

# **SERVICE BULLETIN**

Jan.12/00

Subject:

Transmittal of Revision 2 to Service Bulletin V2500-ENG-73-0148.

## Service Bulletin Revision History:

Event

Date

Initial Issue

Jan. 29/99.

Revision 1

Mar. 5/99.

Revision 2

Jan. 12/00

# Reason for Revision:

(1) Added statement in 1. B. Concurrent Requirements.

To the effect that SB 73-0148 is replaced by SB 73-0154.

#### Effect on Past Compliance:

None.

#### List of Effective Pages:

Page No.	Revision No.	Effective Date	
1	Revision 2	Jan.12/00.	
2	Revision 2	Jan.12/00	
3	Initial Issue	Jan. 29/99.	
4	Revision 1	Mar. 5/99.	
5 to 8	Initial Issue	Jan. 29/99.	



# **SERVICE BULLETIN**

# ENGINE FUEL AND CONTROL - FUEL NOZZLE - INTRODUCTION OF REVISED FUEL NOZZLE CLIPPING BRACKETS

## **MODEL APPLICATION**

V2525-D5 V2528-D5

### **BULLETIN INDEX LOCATOR**

73-13-00

Compliance Category Code

Internal Reference No.

4

EC98VR030

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# ENGINE FUEL AND CONTROL - FUEL NOZZLE - INTRODUCTION OF REVISED FUEL NOZZLE CLIPPING BRACKETS

#### 1. Planning Information

### A. Effectivity

- (1) Aircraft:
  - (a) Boeing-Douglas MD-90.
- (2) Engines:
  - (a) V2525-D5 Engines prior to Serial No. V20286.
  - (b) V2528-D5 Engines prior to Serial No. V20286.

#### B. Concurrent Requirements

R This Service Bulletin is superseded by Service Bulletin 73-0154

#### C. Reason

## (1) Problem

Hot air from the Stage-12 of the HP Compressor can leak from the fuel nozzle supports assemblies. In extreme conditions this can result in damage to the nacelle.

The problem is caused by overheating of the clipping brackets. This can result in the deformation of the holes and the thinning of the material under the bolt head. This causes a reduction in the torque on the attaching bolts and air can then leak past the fuel-nozzle support brackets.

(2) Evidence

The problem has been found on engines in service.

(3) Substantiation

A satisfactory engineering analysis has been done on the changes introduced by this Service Bulletin.

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(4)	Ob:	ective
17		

The purpose of this Service Bulletin is to maintain reliability.

- (5) Effect of Bulletin on:
  - (a) Operation

Not affected.

(b) Maintenance

Not affected.

(c) Overhaul

Not affected.

(d) Repair Schemes

Not affected.

(e) Interchangeability

Not affected.

(f) Fits and Clearances

Not affected.

#### D. Description

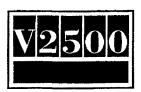
- (1) Five clipping brackets have been revised at seven locations, the changes are as follows:
  - (a) The material of the clipping brackets has changed from CP Titanium to 18-8 (Nb) Stainless Steel.

#### E. Compliance

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Category Code 4.

Accomplish at the first visit of an engine or module to a maintenance base that can comply with the accomplishment instructions. Accomplish regardless of the planned maintenance action or the reason for engine removal.



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#### 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

R

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

(1) In Service:

(a)	To gain access			16 Minutes
(b)	To embody		9 Hours	00 Minutes
(c)	To return engine to a serviceable condition			20 Minutes
		<u>Total</u>	9 Hours	36 Minutes

(2) At Overhaul:

(a) To embody 1 Hour 07 Minutes

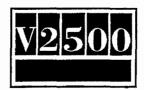
<u>NOTE</u>: It is possible to get access to the parts affected by this Service Bulletin at overhaul.

#### H. Material - Price and Availability

- (1) A modification kit is necessary. (Refer to 2. A.).
- (2) Refer to 2. Material Information for prices and availability of future spares.
- I. Tooling Price and Availability

Special tools are not necessary.

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## J. Weight and Balance

(1) Weight Change

Plus 0.3lb (0,14 kg).

(2) Moment Arm

33.6 in. (853 mm) to the rear.

(3) Datum

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

#### K. Electrical Load Data

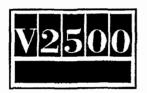
The aircraft electrical load is not affected by this Service Bulletin.

#### L. References

- (1) D5 Engine Manual (EM), Chapter/Section 72-00-40, Disassembly/Assembly.
- (2) MD-90 Aircraft Maintenance Manual (AMM), Chapter/Section 73-13-41, Removal/Installation.

#### M. Other Publications Affected

- (1) Illustrated Parts Catalogue (IPC), Chapter/Section 73-13-41.
- (2) D5 Engine Manual (EM), Chapter/Section 72-00-40, Disassembly/Assembly.
- (3) MD-90 Aircraft Maintenance Manual (AMM), Chapter/Section 73-13-41, Removal/Installation.
- (4) Component Maintenance Manual (CMM), Chapter/Section 73-13-41, Cleaning and Inspection/Check.



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# 2. Material Information

A Kits necessary for this Service Bulletin:

Modification Kit MKV803001

B. Parts affected by this Service Bulletin:

NEW PART No. (ATA No.)	QTY	EST'D UNIT PRICE (\$)	PART TITLE	OLD PART No. (IPC No.)	INSTR DISP
6A7537 (73-13-41)	1	33.00	.Bracket, clipping	6A4758 (01-350)	(A)(B)(S1)
6A7535 (73-13-41)	1	33.00	.Bracket, clipping	6A4746 (01-450)	(A)(B)(S1)
6A7536 (73-13-41)	1	33.00	.Bracket, clipping	6A4747 (01-550)	(A)(B)(S1)
6A7536 (73-13-41)	1		.Bracket, clipping	6A4747 (01-600)	(A)(B)(S1)
6A7534 (73-13-41)	1	33.00	.Bracket, clipping	6A4745 (01-650)	(A)(B)(S1)
6A7534 (73-13-41)	1		.Bracket, clipping	6A4745 (01-700)	(A)(B)(S1)
6A7538 (73-13-41)	1	33.00	.Bracket, clipping	6A5857 (01-720)	(A)(B)(S1)

NOTE:

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

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## C. Instruction Disposition Codes:

- (1) (A) New part will be available from February 1999.
- (2) (B) Old part will be discontinued.
- (3) (S1) Old and new parts are freely and fully interchangeable.



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## 3. Accomplishment Instructions

A. Rework Instructions

None.

- B. Assembly Instructions
  - (1) For the correct removal/installation procedure, refer to the:
    - (a) D5 Engine Manual (EM), Chapter/Section 72-00-40, Disassembly/Assembly and
    - (b) MD-90 Aircraft Maintenance Manual (AMM), Chapter/Section 73-13-41, Removal/Installation.
- C. Recording Instructions

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A record of accomplishment is necessary.