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V2500-A1 SERIES PROPULSION SYSTEM SERVICE BULLETIN

Printed in Great Britain

This document transmits the Initial Issue of Service Bulletin EV2500-72-0476 and the Initial Issue of the Supplement

Bulletin Initial Issue

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| | Page 1 and 2 of the | Initial issue |
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Supplement Initial Issue

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LIST OF EFFECTIVE PAGES

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ENGINE – HP COMPRESSOR DISCS (STAGES 3–8) – INTRODUCTION OF A DISC ASSEMBLY WITH
REVISED MATERIAL STAGES 6 TO 8

SUMMARY

1. PLANNING

A. EFFECTIVITY

V2500–A1 Engines prior to Serial No V0362.

B. CONCURRENT REQUIREMENTS

None.

C. REASON/PROBLEM

Problem and Evidence

The transfer of manufacturing site for the HP Compressor Stage 3–8 Disc Assembly resulted in a surplus supply of pre transfer part machined forgings.

There is a requirement to utilise this surplus material for the manufacture of V2500–A1 HP Compressor Stage 3–8 Disc Assemblies.

Substantiation

The changes introduced by this Service Bulletin have been the subject of satisfactory engineering and stress analysis using both new and existing data regarding features previously demonstrated to comply with Federal Aviation requirements.

Objective

Incorporation of this Service Bulletin is designed to facilitate spare part supply.

D. DESCRIPTION

A revised HP Compressor Stage 3–8 Disc Assembly is introduced similar to the existing standard except for the following change:

The material of the stage 6–8 discs has been changed from Ti6246 to Ti5331s.

For effect on declared life, see Time Limits Manual, 5–10–01.

E. COMPLIANCE

INFORMATION

This modification is introduced for Record Purposes Only (RP0).

F. MANPOWER

In service – Not applicable.

At overhaul – Not affected.

G. INTERCHANGEABILITY OF PARTS

Not affected.

2. MATERIAL INFORMATION

A. PARTS PRICES

| Part No. | Description | Unit Price US Dollars |
|----------|---|--------------------------|
| 6A8350 | Disc, Assy of Stage 3–8 HP Compressor | 143,040.00 |

ENGINE – HP COMPRESSOR DISCS (STAGES 3–8) – INTRODUCTION OF A DISC ASSEMBLY WITH
REVISED MATERIAL STAGES 6 TO 8

1. Planning Information

A. Effectivity

(1) Airbus A320

(a) V2500–A1 Engines prior to Serial No. V0362.

B. Concurrent Requirements

None.

C. Reason

(1) Problem and Evidence

The transfer of manufacturing site for the HP Compressor Stage 3–8 Disc Assembly resulted in a surplus supply of pre transfer part machined forgings.

There is a requirement to utilise this surplus material for the manufacture of V2500–A1 HP Compressor Stage 3–8 Disc Assemblies.

(2) Substantiation

The changes introduced by this Service Bulletin have been the subject of satisfactory engineering and stress analysis using both new and existing data regarding features previously demonstrated to comply with Federal Aviation requirements.

(3) Objective

Incorporation of this Service Bulletin is designed to facilitate spare part supply.

(4) Effect of Bulletin on:

(a) Operation

Not affected.

(b) Maintenance

Affected.

(c) Overhaul

Affected.

(d) Repair Schemes

Affected.

(e) Interchangeability

Not affected.

(f) Fits and Clearances

Not affected.

D. Description

(1) A revised HP Compressor Stage 3-8 Disc Assembly is introduced similar to the existing standard except for the following change:

(a) The material of the stage 6-8 discs has been changed from Ti6246 to Ti5331s.

(2) For effect on declared life, see Time Limits Manual, 5-10-01.

E. Compliance

INFORMATION

This modification is introduced for Record Purposes Only (RP0).

F. Approval

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 models given.

G. Manpower

(1) In service

Not applicable.

(2) At overhaul

Not affected.

NOTE: The parts affected by this Service Bulletin are accessible at overhaul.

H. Material Price and Availability

Modification kit not required; parts supplied as single line items.

For prices and availability of future spares see supplement to this bulletin.

I. Tooling Price and Availability

Special tools are not required.

J. Industry Support Information

Not applicable.

K. Weight and Balance**(1) Weight Change**

Minus 1.4 lb (0,64 kg.)

(2) Moment Arm

28.5in. (655 mm) rearwards of datum

(3) Datum

Engine Front Mount Centreline (Power Plant Station PPS100).

L. Electrical Load Data

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

M. Software Accomplishment Summary

Not applicable.

N. References

(1) Internal Reference No. - 03VR021

(2) ATA Locator - 72-41-11

(3) Engine Manual, Chapter/Section 72-41-10, Assembly, Disassembly.

O. Other Publications Affected

(1) Illustrated Parts Catalogue will be revised.

(2) Time Limits Manual, 5-10-01 will be revised.

(3) Engine Manual, Chapter/Section 72-41-10, Assembly, Disassembly.

(4) Engine Manual, Chapter/Section 72-41-11, Cleaning, Inspection/Check.

P. Interchangeability of Parts

Not affected.

2. Material Information

A. The kit required consists of the following parts:

None.

B. Parts to be reworked:

None.

C. New production parts:

A1 Engines only

72-41-11

| FIG ITEM NO. | NEW PART NO. | QTY | PART TITLE | MAT | OLD PART NO. | INSTR DISP |
|--------------------|--------------------|-----|--|-----|--------------------|---------------|
| 01200 | 6A8350 | 1 | .Disc, Assy of Stage 3-8 - HP Compressor | - | 6A8318 | (A)(S1) |
| 01245 | 6A8351 | 1 | ..Disc, Assy of Stage 3-8 - HP Compressor | - | 6A8317 | (B) |

D. Instruction Disposition Codes:

(A) New part will be available from May 2005.

(B) Part of Disc Assy, 6A8350. Will not be made available as a spare for replenishment purposes.

(S1) Old and new parts are freely and fully interchangeable.

A1 Engines Only
Baseline
V2500-ENG-72-0035

HP Compressor Discs and
Blades-Stages 3 to 5 -
Anti-Frettagge Treatment

V2500-ENG-72-0130

HP Compressor Discs
Stage 3 to 8 Rotor Drum
Assembly with Spacers in
Triple Melt Titanium

V2500-ENG-72-0161

HP Compressor Discs and
Blades-Stage 7 & 8 Damper Wires
and Stage 6, 7 & 8 Blades with
Anti-Frettagge Coating

V2500-ENG-72-0178

HP Compressor Discs
Stage 3 to 8 Rotor Drum
Thicker Stage 6 Disk Hub
and Damping Wire Locating Lip

V2500-ENG-72-0254

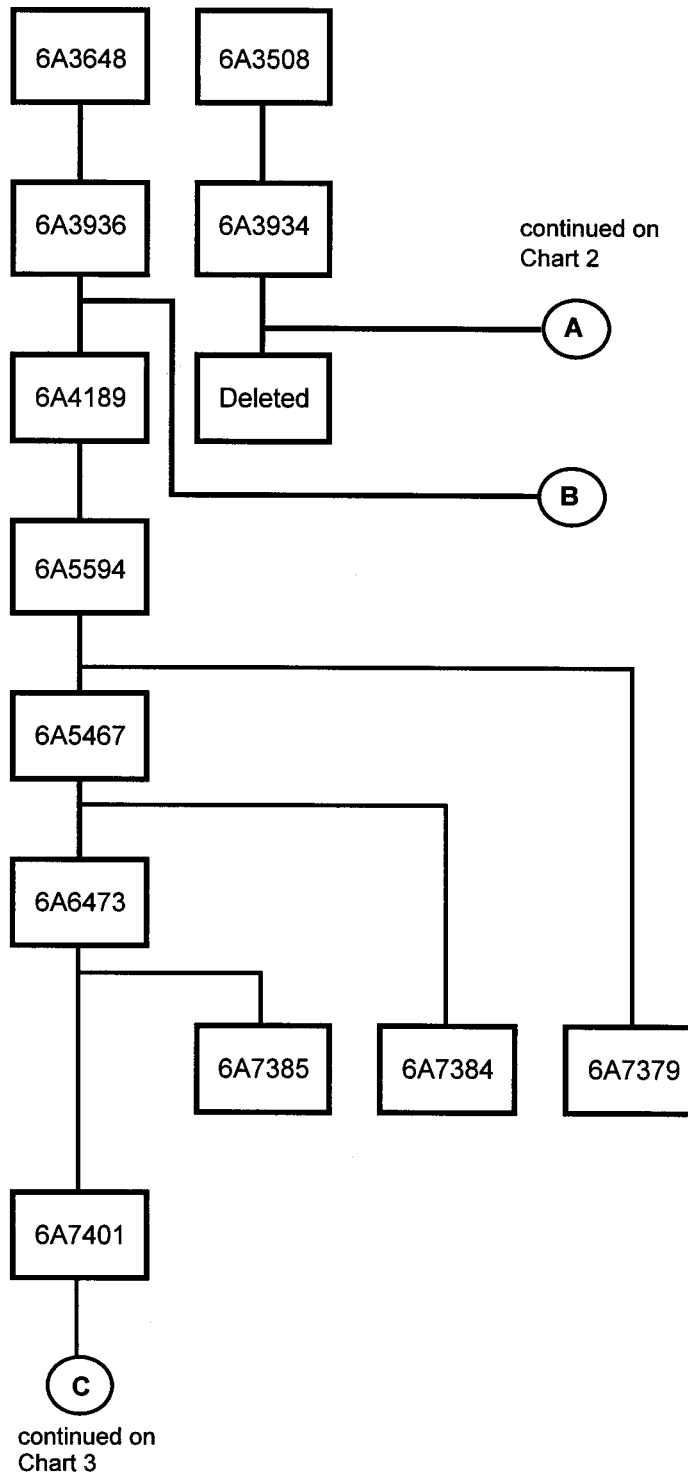
HP Compressor Discs
Stage 3 to 8-Introduction of
HPC Drum with Revised
Disc Profiles

V2500-ENG-72-0304

HP Compressor Discs
Stage 3 to 8-Intro of Reworked
Stage 3 to 8 Disc Assy with
Revised 'L' Shaped Sealing Wires

V2500-ENG-72-0300

HP Compressor Discs
Stages 3 to 8-Intro of HP Comp
Disc Assy with Revised Location
Of Damper Wire Grooves



HP Compressor Stage 3-8 Disc Assembly Family Tree
Chart 1

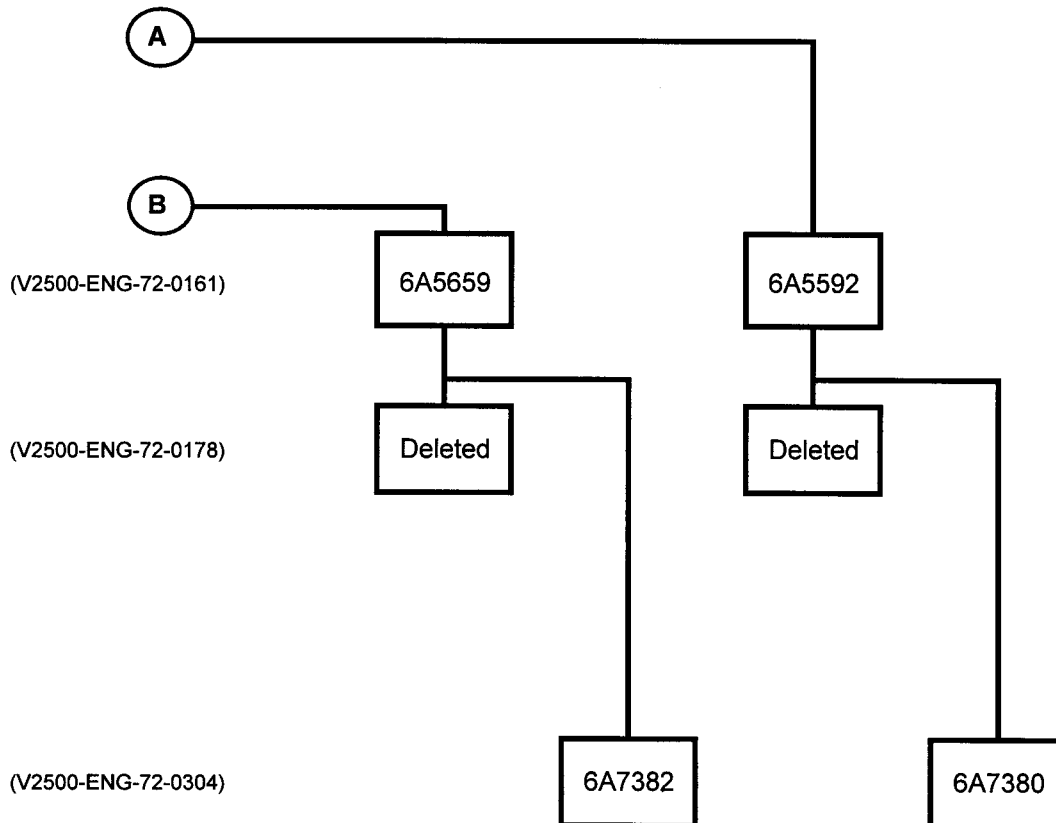
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A1 Engines Only

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continued from
Chart 1



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HP Compressor Stage 3-8 Disc Assembly Family Tree
Chart 2

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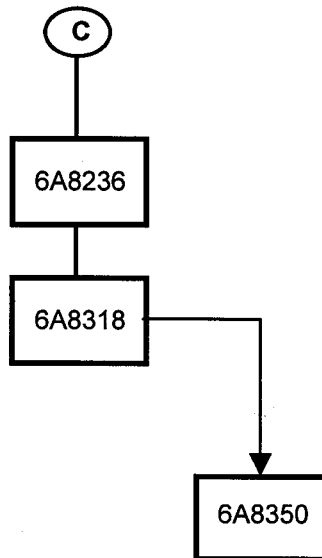
Not subject to the EAR per 15 C.F.R. Chapter 1, Part 734.3(b)(3).

continued from
Chart 1

V2500-ENG-72-0450
HP Compressor Discs
Stages 3-8 - Intro of a
Revised Stage Disc Assy

V2500-ENG-72-0470
HP Compressor Discs
Stages 3-8 - Intro of a Revised
Disc Assy with Reduced
Stage 7 Rear Damper Wire
Retaining Tower

V2500-ENG-72-0476
HP Compressor Discs
Stages 3-8 - Intro of a Revised
Disc Assy with TDX Material



HP Compressor Stage 3-8 Disc Assembly Family Tree
Chart 3

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Not subject to the EAR per 15 C.F.R. Chapter 1, Part 734.3(b)(3).

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3. Accomplishment Instructions

A. Rework Instructions

None.

B. Assembly Instructions

For the Removal and Installation Instructions refer to Engine Manual, Chapter/Section 72-41-00, Disassembly and Assembly.

C. Recording Instructions

- (1) A record of accomplishment is necessary.

ENGINE – HP COMPRESSOR DISCS (STAGES 3-8) – INTRODUCTION OF A DISC ASSEMBLY WITH
REVISED MATERIAL STAGES 6 TO 8

SUPPLEMENT – PRICES AND AVAILABILITY

The prices (if 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 catalogue for current prices.

1. Modification Kit:

Not applicable.

2. Parts required:

| Part No. | Description | Unit Price US Dollars |
|----------|---|--------------------------|
| 6A8350 | Disc, Assy of Stage 3-8 HP Compressor | 143,040.00 |