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DATE: Oct.27/11

V2500-A1/A5/D5 PROPULSION SYSTEMS SERVICE BULLETIN

This document transmits the Initial Issue of Service Bulletin V2500-ENG-72-0622.

Service Bulletin Initial Issue

Remove	Incorporate	Reason for change
	Pages 1 to 10 of the Service Bulletin.	Initial Issue.
	Pages 1 to 2 of the Appendix 1.	Initial Issue.
	Page 1 of the Appendix 2.	Initial Issue.
	Page 1 of the Supplement.	Initial Issue.

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CHECK THAT ALL PREVIOUS TRANSMITTALS HAVE BEEN INCORPORATED
 If any have not been received please advise IAE International Aero Engines AG

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ENGINE – SEAL ASSEMBLY, NO. 3 BEARING – REPLACE OR MODIFY TO IMPROVE DURABILITY**1. Planning Information****A. Effectivity****(1) Airbus A319**

V2522-A5, V2524-A5, V2527M-A5 (A5 Standard and A5 SelectOne™ Retrofit Standard) Engines from Serial No. V10001 thru V13190 and V15001.

V2522-A5, V2524-A5, V2527M-A5 (A5 SelectOne™ Production Standard) Engines from Serial No. V15002 thru V16180*.

(2) Airbus A320

V2500-A1 Engines from Serial No. V0001 thru V0361.

V2527-A5, V2527E-A5 (A5 Standard and A5 SelectOne™ Retrofit Standard) Engines from Serial No. V10001 thru V13190 and V15001.

V2527-A5, V2527E-A5 (A5 SelectOne™ Production Standard) Engines from Serial No. V15002 thru V16180*.

(3) Airbus A321

V2530-A5, V2533-A5 (A5 Standard and A5 SelectOne™ Retrofit Standard) Engines from Serial No. V10001 thru V13190 and V15001.

V2530-A5, V2533-A5 (A5 SelectOne™ Production Standard) Engines from Serial No. V15002 thru V16180*.

(4) Boeing MD-90

V2525-D5, V2528-D5 Engine Serial Nos. V20001 thru V20285.

*This estimate of engine serial numbers will be revised, if necessary, when parts are installed in engines in production.

B. Concurrent Requirements

None.

C. Reason**(1) Condition**

The No. 3 bearing rear carbon seal assembly wear durability has been lower than expected.

(2) Background

The current contact pressure limits the carbon seal performance.

(3) Objective

To improve the carbon seal contact pressure by introducing a carbon detail with a wider nose. The increased contact area will ensure that a reduced contact pressure is maintained.

(4) Substantiation

The changes introduced by this Service Bulletin were subject to satisfactory analysis and test(s). This Service Bulletin complies with the applicable engine certification basis.

(5) Effect of Bulletin on:**(a) Removal/Installation**

Not affected.

(b) Disassembly/Assembly

Not affected.

(c) Cleaning

Not affected.

(d) Inspection/Check

Not affected.

(e) Repair

Not affected.

(f) Testing

Not affected.

(6) Supplemental Information

None.

D. Description

Replace or modify the No. 3 bearing seal assembly.

E. Compliance

Category Code 7

Accomplish when supply of superseded parts has been depleted.

F. Approval

The part number changes and/or part modifications specified in the Accomplishment Instructions and Material Information sections of this Service Bulletin have been shown to comply with the applicable Federal Aviation Regulations and are FAA-APPROVED for the engine models given.

G. Manpower

(1) In Service

Not applicable.

(2) At Overhaul

NOTE: The parts affected by this Service Bulletin are accessible at overhaul.

(a) For Replacement of the No. 3 Bearing Seal Assembly by Replacement with New Seal Assembly or Re-worked Seal Assembly – 30 minutes total.

H. Weight and Balance

(1) Weight Change

None.

(2) Moment Arm

No effect.

(3) Datum

Engine Front Mount Centerline (Power Plant Station (PPS) 100).

I. Electrical Load Data

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

J. Software Accomplishment Summary

Not applicable.

K. References

- (1) IAE V2500 Service Bulletin V2500-ENG-72-0010 Engine - LP Compressor - Replacement Of No.3 Bearing Seal Ring Holder.
- (2) IAE V2500 Service Bulletin V2500-ENG-72-0132 Engine - LP Compressor - Removal Of Stage 6 Buffer Air System.
- (3) IAE V2500 Service Bulletin V2500-ENG-72-0478 Engine - Replace Number 3 Bearing Carbon Seal Assembly.
- (4) IAE V2500 Service Bulletin V2500-ENG-72-0568 Engine - Seal Assembly, No. 3 Bearing - Replacement Of Carbon Seal for Improved Durability.
- (5) V2500 Engine Illustrated Parts Catalogs (S-V2500-1IA, S-V2500-2IA, S-V2500-2IB, S-V2500-3IA, S-V2500-3IB, S-V2500-5IA, S-V2500-5IB, S-V2500-6IA, S-V2500-6IB, S-V2500-7IA and S-V2500-7IB), Chapter/Section 72-32-25.
- (6) V2500 Engine Illustrated Parts Catalogs (S-V2500-2SA, S-V2500-2SB, S-V2500-5SA, S-V2500-5SB, S-V2500-6SA, S-V2500-6SB, S-V2500-7SA, and S-V2500-7SB, Chapter/Section 72-32-25.
- (7) V2500 Engine Manual (E-V2500-1IA), Chapter/Section 72-32-25.
- (8) V2500 Engine Manual (E-V2500-3IA), Chapter/Section 72-32-25.
- (9) V2500 Standard Practices/Processes Manual (E-V2500-1IA), Chapter/Section 70-09-00.
- (10) V2500 Standard Practices/Processes Manual (E-V2500-3IA), Chapter/Section 70-09-00.
- (11) Internal Reference No. - EC 08VA107.
- (12) ATA Locator - 72-32-25.

L. Other Publications Affected

- (1) V2500 Engine Illustrated Parts Catalogs (S-V2500-1IA, S-V2500-1IB, S-V2500-2IA, S-V2500-2IB, S-V2500-3IA, S-V2500-3IB, S-V2500-5IA, and S-V2500-5IB, S-V2500-6IA, S-V2500-6IB, S-V2500-7IA, and S-V2500-7IB), Chapter 72-32-25.

- (2) V2500 Engine Illustrated Parts Catalogs (S-V2500-2SA, S-V2500-2SB, S-V2500-5SA, S-V2500-5SB, S-V2500-6SA, S-V2500-6SB, S-V2500-7SA, and S-V2500-7SB), Chapter 72-32-25.
- (3) V2500 Engine Manuals (E-V2500-1IA and E-V2500-3IA), Chapter/Section 72-32-25 Assembly, Cleaning 00, Cleaning 01, Inspection/Check 00, Inspection/Check 01, Repair 006, Repair 007, Repair 008, Repair 009, Repair 010, Repair 026, Repair 027, and Repair 028.

M. Interchangeability of Parts

Old and new parts are interchangeable only in full sets.

N. Information in the Appendix

Alternate Accomplishment Instructions (No)

Progression Charts (Yes)

Added Data (Yes)

Revision to Table of Limits (No)

Inspection Procedures (No)

2. Material Information

A. Material – Price and Availability:

Modification kit is not required.

For Price and Availability of spares refer to the supplement of this Service Bulletin.

B. Industry Support Program:

Not applicable.

C. The material data that follows is for each engine:

72-32-25

For V2500-A1, V2522-A5, V2524-A5, V2527-A5, V2527E-A5, V2527M-A5, V2530-A5, V2533-A5, V2525-D5, V2528-D5, V2522-A5 (SelectOne™), V2524-A5 (SelectOne™), V2527-A5 (SelectOne™), V2527E-A5 (SelectOne™), V2527M-A5 (SelectOne™) V2530-A5 (SelectOne™), V2533-A5 (SelectOne™) Engines:

FIGURE ITEM NO.	NEW PART NO.	QTY	PART TITLE	MAT	OLD PART NO.	INSTR DISP
02-100	2A4287	1	Seal Assembly, No. 3 Bearing	–	2A2370	(1)(F)(I)
02-150	2A4286	1	.Face Seal Assembly, No.3 Bearing	–	2A1786	(1)(A)(D)(L)

D. Instructions/Disposition Code Statements:

Parts Modification Instructions

(1) The new part can be obtained by modification of the old part as specified in the Accomplishment Instructions.

Spare Parts Availability

(A) The new part is available.

(D) The new part is a detail of the assembly.

(F) The new part will be available on a Full Manufacturing Lead time quote basis only.

(L) The old part will be supplied until the supply is fully used.

Cleaning, Inspection and Repair Information

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(I) The cleaning, inspection and repair requirements are the same for the old and new part. The applicable engine manuals will be revised.

E. Vendor Services

Please contact IAE for a list of qualified vendors to perform this modification.

F. Tooling-Price and Availability

Special tools are not required to accomplish this Service Bulletin.

G. Reidentified Parts

Reidentified Parts Data

New PN	Keyword	Old PN
2A4287	NO. 3 BEARING SEAL ASSEMBLY	2A2370
2A4286	NO. 3 BEARING FACE SEAL ASSEMBLY	2A1786

H. Other Material Information Data

Not applicable.

3. Accomplishment Instructions

- (1) Replace No. 3 Bearing Seal Assembly, PN 2A2370 with PN 2A4287, refer to Figure 1 for the location of the assembly.

You can also modify your No. 3 bearing seal assembly by one of the procedures that follow:

(a) Modification by Replacement of the No. 3 Bearing Face Seal Assembly

- (i) Replace No. 3 Bearing Face Seal Assembly, PN 2A1786 with PN 2A4286. See Figure 1 for the location of the assembly.
- (ii) Assemble the No. 3 bearing seal assembly by the procedure in Reference 7 or 8, Engine Manual, Task 72-32-25-440-001.
- (iii) Identify the modified No. 3 bearing seal assembly as specified in the list that follows. Use the procedure in Reference 9 or 10, Standard Practices Manual, Task 70-09-00-400-501. Use the vibration peen method. Mark the new part number near the old part number.

Identification of the No. 3 Bearing Seal Assembly

New PN	Old PN
2A4287	2A2370

(b) Modification by Replacement of the No. 3 Bearing Face Seal

- (i) Send your No. 3 Bearing Face Seal Assembly, PN 2A1786 to an approved source, listed in the Vendor Services Table, for modification.
- (ii) Specify that the No. 3 bearing face seal assembly is being sent for modification per Service Bulletin No. 72-0622.

NOTE: The vendor will replace the detail No. 3 bearing face seal, identify the modified No. 3 bearing face seal assembly as PN 2A4286, and return the assembly to you.

- (iii) Assemble the No. 3 bearing seal assembly by the procedure in Reference 7 or 8, Engine Manual, Task 72-32-25-440-001.

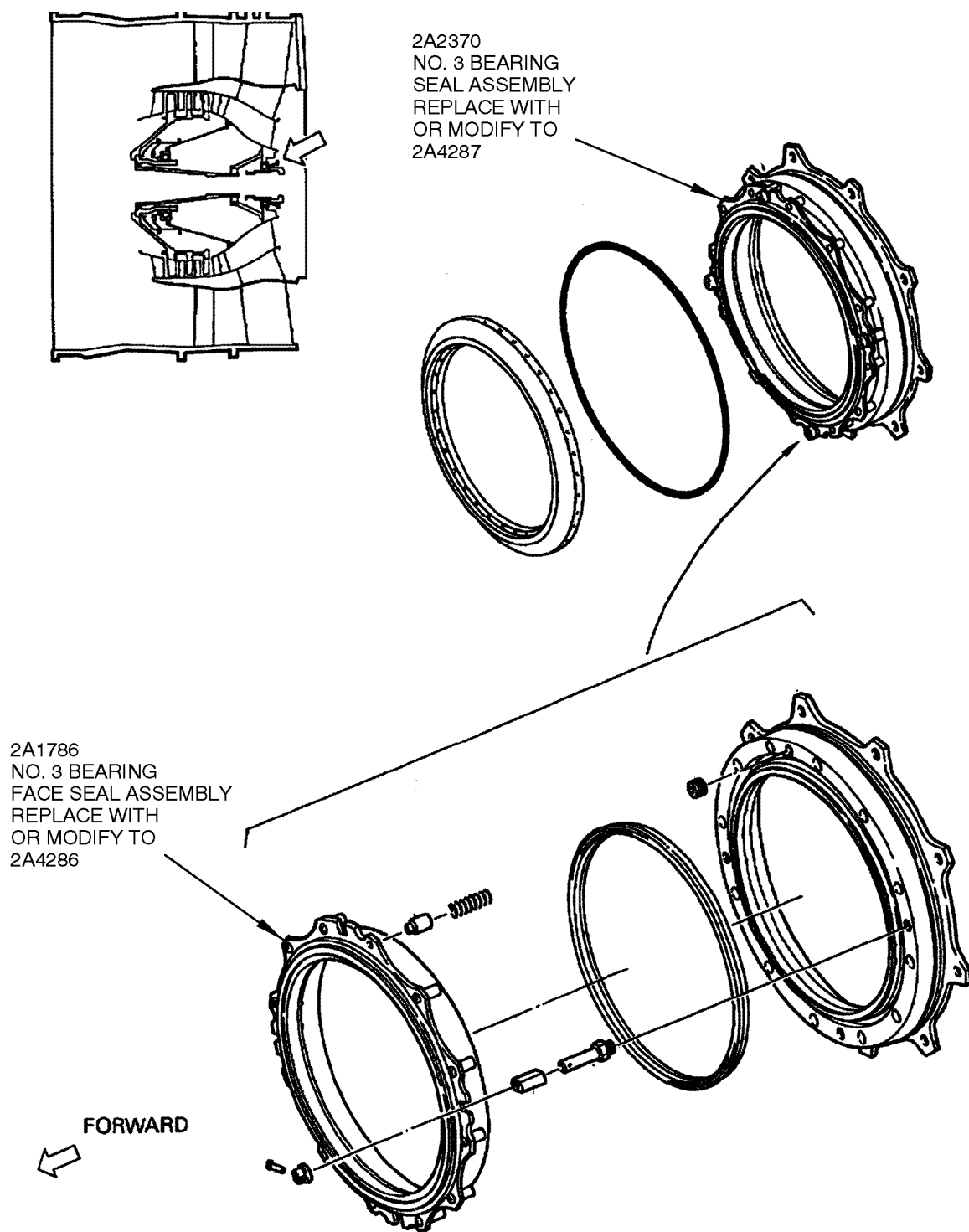
- (iv) Identify the modified No. 3 bearing seal assembly as specified in the list that follows. Use the procedure in Reference 9 or 10, Standard Practices Manual, Task 70-09-00-400-501. Use the vibration peen method. Mark the new part number near the old part number.

Identification of the No. 3 Bearing Seal Assembly

New PN	Old PN
2A4287	2A2370

(2) Recording Instructions

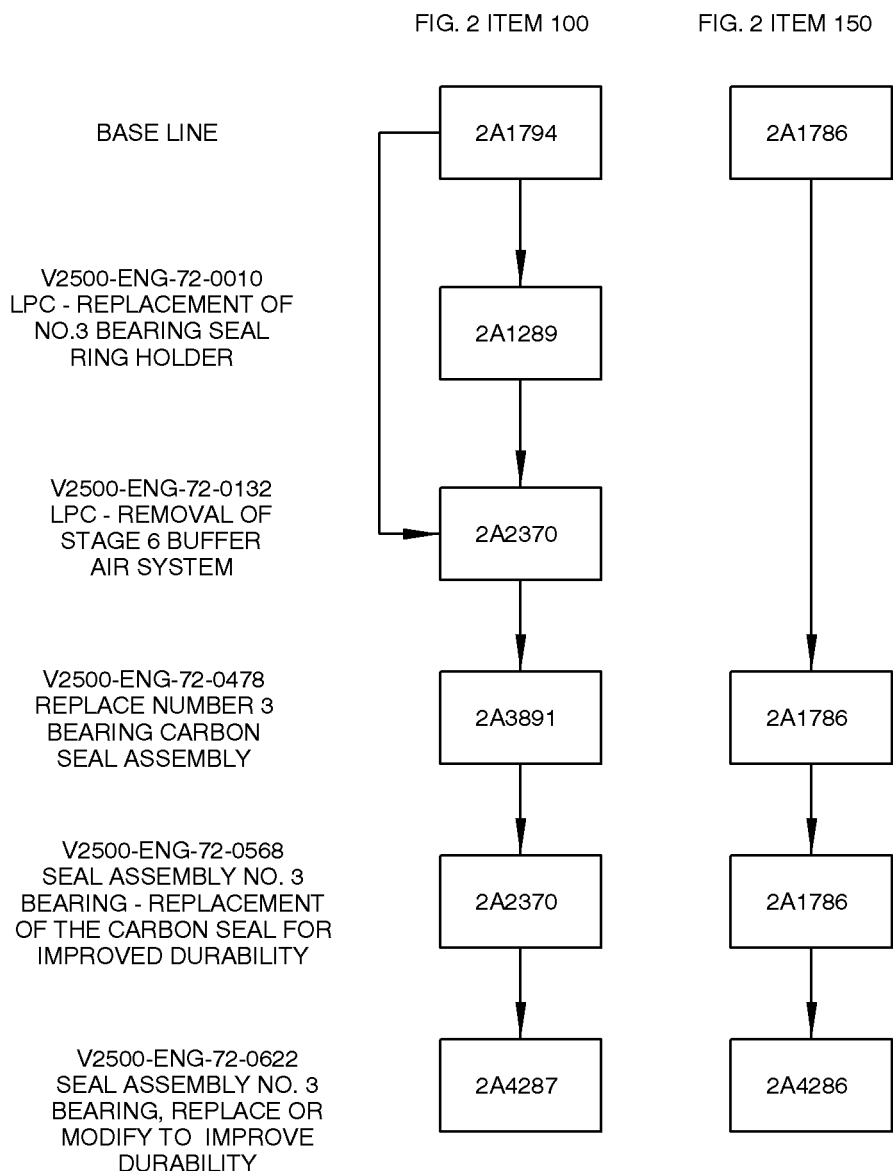
- (a) A record of accomplishment is required.



Location of the No. 3 Bearing Seal Assembly 72-32-25
Figure 1

APPENDIX 1Added DataParts Progression to show the changed part in relation to other parts

PART NUMBER CHANGE



Family Tree – No. 3 Bearing Seal Assembly Ref. Catalog Sequence 72-32-25 Figure.
02 Item 100 and No. 3 Bearing Face Seal Assembly Ref. Catalog Sequence 72-32-25
Figure 02 Item 150 CHART A

APPENDIX 2Added Data

Internal Reference Information

Revision No.	Reference Document	Origination
Original	EC08VA107	JSK/JDH

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ENGINE – SEAL ASSEMBLY, NO. 3 BEARING – REPLACE OR MODIFY TO IMPROVE DURABILITYSUPPLEMENT – PRICES AND AVAILABILITY1. Modification Kit:

A. Not applicable.

2. Material Cost

NOTE: The prices (if shown) are for estimating purposes only and as such are given in good faith, without commercial liability for advanced planning purposes only. Refer to IAE Spares and/or current price catalog for current prices.

A. If this Service Bulletin is incorporated by purchase of PN 2A4286, the estimated price of incorporation is \$9,784.00.

B. There is no kit provided to do this Service Bulletin.

3. New Production Parts:

New Production Part Number	Description	Unit Price US Dollars	Part availability
2A4287	No. 3 BEARING SEAL ASSEMBLY	Quote	Part is available on a Full Manufactory lead time quote basis only.
2A4286	No. 3 BEARING FACE SEAL ASSEMBLY	9,784.00	Part is available.



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Please use this form to give feedback on the quality of this Service Bulletin. The input you provide will be used to analyse areas of improvement and to take action to further improve on the quality of our Service Bulletins.

We thank you for the time you spent in completing this form.

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- Quality rating of the Accomplishment Instructions	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
- Quality rating of the Illustration	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
- Is this Service Bulletin easy to understand ?	<input type="checkbox"/> Yes		<input type="checkbox"/> No		

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Planning Information Section:		Material Information Section:	Accomplishment Instruction Section:
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<input type="checkbox"/> 1.D.	<input type="checkbox"/> 1.L.	<input type="checkbox"/> 2.D.	<input type="checkbox"/> Inspection
<input type="checkbox"/> 1.E.	<input type="checkbox"/> 1.M.	<input type="checkbox"/> 2.E.	<input type="checkbox"/> Test
<input type="checkbox"/> 1.F.	<input type="checkbox"/> 1.N.	<input type="checkbox"/> 2.F.	<input type="checkbox"/> Close the Access
<input type="checkbox"/> 1.G.	<input type="checkbox"/> 1.O.		<input type="checkbox"/> Log Book Entry
<input type="checkbox"/> 1.H.	<input type="checkbox"/> 1.P.		

Explanatory notes:

Operator:	Overhaul Site:
Name/Title:	Date:

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