

SERVICE BULLETIN

ENGINE - LP TURBINE - REPLACE THE EXISTING NO.5 BEARING SEAL SPACER WITH A SPACER INCORPORATING FOOL-PROOF INSTALLATION FEATURES - CATEGORY CODE 5 - MOD.ENG-72-0165

1. Planning Information

A. Effectivity

- (1) Aircraft: Airbus A320, A321
McDonnell Douglas MD-90
- (2) Engine: V2500-A1 Engines before Serial No.V0348
V2500-A5 Engines before Serial No.V10047*
V2500-D5 Engines before Serial No.V20007

*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 was possible to install the No. 5 bearing Seal Spacer so that it was not correct.

(2) Background

It was found that it was possible to install the No. 5 Bearing Seal Spacer so that the assembly was not correct.

(3) Objective

To provide a No. 5 Bearing Seal Spacer, which has features to prevent an installation that is not correct.

(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

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None

C. Description

Replace the No. 5 bearing Seal Spacer with one that has features to prevent its installation in a position that is not correct.

D. Approval

The Part Number Changes and/or part modification described in Section 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 5

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

G. Manpower

Estimated Manhours to incorporate the full intent of this Bulletin for V2500-D5 Engines only :

Venue	Estimated Manhours
(1) In Service	Not applicable
(2) At Overhaul (NOTE: The parts affected by this Service Bulletin are accessible at overhaul.)	
(a) To remove the old No. 5 Bearing Seal Spacer.. ..	24 Minutes
(b) To install the new No. 5 Bearing Seal Spacer.. ..	26 Minutes
	TOTAL 50 Minutes

G. Material - Price and Availability

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

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H. Tooling - Price and Availability

Special tools are not required to accomplish Sub-division 2 of this Service Bulletin.

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) |

K. Electrical Load Data

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

K. References

- (1) Internal Reference No.

93VA004

- (2) Other References

V2500 Engine Illustrated Parts Catalogs (V2500-A1, V2500-A5 and V2500-D5).

V2500 Engine Manual.

MD-90 Engine Manual.

L. Other Publications Affected

- (1) The V2500 Engine Illustrated Parts Catalog Chapter/Section 72-50-42, Figure 20 (For the V2500-A1, V2500-A5 and V2500-D5), to add the new parts.
- (2) The V2500 Engine Manual Chapter/Section 72-50-42, Cleaning, to add the new parts.
- (3) The V2500 Engine Manual Chapter/Section 72-50-42, Inspection, to add the new parts.
- (4) The V2500 Engine Manual Chapter/Section 72-50-42, Repair, to add the new parts.
- (5) The MD-90 Engine Manual Chapter/Section 72-50-42, Cleaning, to add the new parts.

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- (6) The MD-90 Engine Manual Chapter/Section 72-50-42, Inspection, to add the new parts.
- (7) The MD-90 Engine Manual Chapter/Section 72-50-42, Repair, to add the new parts.
- (8) Repair Schemes VRS3167, VRS3168, VRS3205, and VRS3244 are affected.

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2. Accomplishment Instructions

A. Rework Instructions

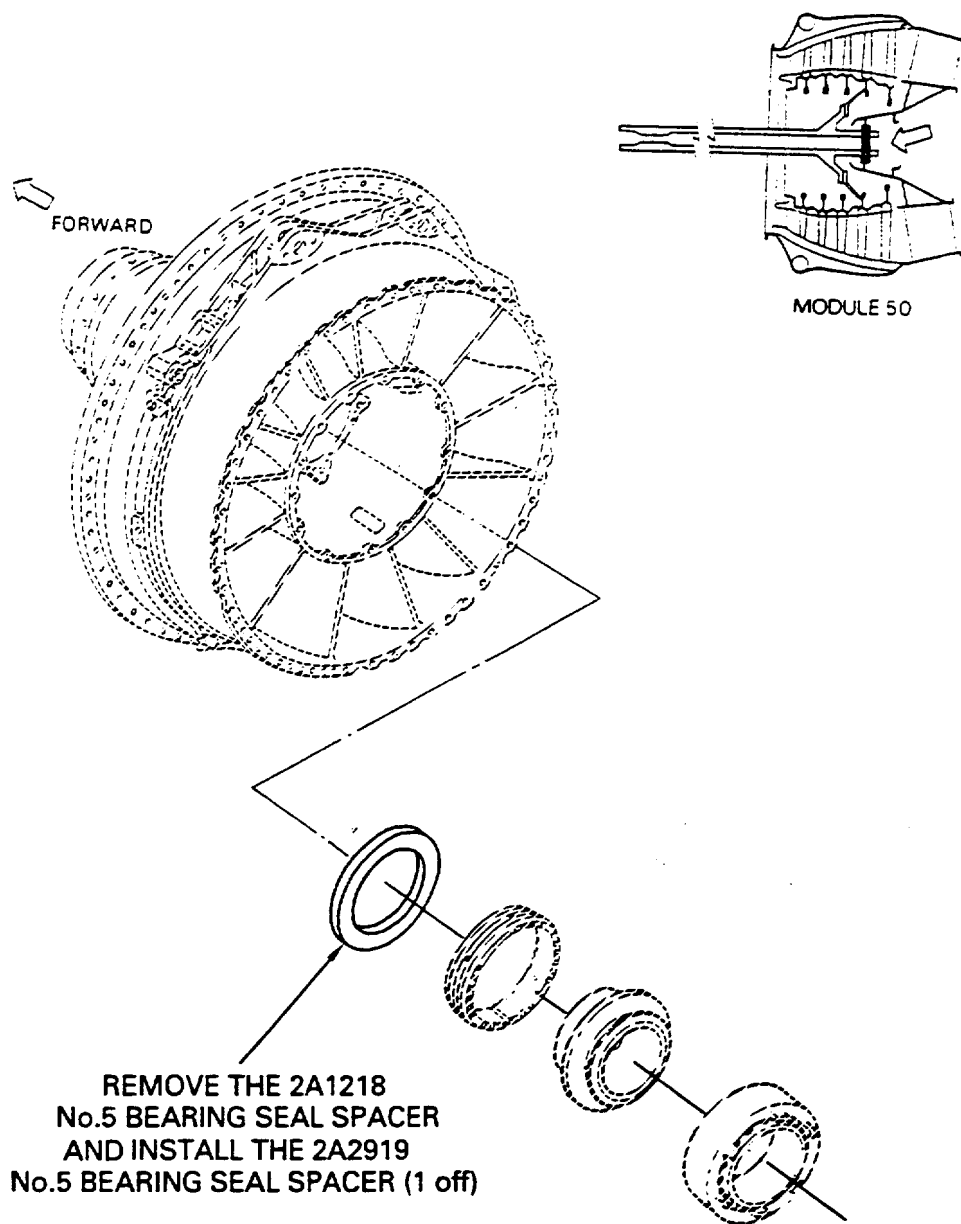
- (1) There are no rework instructions necessary to accomplish this Service Bulletin.

C. Assembly Instructions

- (1) For V2500-A1 and V2500-A5 Engines
 - (a) Remove the 2A1218 No. 5 Bearing Seal Spacer by the approved procedure given in Reference (2), Chapter/Section 72-50-00, Disassembly-01.
 - (b) Install the 2A2919 No. 5 Bearing Seal Spacer (1 off) by the approved procedure given in Reference (2), Chapter/Section 72-50-00, Assembly-02, and Figure 1.
- (2) For V2500-D5 Engines
 - (a) Remove the 2A1218 No. 5 Bearing Seal Spacer by the approved procedure given in Reference (3), Chapter/Section 72-50-00, Disassembly-01.
 - (b) Install the 2A2919 No. 5 Bearing Seal Spacer (1 off) by the approved procedure given in Reference (3), Chapter/Section 72-50-00, Assembly-02, and Figure 1.

D. Recording Instructions

A record of accomplishment is necessary.



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

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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
2A2919 (72-50-42)	1	285.00	.Spacer, No. 5 Bearing, Seal	2A1218 (20-160)	(S1)(A) (B)

C. Instruction/Disposition Code Statements:

(S1) Old Parts and new parts coded (S1) are freely and fully interchangeable.

(A) New part is currently available.

(B) Old part is no longer available.

NOTE: The estimated 1994 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.

