



## SERVICE BULLETIN

ENGINE - ANGLE GEARBOX ASSEMBLY - INTRODUCTION OF MODIFIED BRACKET SUPPORT - VSCF OIL COOLING TUBES - CATEGORY CODE 7 - MOD.ENG-72-0197

1. Planning InformationA. Effectivity

- (1) Aircraft: McDonnell Douglas MD-90
- (2) Engine: V2500-D5 Engines, Serial Nos.V20007 and V20008 only.

B. Concurrent Requirements

None

C. Reason

## (1) Condition

See (2) Background

## (2) Background

Difficulty has been reported in clipping the variable speed constant frequency generator oil cooling tubes at clipping point 2354. This may result in the tube assembly being prestressed during assembly.

## (3) Objective

To introduce a new bracket for ease of assembly and to avoid potential tube damage.

## (4) Substantiation

Trial build with a redesigned bracket has been shown to eliminate the assembly difficulty previously experienced.

## (5) Effect 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

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**D. Description**

This Bulletin introduces a new bracket similar to the existing bracket except for a repositioned clipping hole and a redesigned stiffening web.

**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 7

Accomplish when supply of superseded parts has been depleted.

**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.

**I. Tooling – Price and Availability**

Special tools are not required.

**J. Weight and Balance**

(1) Weight change	T.B.A.
(2) Moment arm	T.B.A.
(3) Datum	Engine front mount centerline (Power Plant Station (PPS) 100)

**K. Electrical Load Data**

This Bulletin has no effect on the aircraft electrical load.

**V2500–ENG–72–0197**



**L. References**

(1) Internal Reference No.

EC94VR012

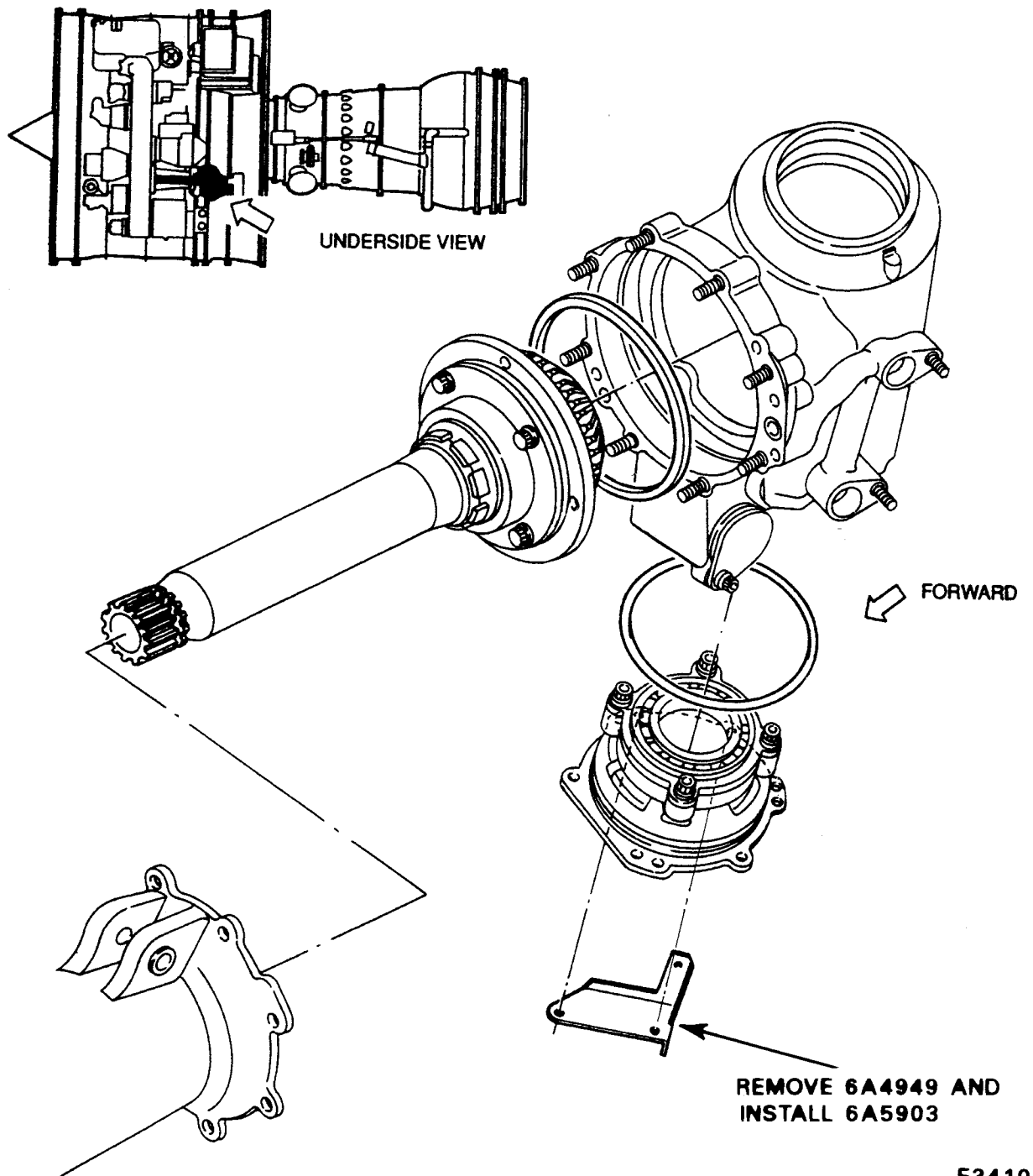
**M. Other Publications Affected**

(1) V2500 Engine Illustrated Parts Catalog (S-V2500-3IA), Chapter/Section 72-60-40.

(2) V2500 Engine Manual (E-V2500-3IA), 72-00-60, Removal-02 and Installation-03.

(3) V2500 Component Maintenance Manual (CMM-MECH-V2500-3IA), 72-60-40, Cleaning and Inspection/Check.

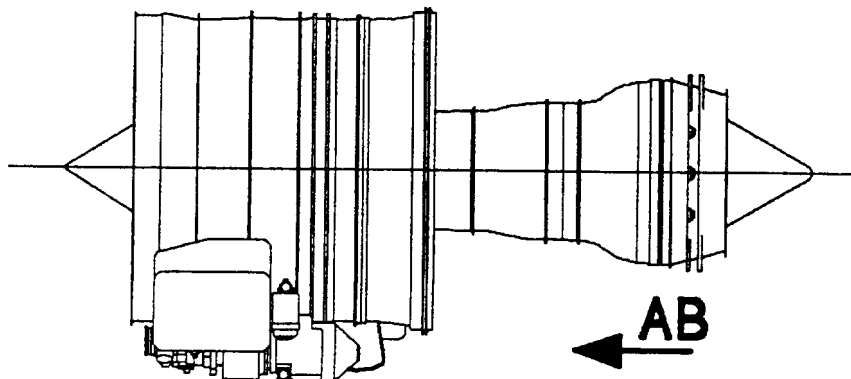
94) V2500 Engine Maintenance Manual (M-V2500-3IA), 72-60-00, Removal/Installation.



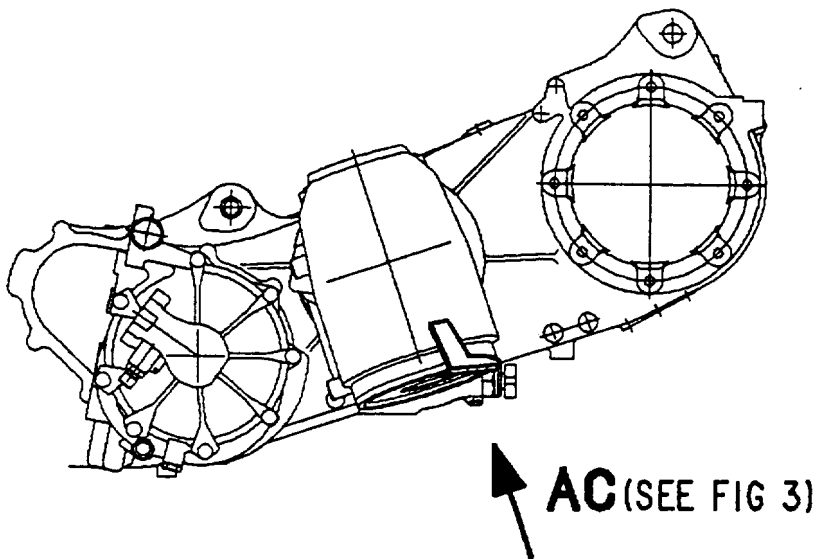
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Location of support bracket  
Fig.1

V2500-ENG-72-0197



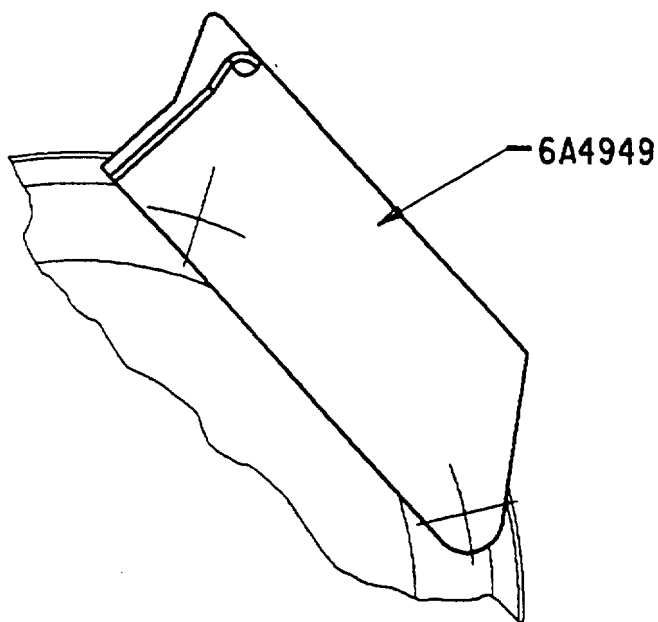
DIAGRAMMATIC VIEW ON LEFT HAND SIDE OF ENGINE



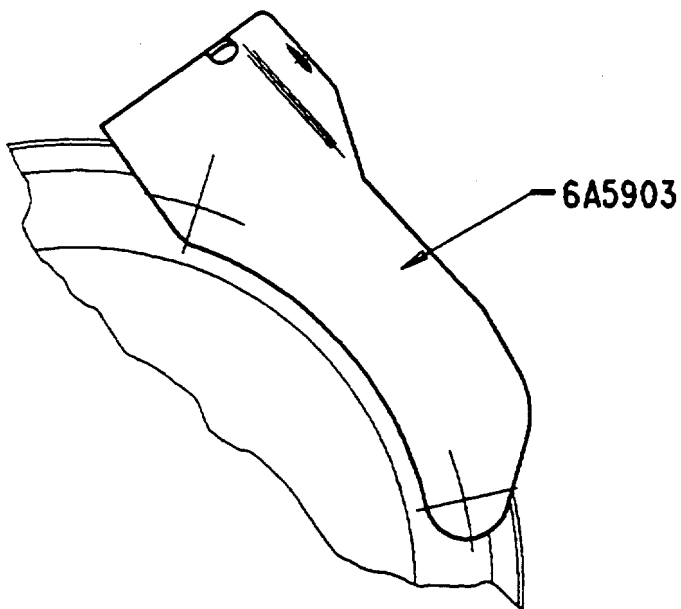
PART VIEW ON ARROW **AB**  
SHOWING POSITION OF SUPPORT  
BRACKET ON ANGLE GEARBOX

Views showing position of support bracket on angle gearbox  
Fig.2

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PART VIEW ON ARROW **AC** (SEE FIG 2)  
BEFORE ALTERATION



PART VIEW ON ARROW **AC** (SEE FIG 2)  
AFTER ALTERATION

Part view on arrow AC (see Figure 2) - Before and after alteration  
Fig.3

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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 6A4949 bracket. Refer to Figures 1, 2 and 3.
- (2) Disassemble clipping point CP2354 sufficiently to allow the removal of 6A4949 bracket.
- (3) Remove the bracket retaining bolts (2 off) and washers (2 off) and remove the 6A4949 bracket.
- (4) Install the new 6A5903 bracket using the retaining bolts (2 off) and washers (2 off) previously removed in step (3).
- (5) Torque the retaining bolts (2 off) to 85 to 105 lbfin (10 to 12 Nm).
- (6) Install clipping point CP2354 using existing parts previously removed at step (2) and torque the bolt to 36 to 45 lbfin (4 to 5 Nm).

### C. Recording Instructions

- (1) A record of accomplishment is necessary.



### 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
6A5903 (72-60-40)	1		Bracket	6A4949 (01-057)	(A)(B)(S1)

#### C. Instructions/Disposition Code Statements:

(A) New parts are currently available

(B) Old parts are no longer available

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

NOTE: The estimated 1994 unit price shown is provided for planning purposes only and does not constitute a firm quotation. Consult the IAE Price Catalog or contact IAE's Spare Parts Sales Department for information concerning firm prices.