



ENGINE - PROVIDE STAGE 1.5 AND 2.0 STATOR ASSEMBLIES WITH OUTER SHROUDS HAVING REDUCED THICKNESS - CATEGORY CODE 7 - MOD.ENG-72-0008

1. Planning Information

A. Effectivity

- (1) Aircraft: Airbus A320
- (2) Engine: V2500-A1 Engines, prior to Serial No.V0021

B. Reason

(1) Condition

With the object of reducing weight, a critical review of the engine has been undertaken. As a result, it was decided to change the design features on the LP Compressor Stage 1.5 and 2.0 Stator Assemblies.

(2) Background

A design review for the LP Compressor Stage 1.5 and 2.0 Stator Assemblies has shown that the existing design features of the vane outer shrouds and the Stage 1.5 inner ring have been over-emphasized.

(3) Objective

The changes in configuration recommended in this Service Bulletin are designed to reduce the engine weight.

(4) Substantiation

The configuration changes shown in this Service Bulletin have been subjected to a cycle testing on development engine with 2000 equivalent flight cycles. The test results obtained were satisfactory.

(5) Effects 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

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C. Description

- (1) New LP Compressor Stage 1.5 and 2.0 Stator Assemblies which have the following changes for reducing weight have been introduced.
 - (a) The thickness of each LPC Stage 1.5 and 2.0 vane outer shroud has been reduced. (See Figure 1.)
 - (b) The scallops of each LPC Stage 1.5 and 2.0 vane have been enlarged. (See Figure 1.)
 - (c) The thickness of the LPC Stage 1.5 Vane inner ring has been reduced. (See Figure 1, Sheet 2.)
- (2) New LPC Stage 1.5 Stator A/O and new LPC Stage 2.0 Stator A/O will be available for future replacement purposes.

D. 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 Model listed.

E. Compliance

Category Code 7.

Accomplish when supply of superseded parts has been depleted.

F. Manpower

Estimated Manhours to incorporate the full intent of this Bulletin:

- (1) In service Not applicable
- (2) At overhaul Not applicable

G. Material - Price and Availability

- (1) Modification Kit not required. Parts supplied as single line items.
- (2) See "Material Information" section for prices and availability of future spares.

H. Tooling - Price and Availability

Special tools are not required to accomplish this Service Bulletin.



SERVICE BULLETIN

I. Weight and Balance

- (1) Weight change Minus 1.30 lb (0,59 Kg)
- (2) Moment arm No effect
- (3) Datum Engine front mount centerline
(Power Plant Station (PPS) 100)

J. Electrical Load Data

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

K. References

- (1) Internal Reference No.

EC87VJ371

ECM87VJ371-02

EC87VJ372

ECM87VJ372-01

- (2) Other References

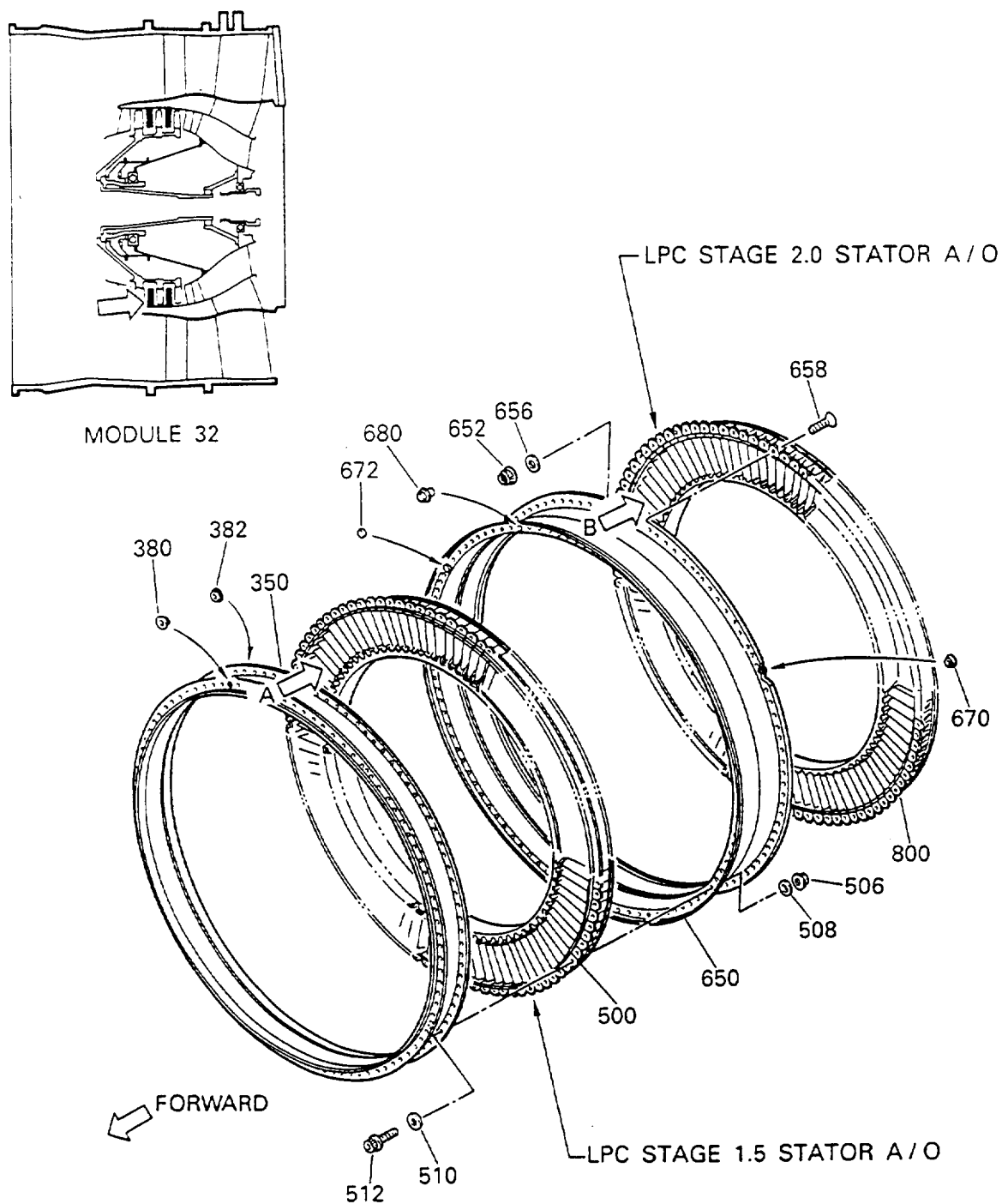
V2500 Engine Illustrated Parts Catalog, Chapter/Section 72-32-83.

V2500 Engine Manual, 72-32-80, Assembly TASK 72-32-80-440-001.

L. Other Publications Affected

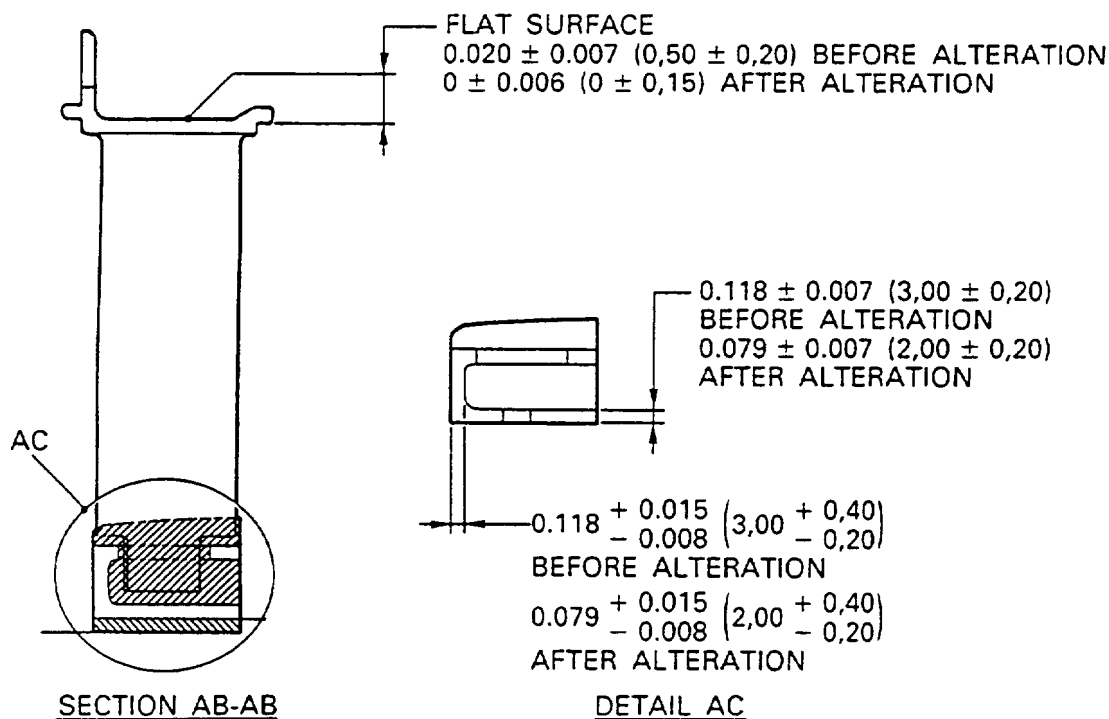
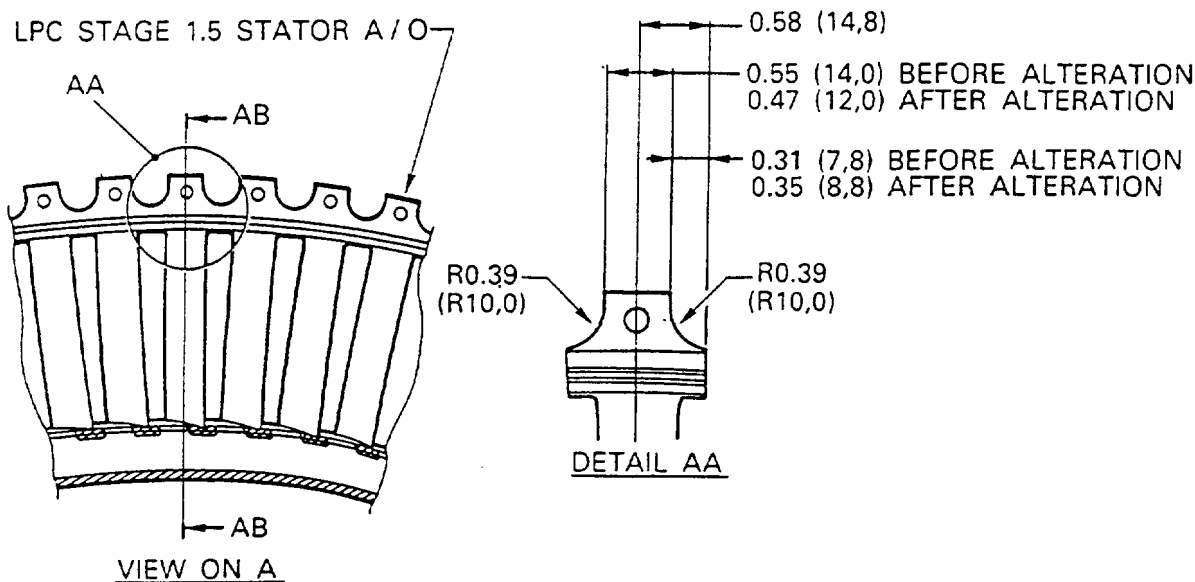
- (1) V2500 Engine Illustrated Parts Catalog, Chapter/Section 72-32-83.
- (2) V2500 Engine Manual, 72-32-83, Cleaning and Repair.

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LP compressor stage 1.5 and 2.0 stator assemblies - Before and after alteration
Fig.1, Sheet 1 of 3

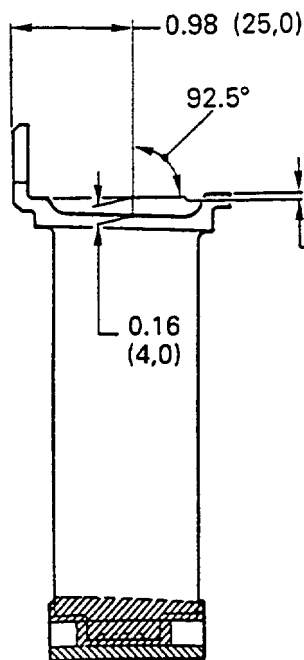
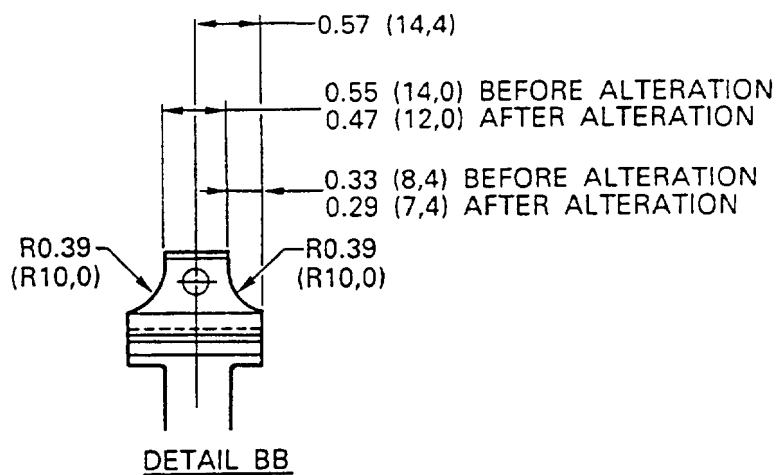
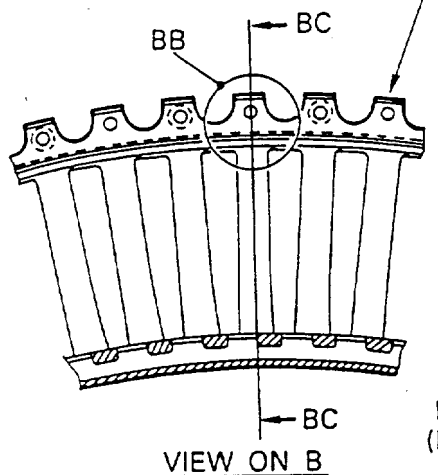
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LP compressor stage 1.5 and 2.0 stator assemblies - Before and after alteration
Fig.1, Sheet 2 of 3

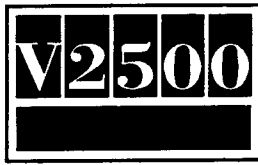
LPC STAGE 2.0 STATOR A/O



FLAT SURFACE
 0.004 ± 0.004 (0,10 \pm 0,10) BEFORE ALTERATION
 0.020 ± 0.004 (0,50 \pm 0,10) AFTER ALTERATION

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LP compressor stage 1.5 and 2.0 stator assemblies - Before and after alteration
 Fig.1, Sheet 3 of 3



2. Accomplishment Instructions

A. Rework Instructions

- (1) There are no rework instructions necessary to accomplish this Service Bulletin.

B. Assembly Instructions

- (1) Assemble new 5A0069, LPC Stage 1.5 Stator A/O and new 5A0071, LPC Stage 2.0 Stator A/O to the LP Compressor Stage 1.5, 2 and 2.5 Assembly by the approved procedures in the Engine Manual, 72-32-80, Assembly (Refer to 1.K.(2)).

C. Recording Instructions

- (1) A record of accomplishment is necessary.



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
5A0069 (72-32-83)	1	42,030.00	.Stator, A/O Stg 1.5 LPC	5A7376 (01-500)	(A)(B)(S1)
5A0070 (72-32-83)	96		..Vane, Stg 1.5 LPC	5A7377 (01-570)	(A)(S2)
5A0071 (72-32-83)	1	40,210.00	.Stator, A/O Stg 2.0 LPC	5A7378 (01-800)	(A)(B)(S3)
5A0072 (72-32-83)	49		..Vane, Stg 2.0 LPC	5A7379 (01-880)	(A)(S4)
5A0073 (72-32-83)	49		..Vane, Stg 2.0 LPC	5A7380 (01-881)	(A)(S4)

C. Instruction/Disposition Code Statements:

- (A) New part is currently available for sale.
- (B) Old part is no longer available for sale.
- (S1) Old and new part is freely and fully interchangeable, both physically and functionally.
- (S2) New parts coded (S2) may be freely intermixed with old parts coded (S2) in old assemblies coded (S1).
- (S3) Old and new part is freely and fully interchangeable, both physically and functionally.
- (S4) New parts coded (S4) may be freely intermixed with old parts coded (S4) in old assemblies coded (S3).

NOTE: The estimated 1991 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.

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