

International Aero Engines

RR-DERBY

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DATER Feb. 1/02

V2500-A5/D5 PROPULSION SYSTEMS SERVICE BULLETIN

This document transmits Revision 1 to Service Bulletin EV2500-72-0328

Document History

Service Bulletin Revision Status Initial Issue Feb.15/99 Supplement Revision Status

Bulletin Revision 1

Remove All pages of the Service Bulletin All pages of Appendix 1 Incorporate
Pages 1 to 7 of the
Service Bulletin
Page 1 and 2 of
Appendix 1

Reason for change To revise Effectivity and Supplemental Information. To revise Effectivity and Supplemental Information.

LIST OF EFFECTIVE PAGES

The effective pages to this Service Bulletin following incorporation of Revision 1 are as follows:

<u>Page</u>		Revision Number	Revision Date
Bulle	tin		
R 1		1	Feb.1/02
R 2		1	Feb.1/02
R 3		1	Feb.1/02
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Appen	dix 1		
R 1		1	Feb.1/02
R 2		1	Feb.1/02

ENGINE - HIGH PRESSURE TURBINE ROTOR AND STATOR ASSEMBLY - INTRODUCE A NEW STAGE 2 HIGH PRESSURE TURBINE BLADE RETAINING PLATE

1. Planning Information

A. Effectivity

Printed in Great Britain

(1) Airbus A319

- R V2522-A5, V2524-A5, V2527M-A5 Engines Serial No. V10001 thru V10502, R V10504 thru V10514, V10516, V10518, V10519, V10521, V10523 thru V10528, V10530 and V10532.
 - (2) Airbus A320
- R V2527-A5, V2527E-A5 Engines Serial No. V10001 thru V10502, V10504 thru R V10514, V10516, V10518, V10519, V10521, V10523 thru V10528, V10530 and R V10532.
 - (3) Airbus A321
- R V2530-A5, V2533-A5 Engines Serial No. V10001 thru V11236 and including R V11238, V11240, V11242, V11244, V11246, V11248, V11250, V11252, V11254 and R V11256.
 - (4) Boeing Longbeach MD-90
- R V2525-D5, V2528-D5 Engine Serial No. V20001 thru V20285.
 - (5) ATA locator 72-45-00

B. Concurrent Requirements

There are no concurrent requirements.

C. Reason

- (1) Condition: High operational stresses in the HP Turbine Stage 2 Blade Retaining Plate limit the potential life of the part.
- (2) Background: Not applicable.
- (3) Objective: The new parts will conform with a customer request for increased life.
- (4) Substantiation: Redesign the HP Turbine Stage 2 Blade Retaining Plate to reduce operational stresses.

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(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

Chapter 5 lives for the Second Stage HPT Blade Retaining Plate is increased from 15,000 to 20,000 cycles.

D. <u>Description</u>

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- This Service Bulletin introduces a new Stage 2 HPT Sideplate.
- For effect on declared life, see Reference 3 or 4, Engine Manual, Chapter/Section 5-10-01.

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.

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G. Manpower

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

Venue	Estimated Manhours		
Tu Osmodas I	Net Applicable		
In Service	Not Applicable		
At Overhaul	Not Applicable		

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

- IAE V2500 Service Bulletin V2500-ENG-72-0327 (Engine HP Turbine Rotor And Stator Assembly - Introduce New Rotating Parts With Potential For Increased Cyclic Life).
- 2. V2500 Engine Illustrated Parts Catalogs (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 72-45-33.
- 3. V2500 Engine Manual (E-V2500-1IA), Chapter/Section 72-45-30, Assembly.
- 4. V2500 Engine Manual (E-V2500-3IA), Chapter/Section 72-45-30, Assembly.

L. Other Publications Affected

- V2500 Engine Illustrated Parts Catalogs (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 72-45-33.
- 2. V2500 Engine Manuals (E-V2500-1IA and E-V2500-3IA), Chapter/Section 72-45-30 Cleaning, Inspection and Repair, to add the new part.

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M. <u>Interchangeability of Parts</u>

Old and new parts are directly interchangeable.

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

Alternate Accomplishment Instructions (No)

Progression Charts (Yes)

Added Data (No)

Revision to Table of Limits (No)

Inspection Procedures (No)



2. Material Information

- A. Material Price and Availability
- 1. Part prices were not available at the time of Service Bulletin publication. Contact IAE's Spare Parts Sales Department for firm quotations.
- 2. There is no kit provided to do this Service Bulletin.
- 3. 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 V2522-A5, V2524-A5, V2527-A5, V2527E-A5, V2527M-A5, V2530-A5, V2533-A5, V2525-D5, V2528-D5 Engines:

New PN		Estimate of Unit Price (\$)		Old PN	Instructions-Dis
2A3437	1	*	.Plate, Retaining, HPT, Stage 2	2A3426 (72-45-33-01-020)	(S1)(A)(B)

- D. <u>Instructions/Disposition Code Statements:</u>
 - (S1) Old and New Parts are freely and fully interchangeable.
 - (A) The new part is available.
 - (B) The old part will no longer be supplied.
- 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.

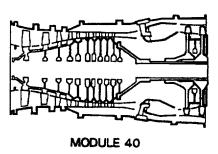
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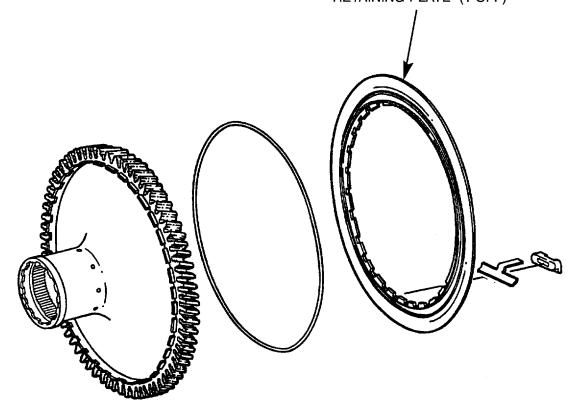
3. Accomplishment Instructions

- (1) Install the 2A3437 Stage 2 HPT Retaining Plate (1 off) by the procedure specified in Reference (3) or (4), Engine Manual, Chapter/Section 72-45-30, Assembly. See Figure 1.
- (2) Recording Instructions
 - (a) A record of accomplishment is required.

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INSTALL THE 2A3437 STAGE 2 HIGH PRESSURE TURBINE BLADE RETAINING PLATE (1 OFF)



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Location of the Stage 2 High Pressure Turbine Blade Retaining Plate Figure 1

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APPENDIX 1

Parts Progression

R Parts progression to show the changed part in relation to other parts

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Parts Progression To Show the Changed Part in Relation to Other Parts

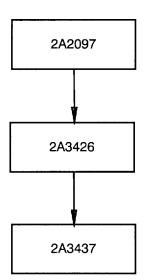
MODIFICATIONS

PART NUMBER CHANGE

BASE LINE

V2500-ENG-72-0327 ENGINE - HP TURBINE ROTOR AND STATOR ASSEMBLY - INTRODUCE NEW ROTATING PARTS WITH POTENTIAL FOR INCREASED CYCLIC LIFE

V2500-ENG-72-0328 ENGINE - HIGH PRESSURE TURBINE ROTOR AND STATOR ASSEMBLY - INTRODUCE NEW STAGE 2 HIGH PRESSURE TURBINE BLADE RETAINING PLATE



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Family Tree - Stage 2 High Pressure Turbine Sideplate Ref. Catalog Sequence No. 72-45-33. Fig. 01 Item 020
Figure 2

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