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## V2500-D5 SERIES PROPULSION SYSTEM NON-MODIFICATION SERVICE BULLETIN

Printed in Great Britain

This document transmits the Initial Issue of Non-Modification Service Bulletin  
V2500-NAC-78-0232

### Service Bulletin Initial Issue

Remove	Incorporate	Reason for change
	Pages 1 to 8 of the Service Bulletin	Initial Issue

# V2500-NAC-78-0232

Transmittal - Page 1 of 1

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NON-MODIFICATION SERVICE BULLETIN – NACELLE – THRUST REVERSER – BLOCKER DOOR LINK  
ASSEMBLY – INSPECTION OF CHAMFER

1. Planning Information

A. Effectivity

- (1) Aircraft
  - (a) Boeing MD-90
- (2) Nacelle
  - (a) ALL V2500-D5 Thrust Reverser (in-service and spare).

B. Concurrent Requirements

- (1) None.

C. Reason

- (1) Condition

Thrust reversers have been found with damaged blocker door links. The bearings migrate out of position at the fixed structure end of the links and can fail in fatigue if left unnoticed for an extended period of time.

- (2) Background

Operators have reported a number of blocker door link failures that have resulted in delays, cancellations and damage to the thrust reverser inner fixed structure.

- (3) Objective

The changes in the configuration recommended in this Non-Modification Service Bulletin are intended to maintain reliability of the thrust reverser by inspecting the blocker door links and taking corrective action as necessary.

- (4) Substantiation

The intent of the Non-Modification Service Bulletin is to verify that the current part is in accordance with FAA approved design. The design of the part is not being altered. Inspection and repair procedure have been verified to accomplish the intent of the Non-Modification Service Bulletin.

**D. Description**

This Non-Modification Service Bulletin provides instructions to inspect the blocker door links and take corrective action as required.

**E. Approval**

The compliance statement and the procedures described in this Non-Modification Service Bulletin have been shown to comply with the applicable Federal Aviation Regulations and are FAA approved for the engine model listed.

**F. 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 regardless of the planned maintenance action for the nacelle or nacelle component.

**G. Manpower**

Estimated man-hours to incorporate the full intent of this Non-Modification Service Bulletin.

**(1) In Service**

(a) To gain access: 30 minutes

(b) To embody: 2 hours

(c) To close up: 30 minutes

Total: 3 hours per thrust reverser (upper and lower half)

**(2) At Overhaul**

(a) To embody: 1 hour (per upper or lower half thrust reverser half)

Total: 2 hours per thrust reverser (upper and lower half)

**NOTE:** Man-hours estimate is provided for planning purposes only. No labor reimbursement is provided under the terms of this Non-Modification Service Bulletin offering.

**H. Material Price and Availability**

No parts or materials are required to accomplish this Non-Modification Service Bulletin.

**I. Tooling and Availability**

Not applicable.

**J. Weight and Balance****(1) Weight Change**

None.

**(2) Moment Arm**

No effect.

**(3) Datum**

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

**K. Electrical Load Data**

Not applicable.

**L. References**

- (1) Boeing MD-90 Aircraft Maintenance Manual, Chapter 78-32-21  
Removal/Installation of blocker door links.
- (2) IAE V2500-D5 Thrust Reverser Component Maintenance Manual  
(CMM-TR-V2500-3IA), Chapter/Section 78-30-00.
- (3) IAE V2500 Standard Practices and Processes Manual (SPP-V2500-1IA),  
Chapter/Section 70-09-00.

**M. Other Publications Affected**

None.

## 2. Material Information

### A. Material – Price and Availability:

None.

### B. Material Requirements:

None.

### C. Kits necessary for this Non-Modification Service Bulletin:

None.

### D. Parts affected by this Non-Modification Service Bulletin:

CMM Illustrated Parts List (IPL), Chapter 78-30-00

FIG ITEM NO.	PART NO.	QTY	PART TITLE	MAT	DISPOSITION
20-120	290-0176 -501	4	Link Assy	-	Inspect
20-200	290-0176 -503	1	Link Assy	-	Inspect
21-120	290-0176 -501	4	Link Assy	-	Inspect
21-200	290-0176 -503	1	Link Assy	-	Inspect
22-070	290-0176 -501	4	Link Assy	-	Inspect
22-150	290-0176 -503	1	Link Assy	-	Inspect
23-070	290-0176 -501	4	Link Assy	-	Inspect
23-150	290-0176 -503	1	Link Assy	-	Inspect

### E. Instructions disposition codes:

None.

**F. Tooling – Price and Availability:**

None.

**G. Materials Required to do this Non-Modification Service Bulletin**

CMM, Task 78-30-00-300-038.

### 3. Accomplishment Instructions

- A. Visually inspect all blocker door link assemblies (P/N 290-0176-501 and 290-0176-503) to see if the part number and revision letter on the part are legible. If legible, only links identified with the following markings require removal for further examination. Removal is also required for links where the part number and revision letter are illegible.

290-0176-501 Rev "NC"  
290-0176-501 Rev "A"  
290-0176-503 Rev "NC"  
290-0176-503 Rev "A"

- B. Remove blocker door links identified in section 3.A. above per MD-90 Aircraft Maintenance Manual, Task 78-32-21-010-801.

- C. For links removed in section 3.B., measure as accurately as possible, the outside diameter of the chamfer (link end common to TR fixed structure). See Figures 1 and 2 for details.

- (1) If the measured chamfer diameter falls within the provided tolerance, then no further action is required for that link.
- (2) If the measured chamfer diameter falls outside the tolerance range, rework the chamfer by removing the bearing per CMM Task 78-30-00-300-038, beginning with Subtask 78-30-00-350-084.

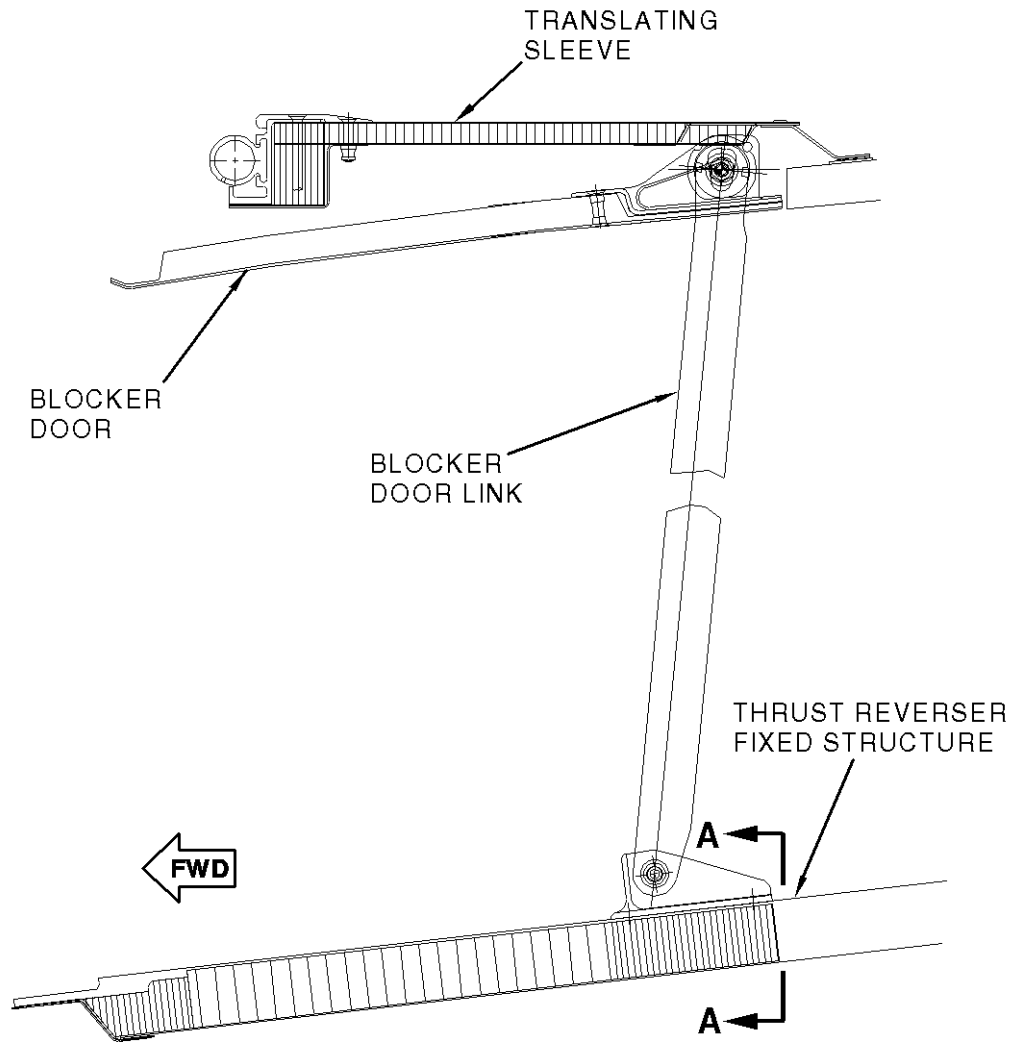
- D. Re-install links per MD-90 Aircraft Maintenance Manual, Task 78-32-21-420-801.

#### E. Recording Instructions

- (1) A record of accomplishment is required.

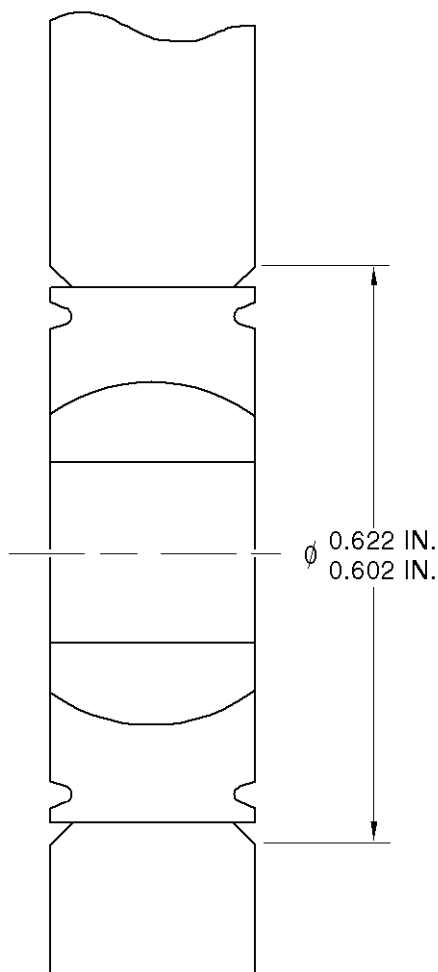
Write in the applicable records and metal stamp, electroetch or vibroetch on the thrust reverser data plate that Non-Modification Service Bulletin V2500-NAC-78-0232 has been done. Refer to the Standard Practices and Processes Manual (SPP-V2500-1IA), Chapter/Section 70-09-00.





gc00vsb998

Blocker Door Link, Installed  
Figure 1



VIEW  
**A-A**

Cross-section of link end with bearing, pre-swaged condition.  
Measure indicated dimension to outer diameter of chamfer.

Figure 2