



# International Aero Engines SERVICE BULLETIN

Jan.16/98

Subject: Transmittal of Revision 1 to Service Bulletin No. V2500-ENG-72-0254

Service Bulletin Revision History:

Event	Date
Basic Issue	Dec.20/96
Revision 1	Jan.16/98

Reason for Issuance of Revision:

Change to D5 Incorporation point

Effect on Past Compliance:

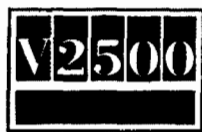
None

List of Effective Pages:

Bulletin Page No.	Rev. No.	Effective Date
1 and 2	1	Jan.16/98
3 to 7	Basic Issue	Dec.20/96

## V2500-ENG-72-0254

Transmittal  
Page 1 of 1



# International Aero Engines SERVICE BULLETIN

ENGINE - HP COMPRESSOR DISC (STAGES 3 TO 8) - INTRODUCTION OF  
HP COMPRESSOR DRUM WITH REVISED DISC PROFILES

## MODEL APPLICATION

V2500-A1  
V2522-A5  
V2524-A5  
V2527-A5  
V2530-A5  
V2525-D5  
V2528-D5

## BULLETIN INDEX LOCATOR

72-41-00

Compliance Category Code

7

Internal Reference No.

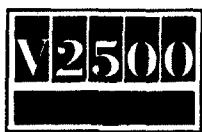
EC95VR020

Dec.20/96

R Revision 1 Jan.16/98 subject to the E.A.R. per 15 C.F.R. Chapter 1, Part 734.3(b)(3).

# V2500-ENG-72-0254

Page 1 of 7



# International Aero Engines SERVICE BULLETIN

## ENGINE - HP COMPRESSOR DISC (STAGES 3 TO 8) - INTRODUCTION OF HP COMPRESSOR DRUM WITH REVISED DISC PROFILES

### 1. Planning Information

#### A. Effectivity

##### (1) Aircraft

- (a) Airbus A319
- (b) Airbus A320
- (c) Airbus A321
- (d) McDonnell Douglas MD-90

##### (2) Engines

- (a) V2500-A1 Engines prior to Serial No.V0362
- (b) V2522-A5 Engine prior to Serial No.V10198
- (c) V2524-A5 Engine prior to Serial No.V10198
- (d) V2527-A5 Engine prior to Serial No.V10198
- (e) V2530-A5 Engine prior to Serial No.V10198
- (f) V2525-D5 Engine prior to Serial No.V20096
- (g) V2528-D5 Engine prior to Serial No.V20096

#### B. Concurrent Requirements

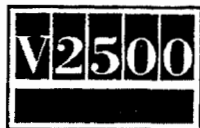
None.

#### C. Reason

##### (1) Condition

If the current standard of stage 3 to 8 HP compressor drum is retained for the 33,000 lb thrust V2500 derivative model, the current declared life would not be maintained.

Printed in Great Britain



## International Aero Engines SERVICE BULLETIN

### (2) Background

A life review of the HP compressor drum has assessed the life of the components to the flight cycle conditions of the increased thrust model and recommended design changes be made.

### (3) Objective

Incorporation of this modification is designed to provide for a possible extension of component life.

### (4) Substantiation

The changes introduced by this modification have been the subject of satisfactory engineering analysis.

### (5) Effect 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.

## D. Description

- (1) A design review of the Stage 3 to 8 HP Compressor drum has indicated that the required disc life may be achieved by strengthening the compressor discs at strategic locations. The changes introduced are:

- (a) A revised Stage 3 to 8 HP compressor rotor drum is introduced, similar to the existing item except for the following:

- (i) The outer diameters of the HP Compressor stage 3, 4 and 5 discs have been increased.
- (ii) Stage 4, 5 and 7 discs upper diaphragms have been re-profiled to provide additional material in the areas of high bending stress.
- (iii) The area forward of the stage 7 dovetail adjacent to the weld face has been re-profiled to provide additional material in the areas of high bending stress.

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



# International Aero Engines SERVICE BULLETIN

## E. Approval

The part number changed and/or part modification described in Section 2 and 3 of this Service Bulletin has been shown to comply with the applicable Federal Aviation Regulations and are FAA-APPROVED for the Engine Model Listed.

## F. Compliance

Category Code 7

Accomplish when supply of superseded parts have been depleted.

## G. Manpower

Estimated manhours to incorporate the full intent of this Bulletin:

<u>Venue</u>	<u>Estimated Manhours</u>
(1) In Service	Not applicable
(2) At Overhaul	Not affected

NOTE: The parts affected by this Service Bulletin are accesible at Overhaul.

## H. Material - Price and Availability

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

## I. Tooling - Price and Availability

Special tools are not required

## J. Weight and Balance

(1) Weight change	Plus 0,45 kg (1.00 lb)
(2) Moment arm	340 mm (13.4 in) rearwards of datum
(3) Datum	Engine front mount centreline (Power Plant Station (PPS) 100)

Printed in Great Britain



## International Aero Engines SERVICE BULLETIN

### K. Electrical Load Data

This modification has no effect on the aircraft electrical load.

### L. References

- (1) V2500 Engine Manual, Chapter/Section 72-41-10, Inspection.

### M. Other Publications Affected

- (1) The V2500 Engine Illustrated Parts Catalog, Chapter/Section 72-41-11.
- (2) The V2500 Engine Manual, Chapter/Section 72-41-11, Inspection.
- (3) The Time Limits Manual, Chapter/Section 5-10-01.



## International Aero Engines SERVICE BULLETIN

### 2. Accomplishment Instructions

#### A. Rework Instructions

None.

#### B. Assembly Instructions

- (1) Install the revised stage 3 to 8 HP compressor drum using the approved procedures, Refer to V2500 Engine Manual, Chapter/Section 72-41-10.

#### C. Recording Instructions

A record of accomplishment is necessary.

Printed in Great Britain



# International Aero Engines SERVICE BULLETIN

## 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
6A6473 (72-41-11)	1	106540-00	Drum 3 to 8 fitting - HP Comp	6A5467 (01-200)	(A)(B)(S1)
6A6474 (72-41-11)	1		Drum 3 to 8 - HP Comp	6A5468 (01-245)	(A)(B)(C) (S1)

### C. Instructions/Disposition Code Statements

(A) New part is currently available.

(B) Old part will be discontinued.

(C) Part of assembly 6A6473 and will not be made available as a spare for replenishment purposes.

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

NOTE: The estimated 1997 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.