ENGINE - ACTUATING MECHANISM HP COMPRESSOR VARIABLE VANES - STAGE 4 AND 5 CENTRALISING PADS WITH REVISED METHOD OF MANUFACTURE - CATEGORY CODE 7 - MOD.ENG-72-0319

1. Planning Information

A. Effectivity

(1) Aircraft:
(a) Airbus A319.
(b) Airbus A320.
(c) Airbus A321.
(d) Boeing-Douglas Product Division MD-90.

(2) Engines:
(a) V2522-A5 Engines Prior to Serial Number V10625.
(b) V2524-A5 Engines Prior to Serial Number V10625.
(c) V2527-A5 Engines Prior to Serial Number V10625.
(d) V2527E-A5 Engines Prior to Serial Number V10625.
(e) V2530-A5 Engines Prior to Serial Number V10625.
(f) V2533-A5 Engines Prior to Serial Number V10625.
(g) V2525-D5 Engines Prior to Serial Number V20286.
(h) V2528-D5 Engines Prior to Serial Number V20286.

B. Concurrent Requirements

None.

C. Reason

(1) Problem

A design review has shown that the manufacture of the centralising pad assemblies for the Stage-4 and 5 Variable Stator Vanes (VSV's) of the HP Compressor can be improved.

(2) Evidence

Refer to (1) Problem.

(3) Substantiation

A satisfactory engineering analysis has been done on the changes introduced by this Service Bulletin.

(4) Objective

The purpose of this Service Bulletin is to improve the method of manufacture.

(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) Alternative centralising pads for the Stage-4 and 5 VSV's are introduced, with the changes that follow:

(a) The method of manufacture has been changed from a machined bar to either an extruded tube, a flash butt-welded tube or a U-Shaped channel.

(b) The nominal height has been increased by 0,4048mm.

(c) To make the revised method of manufacture easier, minor changes have been made to the shape of the cross-section.

(d) The material has been changed from a solid bar of Stainless Steel (EAF) to an extruded tube of Stainless Steel (EBS/EBK).

(2) The alternative material forms have resulted in minor differences to the shape of the finished component.

(3) The Stage-4 adjusting shims are replaced by the existing Stage-5 adjusting shims.

(4) Because of the increase in height of the centralising pads, the maximum number of shims allowed in a stack is increased from 2 to 3.

E. Compliance

Category Code 7.

Accomplish when there are no superseded parts remaining.

F. Approval

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

G. Manpower

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

	Venue	Estimated Man-Hours
(1)	In Service	Not applicable.
(2)	At Overhaul	No additional time is necessary to embody 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

A modification kit is not necessary.

I. Tooling - Price and Availability

Special tools are not necessary.

J. Weight and Balance

(1) Weight Change

None.

(2) Moment Arm

Not affected.

(3) Datum

Engine front mount centreline (Power Plant Station) - PPS 100).

K. Electrical Load Data

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

L. References

(1) Internal Reference No.

EC98VR001

M. Other Publications Affected

(1) A5/D5 Engine Manual (EM), Chapter/Sections 72-41-30 Disassembly-05/Assembly-06 and 72-41-34 Cleaning, Inspection/Check and Repair.

(2) Illustrated Parts Catalogue (IPC), Chapter/Section 72-41-34.

2. Material Information

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
6A2632C01 (72-41-34)	1	5.72	.Washer, adjusting (0.0050 ins (0,127mm))	6A2631C01 (04-654)	(A)(S1) (1D)
6A2632C02 (72-41-34)	1		.Washer, adjusting (0.0070 ins (0,178mm))	6A2631C02 (04-655)	(A)(S1) (1D)
6A2632C03 (72-41-34)	1		.Washer, adjusting (0.0080 ins (0,203mm))	6A2631C03 (04-656)	(A)(S1) (1D)
6A2632C04 (72-41-34)	1		.Washer, adjusting (0.0100 ins (0,254mm))	6A2631C04 (04-657)	(A)(S1) (1D)
6A2632C05 (72-41-34)	1		.Washer, adjusting (0.0140 ins (0,356mm))	6A2631C05 (04-658)	(A)(S1) (1D)
6A2632C06 (72-41-34)	1		.Washer, adjusting (0,0177 ins (0,450mm))	6A2631C06 (04-659)	(A)(S1) (1D)
6A2632C07 (72-41-34)	1		.Washer, adjusting (0,0217 ins (0,550mm))	6A2631C07 (04-660)	(A)(S1) (1D)
6A2632C08 (72-41-34)	1		.Washer, adjusting (0,0256 ins (0,650mm))	6A2631C08 (04-661)	(A)(S1) (1D)
6A2632C09 (72-41-34)	1		.Washer, adjusting (0,0295 ins (0,750mm))	6A2631C09 (04-662)	(A)(S1) (1D)
6A2632C10 (72-41-34)	1		.Washer, adjusting (0,0305 ins (0,775mm))	6A2631C10 (04-663)	(A)(S1) (1D)
6A2632C11 (72-41-34)	1	5.72	.Washer, adjusting (0,0315 ins (0,800mm))	6A2631C11 (04-664)	(A)(S1) (1D)
6A2632C12 (72-41-34)	1		.Washer, adjusting (0,0325 ins (0,825mm))	6A2631-C12 (04-665)	(A)(S1) (1D)

6A2632C13 (72-41-34)	1		.Washer, adjusting (0,0335 ins (0,850mm))	6A2631C13 (04-666)	(A)(S1) (1D)
6A7394 (72-41-34)	4	1074.00	.Pad A/O, centralising - Stage-4	- (04-680)	(B)(C)(F)
6A2632C01 (72-41-34)	1		.Washer, adjusting (0,0050 ins (0,127mm))	6A2632C01 (05-654)	(A)(1D)
6A2632C02 (72-41-34)	1		.Washer, adjusting (0.0070 ins (0,178mm))	6A2632C02 (05-655)	(A)(1D)
6A2632C03 (72-41-34)	1		.Washer, adjusting (0.0080 ins (0,203mm))	6A2632C03 (05-656)	(A)(1D)
6A2632C04 (72-41-34)	1		.Washer, adjusting (0,0100 ins (0,254mm))	6A2632C04 (05-657)	(A)(1D)
6A2632C05 (72-41-34)	1		.Washer, adjusting (0,0140 ins (0,356mm))	6A2632C05 (05-658)	(A)(1D)
6A2632C06 (72-41-34)	1		.Washer, adjusting (0,0177 ins (0,450mm))	6A2632C06 (05-659)	(A)(1D)
6A2632C07 (72-41-34)	1		.Washer, adjusting (0,0217 ins (0,550mm))	6A2632C07 (05-660)	(A)(1D)
6A2632C08 (72-41-34)	1		.Washer, adjusting (0,0256 ins (0,650mm))	6A2632C08 (05-661)	(A)(1D)
6A2632C09 (72-41-34)	1		.Washer, adjusting (0,0295 ins (0,750mm))	6A2632C09 (05-662)	(A)(1D)
6A2632C10 (72-41-34)	1		.Washer, adjusting (0,0305 ins (0,775mm))	6A2632C10 (05-663)	(A)(1D)
6A2632C11 (72-41-34)	1		.Washer, adjusting (0,0315 ins (0,800mm))	6A2632C11 (05-664)	(A)(1D)
6A2632C12 (72-41-34)	1		.Washer, adjusting (0,0325 ins (0,825mm))	6A2632C12 (05-665)	(A)(1D)
6A2632C13 (72-41-34)	1		.Washer, adjusting (0,0335 ins (0,850mm))	6A2632C13 (05-666)	(A)(1D)
6A7395 (72-41-34)	1	1626.00	.Pad A/O, centralising - Stage-5	(05-680)	(B)(E)(F)

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

C. Instruction Disposition Codes:

(A) Select as required.
(B) Additional.
(C) Alternative to 6A2468.
(E) Alternative to 6A3091.
(F) New part will be available from December 1998.
(S1) Old and new parts are freely and fully interchangeable.
(1D) Quantity changed from AR (2 off max) to 3 off max.

3. Accomplishment Instructions

A. Rework Instructions

None

B. Assembly Instructions

(1) For the correct removal/installation procedures, refer to the A5/D5 Engine Manual (EM), Chapter/Sections 72-41-30 Disassembly-05/Assembly-06.

C. Recording Instructions

A record of accomplishment is necessary.