat 08-045 silicone rubber compound in to the clearance AA with a sealant dispenser.
- 4 Press the silicone rubber compound in to position and make smooth with a spatula.

NOTE: Press the silicone rubber compound in to position immediately after it is applied to each clearance and corner.

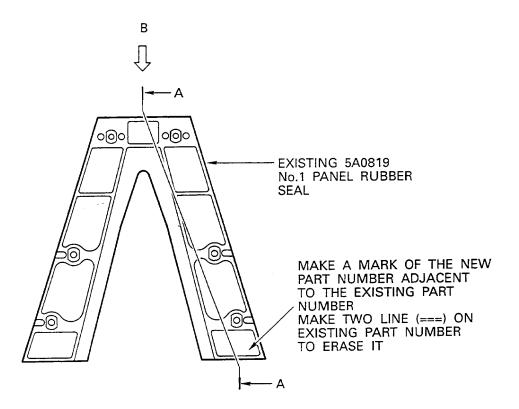
- 5 Let silicone rubber compound cure at room temperature for 48 hours, and do not apply load during this time.
- C. Recording Instructions
 - (1) A record of accomplishment is necessary.



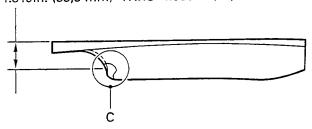


DETAIL B

Location of the No.1 Panel Rubber Seal and Sealant Position Fig.1



1.319in. (33,5 mm) THRU 1.359in. (34,5 mm)



SECTION A - A

Modification of the No.1 Panel Rubber Seal Fig.2 (Sheet 1 of 2)

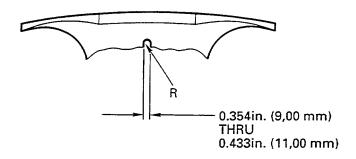
V2500-ENG-72-0156

ded0000729





DETAIL C



VIEW ON B

ded0000730

Modification of the No.1 Panel Rubber Seal Fig.2 (Sheet 2 of 2)



3. Material Information

Applicability: For V2500-A1, V2527-A5 and V2530-A5 engines

to incorporate this bulletin.

A. Kits associated with this Bulletin:

None

B. Parts affected by this Bulletin:

New Part No. (ATA No.)	Qty	Est'd Unit Price (\$)	Keyword	Old Part No. (IPC No.)	Instructions /Disposition
5A1601 (72-32-87)	1	842.00	.Seal, A/O Rubber Panel No.1	5A0819 (01-100)	(A)(B)(S1) (1D)

C. <u>Instruction/Disposition Code Statements:</u>

- (A) New part is currently available for sale.
- (B) Old part will no longer be available for sale.
- (S1) Old and new parts are not interchangeable, but the new part can be fitted in lieu of the replaced part but not vice-versa.
- (1D) Old part can be reworked and reidentify to the new part number.

NOTE: The estimated 1996 unit prices shown are provided for planning purposes only and do not constitute a firm quotation. Consult IAE Price Catalog or contact IAE's Spare Parts Sales Department for information concerning firm prices.