International Aero Engines

V2500 Propulsion System - Nacelle

SERVICE BULLETIN

Number: V2500-NAC-78-0192

Summary

Date: April 12, 2001

ATA System: 78-30

Internal Reference No.

JG 01VN801

SUBJECT: "MODIFICATION SERVICE BULLETIN" - "NACELLE - EXHAUST - THRUST REVERSER COMPRESSION STRUT - ADDITION OF PROTECTIVE SLEEVE"

BACKGROUND

GENERAL:

Thrust reverser compression struts have been found with chafing damage in service.

This service bulletin provides instructions to install a protective teflon sleeve on the compression struts.

ACTION:

Install a protective teflon sleeve on the compression struts.

COMPLIANCE:

Category 6

Accomplish when the nacelle subassembly (i.e., accessories, components) is disassembled sufficiently to afford access to the affected part and to all affected spare parts.

EFFECTIVITY:

All V2500-D5 thrust reversers with serial numbers prior to 0701001.

MANPOWER:

Manpower necessary to incorporate Service Bulletin is 1.0 man hour for each thrust reverser. 2.0 man hours for each aircraft. 0.50 man hour for each spare compression strut.

MATERIAL INFORMATION:

The material required to accomplish this service bulletin is to be procured by the operator. Refer to Paragraph 3.G. of the service bulletin for material information.

SERVICE BULLETIN

"MODIFICATION SERVICE BULLETIN" - "NACELLE - EXHAUST - THRUST REVERSER COMPRESSION STRUT - ADDITION OF PROTECTIVE SLEEVE"

1. PLANNING INFORMATION

A. Effectivity

(1) Airplane: MD-90

(2) Nacelle: All V2500-D5 thrust reversers with serial numbers prior to 0701001.

B. Concurrent Requirements

(1) None.

C. Reason

(1) Problem

(a) The thrust reverser compression struts can become chafed in service.

(2) Cause

(a) Chafing between the compression strut and the mounting clips on the flame deflector.

(3) Background

(a) Thrust reverser compression struts have been found chafed in service.

(4) Objective

(a) The changes in configuration recommended in this Service Bulletin are intended to maintain reliability of the thrust reverser by preventing the compression struts from getting chafed in service.

(5) Substantiation

(a) Not applicable.

(6) Effects of Bulletin on Workshop Procedures

(a) Removal/Installation - not affected

(b) Disassembly/Assembly - not affected

(c) Cleaning - not affected

(d) Inspection/check - affected

(e) Repair - affected

(f) Testing - not affected

D. Description

This service bulletin provides instructions to install a protective teflon sleeve on the compression struts.

E. Compliance

Category 6

Accomplish when the nacelle subassembly (i.e., accessories, components) is disassembled sufficiently to afford access to the affected part and to all affected spare parts.

F. Approval

Incorporation of this Service Bulletin must be accomplished only in conjunction with Boeing Service Bulletin MD90-78-050 which has received exclusive FAA approval for MD-90 Series Aircraft.

G. Manpower

Estimated manhours to incorporate the full intent of this Service Bulletin.

VENUE	EST'D MAN HOURS
(1) In Shop	
(a) To accomplish	1.0 hours
Total	1.0 hours per nacelle (2.0 hours per aircraft)(0.5 hours per spare strut)

NOTE: Man hour estimate is provided for planning purposes only. No labor reimbursement is provided under the terms of this service bulletin offering.

H. Material Cost and Availability

The material required to incorporate this service bulletin is to be procured by the operator.

I. Tooling

None.

J. Weight and Balance

1)	Weight change	None
2)	Moment Arm	No effect
3)	Datum	Engine front mount centreline (Powerplant Station PS 100)

K. References

Publication	Chapter/Section
IAE Standard Practices/Processes Manual (SPP-V2500-1IA)	70-09-00
MD-90 Aircraft Maintenance Manual	78-30-00
Overhaul Processes/Consumable Index (PCI-V2500-1AE)	

L. Other Publications Affected

Publication	Chapter/Section
Thrust Reverser Component Maintenance Manual (CMM-TR-V2500-3IA)	78-30-15

2. Material Information

A. Material - Price and Availability

None.

B. Material Requirements

(1) The following is applicable to one thrust reverser.

C. Kits necessary for this Service Bulletin:

None.

D. Parts affected by this Service Bulletin:

NEW PNUMBER (ATA NUMBER)	QTY	ESTD UNIT PRICE	KEYWORD	OLD PN (IPL NUMBER)	INSTR/ DISPOS
290-0069-505 (78-30-15)	1		Strut, Comp Fwd	290-0069-501 (04-001)	(A)(1D) (S1)
290-0069-507 (78-30-15)	1		Strut, Comp Aft	290-0069-503 (04-010)	(A)(1D) (S1)

E. Instructions/Disposition Codes:

(A) Old part will no longer be available.

(1D) Old part can be modified and re-identified as new part number.

(S1) New part can replace old but not vice-versa.

F. Tooling - Price and Availability:

None.

G. Materials Required to do this Service Bulletin:

NOTE: To identify the consumable materials, refer to the Overhaul Processes/Consumable Index PCI-V2500-1IA.

CoMat 01-438	Solvent
CoMat 02-099	Lint Free Cloth
1H 750 SW 0	Heat Shrink PTFE Tubing

Zeus, Inc.
620 Magnolia Street
Orangeburg, SC 29115
(www.zeusinc.com)

3. Accomplishment Instructions

A. For compression struts that are installed, open the thrust reverser halves. Refer to the MD-90 Aircraft Maintenance Manual.

B. For compression struts that are installed, remove the thrust reverser compression struts from the flame deflector. Refer to Figure 1.

WARNING: SOLVENT (COMAT 01-438) IS CLASSIFIED AS A HAZARDOUS MATERIAL WHICH MAY CAUSE INJURY OR ILLNESS IF NOT PROPERLY USED. THIS PRODUCT SHOULD BE USED ONLY IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFIC SAFETY AND HEALTH RECOMMENDATIONS. PRIOR TO USE OF THIS PRODUCT, CAREFULLY READ THE APPLICABLE "MATERIAL SAFETY DATA SHEET" AND FOLLOW ALL LISTED SAFETY AND HEALTH PRECAUTIONS.

C. Clean the compression struts with solvent (CoMat 01-438) and a lint free cloth (CoMat 02-099). Wipe the surfaces dry before the solvent becomes dry.

D. Install the protective teflon sleeve on the compression struts. Refer to the manufacturer's instructions. Refer to Figure 1.

E. Re-identify the 290-0069-501 strut as the 290-0069-505. Re-identify the 290-0069-503 strut as the 290-0069-507. Use rubber stamp and metal marking ink. Refer to the IAE V2500 Standard Practices/ Processes Manual (SPP-V2500-1AE), Chapter 70-09-00.

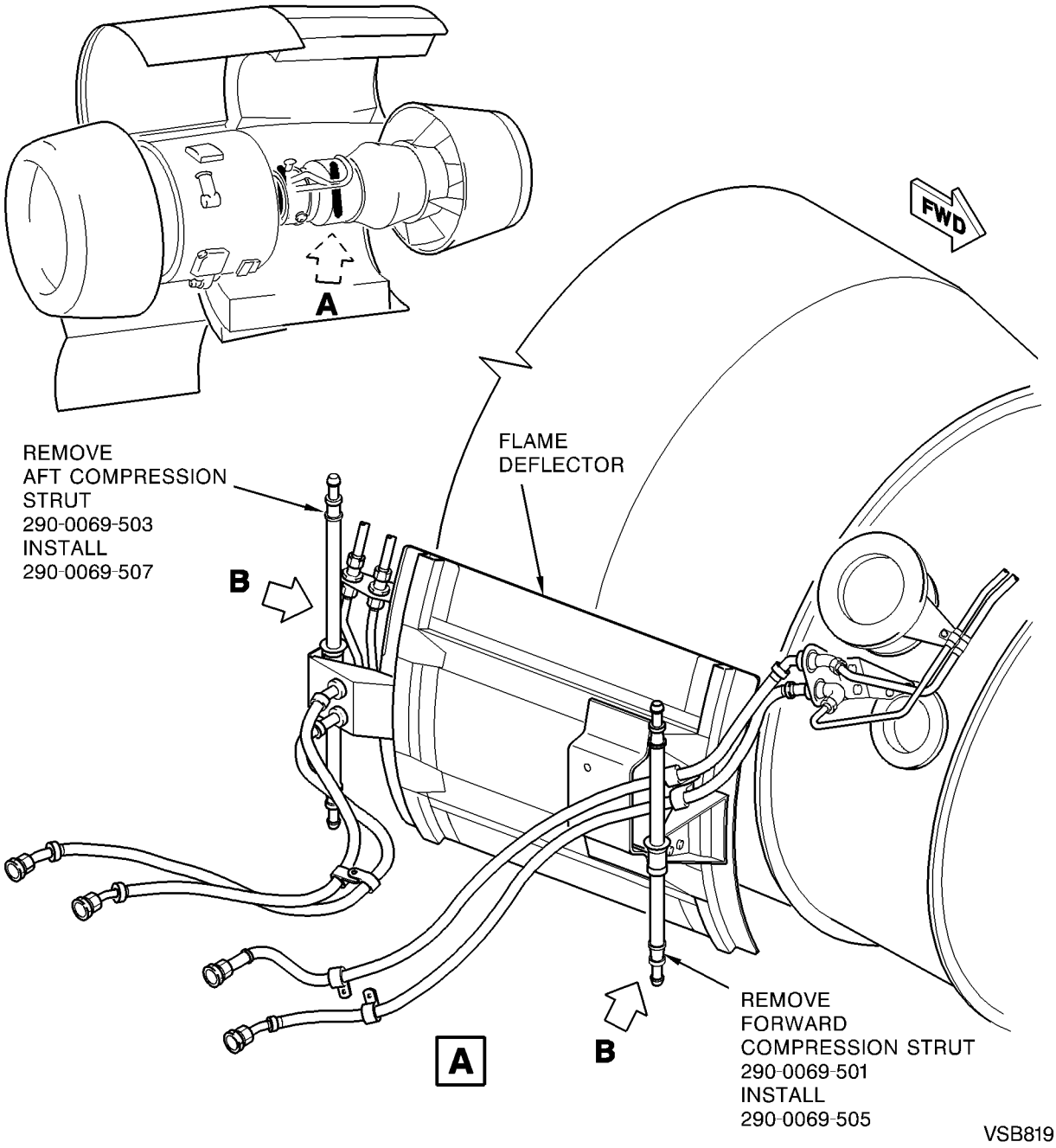
F. Install the thrust reverser compression struts on the flame deflector. Make sure the "UP" mark on the compression strut is at the upper end of the strut. Refer to Figure 1.

(1) Install the 290-0069-505 (short) compression strut at the forward end of the flame deflector.

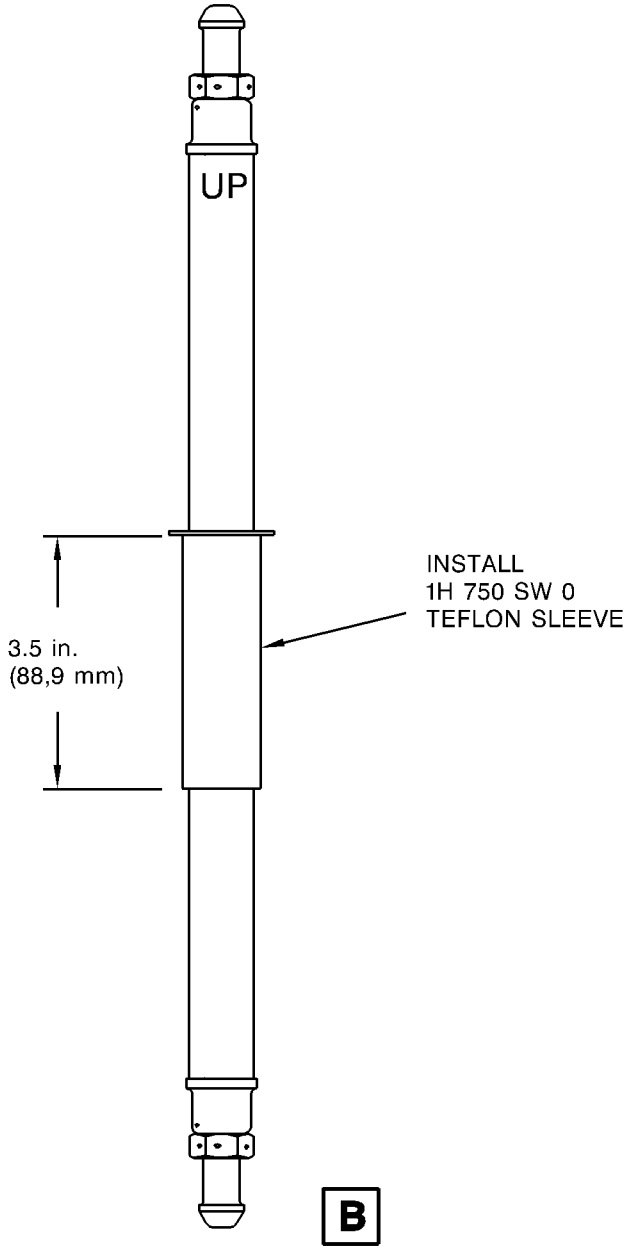
(2) Install the 290-0069-507 (long) compression strut at the aft end of the flame deflector.

G. 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 Service Bulletin V2500-NAC-78-0192 has been done. Refer to the Standard Practices/Processes Manual (SPP-V2500-1IA), Chapter 70-09-00.



Thrust Reverser Compression Strut Protective Sleeve
Figure 1 (sheet 1)



Thrust Reverser Compression Strut Protective Sleeve
Figure 1 (sheet 2)