

SERVICE BULLETIN

<u>ENGINE - HP COMPRESSOR - FRONT SHAFT AND SEAL ASSY WITH STIFFENED SEAL CARRIER - CATEGORY CODE 7 - MOD.ENG-72-0026</u>

1. Planning Information

A. Effectivity

(1) Aircraft: Airbus A320

(2) Engine: V2500-A1 Engines prior to Serial No.V0118*

*The serial number data is of a preliminary mature and is provided for advanced planning only. A future revision to this Service Bulletin will confirm final serial number effectivity.

B. Reason

(1) Condition

Cracking of the seal carrier can occur in the bolt holes.

(2) Background

Cracks were found in the shaft seal carrier during inspection after the strip of development test of three engines. These were probably caused by frettage and high cycle fatigue.

(3) Objective

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

(4) Substantiation

No engine testing has been carried out, but previous experience with this type of problem and solution has demonstrated that the cracking problem has been alleviated.

(5) Effect of bulletin on workshop procedures:

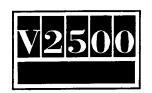
Removal/Installation Not affected Disassembly/Assembly Not affected Cleaning Not affected

Inspection/Check Affected (See Supplemental Information)

Repair Not affected Testing Not affected

(6) Supplemental Information

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(a) The Inspection Check will be revised due to the new configuration of the carrier assembly.

C. <u>Description</u>

- (1) The changes introduced by this Service Bulletin are as follows:
 - (a) A new HPC front shaft and seal assembly is introduced which features a shorter seal diameter, thicker outer front diameter and increased flange thickness.
- (2) Existing retaining bolts for the carrier seal can be used.

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Accomplish when supply of superseded parts has been depleted.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 Service Bulletin.

Venue Estimated Manhours

(1) In Service Not applicable

G. <u>Material - Price and Availability</u>

Modification Kit not required. Parts supplied as single line items.

H. Tooling - Price and Availability

Special tools are not required to accomplish this Service Bulletin.

I. Weight and Balance

(1) Weight change Plus 0.12lb (0,05 Kg)

(2) Moment arm 0.400in. (10,2 mm) rearward

(3) Datum Engine front mount centreline (Power Plant Station (PPS) 100)

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J. Electrical Load Data

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

K. References

(1) Internal Reference No.

EC88VR117

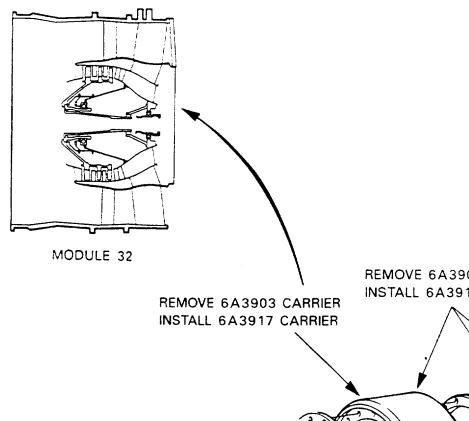
(2) Other References

V2500 Engine Manual, 72-32-10, Assembly.

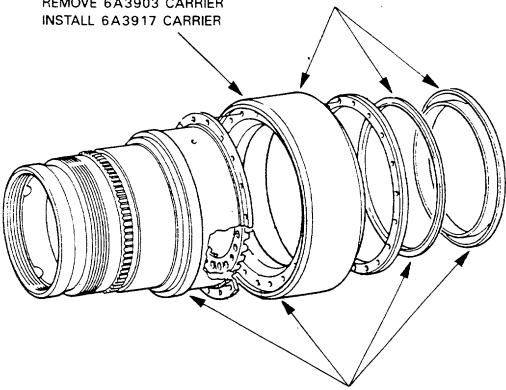
L. Other Publications Affected

- (1) V2500 Illustrated Parts Catalogue, 72-32-23
- (2) V2500 Engine Manual, 72-32-23, Inspection/Check and Cleaning

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REMOVE 6A3902 CARRIER ASSEMBLY INSTALL 6A3916 CARRIER ASSEMBLY



REMOVE 6A3898 SHAFT AND SEAL ASSEMBLY INSTALL 6A3915 SHAFT AND SEAL ASSEMBLY

Location of H.P. compressor front shaft and seal assembly Fig.1

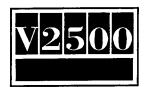
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2. Accomplishment Instructions

- A. Rework Instructions
 - (1) There are no rework instructions required for this Service Bulletin.
- B. Assembly Instructions
 - (1) New 6A3915 Shaft and seal assembly, 6A3916 carrier assembly and 6A3917 carrier are interchangeable with in use shaft seal and carrier assemblies.
 - (2) Assemble 6A3916 carrier assembly to new 6A3915 shaft and seal assembly by use of approved procedures Engine Manual, 72-32-10, Assembly.
- C. Recording Instructions
 - (1) A record of accomplishment is necessary.



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3. Material Information

New Est'd Old

Part No. Unit Part No. Instructions (ATA No.) Qty Price (\$) Keyword (IPC No.) Disposition

Applicability: For each V2500 Engine to incorporate this Bulletin.

A. <u>Kits associated with this bulletin:</u>

None

B. Parts affected by this bulletin:

6A3915	1	_	Shaft and seal assembly	6A3898	(S1)(A)(B)
(72 - 32 - 23)				(01-700)	
6A3916	1	1547.00	Carrier assembly	6A3902	(S1)(A)(B)
(72-32-23)				(01-720)	
6A3917	1	876.00	Carrier	6A3903	(S1)(A)(B)
(72 - 32 - 23)				(01-728)	

C. <u>Instruction/Disposition code statements</u>

- (S1) New parts coded (S1) replace old parts coded (S1) as a complete set.
- (A) New part currently available.
- (B) Old part no longer available for sale.

NOTE: The estimated 1989 Unit Prices shown are provided for planning purposes only and do not constitute a firm quotation. Consult IAE Price catalog or contact IAE's Spare Parts Sales department for information concerning firm prices.