



**International
Aero Engines**

V2500 Propulsion System — Nacelle

SERVICE BULLETIN

Date: August 25, 1998

Subject: Transmittal of Revision 4 to Service Bulletin Number V2500-NAC-78-0155

Service Bulletin Revision History:

<u>Event</u>	<u>Date</u>
Basic Issue	Mar. 26/98
Revision 1	May. 08/98
Revision 2	Jun. 15/98
Revision 3	Jun. 30/98
Revision 4	Aug. 25/98

Reasons for Issuance of Revision

- (1) To add instructions for re-identification of the 290-1201-513 to the 290-1201-515.

Effect on Past Compliance

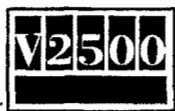
- (1) Operators who have done this service bulletin can re-identify the 290-1201-513 CNAs to 290-1201-515.

List of Effective Pages:

<u>Page No.</u>	<u>Rev. No.</u>	<u>Date</u>
1 and 2	3	Jun. 30/98
3 and 4	2	Jun. 15/98
5 thru 8	1	May 08/98
9	4	Aug. 25/98
10 thru 12	1	May 08/98
13	4	Aug. 25/98
14	1	May 08/98

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Transmittal
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NACELLE — EXHAUST — RUB BLOCKS, COMMON NOZZLE ASSEMBLY — MODIFICATION OF

MODEL APPLICATION

V2500-D5

BULLETIN INDEX LOCATOR

78-00-00

Compliance Category Code

4

Internal Reference No.

JG 97VN320

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1. Planning Information

A. Effectivity

- (1) Airplane: MD90
- (2) Nacelle: V2500-D5 common nozzle assembly (CNA) serial numbers prior to 0198001.

B. Concurrency Recommendations

To achieve the full intent of this Service Bulletin, the following service bulletins should be done at the same time as this service bulletin:

V2500-NAC-71-0212

V2500-NAC-78-0146

NOTE: The CNA modified by this service bulletin can be used with both pre- and post-service bulletin V2500-NAC-78-0146 translating sleeves.

C. Reason

(1) Condition

The translating sleeve can disbond at the aft inboard corner. Modifications to the translating sleeve to solve this problem have changed the interface between the translating sleeve and the CNA.

(2) Background

Interference between the new configuration translating sleeve and the common nozzle assembly rub blocks can occur.

(3) Objective

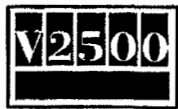
Modify the common nozzle assembly rub block installation to eliminate the possibility of interference with the

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translating sleeves and maintain compatibility between the various configurations of translating sleeves and the CNA.

(4) Substantiation

This change has been substantiated by analysis.

(5) Impact of the Bulletin on Workshop Procedures:

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

(6) Supplemental Information

None.

D. Description

The change introduced by this Bulletin is as follows:

Six rub blocks are removed from the CNA to provide clearance for the translating sleeve closures and brackets added by service bulletin V2500-NAC-78-0146.

E. Approval

Incorporation of this service bulletin must be accomplished only in conjunction with Douglas Aircraft Company Service Bulletin MD-90-78-029 which has received exclusive FAA approval for MD-90 Series Aircraft.

F. Compliance

Category 4

Accomplish at the first visit of the nacelle or nacelle

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

<u>VENUE</u>	<u>ESTIMATED MANHOURS</u>
(1) In Service	
(a) To gain access	0.25 M/Hrs.
(b) To rework	1.00 M/Hrs.
(c) To return to service	<u>0.25 M/Hrs.</u>
Total	1.50 M/Hrs.
(2) In Shop	
(a) To Rework	<u>1.0 M/Hrs.</u>
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:

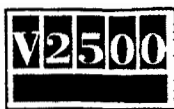
Rohr, Inc.
850 Lagoon Drive
Chula Vista, CA 91910-2098
Attn: Airline Support Manager, MZ 107A
Warranty Department
(Ref. Service Bulletin V2500-NAC-78-0155)

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H. Material Cost and Availability

The parts to accomplish this Service Bulletin are available from the supplier as single line items at no cost to the operator.

Operators with units listed in Paragraph 1.A. should submit a no-charge purchase order for the applicable quantity of parts. 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, 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: Airline Support Manager -MZ 107A
(Ref. Service Bulletin V2500-NAC-78-0155)

NOTE: Please do not send purchase orders for service bulletin parts via Spec 2000 ordering system.

I. Tooling Cost and Availability

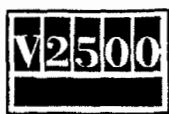
None required.

J. Weight and Balance

- (1) Weight change None
- (2) Moment arm No effect
- (3) Datum Engine Front Mount Centerline
..... (Powerplant Station PPS 100.00)

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K. Electrical Load Data

Not affected.

L. Reference

Chapter/Section

MD-90 Aircraft Maintenance Manual

78-32-00

IAE V2500 Standard Practices/Processes
Manual (SPP-V2500-1IA)

70-09-00

M. Other Publications Affected

MD90/V2500D5 Common Nozzle Component
Maintenance Manual (CMM-CN-V2500-3IA)

78-11-11

MD-90 Aircraft Maintenance Manual

78-33-12

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2. Accomplishment Instructions

A. Pre-requisite Instructions

- (1) Open the thrust reverser halves. Refer to the MD-90 Aircraft Maintenance Manual, Chapters 78-32-00 Page Block 201.

B. Re-work The Common Nozzle Assembly (CNA) Rub Block Installation.

NOTE: This procedure is the same for the left and right CNA. The right CNA part numbers are shown in parenthesis.

NOTE: The rub block attach fasteners were installed from the inside at manufacture. You will remove and and install the fasteners from the outside in this procedure.

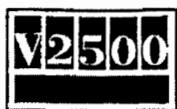
- (1) Remove the fasteners, three rub blocks, and associated shims from each side of the CNA. Refer to Figure 1 (sheet 2).

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.

- (2) Clean the CNA in the modification area with a lint free cloth (CoMat 02-099) and solvent (CoMat 01-438). Wipe the surface dry before the solvent becomes dry.

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WARNING: CONVERSION COATING (COMAT 07-028) 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.

- (3) Apply conversion coating (CoMat 07-028) to any areas of exposed aluminum. Refer to the manufacturer's instructions.

WARNING: CATALYST (COMAT 07-139), EPOXY PRIMER (COMAT 07-140) AND THINNER (COMAT 07-144) ARE CLASSIFIED AS HAZARDOUS MATERIALS WHICH MAY CAUSE INJURY OR ILLNESS IF NOT PROPERLY USED. THESE PRODUCTS SHOULD BE USED ONLY IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFIC SAFETY AND HEALTH RECOMMENDATIONS. PRIOR TO USE OF THESE PRODUCTS, CAREFULLY READ THE APPLICABLE "MATERIAL SAFETY DATA SHEET" AND FOLLOW ALL LISTED SAFETY AND HEALTH PRECAUTIONS.

- (4) Mix the catalyst (CoMat 07-139), epoxy primer (CoMat 07-140), and thinner (CoMat 07-144). Refer to the manufacturer's instructions.
- (5) Apply the primer to the treated aluminum areas. Refer to the manufacturer's instructions.
- (6) Cure the primer. Refer to the manufacturer's instructions.
- (7) Fill the empty rub block fastener holes with the NAS1097AD5 rivets. Wet install the rivets with primer mix. Refer to Figure 1 (sheet 3).

NOTE: Because of limited access, you will not be able to fill some of the holes with rivets. Fill these holes with adhesive (CoMat 08-021).

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- R (8) Reidentify the 290-1201-513 CNA as 290-1201-515. Use metal
R stamp, electroetch, or vibroetch method. Refer to the IAE
R V2500 Standard Practices/Processes Manual, Chapter
R 70-09-00.

C. Post-requisite Instructions

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

D. Recording Instructions

- (1) A record of accomplishment is necessary. Write in the
applicable records and metal stamp, electroetch, or
vibroetch on the CNA data plate that Service Bulletin
V2500-NAC-78-0155 has been done. Refer to the IAE V2500
Standard Practices/Processes Manual, Chapter 70-09-00.

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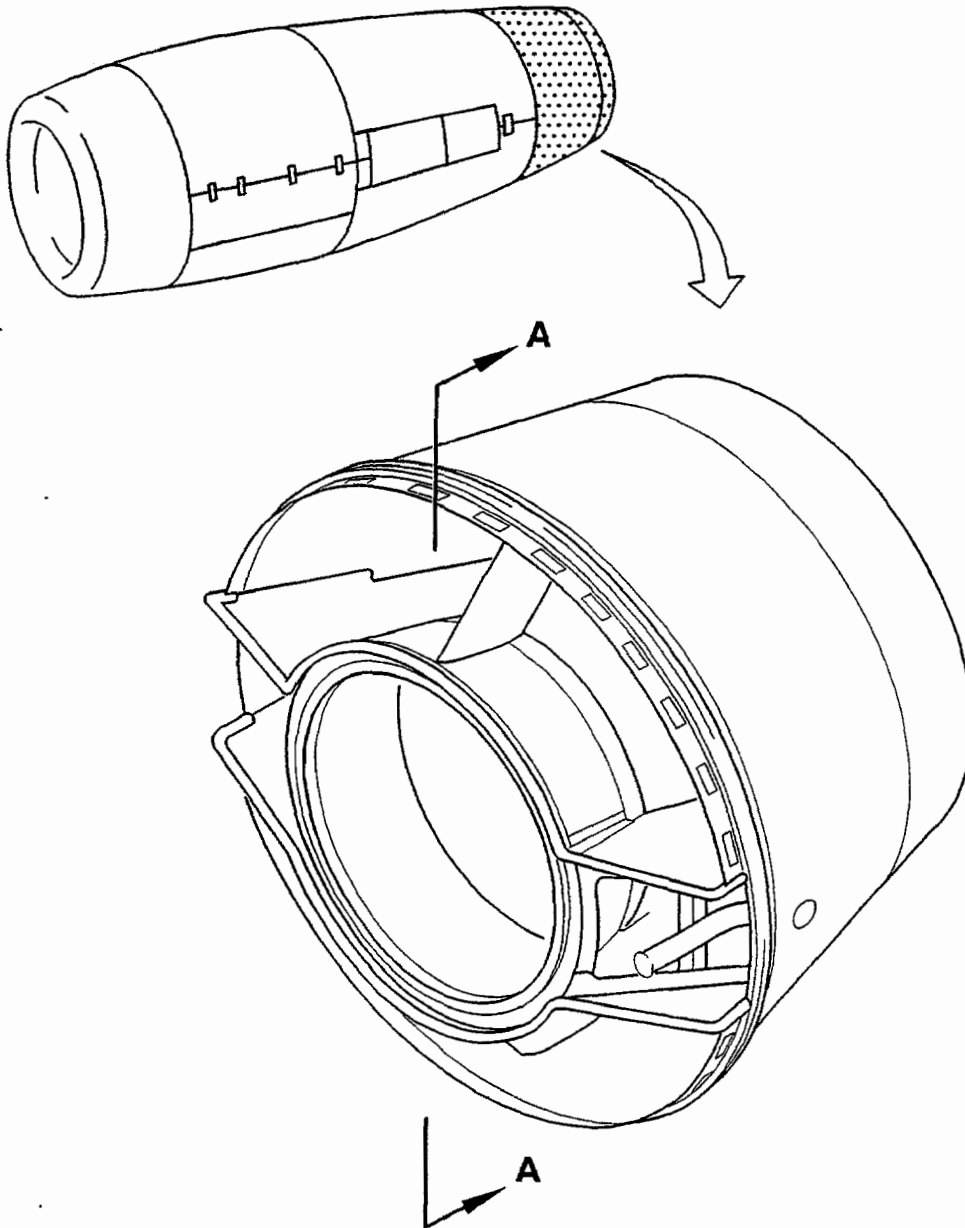
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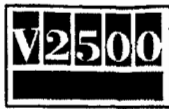


VSB635

CNA Rub Block Installation
Figure 1 (Sheet 1)

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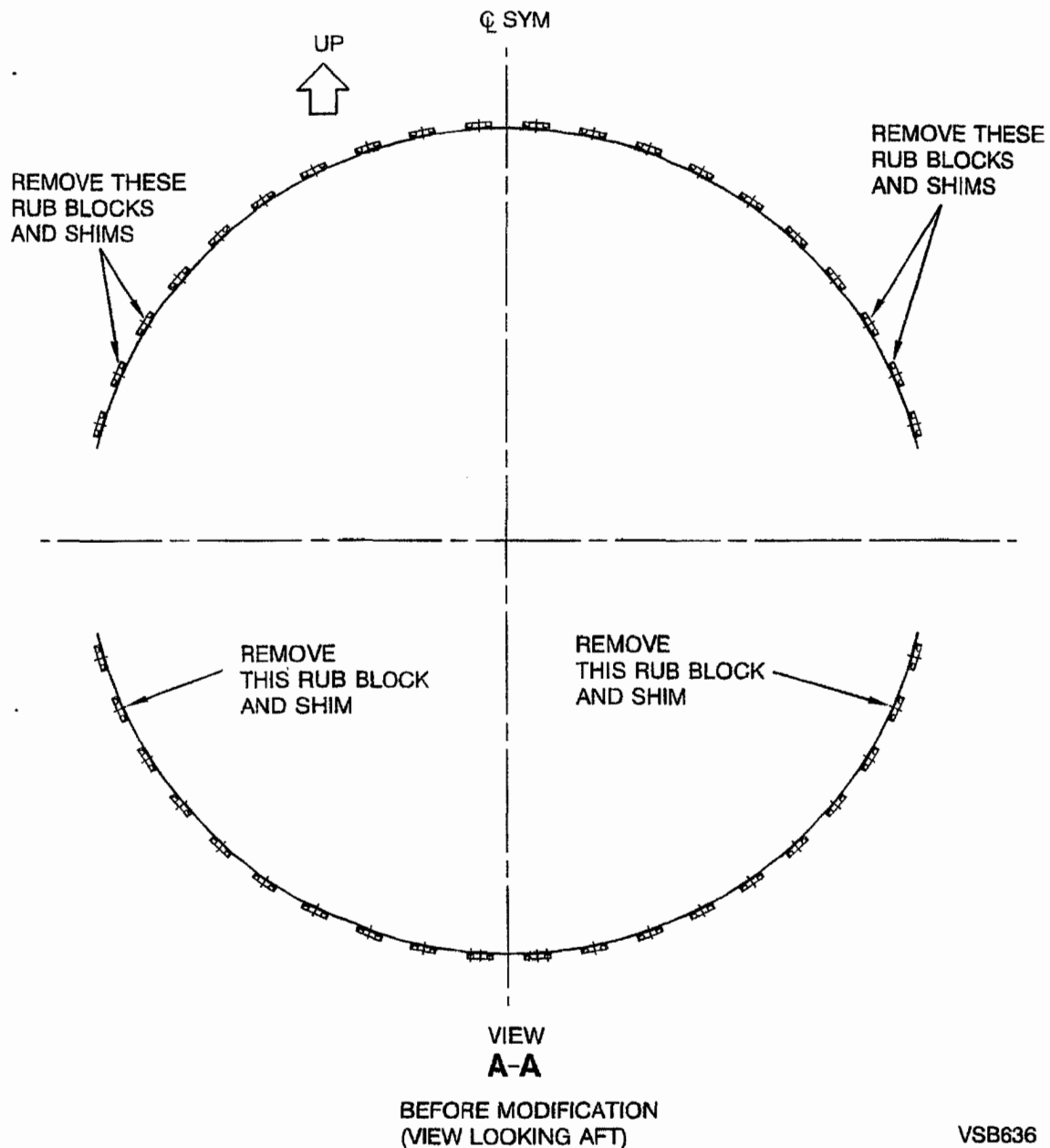
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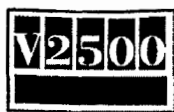


VSB636

CNA Rub Block Installation
Figure 1 (Sheet 2)

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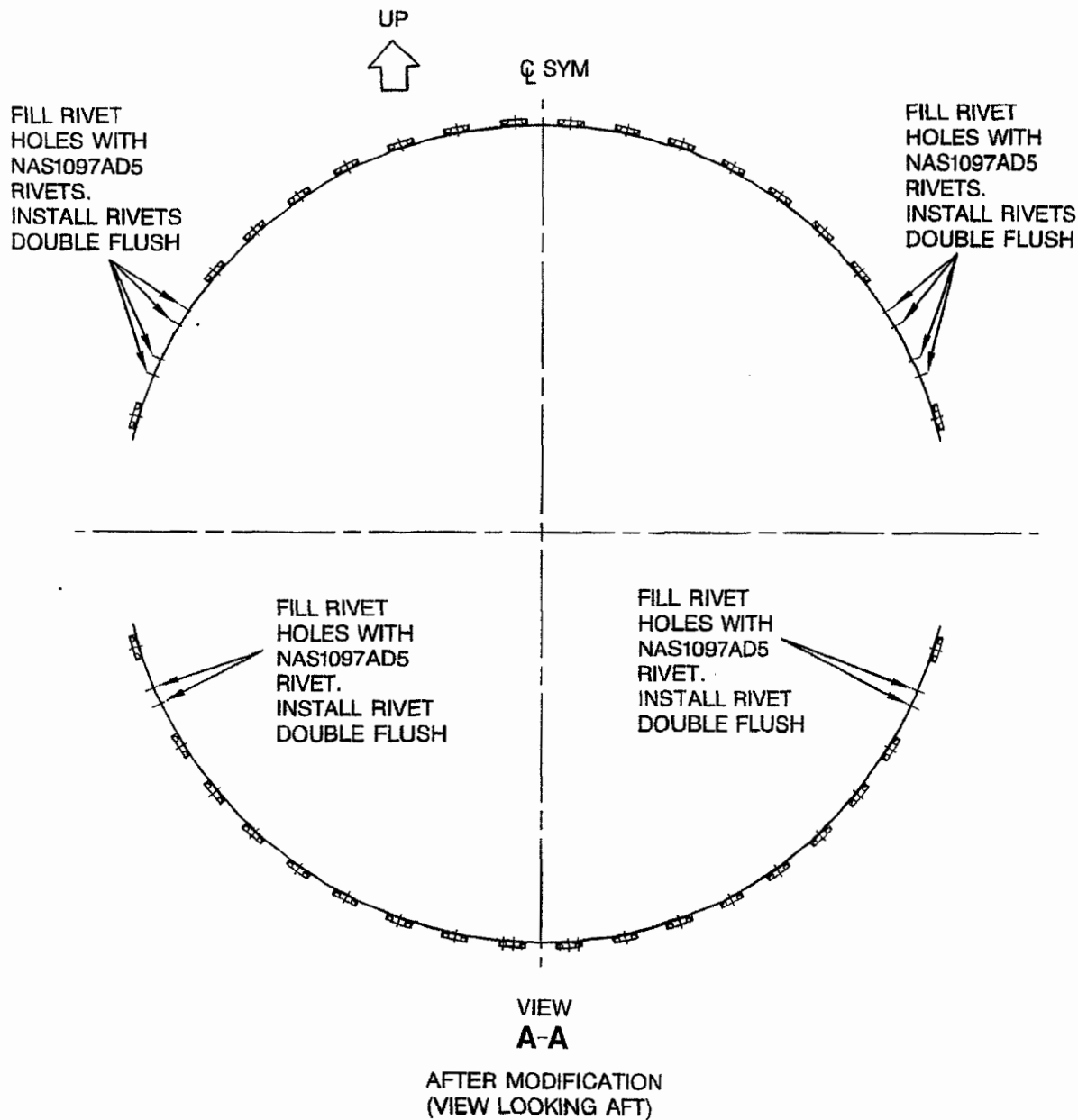
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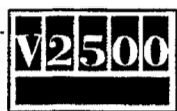
VSB637

CNA Rub Block Installation Modification
Figure 1 (Sheet 3)

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3. Material Information

Applicability: For each MD-90 common nozzle assembly to incorporate this Bulletin.

A. Kits associated with this Bulletin:

None. Send a no charge purchase order to Rohr for the following parts. Quantities are for each common nozzle assembly.

NEW PART NO. (ATA NO.)	QTY	EST'D UNIT PRICE	KEYWORD	OLD PART NO. (IPC NO.)	INSTR/ DISPOS
NAS1097AD5-3	12		Rivet		

B. Parts Affected by this Bulletin:

NEW PART NO. (ATA NO.)	QTY	EST'D UNIT PRICE	KEYWORD	OLD PART NO. (IPC NO.)	INSTR/ DISPOS
290-1201-515 (78-11-11)	1		Common Nozzle Assembly	290-1201-513 (05-005)	(A)(B) (1D)(S1)

C. Instruction/Disposition Code Statements

(A) New part is currently available.

(B) Old part will no longer be available.

(1D) Old part can be re-worked and re-identified to the new part number.

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

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NOTE: The estimated 1998 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.

D. Materials Required to Incorporate This Bulletin:

CoMat 01-438	Solvent
CoMat 02-099	Lint Free Cloth
CoMat 07-028	Chromate Conversion Coating for Aluminum
CoMat 07-139	Catalyst
CoMat 07-140	Epoxy Primer
CoMat 07-144	Thinner
CoMat 08-021	Adhesive

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

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