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## V2500-A5/D5 SERIES PROPULSION SYSTEMS SERVICE BULLETIN

Printed in Great Britain

This document transmits the Initial Issue of Service Bulletin EV2500-72-0477 and the Initial Issue of the Supplement

### Bulletin Initial Issue

Remove	Incorporate	Reason for change
	Page 1 and 2 of the	Initial issue
	Summary	
	Pages 1 to 7 of the	Initial issue
	Service Bulletin	

### Supplement Initial Issue

Remove	Incorporate	Reason for change
	Page 1	Initial issue

# V2500-ENG-72-0477

Transmittal - Page 1 of 2

CHECK THAT ALL PREVIOUS TRANSMITTALS HAVE BEEN INCORPORATED

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# LIST OF EFFECTIVE PAGES

The effective pages to this Service Bulletin are as follows:

<u>Page</u>	<u>Revision Number</u>	<u>Revision Date</u>
Summary		
1		Mar.16/05
2		Mar.16/05
Bulletin		
1		Mar.16/05
2		Mar.16/05
3		Mar.16/05
4		Mar.16/05
5		Mar.16/05
6		Mar.16/05
7		Mar.16/05
Supplement		
1		Mar.16/05

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ENGINE – HP COMPRESSOR RING CASES – DELETION OF STAGE 8 TO 11 HEATSHIELDS

## SUMMARY

### 1. PLANNING

#### A. EFFECTIVITY

Engine V2500–A5 Serial Numbers prior to V12025.

Engine V2500–D5 Serial Numbers prior to V20286.

#### B. CONCURRENT REQUIREMENTS

None

#### C. REASON/PROBLEM

Problem:

Evidence of fretting of the HP Compressor Stage 8–11 heatshields has been observed during overhaul and can lead to scrapping of these parts.

A design review has indicated that the Stage 8 to 11 Heatshields may be deleted.

Objective:

Incorporation of this Service Bulletin (modification) is designed to maintain engine reliability.

#### D. DESCRIPTION

The HP Compressor Stage 8 to 11 Heatshields and Retainers have been deleted.

On engines not incorporating ENG–72–0296 only, Heatshields will be deleted and Retainers will remain on the engine.

#### E. COMPLIANCE

Category 7; Accomplish when supply of superseded parts has been depleted.

#### F. MANPOWER

(1) In Service

Not applicable

(2)At Overhaul

Not affected

## 2. MATERIAL INFORMATION

### Part Prices

A. Not applicable.

ENGINE – HP COMPRESSOR RING CASES – DELETION OF STAGE 8 TO 11 HEATSHIELDS**1. Planning Information****A. Effectivity****(1) Airbus A319**

(a) V2522-A5, V2524-A5, V2527M-A5 prior to engine serial No. V12025.

**(2) Airbus A320**

(a) V2527-A5, V2527E-A5 prior to engine serial No. V12025.

**(3) Airbus A321**

(a) V2530-A5, V2533-A5 prior to engine serial No. V12025.

**(4) Boeing – Longbeach Division MD-90**

(a) V2525-D5, V2528-D5 prior to engine serial No. V20286.

**B. Concurrent Requirements**

None

**C. Reason****(1) Problem**

Evidence of fretting of the HP Compressor Stage 8-11 heatshields has been observed during overhaul and can lead to scrapping of these parts.

A design review has indicated that the Stage 8 to 11 Heatshields may be deleted.

**(2) Evidence**

See (1) Problem.

**(3) Substantiation**

The changes introduced by this Service Bulletin have been the subject of extensive engineering, thermal and performance analysis.

**(4) Objective**

Incorporation of this Service Bulletin (modification) is designed to maintain engine reliability.

## (5) Effect of Bulletin on:

## (a) Operation

Not Affected

## (b) Maintenance

Not Affected

## (c) Overhaul

Affected

## (d) Repair Schemes

Not Affected

## (e) Interchangeability

Not affected.

## (f) Fits and Clearances

Not affected.

**D. Description**

## (1) The changes introduced are:

(a) The HP Compressor Stage 8 to 11 Heatshields and Retainers have been deleted.

(b) For engines not incorporating Service Bulletin 72-0296 only, the heatshields will be deleted and retainers will remain as existing.

## (2) This Service Bulletin is in parts as follows:

Part 1 – New Production and engines incorporating ENG-72-0296.

Part 2 – Covers Engines not incorporating ENG-72-0296.

**NOTE:** New production engines fully embodying this modification will not be annotated with a mod part and can be considered equivalent to Part 1.

**E. Compliance**

Category Code 7

Accomplish when the supply of superseded parts has been depleted.

**F. Approval**

The part number changes and/or part modifications described in Sections 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 models listed.

**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**

No special tools required.

**J. Industry Support Information**

Not applicable

**K. Weight and Balance**

The following weight information applies to Part 1 – New Production and engines incorporating ENG-72-0296:

**(1) Weight Change**

Minus 8.1 lb (3.67 kg)

**(2) Moment Arm**

21.3in (542 mm) rearwards of datum.

**(3) Datum**

Engine Front Mount Centreline (Power Plant Station PPS100).

**L. Electrical Load Data**

The aircraft electrical load is not affected by this Service Bulletin.

**M. Software Accomplishment Summary**

Not applicable.

**N. References**

- (1) IAE V2500 Service Bulletin:

ENG 72-0296

ENGINE – HP COMPRESSOR – INTRODUCTION OF INTEGRAL FRONT SUPPORT CONE STAGE 7 ROTOR PATH AND REVISED HEATSHIELD AND FASTENER CONFIGURATION.

- (2) Engine Manual, 72-41-00, Assembly/Disassembly

- (3) ATA Locator – 72-41-00

- (4) Internal Reference No. 03VR020

**O. Other Publications Affected**

- (1) Illustrated Parts Catalogue (IPC) Chapter/Section 72-41-00 will be revised.

- (2) Engine Manual, 72-41-00, Assembly/Disassembly

- (3) Engine Manual, 72-41-00, Inspection/Check

- (4) Engine Manual, 72-41-00, Cleaning

**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:

None.

### D. Redundant parts:

All Engines

72-41-21

Mod Part 1

FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	MAT	OLD PART NO.	INSTR DISP
03880	-	2	.Retainer, Assy, Stage 7	-	6A6506	(A)
03900	-	1	.Shield Assy, Heat Stage 8 - HP Compressor	-	6A6553 or 6A5978 or 6A4260	(A)
03920	-	2	.Retainer, Assy, Stage 9	-	6A7567 or 6A6507	(A)
04450	-	2	.Retainer Assy, Stage 10 Rear	-	6A6508	(A)
04500	-	2	.Shield Assy, Heat, Stage 10	-	6A6509 or 6A7568	(A)
04520	-	1	.Shield Assy, Heat Stage 11- HP Compressor	-	6A6555 or 6A5979 or 6A4264	(A)

Mod Part 2

Mar.16/05

Mar.16/05

# V2500-ENG-72-0477

Page 5

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

FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	MAT	OLD PART NO.	INSTR DISP
03900	-	1	.Shield Assy, Heat, Stage 8- HP Compressor		6A6553 or 6A5978 or 6A4260	(A)
04520	-	1	.Shield Assy, Heat, Stage - 11 HP Compressor		6A6555 or 6A5979 or 6A4264	(A)

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**E. Instruction Disposition Codes:**

(A) Old part may be used up on other applications.

### 3. Accomplishment Instructions

#### A. Rework Instructions

None

#### B. Disassembly Instructions

For the correct Disassembly instructions refer to the Engine Manual, Chapter/Section 72-41-00, Disassembly.

#### C. Recording Instructions

A record of accomplishment is necessary.

ENGINE - HP COMPRESSOR RING CASES - DELETION OF STAGE 8 TO 11 HEATSHIELDSSUPPLEMENT - 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. New Production Parts:

Not applicable.