

SERVICE BULLETIN

ENGINE - LP TURBINE - INTRODUCE A NEW NO.5 BEARING FACE SEAL WITH A DECREASED THICKNESS - CATEGORY CODE 6 - MOD.ENG-72-0162

1. Planning Information

A. Effectivity

(1) Aircraft: Airbus A320

(2) Engine: V2500-A1 Engines before Serial No.V0349*

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

B. Reason

(1) Condition

It is possible that the No. 5 Bearing Seal now in use does not have the best seat with the adjacent plate.

(2) Background

The seal function can be improved by installation of the new seal.

(3) Objective

To replace the No. 5 Bearing Rear Seal with one that has a decreased radial thickness and improve the seal function.

(4) Substantiation

None.

(5) Effects of Bulletin on Workshop Procedures:

Removal/Installation	Not affected
Disassembly/Assembly	Not affected
Cleaning	Not affected
Inspection/Check	Not affected
Repair	Not affected
Testing	Not affected

(6) Supplemental Information

None.

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**C. Description**

- (1) This change provides a new No. 5 Bearing Face Seal, which has a decreased radial thickness.

D. Approval

The Part Number changes and/or part modification 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.

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 part and to all affected spare parts.

F. Manpower

Estimated Manhours to incorporate the full intent of this Bulletin:

Venue	Estimated Manhours
(1) In Service	Not applicable
(2) At overhaul	Not applicable

G. Material Price and Availability

- (1) Modification Kit not required.
- (2) See "Material Information" section for prices and availability of future spares.

H. Tooling - Price and Availability

Special tools are not required.

I. Weight and Balance

- (1) Weight change None
- (2) Moment arm No effect
- (3) Datum Engine front mount centerline
(Powerplant Station P.P.S. (100))

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**J. Electrical Load Data**

- (1) This Service Bulletin has no effect on the aircraft electrical load.

K. Reference

- (1) Internal Reference No.

92VA189

92VA189B

93VC051

- (2) Other References

V2500-ENG-72-0063 - Engine LP Turbine - To Announce The Availability of a New Turbine Exhaust Case Assembly

V2500-ENG-72-0142 - Provide a New Carbon Seal for The No. 5 Bearing Compartment

V2500-A1 Engine Illustrated Parts Catalog.

V2500 Engine Manual.

L. Other Publications Affected

- (1) V2500-A1 Engine Illustrated Parts Catalog, Chapter/Section 72-50-42, Figures 1 and 20, to add the new parts.
- (2) V2500 Engine Manual, Chapter/Section 72-50-42, Cleaning, to add the new parts.
- (3) V2500 Manual Manual, Chapter/Section 72-50-42, Inspection, to add the new parts.
- (4) V2500 Engine Manual, Chapter/Section 72-50-42, Repair, to add the new parts.



2. Accomplishment Instructions

A. Rework Instructions

- (1) There are no rework instructions necessary for this Service Bulletin.

B. Assembly Instructions

- (1) For Engines which incorporate V2500-ENG-72-0142, but do not incorporate V2500-ENG-72-0063 proceed as follows:

- (a) Do an inspection of the No. 5 Bearing Face Seal to make sure that the radial thickness is 0.234 to 0.238in. (5,944 to 6,045 mm).

NOTE: The obsolete No. 5 Bearing Face Seals have a radial thickness of 0.338 to 0.346in. (8,585 to 8,788 mm). Do not use these seals.

- (b) Assemble the No. 5 Bearing Carbon Seal Assembly by the instructions given in Reference (2).

1 Use a No. 5 Bearing Face Seal from the 2A2877 Seal Option (1 off).

- (c) Install the No. 5 Bearing Carbon Seal Assembly by the instructions given in Reference (4), Chapter/Section 72-50-00, Assembly-02. See Figure 1.

- (2) For Engines which do not incorporate V2500-ENG-72-0063 and V2500-ENG-72-0142 proceed as follows:

- (a) Assemble the No. 5 Bearing Carbon Seal Assembly by the instructions given in Reference (2).

1 Use a No. 5 Bearing Face Seal from the 2A2877 Seal Option (1 off).

- (b) Install the No. 5 Bearing Carbon Seal Assembly by the instructions given in Reference (4), Chapter/Section 72-50-00, Assembly-02. See Figure 1.

- (3) For Engines which incorporate V2500-ENG-72-0063 proceed as follows:

- (a) Do an inspection of the No. 5 Bearing Face Seal to make sure that the radial thickness is 0.234 to 0.238in. (5,944 to 6,045 mm).

NOTE: The obsolete No. 5 Bearing Face Seals have a radial thickness of 0,338 to 0.346in. (8,585 to 8,788 mm). Do not use these seals.

- (b) Install the No. 5 Bearing Carbon Seal by Figure 1 and as follows:

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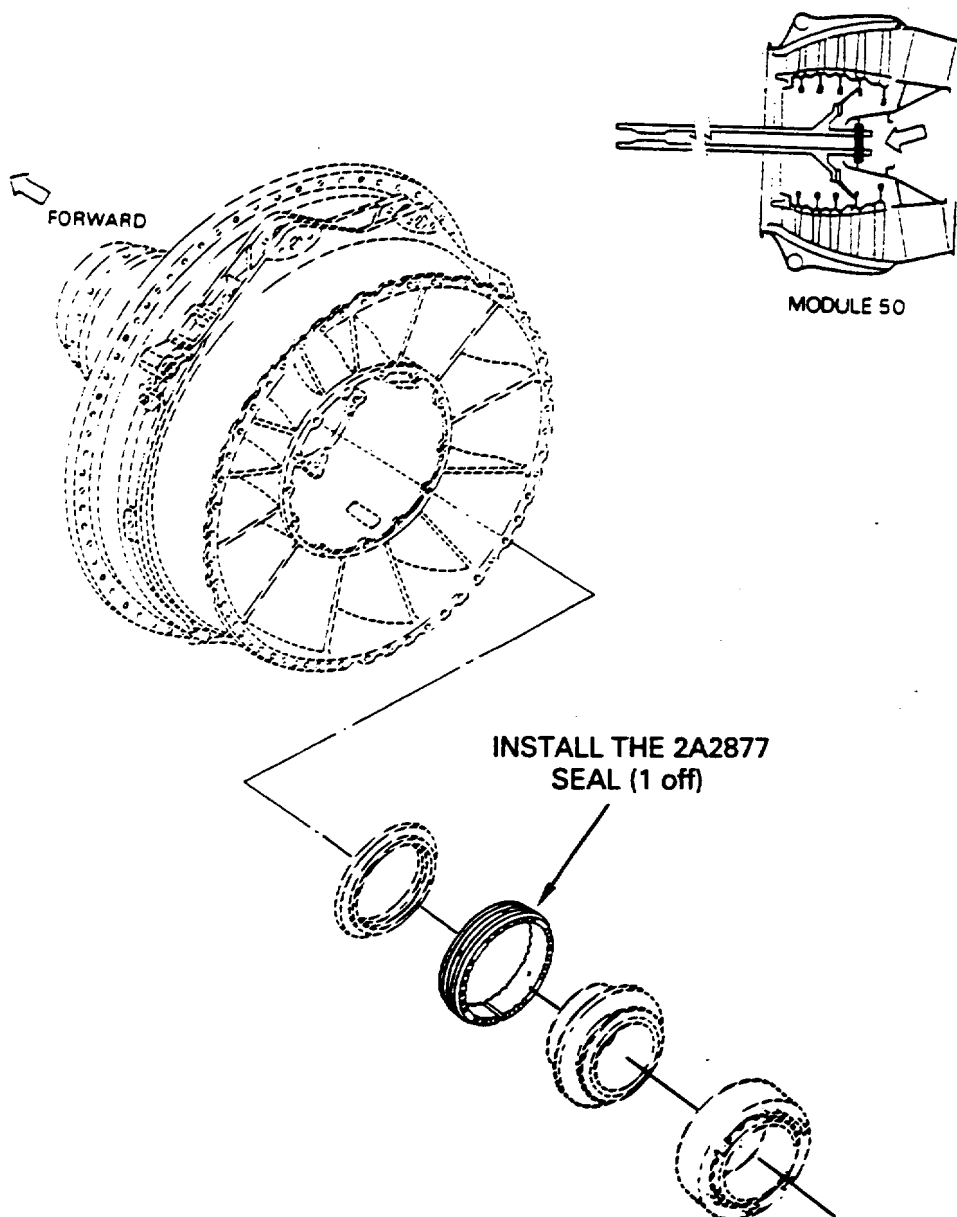
1 Use a No. 5 Bearing Face Seal from the 2A2877 Seal Option (1 off).

Printed in Great Britain

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Location of the No. 5 Bearing Face Seal
Fig.1

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- 2 Soak the carbon seal in hot CoMat 10-077 Approved Engine Oil for 10 minutes.
- 3 Install the front seal plate with the flat surface forward.
- 4 Install the carbon seal. Use light pressure and a push forward.
- 5 Install the rear seal plate. Make sure the groove points to the rear.

C. Recording Instructions

- (1) A record of accomplishment is necessary.

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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
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Applicability: For Engines which incorporate V2500-ENG-72-0142 but do not incorporate V2500-ENG-72-0063.

2A2877 (72-50-42)	1	280.00	..Seal, Option Consisting of:	4T8051 (01-146)	(A) (B)
2A2878 (72-50-42)	Ref.	-	..Seal - Face No. 5 Bearing	4T8034 (01-146)	(S1)
			or		
2A2879 (72-50-42)	Ref.	-	..Seal - Face No. 5 Bearing	2A1214 (01-146)	(S1)
			or		
4T8034 (72-50-42)	Ref.	-	..Carbon	4T8051 (01-146)	(C) (S1)

Applicability: For Engines which do not incorporate V2500-ENG-72-0063 and V2500-ENG-72-0142.

4T8035 (72-50-42)	1	8371.00	..Seal, Carbon	4T8002 or 4T8017 (01-140)	(B) (D)
2A2877 (72-50-42)	1	280.00	..Seal, Option Consisting of:	- (01-146)	(A)
2A2878 (72-50-42)	Ref.	-	..Seal - Face No. 5 Bearing	- (01-146)	(S1)
			or		
2A2879 (72-50-42)	Ref.	-	..Seal - Face No. 5 Bearing	- (01-146)	(S1)
			or		
4T8034 (72-50-42)	Ref.	-	..Carbon	- (01-146)	(C)

Applicability: For Engines which incorporate V2500-ENG-72-0063.

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-	1	-	..Seal - Face No.	2A1214	(S1) (B)
(72-50-42)			5 Bearing	(20-140)	
2A2877	1	280.00	..Seal, Option	-	(A)
(72-50-42)			Consisting of:	(20-140)	
2A2878	Ref.	-	..Seal - Face No.	-	(S1)
(72-50-42)			5 Bearing	(20-140)	
			or		
2A2879	Ref.	-	..Seal - Face No.	-	(S1)
(72-50-42)			5 Bearing	(20-140)	

C. Consumable Materials Required to Incorporate This Service Bulletin

Reference	Designation
CoMat 10-077	Approved Engine Oils

D. Instruction/Disposition Code Statements:

- (S1) Old and new parts coded (S1) are directly interchangeable.
- (A) New part is currently available.
- (B) Old Part will no longer be available for sale.
- (C) New part will continue to be supplied under new option number, until supply is exhausted.
- (D) New part will continue to be supplied until stock is exhausted.

NOTE: The estimated 1993 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.

