

International Aero Engines

SERVICE BULLETIN

POWER PLANT - BRACKETS AND RACEWAYS, HARNESS SUPPORT, FAN - INTRODUCTION OF MODIFIED SUPPORT BRACKET AND SPACER FOR HARNESS RACEWAY ADJACENT TO EEC - CATEGORY CODE 6 - MOD.ENG-71-0116

1. Planning Information

A. Effectivity

- (1) Aircraft: (a) McDonnell Douglas MD-90
- (2) Engine: (a) V2525-D5 Engines prior to Serial No.V20007.
 - (b) V2528-D5 Engines prior to Serial No.V20007.

B. Concurrent Requirements

None.

C. Reason

(1) Condition

Installation of the EEC harness Loom A can be difficult.

The problem is caused by the support tube and clip points CP2432 and CP2277 which do not align correctly.

(2) Background

During build of flight certification engines it was found that the support tube did not locate correctly.

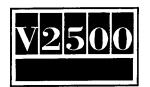
(3) Objective

The purpose of this Service Bulletin is to make engine build easier.

(4) Substantiation

A satisfactory engineering analysis has been done on the changes contained in this Service Bulletin. A satisfactory trial installation has also been done on a V2500 mock-up engine.

(5) Effect of Bulletin on Workshop Procedures



Removal/Installation Affected
Disassembly/Assembly Not affected
Cleaning Not affected
Inspection/Check Not affected
Repair Not affected
Testing Not affected

(6) Supplemental Information

None.

D. <u>Description</u>

This Service Bulletin includes the changes that follow:

- (1) A 0.200 in. (5 mm) aluminium spacer and longer bolt at clip point 2277.
- (2) A raceway support bracket with a decrease in height at flange FB and with the clipping hole for clip point 2432 in a different position.

E. Approval

The part number changes and/or part modifications are given in Section 2 and 3 of this Service Bulletin. They obey the applicable Federal Aviation Regulations and are FAA-APPROVED for the engine model listed.

F. Compliance

Category code 6.

Do this Service Bulletin when the sub-assembly (That is modules, accessories, components, build groups) is disassembled sufficiently to get access to the affected parts.

G. Manpower

Estimate of manhours necessary to do this Service Bulletin in full

Venue Estimated Manhours

(1) In service Not applicable

(2) At overhaul No additional time is necessary to do this Service Bulletin

NOTE: It is possible to get access to parts affected by this Service Bulletin at overhaul.



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- H. <u>Material Price and Availability</u>
 - (1) A modification kit is not necessary.
 - (2) See "Material Information" section for prices and availability of spares.
- I. Tooling Price and Availability

Special tools are not necessary.

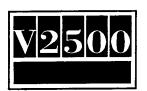
- J. Weight and Balance
 - (1) Weight change Plus 0,05 kg (0.1lb.)
 - (2) Moment arm 500 mm (19.7in.) forwards
 - (3) Datum Engine front mount centreline (Power Plant Station PPS 100)
- K. Electrical Load Data

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

- L. <u>References</u>
 - (1) Internal Reference No.

93VR061

- M. Other Publications Affected
 - (1) The V2500 Illustrated Parts Catalog, Chapter/Section 71-71-50.
 - (2) The V2500 Engine Manual, Chapter/Section 72-00-32.



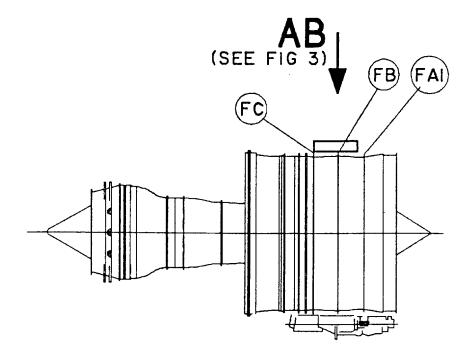
2. Accomplishment Instructions

A. Rework Instructions

None.

- B. Assembly Instructions
 - (1) For the correct removal/installation procedures refer to the V2500 Engine Manual (EM), Chapter/Section 72-00-32, Removal/Installation.
- C. Recording Instructions
 - (1) A record of accomplishment is necessary.

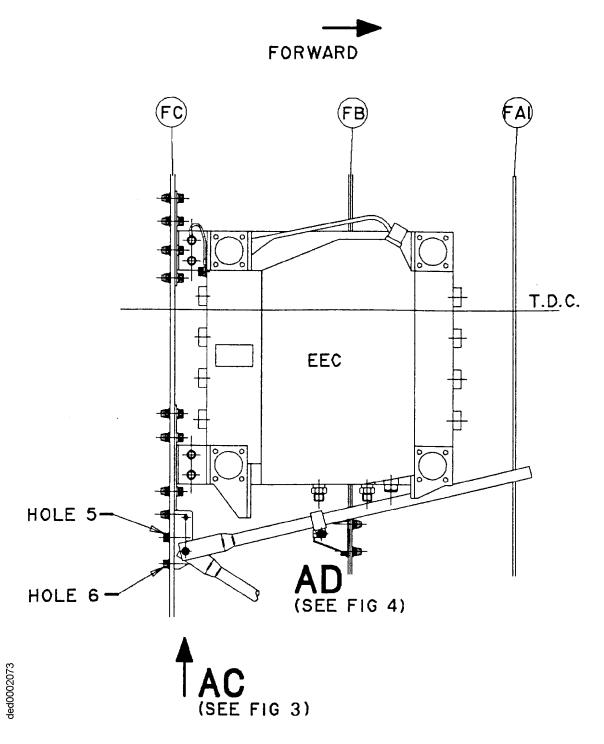




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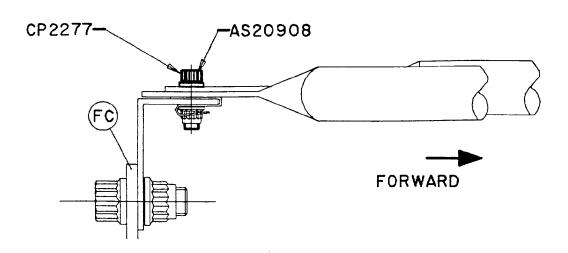
Diagrammatic view on RH side of engine Fig.1 $\,$



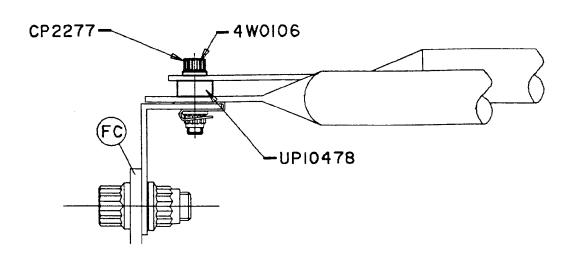


Enlarged view at AB - Position of support brackets of harness raceway - Before and after alteration
Fig.2





VIEW ON ARROW AC BEFORE ALTERATION

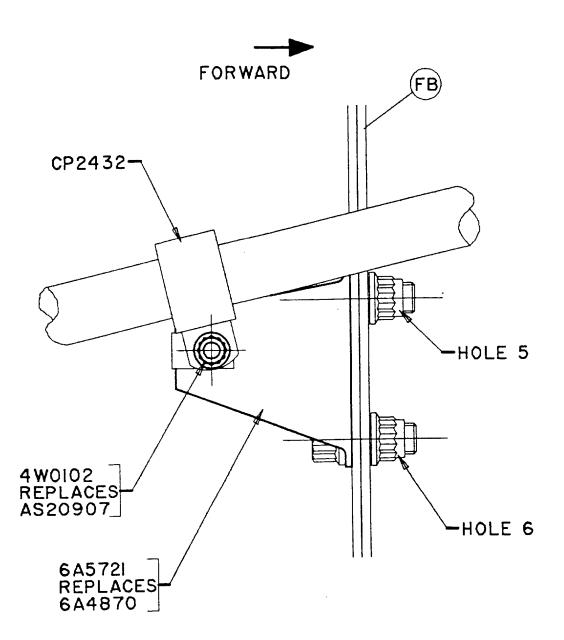


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VIEW ON ARROW AC

Enlarged view at AC - Support bracket of harness raceway - Before and after alteration Fig.3

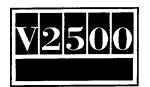




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VIEW AT AD

Enlarged view at AD - Support bracket of harness raceway - Before and after alteration Fig.4



3. Material Information

Applicability: For each V2500 Engine to incorporate this Bulletin.

A. <u>Kits associated with this Bulletin:</u>

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
4W0106 (71-51-50)	1	4.63	Bolt, machine double hex (CP2277) (0.190 dia x 0.688)	AS20908 (01-310)	(A)(S1)(1D)
UP10478 (71-51-50)	1	10.90	Spacer (CP2277)	- (01–311)	(A)(B)
4W0102 (71-51-50)	1	4.63	Bolt, machine double hex (CP2432)	AS20907 (01-333)	(A)(S1)(1D)
6A5721 (71-51-50	1	27.20	Bracket, clipping (CP2432)	6A4870 (01-350)	(A)(C)(S1)

NOTE: The 1997 unit prices shown are an estimate and they are given for the purpose of planning only. For information about actual prices, refer to the IAE Price Catalog or contact IAE's Spare Parts Sales Department.

C. <u>Instructions Disposition Codes:</u>

- (A) New part is currently available.
- (B) Additional.
- (C) Old part will be discontinued.
- (S1) New and old parts are not interchangeable.
- (1D) Old part may be used up on other applications.

