

# ENGINE - NO. 4 BEARING COMPARTMENT - INTRODUCE A NEW NO. 4 BEARING OIL TUBE ASSEMBLY - CATEGORY CODE 6 - MOD.ENG-72-0168

#### 1. Planning Information

#### A. Effectivity

(1) Aircraft: Airbus A320, A321

McDonnell Douglas MD-90

(2) Engine: V2500-A1 Engine Serial No. V0353 and Engines before Serial

No.V0337

V2527-A5 Engines before Serial No.V10051 V2530-A5 Engines before Serial No.V10051 V2525-D5 Engines before Serial No.V20007 V2528-D5 Engines before Serial No.V20007

#### B. Reason

#### (1) Condition

It was possible to have interference between the No. 4 Bearing and Airframe Outer Tube Assembly and the active clearance control linkage. Also, the sealing function did not always operate correctly.

## (2) Background

During the assembly procedure, some engines had No. 4 Bearing and Airframe Outer Tube Assemblies with interference and/or sealing problems.

## (3) Objective

To improve the fit and the sealing function of the No. 4 Bearing and Airframe Outer Tube Assembly.

#### (4) Substantiation

None.

## (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) Replace the No. 4 Bearing Outer Tube Assembly with one that has the following features:
  - (a) A decreased length.
  - (b) A connector with improved O. D. sealing.

#### 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. <u>Compliance</u>

Category Code 6

Accomplish when the subassembly (i.e. modules, accessories, components, build groups) is disassembled sufficiently to afford access to the affected part and to all affected spare parts.

## F. Manpower

Estimated Manhours to incorporate the full intent of this Bulletin for V2500-D5 Engines only:

Venue Estimated Manhours

(1) In service Not applicable

(2) At overhaul (Note: The parts affected by this Service Bulletin are accessible at overhaul.)

#### G. Material - Price and Availability

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

#### H. Tooling - Price and Availability

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



## International Aero Engines

## 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 electical load.

## K. Reference

(1) Internal Reference No.

92VA167

(2) Other References

V2500 Engine Illustrated Parts Catalogs (V2500-A1, V2500-A5 and V2500-D5).

V2500 Engine Manual.

MD-90 Engine Manual.

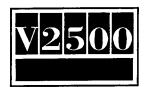
#### L. Other Publications Affected

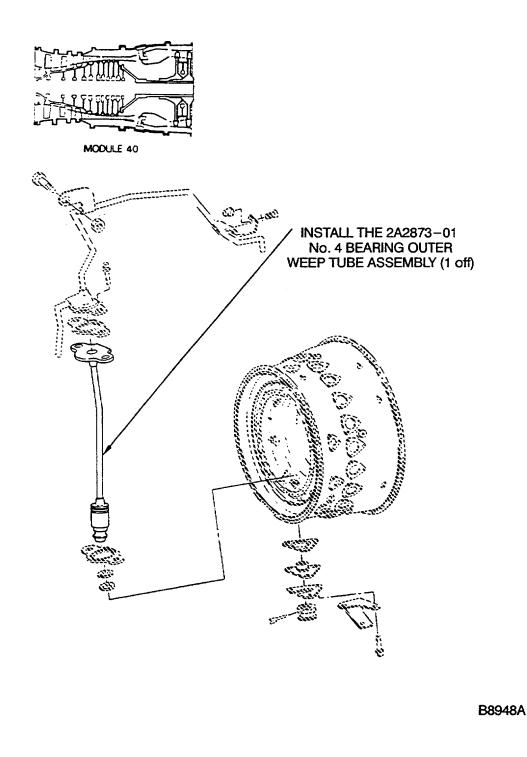
- (1) The V2500 Engine Illustrated Parts Catalog Chapter/Section 72-42-20, Figure 3 (for the V2500-A1, V2500-A5 and V2500-D5), to add the new parts.
- (2) The V2500 Engine Manual Chapter/Section 72-42-20, Cleaning, to add the new parts.
- (3) The V2500 Engine Manual Chapter/Section 72-42-20, Inspection, to add the new parts.
- (4) The V2500 Engine Manual Chapter/Section 72-42-20, Repair, to add the new parts.
- (5) The MD-90 Engine Manual Chapter/Section 72-42-20, Cleaning, to add the new parts.
- (6) The MD-90 Engine Manual Chapter/Section 72-42-20, Inspection, to add the new parts.
- (7) The MD-90 Engine Manual Chapter/Section 72-42-20, Repair, to add the new parts.



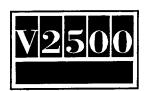
## 2. Accomplishment Instructions

- A. Rework Instructions
  - (1) There are no rework instructions necessary to accomplish this Service Bulletin.
- B. Assembly Instructions
  - (1) For V2500-A1 and V2500-A5 Engines
    - (a) Install the 2A2873-01 No. 4 Bearing Outer Weep Tube Assembly (1 off) by the approved procedure given in Reference (2), Chapter/Section 72-42-10, Asembly, and Figure 1.
  - (2) For V2500-D5 Engines
    - (a) Install the 2A2873-01 No. 4 Bearing Outer Weep Tube Assembly (1 off) by the approved procedure given in Reference (3), Chapter/Section 72-42-10, Assembly, and Figure 1.
- C. Recording Instructions
  - (1) A record of accomplishment is necessary.





Location of the No. 4 Bearing Outer Tube Assembly Fig.1



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
- (72 /2 20)	1	-	.Tube, Assembly, Outer	2A0367-01	(S1) (A)
(72-42-20) 2A2873-01 (72-42-20)	1	894.00	No. 4 Bearing .Tube, No. 4 Bearing Weep, Outer Assembly	(03-040) - (03-040)	(S1) (B)

- C. Instruction/Disposition Code Statements:
  - (S1) Old Parts and new parts coded (S1) are freely and fully interchangeable.
  - (A) Old part is no longer available.
  - (B) New part is currently available.

NOTE: The estimated 1994 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.