**International Aero Engines****RR-DERBY**

400 MAIN STREET, MAIL STOP 121-10  
EAST HARTFORD, CT 06108, USA.  
TELEPHONE: 860 565 5515  
FAX: 860 565 0600

DATE: **Mar.17/00**

P.O. BOX 31, DERBY  
TELEGRAMS - 'ROYCAR' DERBY  
TELEX - 37645  
TELEPHONE - DERBY 242424

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This document transmits the Initial Issue of Service Bulletin EV2500-71-0278

**Bulletin Initial Issue**

Remove

Incorporate  
Pages 1 to 9 of the  
Service Bulletin

Reason for change  
Initial issue

**V2500-ENG-71-0278**

Transmittal - Page 1 of 2

CHECK THAT ALL PREVIOUS TRANSMITTALS HAVE BEEN INCORPORATED

If any have not been received please advise Publication Services, Rolls-Royce plc, Derby, England

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# LIST OF EFFECTIVE PAGES

The effective pages to this Service Bulletin are as follows:

<u>Page</u>	<u>Revision Number</u>	<u>Revision Date</u>
-------------	------------------------	----------------------

Bulletin		
----------	--	--

1		Mar.17/00
2		Mar.17/00
3		Mar.17/00
4		Mar.17/00
5		Mar.17/00
6		Mar.17/00
7		Mar.17/00
8		Mar.17/00
9		Mar.17/00

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POWER PLANT – CORE HARNESSSES – INTRODUCTION OF EEC LOOMS G AND H WITH REVISED  
INSULATION SHIELDING

1. Planning Information

A. Effectivity

(1) Aircraft

(a) Boeing Long Beach Division MD-90

(2) Engines

(a) V2525-D5 Engines prior to Serial No.V20286

(b) V2528-D5 Engines prior to Serial No.V20286

(3) ATA Locator 71-52-00

B. Concurrent Requirements

None.

C. Reason

(1) Condition

Thermal break down of the loom G and loom H (fire wire system harnesses) insulation shield can occur, which allows the rolled back end of the metal over-braid to creep forward and make contact with the terminal tags.

This results in a short circuit to ground, leading to false fire indicators with subsequent delays and maintenance carry-overs.

(2) Background

The problem has been observed on engines in-service.

(3) Objective

Incorporation of this Service Bulletin is designed to maintain reliability.

(4) Substantiation

The changes introduced by this Bulletin have been the subject of satisfactory engineering analysis.



(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

D. Description

(1) The changes introduced are (Refer to Figure 1) :-

(a) Revised Fire Detection Harnesses, EEC Looms G and H, are introduced similar to the existing items except for the following:-

- (i) There are two locations on the harness with terminal tags and ground wires arranged as shown in Fig.1. At one of these locations only layers of glass tape are introduced between the existing insulation and the inner wire braid, with the unshielded space being increased from 0.25in. to 0.47in. (6,35mm to 12,00mm.)
- (ii) The protective bands have been reduced in quantity from 4 off to 2 off per harness.
- (iii) The Sleeves have been reduced in quantity from 8 off to 4 off per harness.
- (iv) Existing insulation shields are replaced by heat shrink sleeving.

E. Approval

The part number changes and/or part modification described in Section 2 and 3 of this Modification Bulletin have been shown to comply with the applicable Federal Aviation Regulations and are FAA-APPROVED for the Engine Models listed.

F. Compliance

Category Code 6

Accomplish when the sub-assembly (i.e. modules, accessories, components and build groups) is disassembled sufficiently to afford access to the affected part and to all affected spare parts.

G. Manpower

Estimate of man hours necessary to embody this Service Bulletin in full:



VENUE

ESTIMATED MANHOURS

(1) In Service

(a) To remove and replace both harnesses (one engine only)

Total : 16 hours  
(typically two men/eight hours  
each)

(2) At Overhaul

No additional time is necessary to embody this Service Bulletin.

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 is necessary, refer to 2. A. Material Information.

I. Tooling Price and Availability

Special tools are not required to accomplish this Service Bulletin.

J. Weight and Balance

(1) Weight Change

None

(2) Moment Arm

No affect

(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. References

IAE Engineering Change Number 99VR006

IAE Engineering Change Number 99VR006-01



IAE Engineering Change Number 99VR006A-01

V2500-D5 Engine Manual, 72-00-40, Removal-02 and Installation-09.

V2500-D5 Aircraft Maintenance Manual 71-52-57, Removal/Installation (Loom G).

V2500-D5 Aircraft Maintenance Manual 71-52-61, Removal/Installation (Loom H).

Boeing LBD Service Bulletin MD-90-26-013

M. Other Publications Affected

- (1) Illustrated Parts Catalogue (IPC), Chapter/Section 71-52-57, 71-52-58, 71-52-59, 71-52-61, 71-52-62 and 71-52-63.
- (1) Component Maintenance Manual (CMM-EHC-V2500-3IA), Chapter/Section 71-52-57 and 71-52-61 Cleaning, Inspection/Check and Repair.

NOTE: A page block referenced in this Service Bulletin may not yet be published in the current revision of the Manual. Contact IAE for additional Information as necessary.



## 2. Material Information

### A. Material - Price and availability

Applicability : For each V2500 engine to incorporate this Bulletin.

The prices as shown are for estimating purposes only and as such are given in good faith without commercial liability for advanced planning purposes only. Refer to IAE Spares and/or current Price catalog for current prices.

#### (1) Modification Kit

- (a) Modification kit MKV900601 is required to permit accomplishment of this Service Bulletin and is currently available.

Kit	Price US
MKV900601	2,152
MILI18746	163

Note: The above glass tape is not part of Kit MKV900601

- (b) Mod.kit MKV900601 consists of:

Part Number	Qty	Keyword
6A7565	1	Harness,assy
6A7566	1	Harness,assy
MILI18746	AR	Tape,glass

Note: The above glass tape is not part of Kit MKV900601

### B. Parts affected by this Bulletin.

NEW PART NO. (ATA No.)	QTY	KEYWORD	OLD PART NO.	INSTR DISP
6A7565 (71-52-57 01005)	1	.Harness, assy	6A5935	(A)(S1)
MILI18746 (71-52-57)	AR	..Tape,glass (V81349)	- (03-072)	(B)
U440266 (71-52-57)	1	..Sleeving (blk stk 1025604) (VK1010)	- (03-233)	(B) (E)



NEW PART NO. (ATA No.)	QTY	KEYWORD	OLD PART NO.	INSTR DISP
TFER3-8X 71-52-57	Ref	..Sleeving, heatshrink (VK1010)	- (03-233)	(B) (C)(F)
- (71-52-57)	2	..P/band	2A1421 (03-721)	(1D)
- (71-52-57)	4	..Sleeve	2A1443 (03-743)	(2D)
6A7566 (71-52-61 01005)	1	.Harness, assy	6A5936 (01-005)	(A)(S1)
MILI18746 (71-52-61)	AR	..Tape,glass (V81349)	- (03-072)	(B)
U440266 (71-52-61)	1	..Sleeving (blk stk 1025604) (VK1010)	- (03-233)	(B) (E)
TFER3-8X 71-52-61	Ref	..Sleeving, heatshrink (VK1010)	- (03-233)	(B) (E)(F)
- (71-52-61)	2	..P/band	2A1421 (03-721)	(1D)
- (71-52-61)	4	..Sleeve	2A1443 (03-743)	(2D)
No. 1 (Port) Position Only				
6A7565 (71-52-58 01005)	Ref	.Harness, assy - Loom G	6A5935	(A)(S1)
6A7566 (71-52-62 01005)	Ref	.Harness, assy - Loom H	6A5936	(A)(S1)
No. 2 (Starboard) Position Only				
6A7565 (71-52-59 01005)	Ref	.Harness, assy - Loom G	6A5935	(A)(S1)
6A7566 (71-52-63 01005)	Ref	.Harness, assy - Loom H	6A5936	(A)(S1)





C. Instructions disposition codes:

(A) New part is currently available.

(B) Additional.

(C) Parts coded (C) are alternative.

(E) Parts coded (E) are alternative.

(F) Reference only, new part will not be made available as a spare for replenishment purposes.

(S1) Old and new parts are freely and fully interchangeable.

(1D) Quantity reduced from 4 off to 2 off.

(2D) Quantity reduced from 8 off to 4 off.



3. Accomplishment Instructions

A. Remove and install in accordance with the V2500-D5 Aircraft Maintenance Manual.

B. Assembly Instructions

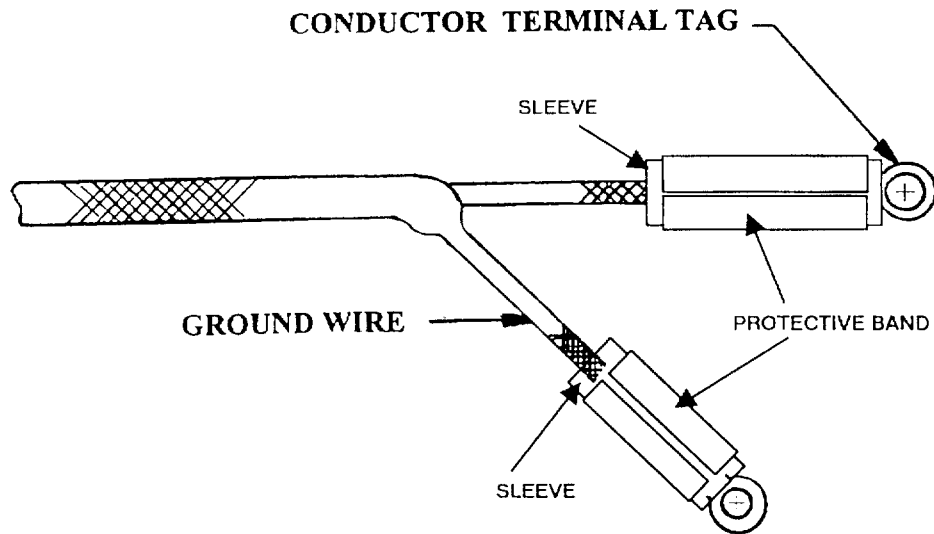
(1) D5 Engine Manual (EM), Chapter/Section 72-00-40, Removal-02 and Installation-09.

C. Recording Instructions

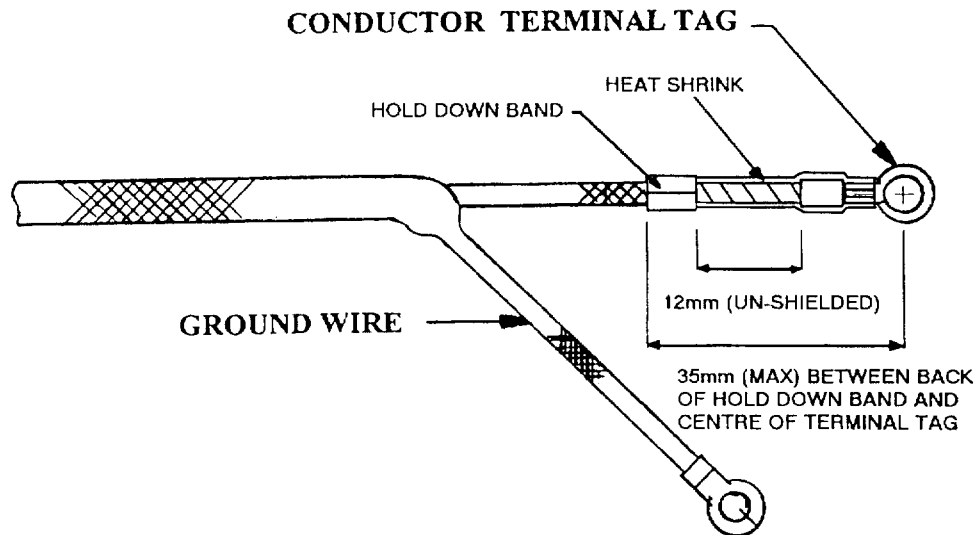
(1) A record of accomplishment is necessary.

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Pre SB71-0278



Post SB71-0278



Ided0003525

**Figure 1**  
**Fire Detection Harness – EEC Looms G and H Insulation Shielding**  
**Before and After Alteration**

