

International Aero Engines

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DATE ~~R~~ Jun.30/03

V2500-A5 SERIES PROPULSION SYSTEM SERVICE BULLETIN

Printed in Great Britain

This document transmits Revision 1 to Service Bulletin EV2500-72-0267

Document History

Service Bulletin Revision Status
Initial Issue Mar.18/97

Supplement Revision Status

Bulletin Revision 1

Remove
All pages of the
Service Bulletin

Incorporate
Pages 1 to 7 of the
Service Bulletin

Reason for change
To announce that the intent
of this SB is superseded by
SB ENG-72-0220 Revision 4.
For record purposes a copy
of this SB should be
retained on file.

All pages of
Appendix 1

Page 1 and 2 of
Appendix 1

To announce that the intent
of this SB is superseded by
SB ENG-72-0220 Revision 4.
For record purposes a copy
of this SB should be
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Transmittal - Page 1 of 2

CHECK THAT ALL PREVIOUS TRANSMITTALS HAVE BEEN INCORPORATED

If any have not been received please advise Publication Services, Rolls-Royce plc, Derby, England

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LIST OF EFFECTIVE PAGES

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

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Appendix 1

R	1	1	Jun.30/03
R	2	1	Jun.30/03

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ENGINE – HP TURBINE ROTOR AND STATOR ASSEMBLY – INTRODUCE NEW SECOND STAGE TURBINE
BLADES WITH MORE DURABLE TIPS AND IMPROVED REPAIRABILITY

1. Planning Information

A. Effectivity

NOTE: All data contained in this Service Bulletin has been updated and incorporated into Service Bulletin V2500-ENG-72-0220 Revision 4 dated 30 June 2003.

(1) Airbus A321

Engine Models Applicable

V2533-A5 Engine Serial Nos. V10198 thru V10210

B. Concurrent Requirements

There are no concurrent requirements.

The intent of this Service Bulletin has been superseded by the instructions provided in Service Bulletin V2500-ENG-72-0220 Revision 4 dated 30 June 2003.

C. Reason

(1) Condition: Tip wear has been exhibited on second stage turbine blades.

(2) Background: Similar wear has been discovered on other stages and other engine models.

(3) Objective: Providing cubic boron nitride tips (PWA 293-2) for the second stage turbine blades to decrease wear and improve repairability.

(4) Substantiation: Endurance and performance testing was completed on other engine models.

(5) Effects of Bulletin on:

Removal/Installation: Not affected.

Disassembly/Assembly: Not affected.

Cleaning: Not affected.

Inspection/Check: Not affected.

Repair: Not affected.

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Testing: Not affected.

(6) Supplemental Information

None.

D. Description

Replace the Stage 2 HPT Blades with new blades that have cubic boron nitride tips.

E. Compliance

Category 8

Accomplish based upon experience with the prior configuration.

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
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

1. V2500 Engine Illustrated Parts Catalogs (S-V2500-5IA, S-V2500-5IB), Chapter/Section 72-45-32.
2. V2500 Engine Manual (E-V2500-1IA), Chapter/Section 72-45-30 and 72-45-32.
3. IAE V2500 Service Bulletin V2500-ENG-72-0220 (Engine - HP Turbine Rotor and Stator Assembly - Introduce New First and Second Stage Turbine Blades with More Durable Tips and Improved Repairability).
4. Internal Reference No. - 93VA039F.
5. ATA Locator - 72-45-00.

L. Other Publications Affected

1. V2500 Engine Illustrated Parts Catalogs (S-V2500-5IA, S-V2500-5IB), Chapter/Section 72-45-32 to add the new part.
2. V2500 Engine Manuals (E-V2500-1IA), Chapter/Section 72-45-32 Cleaning, Inspection and Repair, to add the new part.

M. Interchangeability of Parts

Old and new parts are directly interchangeable.

N. Information in the Appendix

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. There is no new material cost to do this Service Bulletin when the part modification procedure is used.
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.

NOTE: 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.

V2533-A5 Engines:

New PN	Qty	Estimate of Unit Price (\$)	Keyword	Old PN (ATA/Figure/Item)	Insts – Disp
2A8702	72	3027.00	Blade Assy. – Stage 2, HPT	2A2702 (72-45-32-01-010)	(S1)(A)(B)

D. Instructions/Disposition Code Statements:

Parts Modification Conditions

(S1) Old and New Parts are freely and fully interchangeable.

Spare Parts Availability

(A) The new part is available.

(B) The old part will continue to be supplied until stock is exhausted.

E. Tooling – Price and Availability

Special tools are not required to accomplish this Service Bulletin.

F. Reidentified Parts

Not Applicable.

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Reidentified Parts Data

New PN	Keyword	Old PN
2A8702	Blade Assy. - Stage 2, HPT	2A2702

G. Other Material Information Data

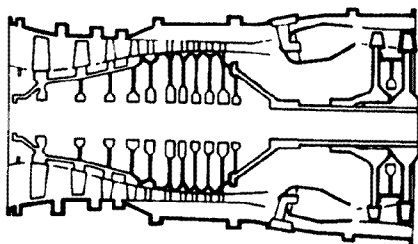
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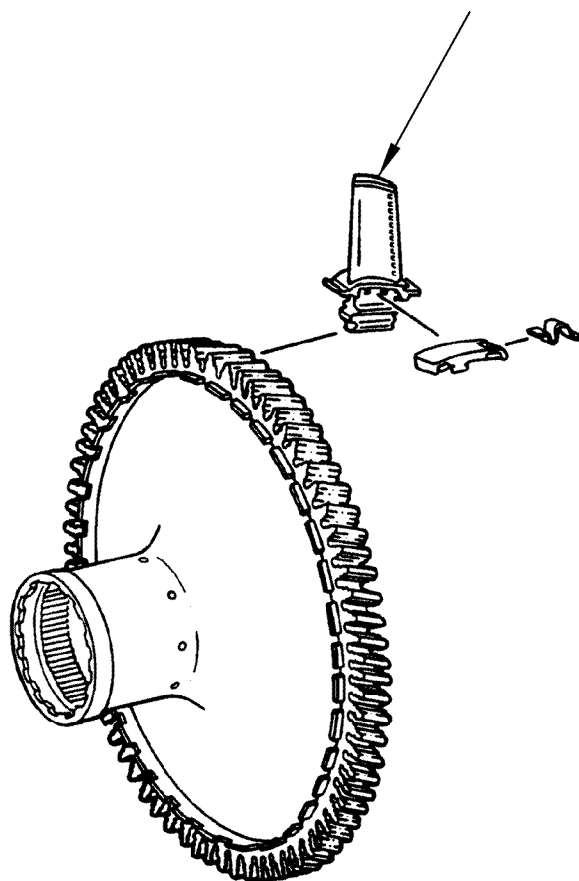
3. Accomplishment Instructions

- (1) Replace the Stage 2 HPT Blades (72 off) by the approved procedure given in Reference (2), Chapter/Section 72-45-30, Assembly-01 and Figure 1.
- (2) Recording Instructions
 - (a) A record of accomplishment is required.



MODULE 40

REPLACE THE STAGE 2 HPT
BLADE ASSEMBLY
PN 2A2702 WITH PN 2A8702



Location of the Stage 2 HPT Blade Assembly
Figure 1

pw0b512001



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SERVICE BULLETIN

APPENDIX 1

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

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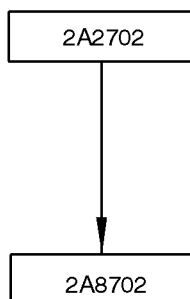
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MODIFICATIONS

PART NUMBER CHANGE

BASE LINE

V2500-ENG-
72-0267



pw0b512002

Family Tree - Stage 2 HPT Blade Assembly (V2533-A5) Ref. Catalogue Sequence No.
72-45-32. Fig.01 Item 010
Figure 2

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