

International Aero Engines

SERVICE BULLETIN

<u>ENGINE - FUEL AND CONTROL - ENGINE FUEL AND CONTROL - FUEL SYSTEM TUBES - INTRODUCTION OF BOLTS WITH INCREASED LENGTH TO ATTACH A FUEL TUBE ASSEMBLY TO THE FUEL DIVIDER VALVE - CATEGORY CODE 5 - MOD.ENG-73-0133</u>

1. Planning Information

A. Effectivity

- (1) Aircraft: (a) Boeing-Douglas Product Division MD-90.
- (2) Engines: (a) V2525-D5 Engines prior to Serial No.V20202.
 - (b) V2528-D5 Engines prior to Serial No.V20202.

B. Concurrent Requirements

None.

C. Reason

(1) Problem

It has been found that the bolts which attach a fuel tube to the fuel divider valve (FDV) are too short. Under adverse tolerance conditions, the engagement of the bolt thread with the insert of the locking feature of the units is not sufficient.

(2) Evidence

The problem has been found during engine build.

(3) Substantiation

A satisfactory engineering analysis and a successful trial installation on a V2500 mock up engine have been done on the changes introduced by this Service Bulletin.

(4) Objective

The purpose of this Service Bulletin is to maintain engine reliability.

(5) Effect of Bulletin on:

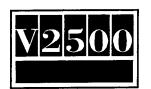
(a) Operation

Not affected.

(b) Maintenance

Not affected.

V2500-ENG-73-0133



SERVICE BULLETIN

(c) Overhaul

Not affected.

(d) Repair Schemes

Not affected.

(e) Interchangeability

Not affected.

(f) Fits and Clearances

Not affected.

D. <u>Description</u>

- (1) A revised bolt is introduced with the change tha follows:
 - (a) The length of the bolt has increased.

E. Compliance

Category 5

This Service Bulletin can be accomplished when the engine is disassembled sufficiently to get access to all the affected subassemblies (That is modules, accessories, components, build groups).

F. Approval

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

G. Manpower

Estimate of manhours necessary to embody this Service Bulletin in full:

Venue Estimated Manhours

(1) In Service

(a) To gain access 12 Minutes

(b) To replace existing bolts 15 Minutes

(c) To return engine to a serviceable condition 15 Minutes

V2500-ENG-73-0133



International Aero Engines

SERVICE BULLETIN

Total 42 Minutes

(2) At Overhaul

(a) To replace existing bolts 15 Minutes

Total 15 minutes

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

H. Material - Price and Availability

- (1) A modification is not necessary.
- (2) Refer to 3.Material Information for prices and availability of future spares.

I. Tooling - Price and Availability

Special tools are not necessary.

J. Weight and Balance

(1) Weight Change

None.

(2) Moment Arm

Not effected.

(3) Datum

Engine front mount centreline (Power Plant Station (PPS)100).

K. Electrical Load Data

The aircraft electrical load is not affected by this Service Bulletin.

L. References

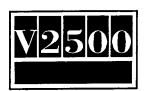
(1) Internal Reference No.

EC98VR006

M. Other Publications Affected

(1) Illustrated Parts Catalogue Chapter/Section 73-11-49.

V2500-ENG-73-0133



SERVICE BULLETIN

2. Accomplishment Instructions

A. Rework Instructions

None.

B. Assembly Instructions

For the correct removal/installation procedures refer to the MD-90 Aircraft Maintenance Manual (AMM), Chapter/Section 73-11-47 or the D5 Engine Manual (EM), Chapter/Section 72-00-40, Removal-02 and Installation-09.

C. Recording Instructions

A record of accomplishment is necessary.



SERVICE BULLETIN

3. Material Information

Applicability: For each V2500 engine for which this Service Bulletin is applicable.

A. Kits necessary for this Service Bulletin:

None.

B. Parts affected by this Service Bulletin:

NEW ITEM NUMBER	QTY	EST'D UNIT PRICE (\$)	PART TITLE	OLD PART NUMBER	INSTR DISP
4W0169 (73-11-49)	3	5.55	Bolt, machine double hex (.250 dia x.938)	4W0166 (09-114)	(A)(S1) (1D)

NOTE: The unit prices, if shown, are an estimate and they are given for the purpose of planning only. For information about actual prices, refer to IAE Price Catalog or contact IAE's spare parts sales department.

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

- (A) New part is available.
- (S1) New part can replace old part, but old part cannot replace new part.
- (1D) Old part can be used on other applications.

