

V2500 Propulsion System - Nacelle **SERVICE BULLETIN**

NACELLE - EXHAUST – DRAIN MAST, THRUST REVERSER – MODIFICATION

MODEL APPLICATION

V2500-D5

BULLETIN INDEX LOCATOR

78-00-00

Compliance Category Code

4

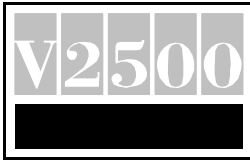
Internal Reference No.

JG 99VN802

October 5, 2000

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NACELLE - EXHAUST – DRAIN MAST, THRUST REVERSER – MODIFICATION

1. Planning Information

A. Effectivity

- (1) Aircraft
 - (a) Boeing MD90
- (2) Nacelle
 - (a) V2500-D5 lower thrust reverser halves with serial numbers prior to 0701001.

B. Reason

- (1) Condition

Operators have found thrust reverser drain mast components with wear.
- (2) Background

Components of the thrust reverser drain mast can chafe against one another and cause wear.
- (3) Objective

To provide improved thrust reverser drain mast wear characteristics.
- (4) Substantiation

By analysis.
- (5) Effect of Bulletin on:

| | | |
|-----|----------------------|--------------|
| (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 |



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C. Description

The thrust reverser drain mast subassembly is removed, disassembled, and inspected for damage. Damaged parts are replaced. If undamaged, the dry film lubricant is applied to the sleeve, the tube, and the retainers. The drain mast is reassembled with a new teflon covered spring. The drain mast subassembly is installed on the thrust reverser.

D. Approval

Incorporation of this Service Bulletin must be accomplished only in conjunction with Boeing Service Bulletin MD90 78-043 which has received exclusive FAA approval for MD-90 Series aircraft.

E. Compliance

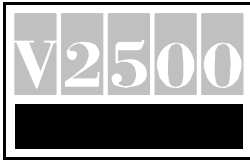
Category 4

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

F. Manpower

| <u>VENUE</u> | | <u>ESTIMATED MANHOURS</u> |
|--------------|----------------------|---------------------------|
| (1) | In Service | Not Applicable |
| (2) | In Shop | |
| (a) | To gain access | 0.25 M/Hrs. |
| (b) | To rework | 1.50 M/Hrs. |
| (c) | To return to service | <u>0.25 M/Hrs.</u> |
| Total | | 2.0 M/Hrs. |

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



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G. Material Cost and Availability

The parts to accomplish this service bulletin are available from the supplier as kit V2578180-551.

Operators with units listed in Paragraph 1.A. should submit a charge purchase order for the applicable quantity of kits. The purchase order must specify this service bulletin number and only the parts listed herein. Operators will have one year from the issue date of the service bulletin to place an order. After one year, kits will no longer be available and operators will have to order parts individually at catalog prices, if they desire to incorporate the change:

Direct Purchase order to:

Rohr, Inc.

850 Lagoon Drive

Chula Vista, CA 91910-2098

U.S.A.

Attn: Regional Business Manager – MZ 107A

(Ref. Service Bulletin No. V2500-NAC-78-0180)

NOTE: Please do not submit orders for kits via Spec 2000 ordering system.

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 Centreline (Powerplant Station PPS 100.0) |

J. Electrical Load Data

Not affected.



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K. References

| <u>Manual</u> | <u>Chapter/Section</u> |
|--|------------------------|
| MD90 Aircraft Maintenance Manual | 78-32-00 |
| IAE V2500 Standard Practices/Processes Manual (SPP-V2500-1IA) | 70-09-00 70-38-03 |
| Overhaul Processes and Consumable Index (PCI-V2500-1IA) | |

L. Other Publications Affected

| <u>Manual</u> | <u>Chapter/Section</u> |
|---|------------------------|
| MD90/V2500D5 Thrust Reverser Component Maintenance Manual (CMM-TR-V2500-3IA) | 78-32-23 |



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2. Material Information

A. Material Requirements

(1) The following is applicable to a lower thrust reverser half.

B. Kits Associated with this Bulletin:

| <u>NEW PART NO.</u> <u>(ATA NO.)</u> | <u>QTY</u> | <u>EST'D UNIT</u> <u>PRICE</u> | <u>KEYWORD</u> | <u>OLD PART NO.</u> <u>(IPC NO.)</u> | <u>INSTR/</u> <u>DISPOS</u> |
|---|------------|-----------------------------------|----------------|---|--------------------------------|
| V2578180-551 | 1 | \$183.00 | Kit, | | (A) |
| Consisting of: | | | | | |
| 290-0205-507 | 1 | | Spring | | |
| CR3522-5-03 | 4 | | Rivet | | |

C. Parts affected by this Bulletin:

| <u>NEW PART NO.</u> <u>(ATA NO.)</u> | <u>QTY</u> | <u>EST'D UNIT</u> <u>PRICE</u> | <u>KEYWORD</u> | <u>OLD PART NO.</u> <u>(IPC NO.)</u> | <u>INSTR/</u> <u>DISPOS</u> |
|---|------------|-----------------------------------|---------------------------|---|--------------------------------|
| 290-0921-503 (78-32-23) | 1 | | Drain Mast Subassembly | 290-0921-501 (40-215) | (B)(C)(D)(S1) |
| 290-0923-503 (78-32-23) | 2 | | Retainer | 290-0923-501 (40-225) | (B)(C)(S1) |
| 290-0924-503 (78-32-23) | 1 | | Sleeve | 290-0924-501 (40-230) | (B)(C)(S1) |
| 290-0922-503 (78-32-23) | 1 | | Flanged Tube | 290-0922-501 (40-235) | (B)(C)(S1) |
| 290-0205-507 (78-32-23) | 1 | | Spring | 290-0205-505 (40-240) | (B)(C)(S1) |

D. Instruction/Disposition Code Statements

- (A) Kit will be available November 2000.
- (B) New part is available.
- (C) Old part will no longer be available.
- (D) 290-0200-1D is optional to 290-0921-503.
- (S1) New part may be used in place of old part but not vice versa.

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E. Materials Required to Incorporate this Service Bulletin:

| | |
|-----------------|----------------------------|
| CoMat 01-438 | Solvent |
| CoMat 02-099 | Lint Free Cloth |
| CoMat 06-073 | Metal Marking Ink |
| Drilube 805N | Dry Film Lubricant |
| (or equivalent) | Drilube Company |
| (alternate for | 711 West Broadway Street |
| Everlube 811) | Glendale, CA. 91204-1009 |
| Everlube 811 | Dry Film Lubricant |
| (or equivalent) | E/M Corp. |
| (alternate for | 6940 Farmdale Avenue |
| Drilube 805N) | North Hollywood, CA. 91605 |

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



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3. Accomplishment Instructions

A. Pre-requisite Instructions

- (1) Move the translating sleeves 8 to 10 inches (20,0 to 25,4 cm) from the stowed position to get access to the thrust reverser drain mast. Refer to the MD-90 Aircraft Maintenance Manual, Chapter 78-32-00, page block 201.
- (2) Remove the nuts, washers, and drain mast subassembly. Refer to Figure 1 (sheet 2).

B. Disassemble the drain mast subassembly. Refer to Figure 1 (sheet 2).

- (1) Remove the clamp, seal retainer, and seal from the subassembly.
- (2) Remove the rivets and the retainers from the sleeve. Discard the rivets.
- (3) Remove the sleeve and the spring from the tube. Discard the spring.

C. Examine the retainers, sleeve and tube for wear to determine if you can do this service bulletin.

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 RECOMMENDATIONS.

- (1) Clean the retainers, sleeve and tube with a lint free cloth (CoMat 02-099) made moist with solvent (CoMat 01-438). Wipe the surfaces dry before the solvent becomes dry.
- (2) Examine the retainers, sleeve and tube for wear.
 - (a) If the minimum thickness of the retainers or sleeve is less than 0.050 inch (1,27 mm), you cannot do this service bulletin and must replace the drain mast subassembly.
 - (b) If the minimum thickness of the tube is less than 0.030 inch (0,762 mm), you cannot do this service bulletin and must replace the drain mast subassembly.



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- D. Modify the retainers, sleeve and tube.

WARNING: DRY FILM LUBRICANT 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 RECOMMENDATIONS.

- (1) Apply dry film lubricant to the outer surface of the retainers. Apply dry film lubricant to the sleeve and tube as shown in Figure 1 (sheet 3). Refer to the Standard Practices/Processes Manual (SPP-V2500-11A), Chapter 70-38-03, TASK 78-38-03-380-501.

- E. Assemble the drain mast subassembly. Refer to Figure 1 (sheet 2).

- (1) Install the sleeve and spring on the tube. Use the retainers and rivets.
- (2) Install the seal, seal retainer, and clamp on the tube.

- F. Re-identify the drain mast subassembly.

- (1) Re-identify the 290-0921-501 drain mast subassembly as the 290-0200-1D. Use a rubber stamp and ink (CoMat 06-073). Refer to the IAE Standard Practices/Processes Manual, Chapter 70-09-00.

- G. Post-Requisite Instructions

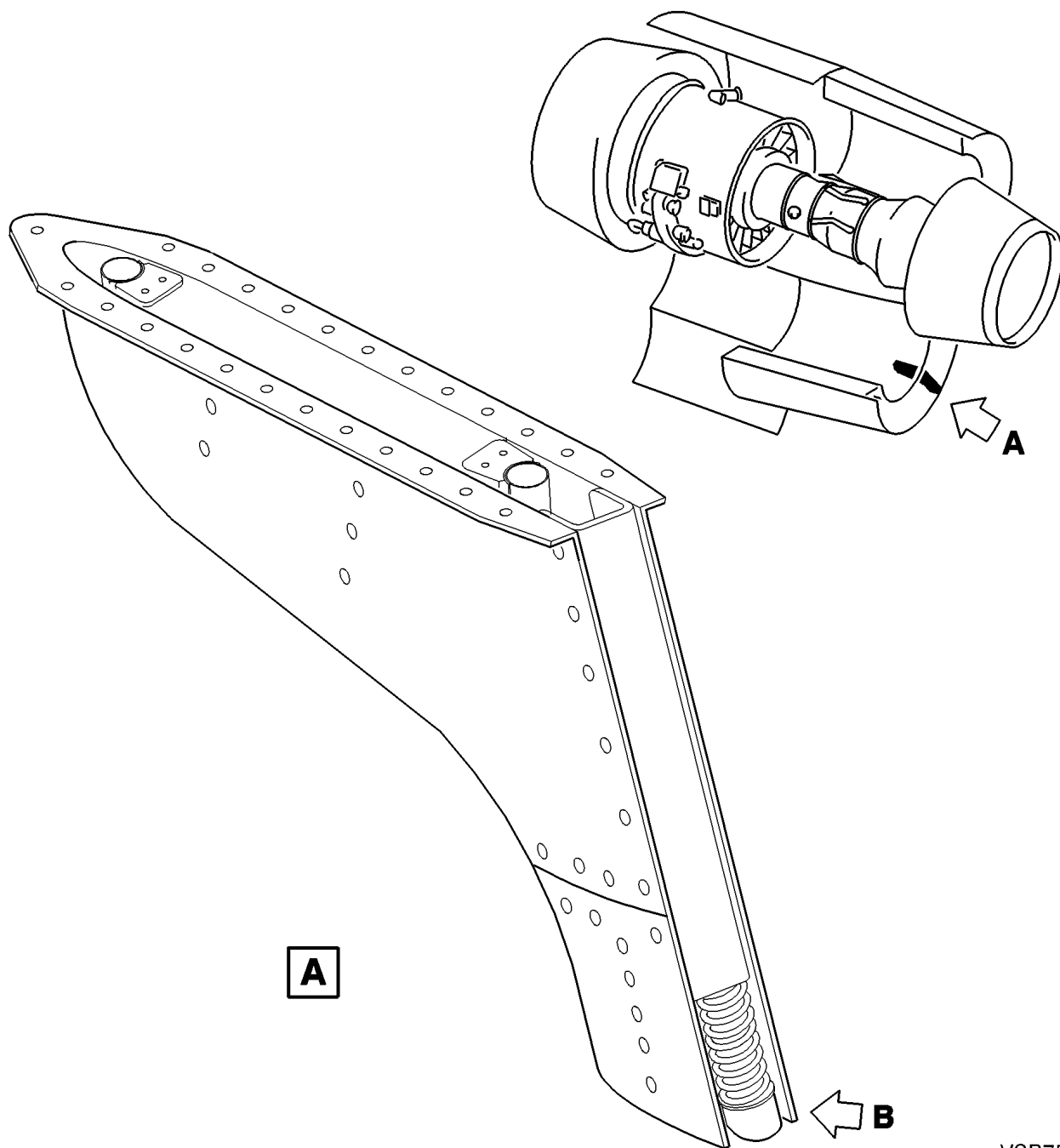
- (1) Install the drain mast subassembly with the nuts and washers. Refer to Figure 1 (sheet 2).
- (2) Move the translating sleeves to the stowed position. Refer to the MD-90 Aircraft Maintenance Manual, Chapter 78-32-00, page block 201.

- H. Recording Instructions

A record of accomplishment is necessary. Write in the applicable records and metal stamp, vibroetch, or electro etch on the thrust reverser assembly data plate that Service Bulletin V2500-NAC-78-0180 has been done. Refer to IAE V2500 Standard Practices/Processes Manual, Chapter 70-09-00.



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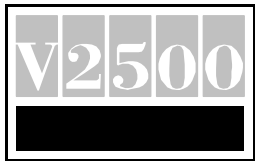
VSB755

Thrust Reverser Drain Mast Subassembly Modification
Figure 1 (Sheet 1)

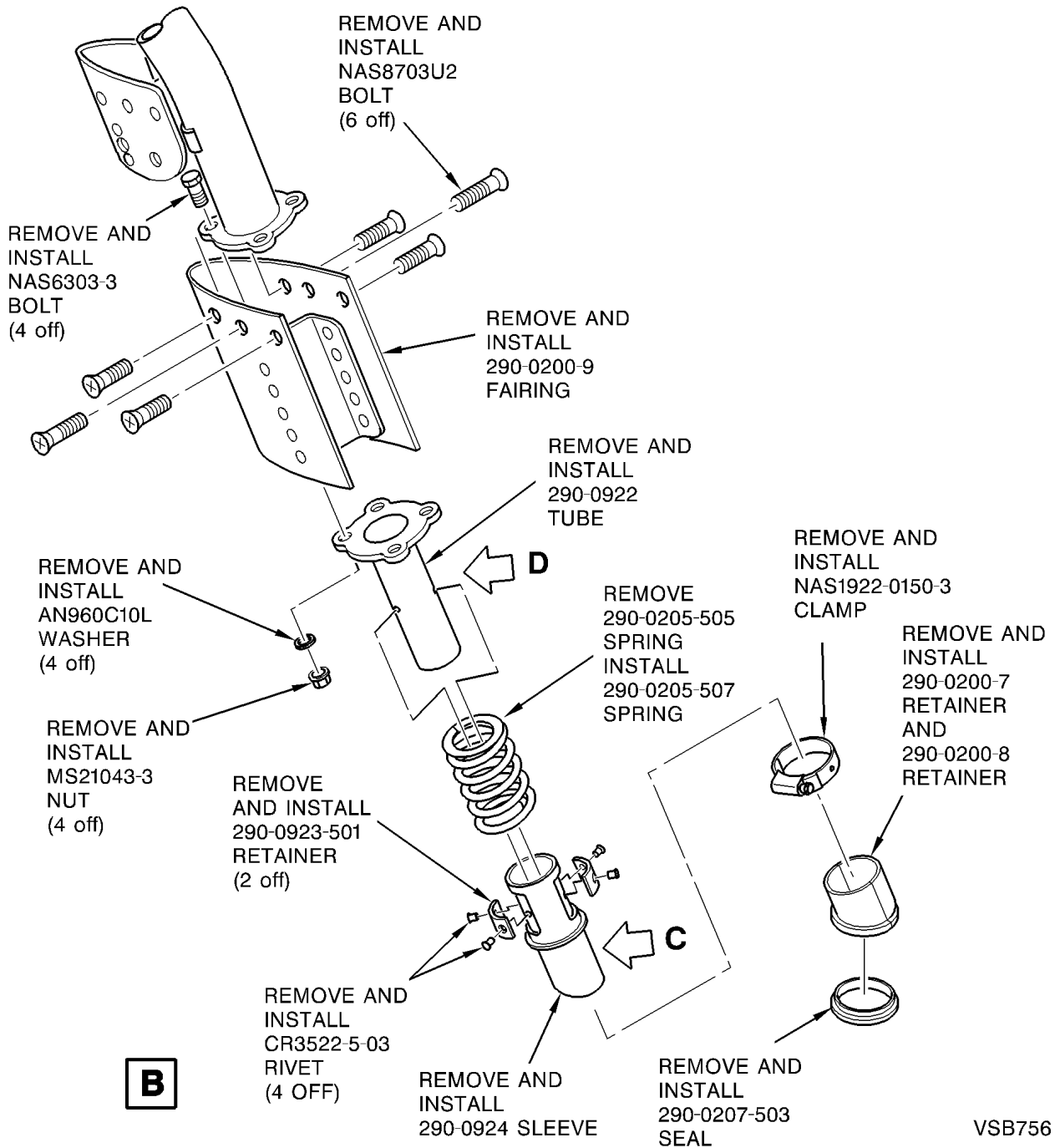
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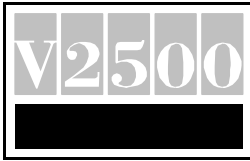


Thrust Reverser Drain Mast Subassembly Modification
Figure 1 (Sheet 2)

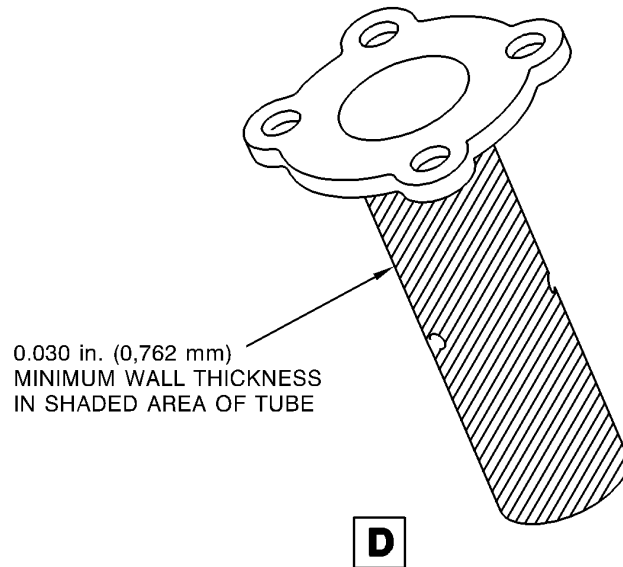
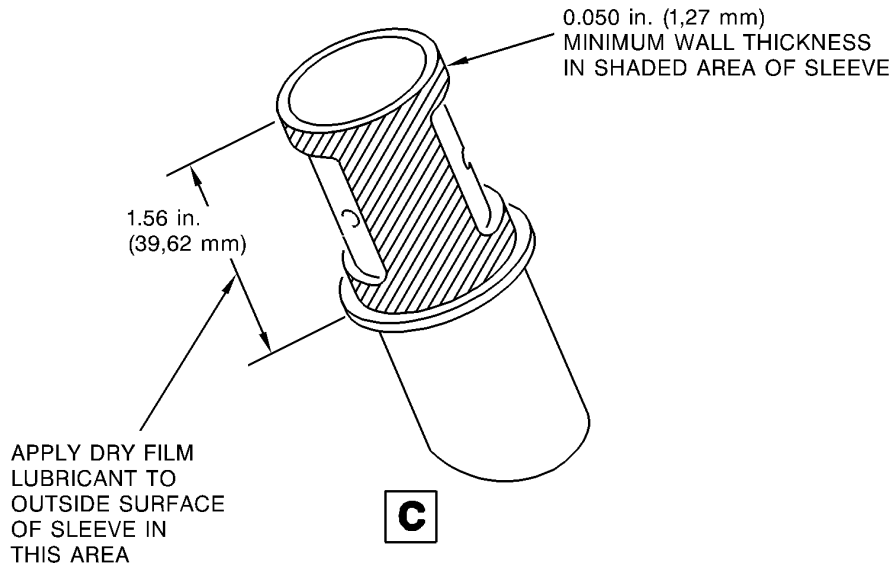
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Thrust Reverser Drain Mast Subassembly Modification
Figure 1 (Sheet 3)