

### International Aero Engines

# SERVICE BULLETIN

<u>ENGINE - HP TURBINE ROTOR AND STATOR ASSEMBLY - PROVIDE A NEW STAGE 2 TURBINE BLADE</u>

<u>(FOR VARIOUS MODEL PARTS COMMONALITY) - CATEGORY CODE 7 - MOD.ENG-72-0187</u>

### 1. Planning Information

### A. Effectivity

(1) Aircraft: Airbus A320, A321

(2) Engine: V2527-A5 Engines before Serial No.V10103

V2530-A5 Engines before Serial No.V10103

### B. Reason

### (1) Condition

The Stage 2 Turbine Rotor Blades now used on the V2500-A5 and V2500-D5 Engines are not the same.

## (2) Background

A new part number Stage 2 Turbine Rotor Blade was made for the V2500-D5 Engine.

### (3) Objective

Provide a common Stage 2 Turbine Rotor Blade part number for use in the V2500-A5 and V2500-D5 engines.

### (4) Substantiation

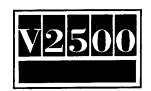
Satisfactory endurance testing on the new parts.

### (5) Effects of Bulletin on Workshop Procedures:

| 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.



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### C. <u>Description</u>

(1) Replace the Stage 2 Turbine Rotor Blade with one that is common with the V2500-D5 Engine.

### 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 7

Accomplish when supply of superseded parts has been depleted.

### F. Manpower

Estimated Manhours to incorporate the full intent of this Bulletin:

Venue Estimated Manhours

(1) In service Not applicable

(2) At overhaul Not applicable

# G. Material - Price and Availability

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

### H. <u>Tooling - Price and Availability</u>

Special tools are not required to accomplish Sub-division 2 of this Service Bulletin.

#### 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)

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### J. Electrical Load Data

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

### K. Reference

(1) Internal Reference No.

93VA037

(2) Other References

V2500 Engine Illustrated Parts Catalog (S-V2500-2I-A), Chapter/Section 72-45-00, 72-45-30 and 72-45-32.

V2500 Engine Manual (E-V2500-1IA), Chapter/Section 72-45-30 and 72-45-00.

V2500 Standard Practices Manual (SPP-V2500-1IA) Chapter/Section 70-09-00.

# L. Other Publications Affected

- (1) The V2500 Engine Illustrated Parts Catalog (S-V2500-2I-A), Chapter/Section 72-45-30, Figure 1, to add the new part.
- (2) The V2500 Engine Manual (E-V2500-1IA), Chapter/Section 72-45-30, Cleaning, to add the new parts.
- (3) The V2500 Engine Manual (E-V2500-1IA), Chapter/Section 72-45-30, Inspection, to add the new parts.
- (4) The V2500 Engine Manual (E-V2500-1IA), Chapter/Section 72-45-30, Repair, to add the new parts.



### 2. Accomplishment Instructions

# A. Rework Instructions

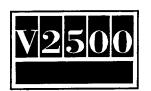
(1) There are no rework instructions necessary to accomplish this Service Bulletin.

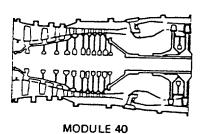
# B. Assembly Instructions

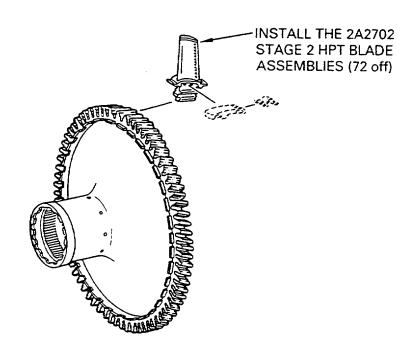
- (1) Install the 2A2702 Stage 2 HPT Blade Assemblies (72 off) by the approved procedure given in Reference (2), Chapter/Section 72-45-30, Assembly, and Figure 1.
- (2) Identify the Stage 2 Turbine Rotor Assembly by the procedure given in Reference (3), Chapter/Section 70-09-00, Marking of Parts.
  - (a) Mark the new part number, 2A2622, adjacent to the old part number, 2A2822.
  - (b) Use the vibration peen method.
- (3) When you install the Stage 2 Turbine Rotor Assembly by the procedure given in Reference (2), Chapter/Section 72-45-00 Assembly identify the HPT Rotor and Stator Assembly Module as follows:
  - (a) Use the procedure given in Reference (3), Chapter/Section 70-09-00, Marking of Parts.
  - (b) Mark the new part number, 2A7000, adjacent to the old part number, 2A4200.
  - (c) Use the vibration peen method.

### C. Recording Instructions

(1) A record of accomplishment is necessary.



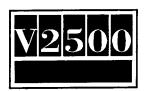




E2043

Location of the Stage 2 HPT Blade Assembly Fig.1

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### 3. Material Information

Applicability: For each V2500 Engine to incorporate this Bulletin.

#### A. <u>Kits associated with this Bulletin:</u>

None

### B. Parts affected by this Bulletin:

| New<br>Part No.<br>(ATA No.) | Qty | Est'd<br>Unit<br>Price (\$) | Keyword            | Old<br>Part No.<br>(IPC No.) | Instructions<br>Disposition |
|------------------------------|-----|-----------------------------|--------------------|------------------------------|-----------------------------|
| 2A7000                       | 1   | _                           | Rotor and Stator   | 2A4200                       | (S1) (1D)                   |
| (72-45-00)                   |     |                             | HPT Module         | (01-001)                     | (A)                         |
| 2A2622                       | 1   | _                           | Turbine Rotor,     | 2A2822                       | (S1) (2D)                   |
| (72-45-30)                   |     |                             | Stage 2, Assembly  | (01-010)                     | (A)                         |
| 2A2702                       | 72  | 3027.00                     | Blade HPT, Stage 2 | 2A2202                       | (S1) (B)                    |
| (72-45-32)                   |     |                             | Assembly           | (01-010)                     |                             |

### C. <u>Instructions/Disposition Code Statements:</u>

- (S1) Old Parts and new parts coded (S1) are freely and fully interchangeable.
- (1D) The new part number can be obtained by installation of the new Stage 2 Turbine Rotor Assembly and identification to the new HPT Rotor and Stator Module number.
- (2D) The new part number can be obtained by installation of the new Stage 2 HPT Blade Assemblies and identification to the new Stage 2 Turbine Rotor Assembly number.
- (A) New part is supplied on a lead time quotation basis only.
- (B) New part is currently available.

NOTE: The estimated 1996 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.