



SERVICE BULLETIN

ENGINE – PROVIDE A NEW CARBON SEAL FOR THE NO.5 BEARING COMPARTMENT – CATEGORY CODE 6
– MOD.ENG-72-0142

1. Planning Information

A. Effectivity

- (1) Aircraft: Airbus A320
- (2) Engine: V2500-A1 engines before Serial No.V0301*

* The serial number data shown is of a preliminary nature and is provided for advance planning only. A future revision to this Service Bulletin will confirm final serial number effectivity.

B. Reason

(1) Condition

(a) Wear may occur on existing wave spring and loading rings inside the seal assembly.

(2) Background

This condition was observed in service.

(3) Objective

To maintain engine reliability.

(4) Substantiation

A 400 hours endurance test has successfully been carried out.

(5) Effects of Bulletin on Workshop Procedures

Removal/Installation	Not affected
Disassembly/Assembly	Affected (See Supplemental Info.)
Cleaning	Affected (See Supplemental Info.)
Inspection/Check	Affected (See Supplemental Info.)
Repair	Affected (See Supplemental Info.)
Testing	Not affected

(6) Supplemental Information

(a) The Engine Manual will be revised to show the Assembly/ Disassembly procedures of the new seal.

(b) The Engine Manual will be revised to show the new Cleaning procedure.

V2500-ENG-72-0142



(c) The Engine Manual will be revised to show the new Inspection/ Check procedure.

(d) The Engine Manual will be revised to show the new Repair procedure.

C. Description

The changes introduced by this Service Bulletin are as follows:

The wave spring and the loading rings have been deleted.

The two carbon pieces have been replaced by one bigger carbon piece.

The old seal assembly can be disassembled to allow incorporation of the new carbon piece using the existing spacers.

D. Approval

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

E. Compliance

Category Code 6

Accomplish when the subassembly (i.e. modules, accessories, components, build groups) is disassembled sufficiently to afford access to the affected parts and to all affected spare parts.

G. Manpower

Estimated man-hours to incorporate the full intent of this Bulletin:

Venue	Estimated Man-hours
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(1) In Service	Not applicable
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(2) At Overhaul	15 minutes
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G. Material – Price and Availability

(1) Modification Kit not provided

(2) See "Material Information" section for prices and availability of future spares.



SERVICE BULLETIN

H. Tooling - Price and Availability

Tool No.	Qty	Description	Function	Avail.
IAE1F10439	1	(Wrench and holder)	Disassemble/Assemble the seal	(1)

(1) Shows that the Tool Design Aperture Cards is available from IAE.

I. Weight and Balance

- (1) Weight Change No significant
- (2) Moment Arm No effect
- (3) Datum Engine front mount centerline
(Powerplant Station (P.P.S) 100)

K. Electrical Load Data

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

K. References

- (1) Internal Reference No.

EC88VF084

EC88VF084A

- (2) Other References

The V2500 Standard Practises/Processes Manual, TASK 70-09-00.

L. Other Publications Affected

- (1) The V2500 Illustrated Parts Catalog, Chapter/Section 72-50-42 to add the new parts.
- (2) The V2500 Engine Manual, Chapter/Section 72-50-42, Assembly/ Disassembly, to add the new procedure.
- (3) The V2500 Engine Manual, Chapter/Section 72-50-42, Cleaning, to add the new parts.
- (4) The V2500 Engine Manual, Chapter/Section 72-50-42, Inspection/Check, to add the new parts.
- (5) The V2500 Engine Manual, Chapter/Section 72-50-42, Repair, to add the new parts.

V2500-ENG-72-0142



International Aero Engines

SERVICE BULLETIN

- (6) The V2500 Illustrated Tool and Equipment Manual to incorporate IAE 1F10439.

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V2500-ENG-72-0142

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Page 4

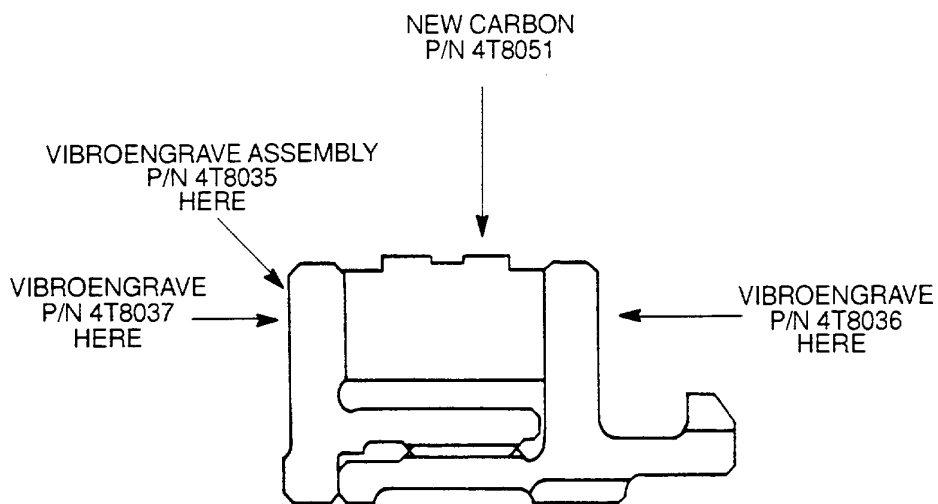


2. Accomplishment Instructions

A. Rework Instructions

- (1) Install the carbon seal assembly P/N 4T8002 on the holder of IAE 1F10439. Make sure that the holes on the seal spacer engage the pins on the holder.
- (2) Install the wrench of IAE 1F10439 on the seal assembly. Make sure that the wrench engage the slots on the seal spacer.
- (3) Turn the wrench counterclockwise until the spacer is fully disengaged. Remove the wrench and the spacer.
- (4) Scrap the carbon rings, the loading rings and the wave spring. Retain the spacers.
- (5) Clean the spacers as specified in the SPM TASK 70-11-22.
- (6) Mark the new part number on the spacers as shown in figure. Use a vibropeen. Remove high metal.
- (7) Do again step (1).
- (8) Install the new carbon ring P/N 4T8051.
- (9) Install the wrench on the spacer. Make sure that the wrench engage the slots on the spacer. Turn manually clockwise the wrench.
- (10) Fully seat the spacers. Torque to 26 to 95 lbfin (2,94 to 10,79 Nm),
- (11) Renumber the carbon seal assembly
 - (a) Cancel the P/N 4T8002 electrochemical etched. use a vibropeen.
 - (b) Vibroengrave the new assembly P/N 4T8035 adjacent to cancelled one.
 - (c) Remove high metal.

B. A record of accomplishment is necessary.



Reidentification of the Seal Components
Fig.1

V2500-ENG-72-0142



SERVICE BULLETIN

3. Material Information

Applicability: For each V2500 Engine 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
4T8035 (72-50-42)	1	-	.Seal, Carbon	4T8002 or 4T8017 (01-140)	(A)(B)(1D) (S1)
4T8036 (72-50-42)	1	-	..Spacer	- (01-142)	(A)(C)(2D) (S1)
4T8037 (72-50-42)	1	-	..Spacer	- (01-144)	(A)(C)(2D) (S1)
4T8051 (72-50-42)	1	-	..Carbon, Option	- (01-146)	(A)(C)
4T8034 (72-50-42)	REF	-	..Carbon,	- (01-146)	
2A1214 (72-50-42)	REF	-	..Seal, Face	- (01-146)	

C. Instruction/Disposition Code Statements:

- (A) New part is currently available for sale.
- (B) Old part will no longer be available for sale.
- (C) Old parts were non-spareable details of the carbon seal assembly and had no part number identification.
- (S1) Old and new parts coded (S1) are directly interchangeable.
- (1D) New part number may be obtained by rework and reidentification of the old part number.
- (2D) New part number identification may be applied to the old part.

NOTE: The estimated 1992 Unit Prices shown are provided for planning purposes only and do not constitute a firm quotation. Consult the IAE Price Catalog or contact IAE's Spare Parts Sales Department for information concerning firm prices.

V2500-ENG-72-0142

