

# **SERVICE BULLETIN**

# <u>ENGINE - LP COMPRESSOR - REMOVE UNNECESSARY BLANKING PLATES AND OIL DRAIN TUBE FROM THE</u> <u>FAN FRAME ASSEMBLY - CATEGORY CODE 7 - MOD.ENG-72-0170</u>

#### 1. Planning Information

#### A. Effectivity

(1) Aircraft: (a) McDonnell Douglas MD-90

(2) Engine: (a) V2525-D5 Engines prior to Serial Number V20007.

(b) V2528-D5 Engines prior to Serial Number V20007.

#### B. Concurrent Requirements

None.

#### C. Reason

#### (1) Condition

Unnecessary blanking plates and seal drain tube remain on the Fan Frame Assembly.

#### (2) Background

A review for the existing Fan Frame Assembly has shown that a weight saving can be achieved by replacing the seal drain tube with flow restricting pin and deletion of blanking plates and plugs.

#### (3) Objective

The changes introduced by this Service Bulletin are designed to reduce engine weight.

## (4) Substantiation

Substantiation testing has been successfully completed.

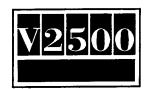
#### (5) Effects of Bulletin on workshop procedure:

Removal/Installation Not affected

Disassembly/Assembly Affected (See supplemental information)

Cleaning Not affected Inspection/Check Not affected Repair Not affected Testing Not affected

#### (6) Supplemental Information



(a) The Disassembly/Assembly will be revised to add new configuration of this Service Bulletin.

#### D. <u>Description</u>

- (1) This Service Bulletin introduces the new Fan Frame Assembly as follows:
  - (a) The blanking plates are deleted from inside of No.1 and No.6 bypass struts on the Fan Frame Assembly.
  - (b) Replace the seal drain tube assembly with flow-restricting pin which is fitted on the Fan Frame Assembly (See Figure 1).
  - (c) The existing bolt and sealing ring of the seal drain tube assembly have been deleted. (See Figure 1).
  - (d) Engine weight will be decreased 0.4 lb. (0,18 kg).

#### E. Approval

The Part Number transaction shown under the Material Information portion of this Bulletin has been shown to comply with the applicable Federal Aviation Regulations and are FAA-APPROVED for the Engine Model listed.

#### F. Compliance

Category Code 7.

Venue

Accomplish when supply of superseded parts has been depleted.

#### G. Manpower

Estimated Manhours to incorporate the full intent of this Bulletin:

(1) In service ........ Not applicable
(2) At overhaul ........ Not affected

NOTE: (The parts affected by this bulletin are accessible at overhaul)

#### H. Material - Price and Availability

(1) Modification kit not required. Parts are supplied as single line items.

**Estimated Manhours** 

(2) See "Material Information" section for prices and availability of future spares.



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#### I. Tooling - Price and Availability

Special tools are not required to accomplish this Bulletin.

#### J. Weight and Balance

- (1) Weight change ----- Minus 0.4 lb. (0,18 kg)
- (2) Moment arm ----- No effect.
- (3) Datum ----- Engine front mount centerline (Powerplant Station (P.P.S.)100)

#### K. Electrical Load Data

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

#### L. References

(1) Internal Reference No.

EC92VJ144

EC95VJ012A

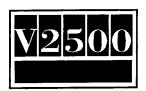
(2) Other references

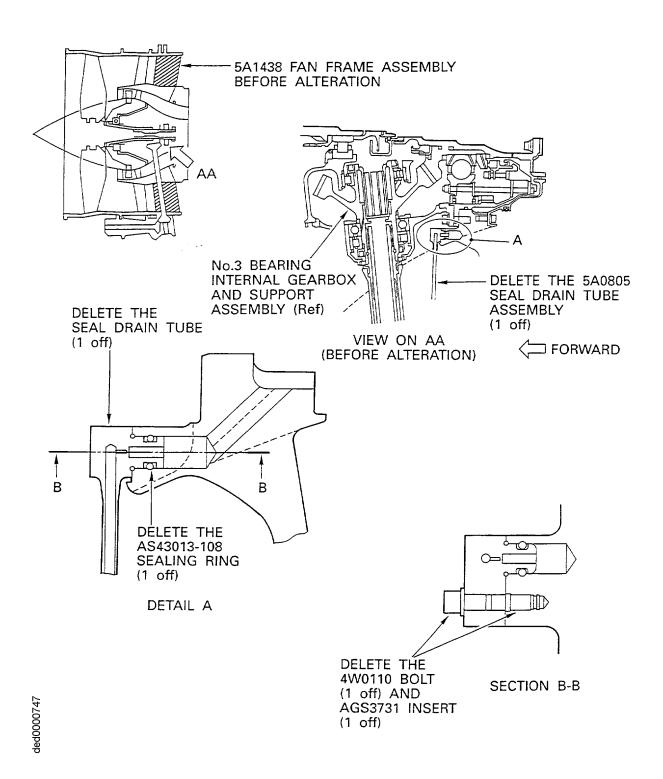
V2500 Engine Illustrated Parts Catalog (S-V2500-3IA).

V2500 Engine Manual (E-V2500-3IA).

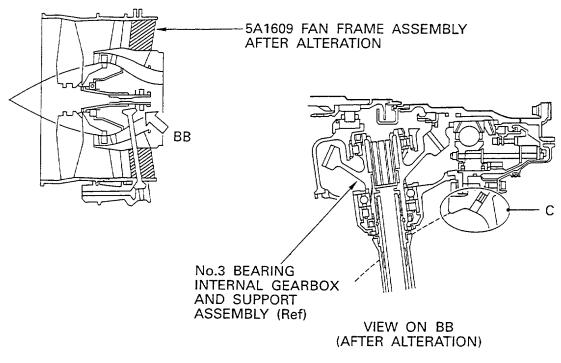
#### M. Other Publications Affected

- (1) V2500 Engine Illustrated Parts Catalog (S-V2500-3IA), Chapter/Section 72-32-00, 72-32-03 and 72-32-38.
- (2) V2500 Engine Manual (E-V2500-3IA), Chapter/Section 72-32-00, Disassembly-12 and Assembly-04.

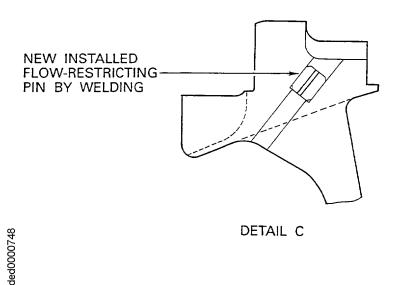




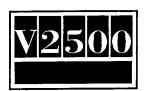
Fan Frame Assembly - Before and After Alteration Fig.1 (Sheet 1 of 2)







Fan Frame Assembly - Before and After Alteration Fig.1 (Sheet 2 of 2)



## 2. Accomplishment Instructions

#### A. Rework Instructions

There are no rework instructions necessary to accomplish this Service Bulletin.

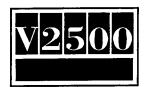
#### B. Assembly Instructions

(1) Install the 5A1609, fan frame assembly by the approved procedures in Reference L. (2), Chapter/Section 72-32-00, Assembly-04.

The 4W0110, bolt, the AS43013-108, sealing ring and the 5A0805, seal drain tube are not necessary to install on the engines.

## C. Recording Instructions

A record of accomplishment is necessary.



### 3. Material Information

Applicability: For each V2500-D5 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.)	Instruction Disposition
 (72-32-00)	1		.Bolt, Machine Double Hex	4W0110 (02-215)	(c)(s1)
 (72-32-00)	1		.Ring, Sealing Toroidal	AS43013-108 (02-220)	(C)(S1)
5A1609 (72-32-03)	1		.Frame, A/O Fan	5A1438 (03-100)	(A)(B) (E)(S1)
 (72-32-03)	1		Insert	AGS3731 (03-141)	(C)(D)
 (72-32-38)	1		.Tube, A/O Seal Drain	5A0805 (01-200)	(c)(s1)

## C. <u>Instruction/Dispostion Code Statements:</u>

- (A) New part is currently available.
- (B) Old part will no longer be available for sale.
- (C) Old part will continue to be supplied.
- (D) This is part of Fan Frame A/O.
- (E) Part is not normally a provisioned item. Contact IAE Spare Parts Department for a firm part price quotation.
- (S1) New parts coded (S1) must replace old parts coded (S1) as a COMPLETE SET per engine.

NOTE: The estimated 1996 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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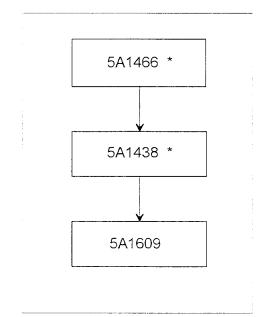
MODIFICATIONS

PART NUMBER CHANGE V2500-D5

BASE LINE

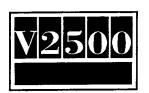
V2500-ENG-70-0244
TO ANNOUNCE THE AVAILABILITY
OF A NEW FAN FRAME ASSEMBLY

V2500-ENG-72-0170
REMOVE UNNECESSARY BLANKING
PLATES AND OIL DRAIN TUBE
FROM THE FAN FRAME ASSEMBLY



\* NOTE: PART ARE NOT REWORKABLE.

. Family Tree - Fan Frame Assembly Ref. Catalog Sequence No. 72-32-03 Fig. 03, Item 100 Fig.2



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