



ENGINE - FUEL AND CONTROL - ENGINE FUEL AND CONTROL - FUEL NOZZLE - INTRODUCTION OF  
REVISED FUEL NOZZLE CLIPPING BRACKETS - CATEGORY CODE 4 - MOD.ENG-73-0154

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

This Service Bulletin replaces the Service Bulletin ENG-73-0148. (Refer to 1.N.(1)).

C. Reason

(1) Problem

Hot air from Stage-12 of the HP Compressor can leak from the nozzle support 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 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.

(4) Objective

The purpose of this Service Bulletin is to maintain reliability.

(5) Effect on Bulletin on:

(a) Operation

Not affected.

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(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) Six clipping brackets have been revised at eight 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

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.

F. Approval

The part number changes and/or part modifications are given in Section 2 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 man-hours necessary to embody this Service Bulletin in full:

(1) In Service

(a) To get access

16 Minutes

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(b) To embody	9 Hours 20 Minutes
(c) To return engine to a serviceable status	20 Minutes
Total	9 Hours 56 Minutes

## (2) At Overhaul

(a) To embody	1 Hours 15 Minutes
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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 kit MKV 900201 is necessary for this Service Bulletin.

This Modification Kit is available free of charge to all affected operators between 16 April and 31 December 1999.

Operators must send a purchase order for the applicable quantity of kits. The purchase order must give the Serial Number of all affected engines and the IAE tracking number S 454 AUI must be put on all purchase orders.

The purchase orders must be sent to:

IAE Spares Division  
400 Main Street  
M/S 121-10  
East Hartford  
CT 06108  
USA

The sales department will advise operators about delivery schedules thirty days after the purchase orders have been received.

- (3) Refer to 2. Material Information for the prices and availability of future spares.

I. Tooling – Price and Availability

Special tools are not necessary.

J. Industry Support Information

Not applicable.

K. Weight and Balance

- (1) Weight Change

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Plus 0.3lb (0,14kg)

(2) Moment Arm

33.6in (853mm) to the rear.

(3) Datum

Engine Front Mount Centreline (Power Plant Station (PPS) 100).

L. Electrical Load Data

This Service Bulletin does not affect the aircraft electrical load.

M. Software Accomplishment Summary

Not applicable.

N. References

(1) Internal Reference No.

EC99VR002

(2) Other References

IAE V2500 Service Bulletin:

ENG-73-0148      ENGINE FUEL AND CONTROL – FUEL NOZZLE – INTRODUCTION OF  
REVISED FUEL NOZZLE CLIPPING BRACKETS.

D5 Engine Manual (EM), Chapter/Section 72-00-40, Disassembly/Assembly.

MD-90 Aircraft Maintenance Manual (AMM), Chapter/Section 73-13-41,  
Removal/Installation.

O. Other Publications Affected

(1) Illustrated Parts Catalogue (IPC), Chapter/Section 73-14-41.

(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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P. Interchangeability of Parts

Not affected.

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2. Material Information

## A. Kits necessary for this Service Bulletin:

Modification Kit MKV900201

## 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	34.80	.Bracket, clipping	6A4758 (01-350)	(A)(S1)
6A7535 (73-13-41)	1	24.80	.Bracket, clipping	6A4746 (01-450)	(A)(S1)
6A7536 (73-13-41)	1	34.80	.Bracket, clipping	6A4747 (01-550)	(A)(S1)
6A7536 (73-13-41)	1		.Bracket, clipping	6A4747 (01-600)	(A)(S1)
6A7534 (73-13-41)	1	34.80	.Bracket, clipping	6A4745 (01-650)	(A)(S1)
6A7534 (73-13-41)	1		.Bracket, clipping	6A4745 (01-700)	(A)S1)
6A7538 (73-13-41)	1	34.80	.Bracket, clipping	6A5857 (01-720)	(A)(S1)
6A7554 (73-13-41)	1	34.80	.Bracket, clipping	6A5548 (01-740)	(B)(S1)

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

## C. Instruction Disposition Codes

(1) (A) New part is available.

(2) (B) New part will be available from April 1999.

(3) (S1) New part may be fitted in place of old part, but not vica versa.

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3. Accomplishment Instructions

A Rework Instructions

None.

B Assembly Instructions

(1) For the correct removal/installation procedures, 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

A record of accomplishment is necessary.

