

SERVICE BULLETIN

<u>ENGINE - DIFFUSER AND COMBUSTION GROUP - NEW INNER NO.4 BEARING AND AIRFRAME MANIFOLD</u>

ASSEMBLY - CATEGORY CODE 8 - MOD.ENG-72-0016

1. Planning Information

A. Effectivity

(1) Aircraft: Airbus A320

(2) Engine: V2500-A1 Engines before Serial No.V0249*

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

effectivity.

B. Reason

(1) Condition

An interface clearance may not be adequate. The interface occurs during a blind assembly of the parts, but is not seen until disassembly of the parts.

(2) Background

After test, an inspection was done on two Inner No. 4 Bearing and Airframe Manifold Assemblies (No. 4 bearing oil weep tube assemblies). These parts, which came from two test engines, showed signs of interference with the HPC Static Air Seal Assembly (thrust balance seal). This occurs because the tube end point coordinates are changed during engine run, so that, after disassembly, it is possible they cannot be assembled again.

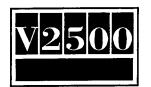
(3) Objective

To remove an interference between the Inner No. 4 Bearing and Airframe Manifold Assembly (oil weep tube assembly) and the HPC Static Air Seal Assembly (thrust balance seal).

(4) Substantiation

Satisfactory analytical review.

(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.

C. <u>Description</u>

- (1) Provide a new Inner No. 4 Bearing and Airframe Manifold Assembly with a new connector and a revised configuration short tube.
- (2) To remove nuts, brackets, a bolt and a screw which will not be used with the new configuration.

D. Approval

The Part Number Changes and/or part modifications described in Section 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 8

Accomplish based upon experience with the prior configuration.

F. Manpower

Estimated Manhours to incorporate the full intent of this Bulletin:

Venue Estimated Manhours

(1) In service Not applicable

(2) At overhaul Not applicable

G. Material - Price and Availability

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



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H. Tooling - Price and Availability

Special tools are not required to accomplish Sub-division 2 of this Service Bulletin.

I. Weight and Balance

(1) Weight change None

(2) Moment arm No effect

(3) Datum Engine front mount Centerline (Powerplant station P.P.S.100)

J. Electrical Load Data

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

K. Reference

(1) Internal Reference No.

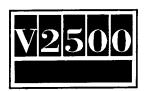
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(2) Other References

V2500 Engine Manual.

L. Other Publications Affected

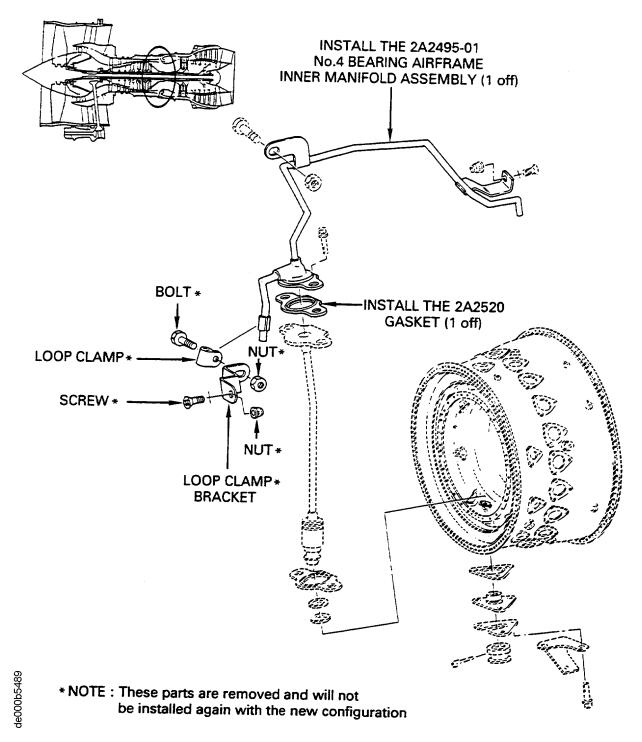
- (1) The V2500 Engine Illustrated Parts Catalog Chapter/Section 72-42-10, Figure 1, to remove parts and 72-42-20, Figure 3, to add the new parts.
- (2) The V2500 Engine Manual Chapter/Section 72-42-20, Cleaning, to add the new parts.
- (3) The V2500 Engine Manual Chapter/Section 72-42-20, Inspection, to add the new parts.
- (4) The V2500 Engine Manual Chapter/Section 72-42-20, Repair, to add the new parts.
- (5) The V2500 Engine Manual Chapter/Section 72-42-00, Disassembly, to add the new procedure.
- (6) The V2500 Engine Manual Chapter/Section 72-42-00, Assembly, to add the new procedure.



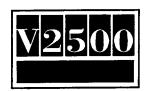
2. Accomplishment Instructions

- A. Rework Instructions
 - (1) There are no rework instructions necessary to accomplish this Service Bulletin.
- **B.** Assembly Instructions
 - (1) Install the 2A2496-01 No. 4 Bearing Airframe Inner Manfold Assembly (1 off) by the approved procedure given in Reference (1), Chapter/Section 72-42-00, Assembly, and Figure 1.
 - (a) The parts which follow are not installed with the new configuration: the 2AO489 Loop Clamp bracket (1 off), the MS122902 Loop Clamp (1 off), the MS9489-05 Bolt (1 off), the 4W2326 Screw (1 off), the 493773 Nut (1 off), and the 4W001 Nut (1 off). See Figure 1.
- C. Recording Instructions
 - (1) A record of accomplishment is necessary.





Location of the Inner No. 4 Bearing And Airframe Manifold Assembly Fig.1



3. Material Information

Applicability: For each V2500 Engine to incorporate this Bulletin.

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

None.

B. Parts affected by this Bulletin:

New Part No. (ATA No.)	Qty	Est'd Unit Price (\$)	Keyword	Old Part No. (IPC No.)	
-	1	-	Bracket, Loop Clamp	2A0489	(H)
(72-42-10) - (73-43-40)	1	-	Screw, Option	(01-180) 4w2326	(B)
(72-42-10) - (72-42-10)	1	-	Nut, Option	(01-200) 4W0001 (01-220)	(B)
(72-42-10) - (72-42-20)	2	-	Gasket	2A0391 (03-020)	(A) (C)
2A0391 (72-42-20)	1	8.42	Gasket	(03-020)	(E) (C)
2A2520 (72-42-20)	1	21.00	Gasket, (2 Hole)	(03-030)	(S1) (E)
(72-42-20) - (72-42-20)	1	-	Clamp, Loop Type Support	MS122902 (03-305)	(A)
(72-42-20) - (72-42-20)	2	-	Bolt	MS9489-05 (03-310)	(A) (F)
MS9489-05 (72-42-20)	1	4.73	Bolt	(03-310)	(E) (F)
(72-42-20)	2	4.04	Nut Option	493773 (03–315)	(B) (G)
493773 (72-42-20)	1	-	Nut Option Consisting of:	(03-315)	(E) (G)
493771	-	-	Nut or	(03 313)	
493772	-	-	Nut or		
638672	-	-	Nut or		
640216	-	-	Nut or		
651159 2A2495-01 (72-42-20)	- 1	- 1682.00	Nut Manifold Assembly – No. 4 Bearing Airframe Inner		(S1) (E) (H)



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C. <u>Instruction/Disposition Code Statements:</u>

- (S1) New Parts coded (S1) must replie Old Parts coded (S1) in a COMPLETE SET per engine.
- (A) Old part will be retained for lesser units and interchangeability.
- (B) Old part will be retained for lesser units.
- (C) The quantity of 2AO391 Gasket is reduced from 2 to 1.
- (E) New part is currently available.
- (F) The quantity of MS9489-05 Bolt is reduced from 2 to 1.
- (G) The quantity of 493773 Nut Option is recuded from 2 to 1.
- (H) Old part will no longer be available.

NOTE: The estimated 1993 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.



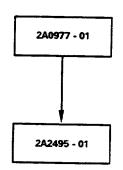
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MODIFICATIONS

BASELINE

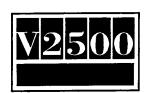
V2500 - ENG - 72 - 0016
PROVIDES A NEW No.4 BEARING AND
AIRFRAME MANIFOLD ASSEMBLY WITH
A NEW CONNECTOR AND REVISED
CONFIGURATION SHORT TUBE, AND
REMOVES NUTS, BOLT, SCREW AND BRACKETS

PART NUMBER CHANGE



1-000h5490

Family tree - Inner No. 4 Bearing And Airframe Manifold Assembly Catalog Sequence No. 72-42-20 Fig 03, Item 240 Fig.2



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