V2500

International Aero Engines

RR-DERBY

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DATER May. 1/03

V2500-A1/A5/D5 SERIES PROPULSION SYSTEM INFORMATION SERVICE BULLETIN

This document transmits Revision 2 to Service Bulletin EV2500-70-0822

Document History

Service Bulletin Revision Status

Supplement Revision Status

Initial Issue 0ct.15/02 Revision 1 Jan.31/03

Bulletin Revision 2

Remove Incorporate Reason for change All pages of the Pages 1 to 7 of the Service Bulletin Service Bulletin Effectivity.

Printed in Great Britain

LIST OF EFFECTIVE PAGES

The effective pages to this Service Bulletin following incorporation of Revision 2 are as follows:

<u>Page</u>		Revision Number	Revision Date
Bul	letin		
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INFORMATION - ENGINE - PROVIDE OVERSIZED PISTON SEAL RING FOR NO. 3 BEARING HOUSING

1. Planning Information

A. Effectivity

Printed in Great Britain

R

R

R

(1) Airbus A319

Engine Models Applicable

V2522-A5, V2524-A5, V2527M-A5 Engines Serial No.V10001 thru V11538

(2) Airbus A320

Engine Models Applicable

V2500-A1 Engines Serial No.V0001 thru V0361

V2527-A5, V2527E-A5 Engines Serial No.V10001 thru V11538

(3) Airbus A321

Engine Models Applicable

V2530-A5, V2533-A5 Engines Serial No.V10001 thru V11538

(4) Boeing MD-90

Engine Models Applicable

V2525-D5, V2528-D5 Engines Serial No.V20001 thru V20285

B. Concurrent Requirements

There are no concurrent requirements.

C. Reason

- (1) Problem: The No. 3 bearing damper housing repair authorizes the machining of the piston ring groove to an oversize thickness to eliminate wear and to refurbish the sealing surfaces. However, oversize piston rings are not available and thus the current repair cannot be performed.
- (2) Background: There was not an engineering change written to introduce the oversized piston rings to the Engine Bill of Material and to Engine Manual.
- (3) Objective: Design oversized piston rings to accommodate the approved repair by providing P10, P20, P30 oversizes.

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(4) Substantiation: Substantiation is demonstrated by similarity to other Pratt and Whitney Engines.

(5) Effects of Bulletin on:

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.

D. <u>Description</u>

Provide a new Seal Ring with P10, P20, and P30 oversizes.

E. Compliance

Category 7

Accomplish when supply of superseded parts has been depleted.

F. Approval Data

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 model(s) given.

The `compliance' statement and the procedures described in this Service Bulletin have been shown to comply with the applicable Federal Aviation Regulations and are FAA-APPROVED for the Engine Model listed.

G. Manpower

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

Venue Estimated Manhours

Venue	Estimated Manhours		
In Service	Not Applicable		
At Overhaul	Not Applicable		

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H. Weight and Balance

Weight Change	None		
Moment	No Effect		
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

- 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-V2500-71B), Chapter/Section 72-32-21 Figure 01 Items 010, 011, 012, and 013.
- 2. V2500 Engine Manual (E-V2500-1IA), Chapter/Section 72-32-21.
- V2500 Engine Manual (E-V2500-3IA), Chapter/Section 72-32-21.
- R 4. Internal Reference Nos. 98VCO19A, 98VCO19A-01, 98VCO19A-03, 98VCO19A-04.
 - 5. ATA Locator 72-32-00.

L. Other Publications Affected

- 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 72-32-21 Figure 01 Items 010, 011, 012, and 013.
- 2. V2500 Engine Manuals (E-V2500-1IA and E-V2500-3IA), Chapter/Section 72-32-00 Cleaning, Inspection and Repair, to add the new part.

M. Interchangeability of Parts

Old and new parts are directly interchangeable.

N. <u>Information in the Appendix</u>

Alternate Accomplishment Instructions (No)

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Progression Charts (No)

Added Data (No)

Revision to Table of Limits (No)

Inspection Procedures (No)

O. General Information

The Material Information section of this Service Bulletin provides the latest information concerning the availability of the affected parts.

For additional information see EM 72-32-21-300-005 No. 3 Bearing Piston Ring Groove Repair, Repair 005 (VRS3007).



2. Material Information

A. Material - Price and Availability

- 1. The estimated price of new material to do this Service Bulletin using new replacement parts is \$352.00.
- 2. There is no kit provided to do this Service Bulletin.
- Part availability information is provided in material data Instructions Disposition.

B. Industry Support Program

Not Applicable.

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

<u>NOTE</u>: The prices 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.

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

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New PN	Qty	Estimate of	Keyword	Old PN	Instructions
		Unit Price (\$)		(ATA/Figure/Item)	- Disposition
2A3803	2	176.00	.Seal, Ring	2A0425	(2)(A)
				(72-32-21-01-010)	(N)(I)
			OR		
2A3803P10	2	176.00	.Seal, Ring	(72-32-21-01-011)	(2)(A)
			OR		
2A3803P20	2	176.00	.Seal, Ring	(72–32–21–01–012)	(2)(A)
			OR		
2A3803P30	2	176.00	.Seal, Ring	(72-32-21-01-013)	(2)(A)

D. <u>Instructions/Disposition Code Statements:</u>

Parts Modification Conditions

(2) The new part is a replacement part only, and cannot be obtained by modification of the old part.

Spare Parts Availability



- (A) The new part will be available approximately March, 2003.
- (N) The old part is not available.

Cleaning, Inspection and Repair Information

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

E. Tooling - Price and Availability

Special tools are not required to accomplish this Service Bulletin.

F. Reidentified Parts

Not Applicable.

G. Other Material Information Data

Not Applicable.



3. <u>Accomplishment Instructions</u>

- A. None
 - (1) Recording Instructions not required.

