V2500 International Aero Engines

V2500 Propulsion System — Nacelle

SERVICE BULLETIN

NACELLE — EXHAUST - OVERHEAT DETECTOR HARNESS INSTALLATION, UPPER THRUST REVERSER HALF - MODIFICATION OF

MODEL APPLICATION

V2500-D5

BULLETIN INDEX LOCATOR

78-00-00

Compliance Category Code

4

Internal Reference No.

JG/LL 97VN814

September 19, 1997

V2500-NAC-78-0149

1. Planning Information

A. Effectivity

(1) Airplane: MD90

(2) Nacelle: V2500-D5 thrust reverser serial numbers 0021001 through 0347001.

B. Reason

(1) Condition

The upper thrust reverser half outboard overheat detector harness can break at the aft terminal lugs. There is also a possibility of interference between the harness and the thrust reverser heat shield at one clipping point.

(2) Background

Operators have experienced broken outboard bifurcation overheat detector harness terminal lugs. The cause has been determined to be stress on the aft terminal lugs which is the result of improper distribution of excess length in the harness. There is a possible interference between the harness and the thrust reverser heat shield at one clipping point.

(3) Objective

Modify the overheat detector harness installation to properly distribute excess length of the harness. Modify one clipping point to eliminate the possibility of interference between the harness and the thrust reverser heat shield.

(4) Substantiation

Not applicable.

(5) Impact of the Bulletin on Workshop Procedures:

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

(6) Supplemental Information

None.

C. Description

The change introduced by this Bulletin is as follows:

The excess length of the outboard bifurcation overheat detector harness is redistributed to eliminate stress on the terminal lugs. One clipping point is modified to eliminate the possible interference condition.

D. Approval

Incorporation of this service bullein must be accomplished only in conjunction with Douglas Aircraft Company Service Bulletin MD-90-26-007 which has received exclusive FAA approval for MD-90 Series Aircraft.

E. Compliance

Category 4

Accomplish at the first visit of the nacelle or nacelle component to a maintenance base capable of compliance with the accomplishment instructions reardless of the planned maintenance action for the nacelle or nacelle component.

F. Manpower

Estimated manhours to incorporate the full intent of this Bulletin for each nacelle:

VENUE		ESTIMATED MANHOURS
(1) In Service		
(a) To gain access		0.5 M/Hrs.
(b) To rework		1.0 M/Hrs.
(c) To return to service		0.5 M/Hrs.
	Total	2.0 M/Hrs.
(2) In Shop		
(a) To Rework		1.0 M/Hrs.
	Total	1.0 M/Hrs

NOTE: After incorporation of this modification, a maximum of 4.0 manhours for labor will be reimbursed by Rohr as a labor credit allowance per affected aircraft. To obtain a labor credit allowance after procurement of noted material. labor claims should reference this service bulletin number and aircraft fuselage number and be submitted to:

Rohr, Inc.
850 Lagoon Drive
Chula Vista, CA 91910-2098
Attn: Airline Support Manager, MZ 107A
Warranty Department
(Ref. Service Bulletin V2500-NAC-78-0149)

G. Material Cost and Availability

None. Parts are available as single line items.

H. Tooling Cost and Availability

None required.

I. Weight and Balance

(1) Weight change ..... None

(2) Moment arm ..... No effect

(3) Datum ..... Engine Front Mount Centerline
.....(Powerplant Station PPS 185.00)

J. Electrical Load Data

Not affected.

K. Reference — Chapter/Section

MD-90 Aircraft Maintenance Manual Manual (SPP-V2500-1IA)	78-32-00
IAE V2500 Standard Practices/Processes Manual (SPP-V2500-1IA)	70-09-00

L. Other Publications Affected

MD90/V2500D5 Thrust Reverser Component Maintenance Manual (CMM-TR-V2500-3IA)	78-33-12
MD-90 Aircraft Maintenance Manual	78-33-12

2. Accomplishment Instructions

A. Pre-requisite Instructions

(1) Open the upper and lower thrust reverser halves. Refer to the MD-90 Aircraft Maintenance Manual, Chapter 78-32-00, Page block 201.

B. Re-work Existing Outboard Overheat Detector Harness Installations.

NOTE: This procedure is the same for the left and right thrust reversers. The right thrust reverser part numbers are shown in parentheses.

(1) Remove the excess length at the aft end of the outboard overheat detector harness. Make the harness installation in this area look the same as shown in Figure 1 (Sheet 1) Detail A.

(2) Distribute the remaining excess length of the overheat detector harness forward. Be careful not to cause interference with other components.

NOTE: A suggested ideal installation of the harness is shown in Figure 1 (Sheet 2) Detail B. To make the installation like this, it is necessary to loosen all the clamps between the aft end of the overheat detector assembly and the forward bulkhead. It may also be necessary to remove and install some of the wire harness ties and the bulkhead fire wall fittings.

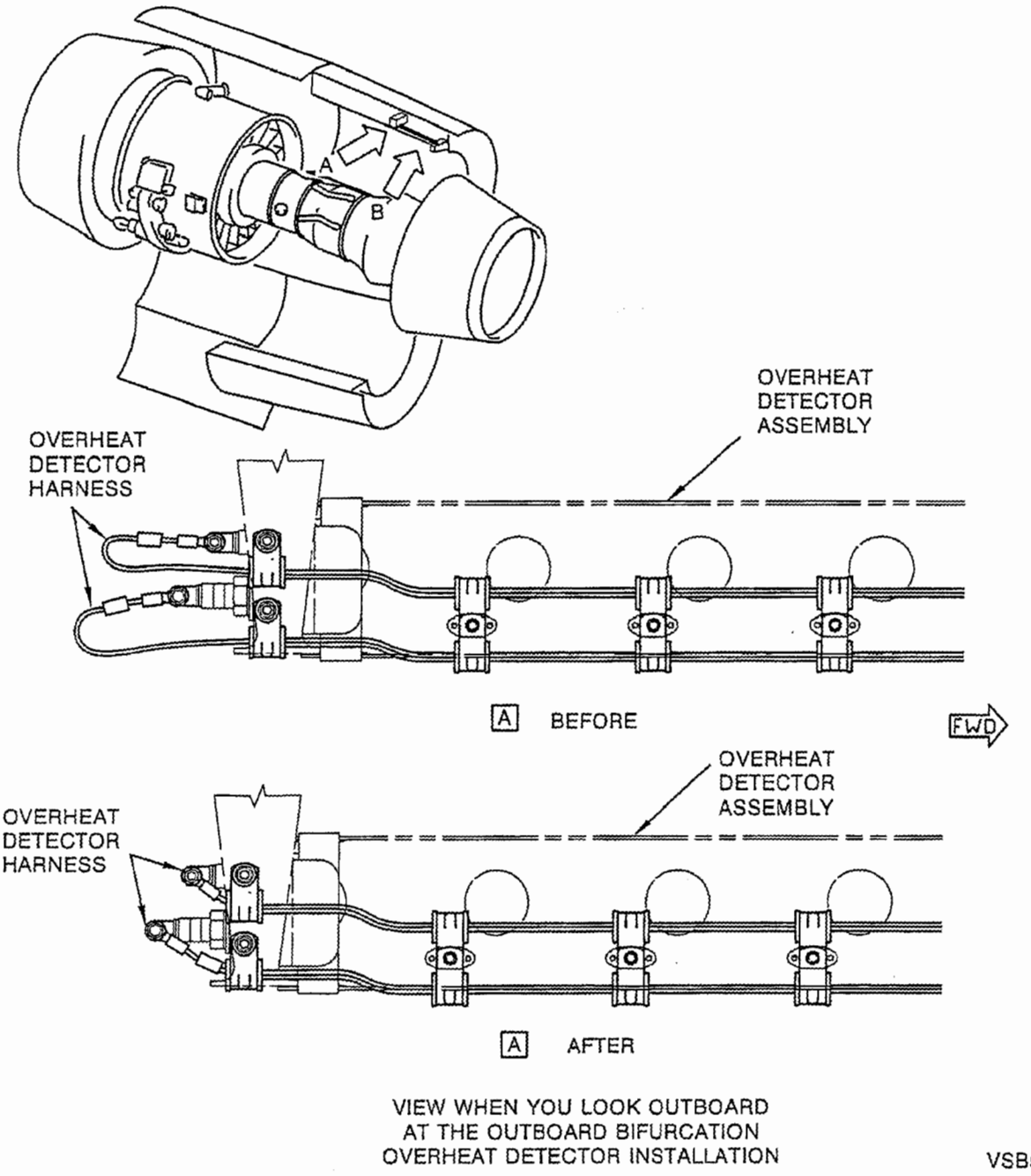
(3) Remove the nut, washer, bolt, and clip. Reverse the clip and install the bolt, washer, and nut. Refer to Figure 1 (Sheet 3) Detail C. This is done to eliminate the possibility of interference between the harness and the thrust reverser heat shield.

E. Post-requisite Instructions

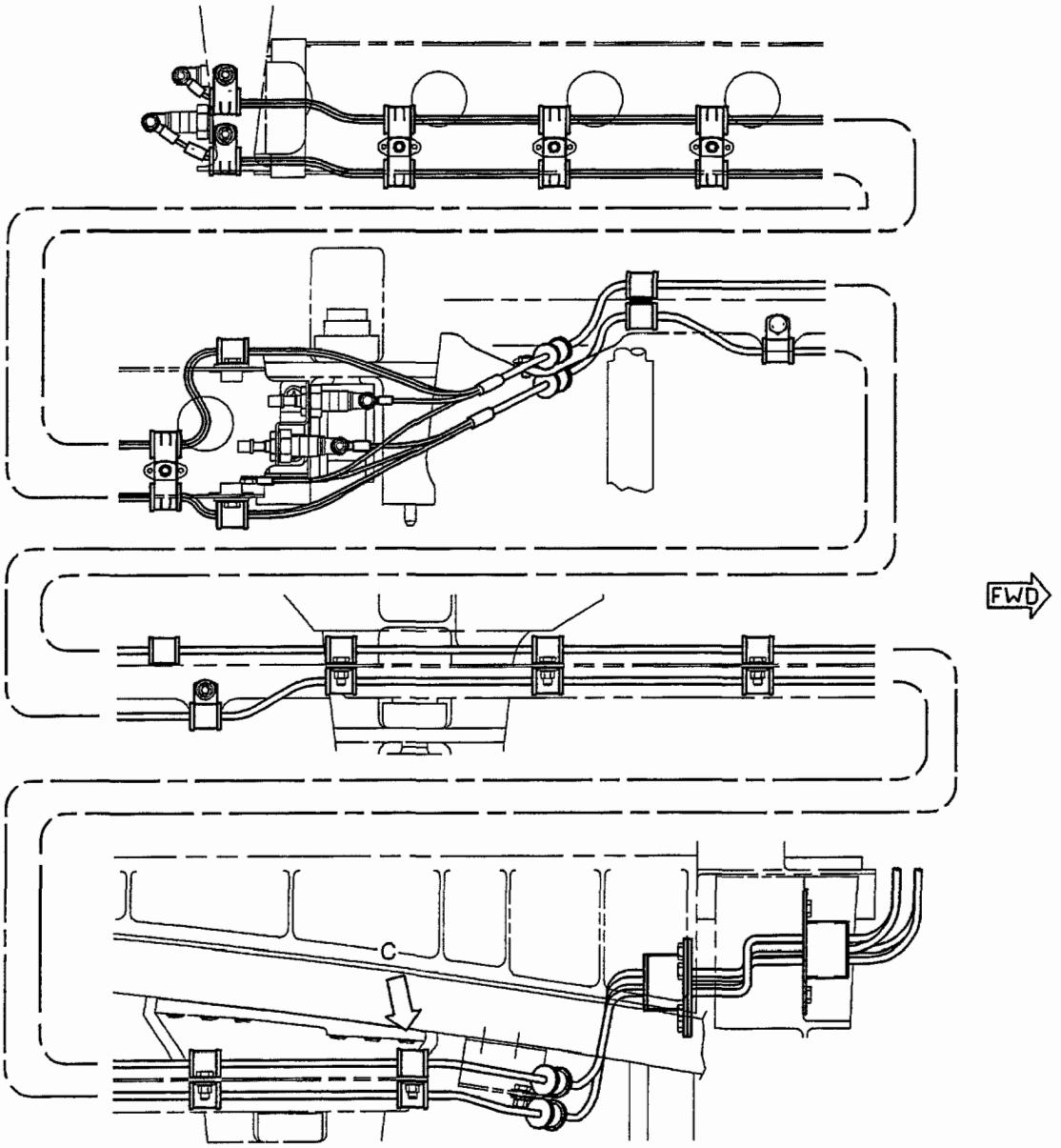
(1) Close the upper and lower thrust reverser halves. Refer to the MD-90 Aircraft Maintenance Manual, Chapter 78-32-00, Page block 201.

F. Recording Instructions

(1) A record of accomplishment is necessary. Write in the applicable records and metal stamp, electroetch, or vibroetch on the thrust reverser data plate that Service Bulletin V2500-NAC-78-0149 has been done. Refer to the IAE V2500 Standard Practices/Processes Manual, Chapter 70-09-00.



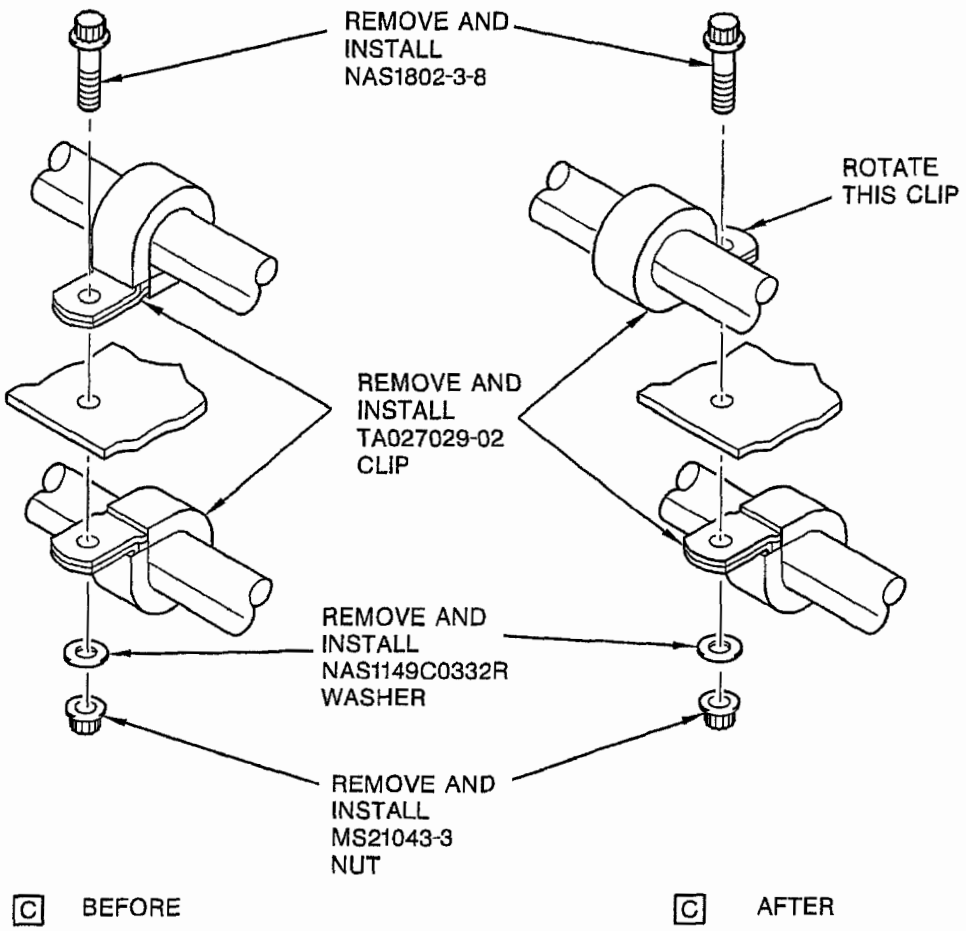
Overheat Detector Harness Instsllation Modification
Figure 1 (Sheet 1)



B VIEW WHEN YOU LOOK OUTBOARD AT THE OUTBOARD BIFURCATION OVERHEAT DETECTOR INSTALLATION

VSB568

Overheat Detector Harness Installation Modification
Figure 1 (Sheet 2)



VSB569

Overheat Detector Harness Installation Modification
Figure 1 (Sheet 3)

3. Material Information

Applicability: For each V2500-D5 Nacelle to incorporate this Bulletin.

A. Kits associated with this Bulletin:
None.

B. Parts Affected by this Bulletin:

NEW PART NO. (ATA NO.)	QTY	EST'D UNIT PRICE	KEYWORD	OLD PART NO. (IPC NO.)	INSTR/ DISPOS
290W5400-509 (78-33-12)	1		Harness Overheat Ch A	290W5400-505 (01-005)	(A)(B)(S1)
290W5400-511 (78-33-12	1 1		Harness Overheat Ch A	290W5400-507 (01-006)	(A)(B)(S1)
290W5406-503 (78-33-12)	1		Harness Overheat Ch B	290W5406-501 (01-102)	(A)(B)(S1)

C. Instruction/Disposition Code Statements

(A) Old part will no longer be available.

(B) New part is currently available.

(S1) New part may be used in place of old part but not vice versa.

NOTE: The estimated 1997 unit prices shown are provided for planning purposes only and do not constitute a firm quotation . Consult the Rohr Price Catalog or contact Rohr's Customer Support Department for information concerning firm prices.