



SERVICE BULLETIN

ENGINE - HP TURBINE ROTOR AND STATOR ASSEMBLY - PROVIDE NEW HPT BAND SEGMENT ASSEMBLIES
AND NEW HPT DUCT SUPPORT ASSEMBLIES - CATEGORY CODE 8 - MOD.ENG-72-0124

1. Planning InformationA. Effectivity

- (1) Aircraft: Airbus A320
- (2) Engine: V2500-A1 Engines before Serial No.V0267*

*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.

This Service Bulletin must be incorporated before or at the same time as V2500-ENG-72-0122.

B. Reason

(1) Condition

The new parts specified in this Service Bulletin will decrease the flow of cooling air to the Second Stage HPT Vane Clusters and Outer Air Seals. This modification will result in improved engine performance.

(2) Background

Not considered necessary.

(3) Objective

To provide increased engine operating efficiency by reducing required cooling air flow to the second stage HPT Vane Clusters and Outer Air Seals.

(4) Substantiation

Satisfactory engine testing.

(5) Effects of Bulletin on Workshop Procedures:

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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.

C. Description

(1) The changes introduced by this Service Bulletin are as follows:

- (a) A modification of the Stage 2 HPT Duct Support Assembly to incorporate headless shoulder pins.
- (b) Replacement of the existing HPT Duct Support Assembly with one that has headless shoulder pins with a clearance cut on each, to accept the new band segments.
- (c) Replacement of the Stage 2 HPT Band Segment Assemblies with new ones which do not have antirotation slots.

D. Approval

The Part Number Changes and/or part modifications 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 8

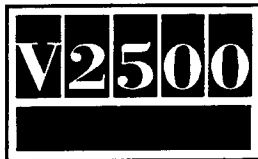
Accomplish based upon experience with the prior configuration.

F. Manpower

Estimated Manhours to incorporate the full intent of this Bulletin:

Venue	Estimated Manhours
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- (1) In Service Not applicable
- (2) At Overhaul (Note: The parts affected by this Service Bulletin are accessible at overhaul.)



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- (a) To accomplish the modification and identification of the Stage 2 HPT

Duct Support Assembly	1 Hours. 10 Minutes
TOTAL:	1 Hours, 10 Minutes

G. Material - Price and Availability

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

H. Tooling - Price and Availability

Tool.	Qty.	Description	Function	Avail.
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New tools required:

IAE3P16274	1	Pin Driver	Install Pins	1)
IAE3P6275	1	Support Block	Support Stage Duct Support Assemblies	1)

- 1) Indicates the Tool Design Aperture Cards are currently available from IAE.

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)

J. Electrical Load Data

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

K. References

- (1) Internal Reference No.

88VA347D

- (2) Other References

IAE V2500 Service Bulletins:

V2500-ENG-72-0122 - Engine H.P. TurbineRotor and Stator Assembly -
Provide New Stage 2 HPT Vane Assemblies, Stage 2 HPT Air Sealing Ring
Segment Assemblies and Stage 2 HPT Seals

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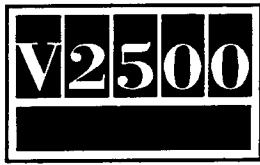
V2500 Engine Illustrated Parts Catalog.

V2500 Standard Practices Manual.

V2500 Engine Manual.

L. Other Publications Affected

- (1) The V2500 Engine Illustrated Parts Catalog, Chapter/Section 72-45-25, Figure 1 and 72-45-26, Figure 1, to add the new parts.
- (2) The V2500 Engine Manual, Chapter/Section 72-45-25 and 72-45-26, Cleaning, to add the new parts.
- (3) The V2500 Engine Manual, Chapter/Section 72-45-25 and 72-45-26, Inspection, to add the new parts.
- (4) The V2500 Engine Manual, Chapter/Section 72-45-25 and 72-45-26, Repair, to add the new parts.
- (5) The V2500 Engine Manual, Chapter/Section 72-45-25 and 72-45-26, Disassembly to add the new parts.
- (6) The V2500 Engine Manual, Chapter/Section 72-45-25 and 72-45-26, Assembly to add the new parts.



2. Accomplishment Instructions

A. Rework Instructions

- (1) Do a modification to PN 2A0189 Stage 2 HPT Duct Support Assembly. (See Reference (2), Chapter/Section 72-45-26, Figure/Item No. 01-020) and identify as follows:

Procedure	Supplementary Information	
(a) Remove the old pin from the Support Assembly with a suitable drift.	Refer to Figures 1 and 3.	
(b) Select a new 2A1268 pin, of the applicable class, to get a 0.0005-0.0015 in. (0.013-0.038) tight fit.	Refer to Figure 3.	
(c) Drift the pin into the Support Assembly.	Refer to Figure 3.	
(1) Use the IAE3P16247 Pin Driver and the IAE3P16275 Support Block.		
(2) Keep the dimension and clearance envelope specified.		
(d) Do the procedure again until all of the Support Assemblies are done.		
(e) Mark the new part number adjacent to the old part number. Use the vibration peen method.	Old Part No. 2A0189	New Part No. 2A2270
	See Reference (3), Control No./ TASK No. 70-09-00-400-501.	

B. Assembly Instructions

- (1) Install the 2A2270 Stage 2 HPT Duct Support Assembly (19 off) by the procedure given in Reference (4), Chapter/Section 72-45-20, Assembly-01. Refer to Figure 1.
- (2) Install the 2A2269-01 Stage 2 HPT Band Segment Assemblies (1 off) and the 2A2271-01 Stage 2 HPT Band Segment Assemblies (2 off). Use the procedure given in Reference (4), Chapter/Section 72-45-20, Assembly-01. Refer to Figure 2.

C. Recording Instructions

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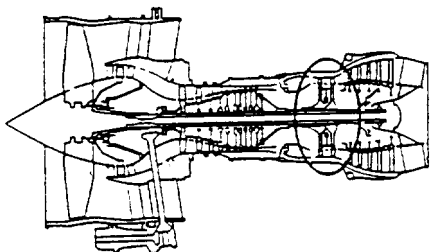
- (1) A record of accomplishment is necessary.

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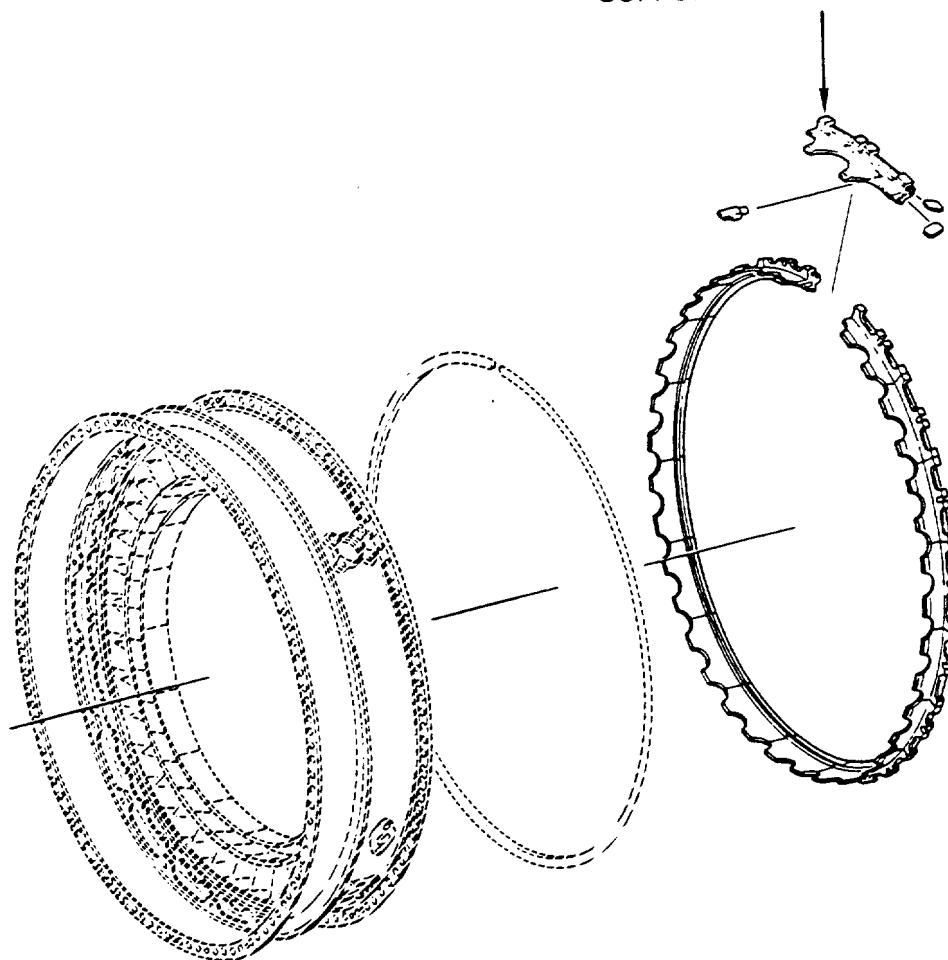
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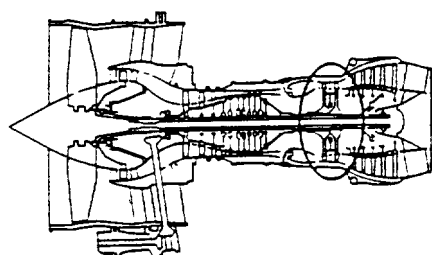
REPLACE THE 2A0189
STAGE 2 HPT DUCT SUPPORT
ASSEMBLIES WITH THE 2A2270
STAGE 2 HPT DUCT
SUPPORT ASSEMBLIES (19 off)



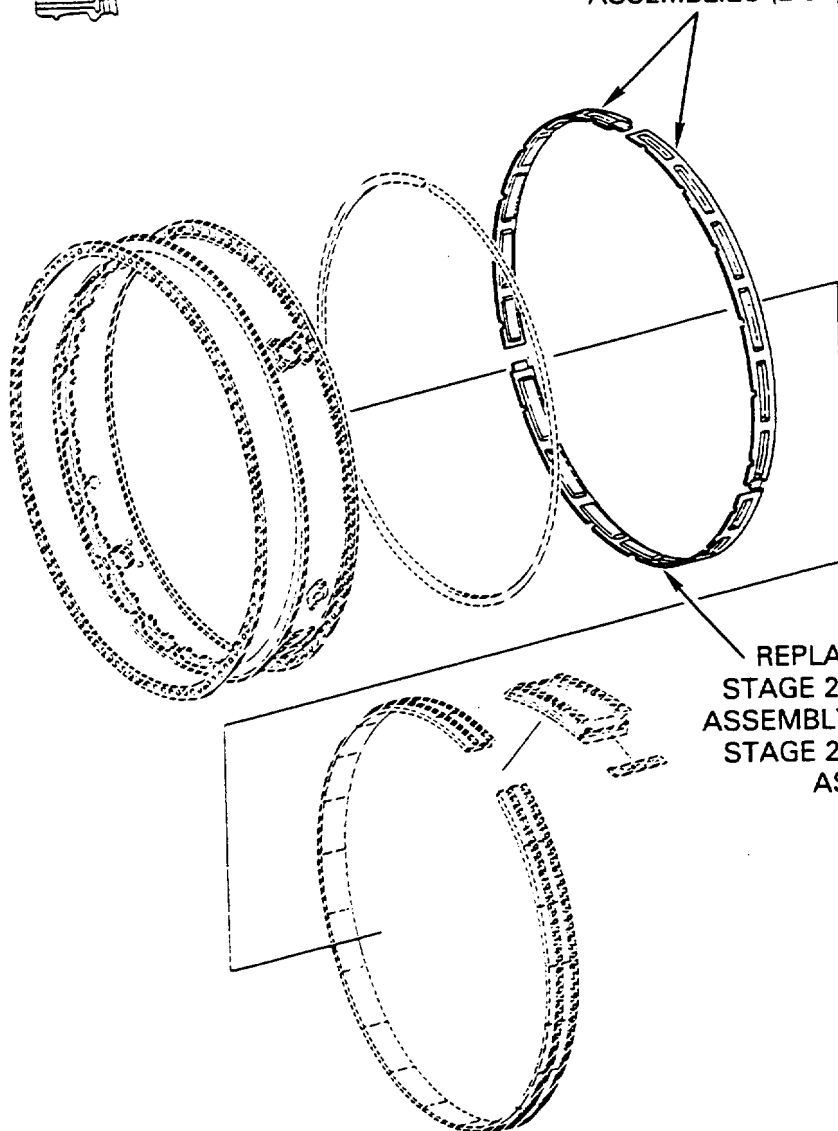
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Location of Stage 2 HPT Duct Support Assembly
Fig.1

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REPLACE THE 2A0195 - 01
STAGE 2 HPT BAND SEGMENT
ASSEMBLIES WITH THE 2A2271 - 01
STAGE 2 HPT BAND SEGMENT
ASSEMBLIES (2 off)



REPLACE THE 2A0198 - 01
STAGE 2 HPT BAND SEGMENT
ASSEMBLY WITH THE 2A2269 - 01
STAGE 2 HPT BAND SEGMENT
ASSEMBLY (1 off)

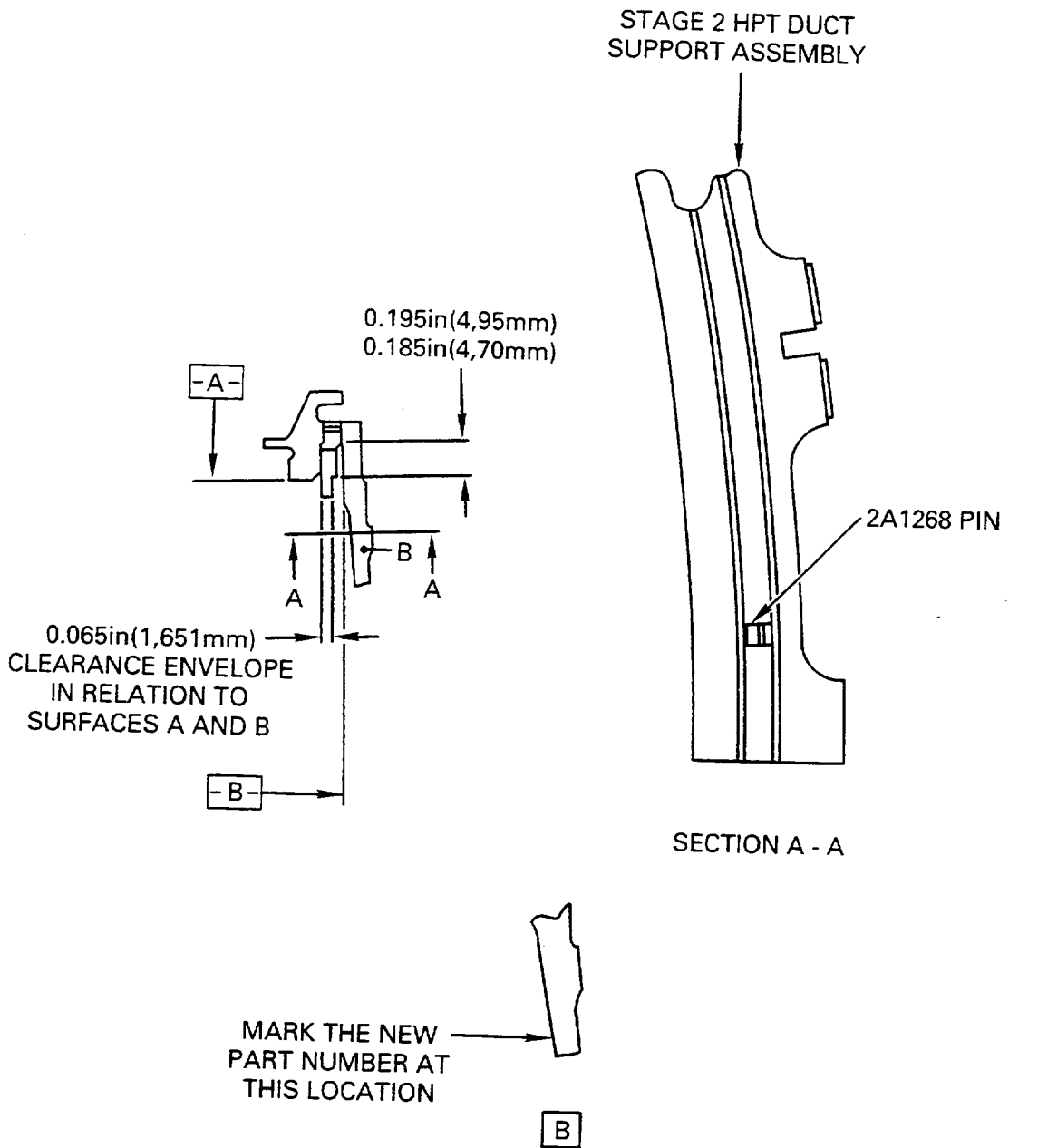
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Location of Stage 2 HPT Band Segment Assembly
Fig.2

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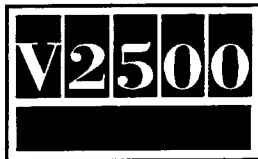
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Modification Of Stage 2 HPT Duct Segment Assembly
Fig.3

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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
2A2270 (72-45-26)	19	1080.00	Support Assy.- HPT Duct, Stage 2	2A0189 (01-020)	(S1)(1D) (A)(B)
2A1268 (72-45-26)	19	-	.Pin - Shoulder, Headless (Class 1-4, Oversizes P3 and P5)	2A0981 (01-040) to (01-054)	(S1)((A) (C)
2A2271-01 (72-45-25)	2	785.00	Band Segment Assy - HPT, Stage 2	2A0195-01 (01-020)	(S1)(A) (B)
2A2269-01 (72-45-25)	1	785.00	Band Segment Assy - HPT, Stage 2	2A0198-01 (01-040)	(S1)(A) (B)

C. Instruction/Disposition Code Statements:

- (S1) New parts coded (S1) must replace old parts coded (S1) as a COMPLETE SET per engine.
- (1D) Rework the Old part number and identify as the New part number.
- (A) New part is currently available.
- (B) Old part will continue to be available until the supply is gone.
- (C) Old part will continue to be available.

NOTE: The estimated 1992 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.

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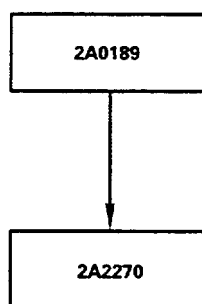
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MODIFICATIONS

BASE LINE

V2500 - ENG - 72 - 0124
NEW STAGE 2 HPT DUCT
SUPPORT ASSEMBLY

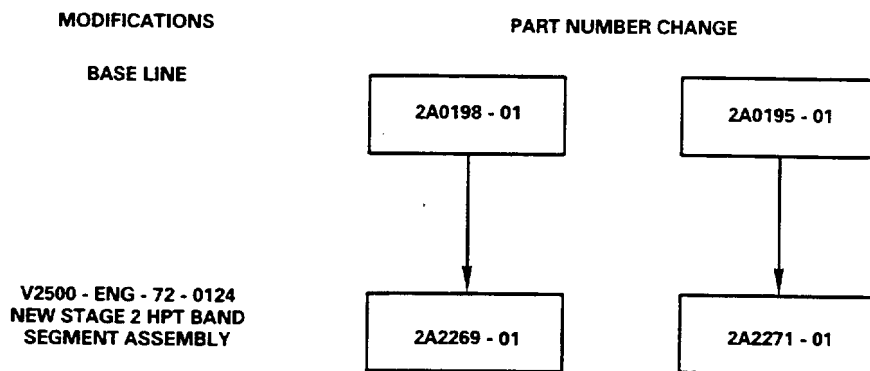
PART NUMBER CHANGE



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Family tree - Stage 2 HPT Duct Support Assembly
Fig.4

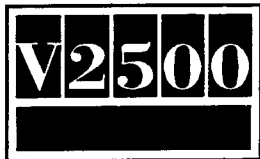
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Family tree - Stage 2 HPT Band Segment Assembly
Fig.5

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