



ENGINE - NO.4 BEARING COMPARTMENT - REPLACE EXISTING TUBE ADAPTERS WITH TUBE ADAPTERS
HAVING A DECREASED INNER DIAMETER - CATEGORY CODE 5 - MOD.ENG-72-0148

1. Planning Information

A. Effectivity

- (1) Aircraft: Airbus A320, A321
McDonnell Douglas MD-90
- (2) Engine: V2500-A5 Engines before Serial No.V10007
V2500-D5 Engines before Serial No.V20007

B. Reason

(1) Condition

The cool air that flows from Stage 10 of the High Pressure Compressor to the Stage 2 Turbine Blades can be increased.

(2) Background

A change to tube boss adapters with a decreased inner diameter increases the flow of air that cools the Stage 2 Turbine Blades.

(3) Objective

To increase the flow of cool air to the Stage 2 Turbine Blades.

(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. Description

- (1) To replace the tube to boss adapters with new adapters.

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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 5

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

F. Manpower

Estimated Manhours to incorporate the full intent of this Bulletin:

Venue	Estimated Manhours
(1) In service	Not applicable
(2) At overhaul (Note: The parts affected by this Service Bulletin are accessible at overhaul.)	
(a) To remove the old adapter	10 Minutes
(b) To install the new adapter	12 Minutes
	TOTAL 22 Minutes

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.

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)

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**SERVICE BULLETIN****J. Electrical Load Data**

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

K. References

- (1) Internal Reference No.

92VA122

- (2) Other References

V2500 Engine Illustrated Parts Catalogs (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 6 (for the 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 MD-90 Engine Manual Chapter/Section 72-42-20, Cleaning, to add the new parts.
- (5) The MD-90 Engine Manual Chapter/Section 72-42-20, Inspection, to add the new parts.

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2. Accomplishment Instructions

A. Rework Instructions

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

B. Assembly Instructions

(1) For V2500-A5 Engines

- (a) Remove the 2A1912 Adapters by the approved procedure given in Reference (2), Chapter/Section 72-42-00, Disassembly.

NOTE: Adapters are removed and installed at two locations.

- (b) Install the 2A2776 Adapters (2 off) by the approved procedure given in Reference (2), Chapter/Section 72-42-00, Assembly, and Figure 1.

(2) For V2500-D5 Engines

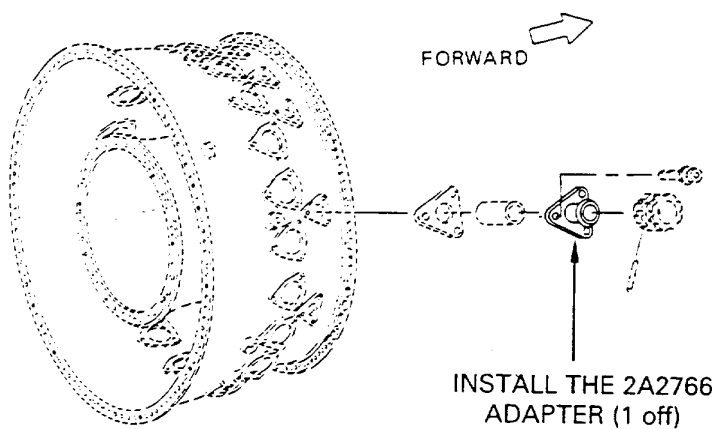
- (a) Remove the 2A1912 Adapter by the approved procedure given in Reference (3), Chapter/Section 72-42-00, Disassembly.

NOTE: Adapters are removed and installed at two locations.

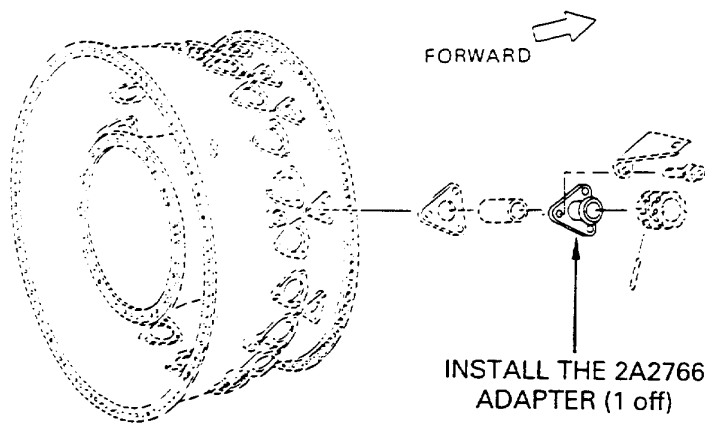
- (b) Install the 2A2776 Adapters (2 off) by the approved procedure given in Reference (3), Chapter/Section 72-42-00, Assembly, and Figure 1.

C. Recording Instructions

- (1) A record of accomplishment is necessary.



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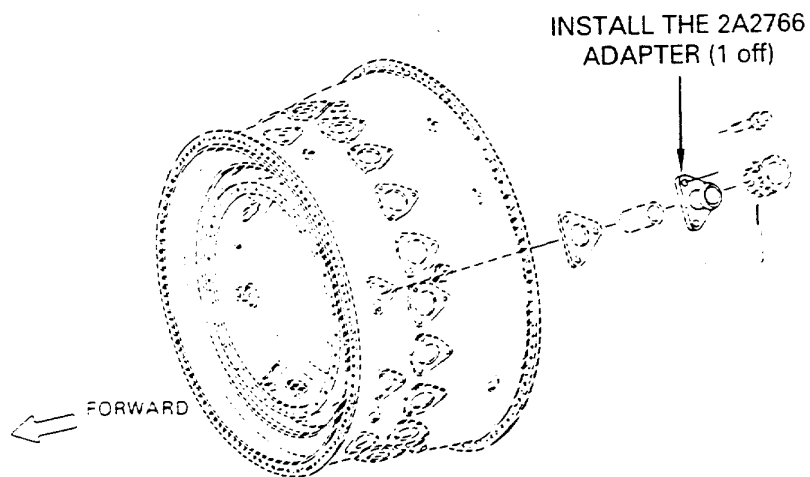


V2500 - A5

B8839

Location of the Adapter (Right Side View V2500-A5 and V2500-D5)
Fig.1 (Sheet 1)

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B8838

Location of the Adapter (Left Side View V2500-A5 and V2500-D5)
Fig.1 (Sheet 2)

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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
2A2766 (72-42-20)	2	-	Adapter	2A1912 (06-240)	(S1) (A) (B)

C. Instruction/Disposition Code Statements:

- (S1) Old Parts and new parts are freely and fully interchangeable.
- (A) New part is currently available.
- (B) Old part is no longer 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.

