

ENGINE - STAGE-3 TO 8 HP COMPRESSOR DISCS - INTRODUCTION OF REVISED STAGE-3 TO 8 DISC ASSEMBLY AND REVISED STAGE-7 AND 8 SEALING WIRES - CATEGORY CODE 7 - MOD.ENG-72-0300

1. Planning Information

A. Effectivity

- (1) Aircraft: (a) Airbus A319
 - (b) Airbus A320
 - (c) Airbus A321
 - (d) Boeing-Douglas MD-90
- (2) Engines: (a) V2500-A1 Engines prior to Serial No. V0362
 - (b) V2522-A5 Engines prior to Serial No. V10368
 - (c) V2524-A5 Engines prior to Serial No. V10368
 - (d) V2527-A5 Engines prior to Serial No. V10368
 - (e) V2527E-A5 Engines prior to Serial No. V10368
 - (f) V2530-A5 Engines prior to Serial No. V10368
 - (g) V2533-A5 Engines prior to Serial No. V10368
 - (h) V2525-D5 Engines prior to Serial No. V20215
 - (i) V2528-D5 Engines prior to Serial No. V20215

B. <u>Concurrent Requirements</u>

None.

C. <u>Reason</u>

(1) Condition

Frettage on the side faces of the Stage-7 and 8 sealing slots of the Stage-3 to 8 drum assembly of the HP Compressor can occur.

The problem is caused by adverse tolerances of the axial positions of the grooves. Together with the circumferential movement of the wires, this can result in additional wear of the groove side walls.

(2) Background

The problem has been found on engines in service.

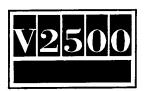
(3) Substantiation

A satisfactory engineering analysis, and successful rig tests have been done on the changes introduced by this Service Bulletin.

(4) Objective

The purpose of this Service Bulletin is to maintain engine reliability.

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- (5) Effect of Bulletin on:-
 - (a) Operation

Not affected.

(b) Maintenance

Not affected.

(c) Overhaul

Not affected.

(d) Repair Scheme

Not affected.

(e) Interchangeability

Not affected.

(f) Fits and Clearances

Not affected.

D. <u>Description</u>

- (1) The Stage-3 to 8 disc assembly of the HP Compressor has changed as follows:
 - (a) The slots for the Stage-7 and 8 front sealing wires have been moved to the rear, away from the edge of the blade platform.
 - (b) The slots for the Stage-7 and 8 rear sealing wires have been moved to the front, away from the edge of the blade platform.
 - (c) So that the revised sealing wires can be installed, the width of the slots for the Stage-7 and 8 front and rear sealing wire has increased.
- (2) The Stage-7 and 8, front and rear sealing wires have changed as follows:
 - (a) The width of the wires has increased.
 - (b) The ends of the wires are stepped so that they can over-lap each other.
- (3) The declared life of the affected components is as follows:

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- (a) A1 Engines 15,000 cycles.
- (b) A5 and D5 Engines 16,000 cyecles.

E. Compliance

Category Code 7.

This Service Bulletin can be done when there are no initial parts remaining.

F. Approval

The part number changes and/or part modification are given in section 2 and 3 of this Service Bulletin. They obey the applicable Federal Aviation Regulations and are FAA-APPROVED for the engine models listed.

G. Manpower

Estimate of man-hours necessary to do this Service Bulletin in full:

Venue Estimated Man-Hours

(1) In Service Not applicable

(2) At Overhaul No additional time is necessary to do this

Service Bulletin

NOTE: It is possible to get access to the parts affected by this Service Bulletin at overhaul.

H. Material Price and Availability

- (1) A modification kit is not necessary.
- (2) Refer to the Material Information section for prices and availability of future spares.

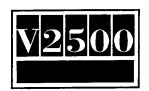
I. Tooling Price and Availability

Special tools are not necessary.

J. Weight and Balance

- (1) Weight Change
 - (a) Plus 0,14 kg (0.3lb)
- (2) Moment Arm
 - (b) 340mm (13.4in.) rearwards

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- (3) Datum
 - (c) Engine front mount centreline (Power Plant Station PPS 100)
- K. Electrical Load Data

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

- M. Other Publications Affected
 - (1) Illustrated Parts Catalog (IPC), Chapter/Section 72-41-11.



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2. Accomplishment Instructions

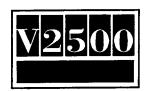
A. Rework Instructions

None

B. Assembly Instructions

None.

- C. Recording Instructions
 - (1) A record of accomplishment is necessary.



3. Material Information

Applicability: For each V2500 engine to incorporate this Service Bulletin.

A. Kits necessary for this Service Bulletin:

None.

B. Parts affected by this Service Bulletin:

NEW PART NO. (ATA NO.)	QTY	EST'D UNIT PRICE (\$)	PART TITLE	OLD PART NO. (IPC NO.)	INSTR DISP
6A7401 (72-41-11)	1		Disc assy of - Stage 3 to 8 - HP Compressor	6A6473 (01-200)	(A)(B) (S1)
6A7402 (72-41-11)	Ref		Disc assy of - Stage 3 to 8 - HP Compressor	6A6474 (01-245)	(A)(B) (C)(S1)
6A7386 (72-41-11)	1		Wire, seal - Stage 7 - Front	6A7358 (01-390)	(A)(B) (S1)
6A7387 (72-41-11)	1		Wire, seal - Stage 7 - Rear	6A7359 (01-392)	(A)(B) (S1)
6A7388 (72-41-11)	1		Wire, seal - Stage 8 - Front	6A7360 (01-394)	(A)(B) (S1)
6A7389 (72-41-11)	1		Wire, seal - Stage 8 - Rear	6A7361 (01-396)	(A)(B) (S1)

NOTE: The unit prices, if shown, are an estimate and they are given for the purposes of planning only. For information about actual prices, refer to the IAE Price Catalog or contact IAE's spare parts sales department.

C. Instruction Disposition Codes

- (A) New part is available.
- (B) Old part will be discontinued.
- (C) Part of assembly 6A7362. This item will not be made available as a spare for future replacement of stock.
- (S1) New parts coded (S1) must replace old parts coded (S1) as a complete set.