



POWER PLANT - DRAIN TUBE MAST - DRAINS COLLECTING BRACKET WITH INCREASED SEALING AREA  
- CATEGORY CODE 6 - MOD.ENG-71-0153

1. Planning Information

A. Effectivity

- (1) Aircraft: McDonnell Douglas MD-90
- (2) Engine: V2500-D5 Engines prior to Serial No.V20009.

B. Concurrent Requirements

None

C. Reason

(1) Condition

The sealing area of the drains collecting bracket is insufficient to accommodate lateral movement of the drains mast compressible seal mounted on the lower cowl door. This can permit oil leakage and damage to the compressible seal when in contact with the edge of the bracket.

(2) Background

The condition was highlighted during assembly.

(3) Objective

To improve the integrity of the seal between the drains collecting bracket and the drains mast.

(4) Substantiation

The new design has been reviewed and the results have shown the increase in sealing surface area provided by the increased bracket width will be sufficient to accommodate any lateral movement of the cowl doors and maintain the seal integrity.

(5) Effect of Bulletin on Workshop Procedures:

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## SERVICE BULLETIN

Removal/Installation  
Disassembly/Assembly  
Cleaning  
Inspection/Check  
Repair  
Testing

Affected (see Supplemental Information)  
Not affected  
Not affected  
Not affected  
Not affected  
Not affected

## (6) Supplemental Information

- (a) The Removal/Installation will be revised to add the new configuration of this Service Bulletin.

D. Description

This Bulletin introduces a new drains collecting bracket with an increased seal land surface. The new bracket also features a side wall opening scalloped to maintain the existing clearance with the fuel pump drains tube.

E. 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.

F. Compliance

Category Code 6

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

G. Manpower

Estimated manhours to incorporate the full intent of this Bulletin:

Venue	Estimated Manhours
(1) In Service	Not applicable
(2) At Overhaul	Not affected

H. 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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**SERVICE BULLETIN****I. Tooling - Price and Availability**

Special tools are not required.

**J. Weight and Balance**

- |                   |  |
|-------------------|--|
| (1) Weight change | None   |
| (2) Moment arm    | No effect  |
| (3) Datum         | Engine front mount centerline<br>(Power Plant Station (PPS) 100) |

**K. Electrical Load Data**

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

**L. References**

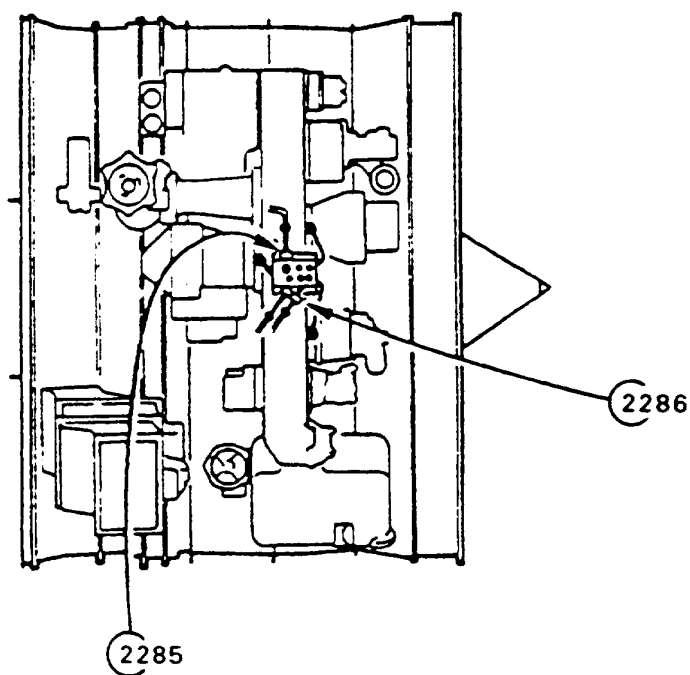
- (1) Internal Reference No.

EC93VR097

**M. Other Publications Affected**

- (1) V2500 Engine Illustrated Parts Catalog (S-V2500-3IA), Chapter/Section 71-71-42.
- (2) V2500 Engine Manual (E-V2500-3IA), 72-00-60, Removal-01 and Installation-04. 71-71-42, Removal, Installation, Cleaning and Inspection.
- (3) V2500 Maintenance Manual (M-V2500-3IA), 71-71-42, Removal and Installation. 72-60-00, Removal and Installation.

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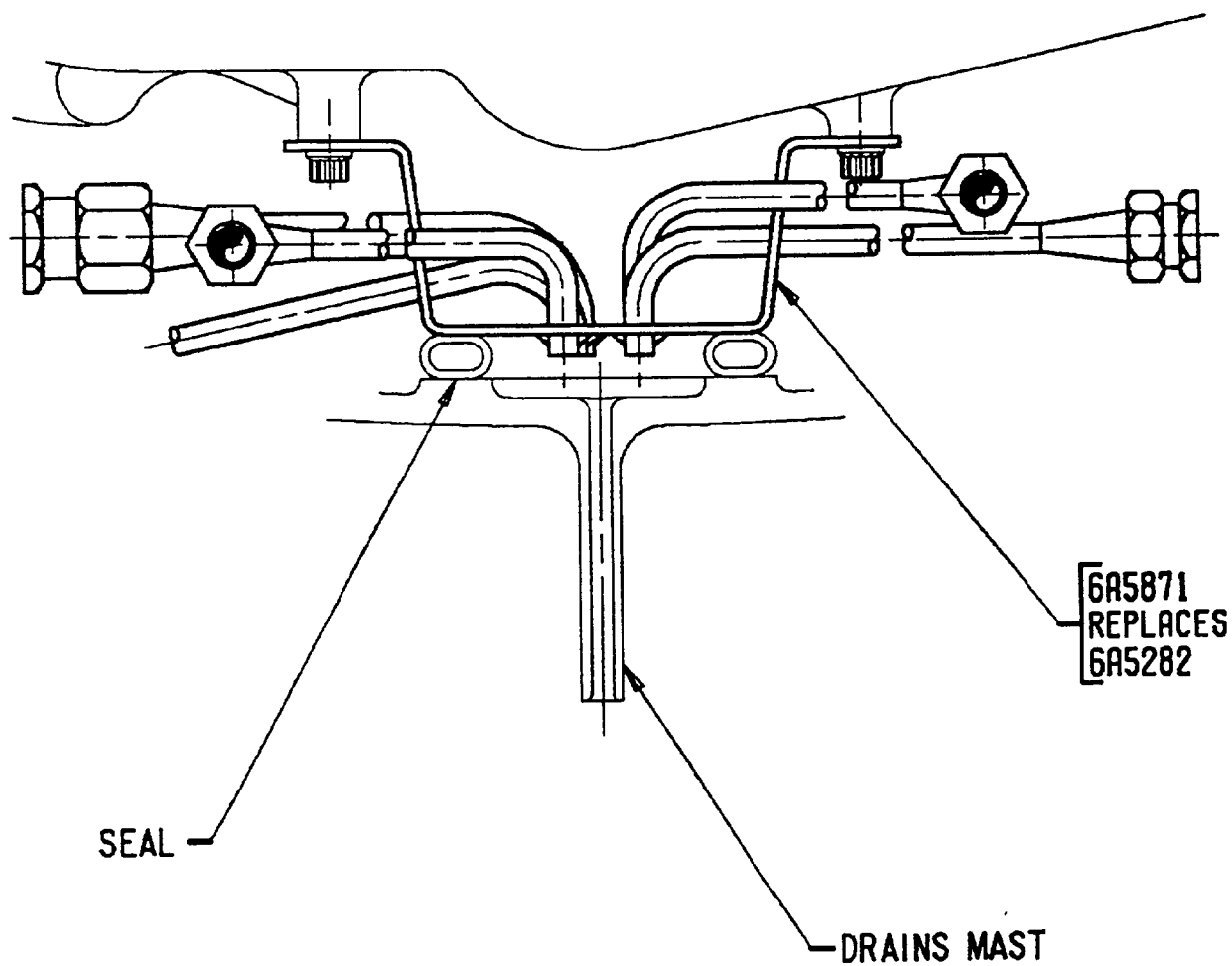
UNDERSIDE VIEW

Location of drains mast tube assembly  
Fig.1

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GEARBOX



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View on drains mast bracket at B.D.C. - Before and after alteration  
Fig.2

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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) Find the drains mast bracket assembly. Refer to Figure 1.
- (2) Remove and discard the lockwire, then disconnect the six drains mast tube nuts from related connections. Refer to Figure 1 and Figure 2.
- (3) Disassemble clipping points CP2285 and CP2286 and keep the parts.
- (4) Remove the drains mast retaining bolts 4W0167 (3 off), 4W0168 (1 off) and washers 4W2622 (4 off) and keep the parts.
- (5) Remove 6A5282 drains mast bracket, leaving CP2607 retaining bracket.
- (6) Install new 6A5871 drains mast bracket and position CP2607 retaining bracket.
- (7) Loosely connect the six drains mast tube nuts to related connections.
- (8) Install drains mast retaining bolt 4W0168 and washer 4W2622 (1 off) to secure CP2607 retaining bracket, install retaining bolts 4W0167 and washers 4W2622 (3 off) at the three other locations.
- (9) Install clipping points CP2285 and CP2286 using existing parts and torque the bolts to 36 to 45 lbfin (4 to 5 Nm).
- (10) Torque the drains mast retaining bolts to 85 to 105 lbfin (10 to 12 Nm).
- (11) Torque the VSCF Generator drains mast tube nut to 230 to 248 lbfin (26 to 28 Nm), torque the remaining five drains mast tube nuts to 159 to 177 lbfin (18 to 20 Nm).
- (12) Safety the six drains mast tube connectors with CoMat 02-126 lockwire.

### C. Recording Instructions

- (1) A record of accomplishment is necessary.



## SERVICE BULLETIN

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
6A5871 (71-71-42)	1		Tubing & Brkt assy of mast, drains collector	6A5282 (02-100)	(A)(B)(S1)

C. Instructions/Disposition Code Statements:

(A) New parts are currently available

(B) Old part will be discontinued

(S1) New parts may be installed in place of old parts  
but not vice versa.

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.

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