

NACELLE - POWERPLANT - TRANSLATING SLEEVE, THRUST REVERSER -MODIFICATION OF - SEAL, THRUST REVERSER - REPLACEMENT OF

MODEL APPLICATION

V2500-D5

BULLETIN INDEX LOCATOR

78-00-00

Compliance Category Code

Internal Reference No.

JG 97VN320

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#### Aero Engines SERVICE BULLETIN

#### 1. Planning Information

- A. Effectivity
  - (1) Airplane: MD90
  - (2) Nacelle: V2500-D5 thrust reverser serial numbers prior to 0485001.
- B. Concurrency Requirements:

To maintain compatability between the translating sleeves, CNA, and pylon aprons, it is necessary to do the following service bulletins concurrently with this service bulletin:

V2500-NAC-71-0212 V2500-NAC-78-0155

C. Reason

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(1) Condition

The translating sleeve can develop a disbond at the aft inboard corner.

(2) Background

Disbonds of the translating sleeve near the aft inboard corner have been discovered in service.

(3) Objective

To repair existing disbonds and eliminate the possibility of further disbonds at the translating sleeve aft inboard corner.

(4) Substantiation

This change has been substantiated by analysis.

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Not subject to the EAR per 15 C.F.R. Chapter 1, Part 734.3(b)(3).

#### Aero Engines SERVICE BULLETIN

Date: August 24, 1998

Subject: Transmittal of Revision 3 to Service Bulletin Number V2500-NAC-78-0146

#### Service Bulletin Revision History:

Event	<u>Date</u>
Basic Issue	Mar. 26/98
Revision 1	May 08/98
Revision 2	Jun. 30/98
Revision 3	Aug. 24/98

#### Reasons for Issuance of Revision

(1) To add thrust reverser part numbers to the Parts Affected by This Bulletin in the Material Information section.

#### Effect on Past Compliance

(1) None.

#### List of Effective Pages:

Page No.	Rev. No.	Date	
1	3	Aug. 24/98	3
2	2	Jun. 30/98	
3 and 4	basic	Mar. 26/98	
5	1	May 08/98	
6 thru 8	basic	Mar. 26/98	
9 and 10	1	May 08/98	
11 and 12	basic	Mar. 26/98	
13	1	May 08/98	3
14	basic	Mar. 26/98	
15 thru 21	1	May 08/98	
22 .	basic	Mar. 26/98	
23 thru 26	1	May 08/98	
27 thru 37	basic	Mar. 26/98	
38	1	May 08/98	
39 thru 42	basic	Mar. 26/98	

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Page No.	Rev. No.	<u>Date</u>
43	2	Jun. 30/98
44 thru 48	basic	Mar. 26/98
49 and 50	3	Aug. 24/98

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(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:

- (1) The translating sleeve aft inboard corner area is inspected for disbonds. Any disbonds found are repaired. Then, brackets and doublers are installed with adhesive and rivets. Finally, primer and top coat is applied to the repaired and modified areas.
- (2) One of the thrust reverser seals is replaced.
- E. Approval

Incorporation of this Service Bulletin must be accomplished only in conjunction with Douglas Aircraft Company Service Bulletin MD90-78-028 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 component to a maintenance base capable of compliance with the accomplishment instructions regardless of the planned maintenance action for the nacelle or nacelle component.

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#### G. Manpower

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

#### VENUE

#### ESTIMATED MANHOURS

(1) In Service

(a) To gain access

 $0.25 \, \text{M/hours}$ 

(b) To modify

9.50 M/hours

(c) To return to service

0.25 M/hours

Total

10.00 M/hours

The operators may submit a claim for labor hours used with the above labor requirements. This Service Bulletin and the Serial Numbers on which accomplished should be referenced.

Claims for labor will be accepted at the following reimbursement percentages:

- 100% for units within warranty at the time of service bulletin issuance.
- (2) 50% for units outside warranty by less than one year.
- (3) 25% for units outside the warranty by two years or less.

. Operators have two years from issue date of the Service Bulletin to accomplish effort and submit claims for reimbursement credit.

Transmit claim to:

Rohr, Inc. 850 Lagoon Drive Chula Vista, CA 91910-2098 U.S.A.

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Attn: Warranty Claims Administrator, MZ 107A (Ref. Service Bulletin V2500-NAC-78-0146)

H. Material Cost and Availability

Operators should obtain one V2578146-551 kit for each left hand nacelle and one V2578146-552 kit for each right hand nacelle from Rohr, Inc. before incorporation of this service bulletin. These kits provide parts to accomplish the modification on translating sleeves without disbonds or with small disbonds. These kits should be sufficient to modify/repair most translating sleeves.

In a very few instances, translating sleeves may have large disbonds which require more parts to modify/repair. Operators are encouraged to obtain one V2578146-553 kit for every five left hand nacelles and one V2578146-554 kit for every five right hand nacelles before incorporation of this service bulletin.

Operators with units shown in paragraph 1.A. should submit a purchase order for the applicable quantity of parts at the specified discounts shown below:

- (1) 100% discount (free of charge) for units within warranty (3 years from initial delivery) at the time of initial service bulletin issuance.
- (2) 50% discount for units outside of warranty by less than one year at the time of initial service bulletin issuance.
- (3) 25% discount for units outside of warranty by less than two years at the time of initial service bulletin issuance.

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Not subject to the EAR per 15 C.F.R. Chapter 1, Part 734.3(b)(3).



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(4) Parts for units outside of the warranty by greater than two years at the time of initial service bulletin issuance are at full retail price.

Transmit purchase order to:

Rohr, Inc. 850 Lagoon Drive Chula Vista, CA 91910-2098 U.S.A.

Attn: Airline Account Administrator, MZ 107A (Ref. Service Bulletin V2500-NAC-78-0146)

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 185.00)
- K. Electrical Load Data

Not affected.

L. Reference

Chapter/Section

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

70-09-00

Overhaul Processes and Consumable Index (PCI-V2500-11A)

M. Other Publications Affected

MD-90 Aircraft Maintenance Manual

78-32-16

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#### 2. Accomplishment Instructions

- A. Pre-requisite Instructions
  - (1) Remove the translating sleeves from the thrust reverser. Refer to the MD-90 Aircraft Maintenance Manual, Chapter 78-32-16, Page block 401.
- B. Examine the Upper Translating Sleeve for Disbonds
  - (1) Look for separation between the core and the outer skin. Refer to Figure 1.
    - (a) If no separation is found, install the brackets and doublers as instructed in paragraph D.
    - (b) If separation is found, find out how far the separation extends.
      - 1. If the area of separation is equal to or less than shown in Figure 1, do the procedures instructed in paragraph E.
      - 2. If the area of separation is greater than shown in Figure 1 but less than or equal to that shown in Figure 2, do the procedures instructed in paragraph F.
      - 3. If the area of separation is greater than shown in Figure 2, contact Rohr or IAE for disposition.
- C. Examine the Lower Translating Sleeve for Disbonds
  - (1) Look for separation between the core and the outer skin. Refer to Figure 3.
    - (a) If no separation is found, install the brackets and doublers as instructed in paragraph G.
    - (b) If separation is found, find out how far the separation extends.

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- 1. If the area of separation is equal to or less than shown in Figure 3, do the procedures instructed in paragraph H.
- 2. If the area of separation is greater than shown in Figure 3, contact Rohr or IAE for disposition.
- D. Modify the Upper Translating Sleeve (no disbond)(kit V2578146-551 LH nacelle)(kit V2578146-552 RH nacelle)
  - (1) Remove the bonded rub strip 290-0570-90 (290-0570-91). Refer to Figure 4 (sheet 1). Discard the rub strip.
  - (2) Prepare one fastener hole for the 290-0652-9 bracket. Refer to Figure 4 (view A-A).
    - (a) Put the 290-0652-9 bracket into position on the translating sleeve and make a mark for the aft upper fastener hole.
    - (b) At the position marked in step (a), drill a 0.16 inch (4.06 mm) hole through the inner skin and the core. Do not drill through the outer skin.
    - (c) Remove the core to a diameter of 0.75 inch (19.05 mm) through the hole drilled in step (a).
    - 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 THE USE OF THIS PRODUCT, CAREFULLY READ THE APPLICABLE "MATERIAL SAFETY DATA SHEET" AND FOLLOW ALL LISTED SAFETY AND HEALTH PRECAUTIONS.
    - (d) Clean the area around the hole with a clean lint free cloth (CoMat 02-099) made moist with solvent (CoMat 01-438). Rub the surfaces dry before the solvent becomes dry.

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WARNING: ADHESIVE (COMAT 08-078) 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 THE USE OF THIS PRODUCT, CAREFULLY READ THE APPLICABLE "MATERIAL SAFETY DATA SHEET" AND FOLLOW ALL LISTED SAFETY AND HEALTH PRECAUTIONS.

- (e) Fill the hole with with adhesive (CoMat 08-078). Make sure the hole is completely filled and there are as few voids as possible.
- (f) Cure the adhesive under mechanical pressure for 2 hours at room temperature then for 2 hours at 200 + 10degrees F.
- Put the brackets and doublers into position on the trans-(3) lating sleeve and drill the holes for the fasteners. Refer to Figure 4.

NOTE: Some of the brackets and doublers are oversize and must be trimmed after installation.

- Remove the brackets and doublers and countersink the holes (4)as required for the flush head fasteners.
- Make the mating surfaces of the brackets, doublers, and (5) translating sleeve rough with silicon carbide abrasive paper (CoMat 05-081).
- Clean the mating surfaces of the brackets, doublers and translating sleeve with a lint free cloth (CoMat 02-099) and solvent (CoMat 01-438). Wipe the surfaces dry before the solvent becomes dry.
- Apply a 0.010 inch (0.25 mm) thick layer of adhesive (CoMat 08-078) to the mating surfaces of the brackets and doublers.

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- (8) Install the brackets and doublers with the fasteners. Wet install the fasteners with adhesive (CoMat 08-078). Refer to Figure 4.
- (9) Cure the adhesive under mechanical pressure for 2 hours at room temperature then for 2 hours at 200 ± 10 degrees F.
- (10) Trim brackets and doublers to agree with the shape of the acoustic panels.
- (11) Clean the bare metal surfaces with a lint free cloth (CoMat 02-099) made moist with solvent (CoMat 01-438). Wipe the surfaces dry before the solvent becomes dry.
- 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 THE USE OF THIS PRODUCT, CAREFULLY READ THE APPLICABLE "MATERIAL SAFETY DATA SHEET" AND FOLLOW ALL LISTED SAFETY AND HEALTH PRECAUTIONS.
- (12) Apply conversion coating (CoMat 07-028) to the exposed aluminum areas. Refer to the manufacturer's instructions.
- WARNING: SEALANT (COMAT 08-030) 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 THE USE OF THIS PRODUCT, CAREFULLY READ THE APPLICABLE "MATERIAL SAFETY DATA SHEET" AND FOLLOW ALL LISTED SAFETY AND HEALTH PRECAUTIONS.
- (13) Apply sealant (CoMat 08-030) to the edges of the brackets and doublers to make a smooth transition with the adjacent surfaces.

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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 THE USE OF THESE PRODUCTS, CAREFULLY READ THE APPLICABLE "MATERIAL SAFETY DATA SHEET" AND FOLLOW ALL LISTED SAFETY AND HEALTH PRECAUTIONS.

- (14) Mix the catalyst (CoMat 07-139), epoxy primer (CoMat 07-140) and thinner (CoMat 07-144). Refer to the manufacturer's instructions.
- (15) Apply the primer mix to the bare metal and fasteners in the modification area.
- (16) Cure the primer. Refer to the manufacturer's instructions.
- (17) Apply topcoat paint to the translating sleeve outer skin as required.
- (18) Go to Paragraph 2.I.
- Modify the Upper Translating Sleeve (with minimum disbond) (kit V2578146-551 - LH nacelle)(kit V2578146-552 - RH nacelle))
  - Remove the bonded rub strip 290-0570-90 (290-0570-91). (1)Refer to Figure 4 (sheet 1). Discard the rub strip.
  - Prepare one fastener hole for the 290-0652-9 bracket. (2) Refer to Figure 4 (view A-A).
    - Put the 290-0652-9 bracket into position and make a mark for the aft upper fastener hole.
    - At the position marked in step (a), drill a 0.16 inch (b) (4.06 mm) hole through the inner skin and the core. Do not drill through the outer skin.
    - (c) Remove the core to a diameter of 0.75 inch (19.05 mm)

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through the hole drilled in step (b).

WARNING:

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(d) Clean the area around the hole with a clean lint free cloth (CoMat 02-099) made moist with solvent (CoMat 01-438). Rub the surfaces dry before the solvent becomes dry.

WARNING:

ADHESIVE (COMAT 08-078) 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 THE USE OF THIS PRODUCT, CAREFULLY READ THE APPLICABLE "MATERIAL SAFETY DATA SHEET" AND FOLLOW ALL LISTED SAFETY AND HEALTH PRECAUTIONS.

- (e) Fill the hole with with adhesive (CoMat 08-078). Make sure the hole is completely filled and there are as few voids as possible.
- (f) Put adhesive (CoMat 08-078) into the space between the skin and the core.
- (g) Cure the adhesive under mechanical pressure for 2 hours at room temperature then for 2 hours at  $200 \pm 10$  degrees F.
- (3) Put the brackets and doublers into position on the translating sleeve and drill the holes for the fasteners. Refer to Figure 4.

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NOTE: Some of the brackets and doublers are oversize and must be trimmed after installation.

- (4) Remove the brackets and doublers and countersink the holes as required for the flush head fasteners.
- (5) Make the mating surfaces of the brackets, doublers, and translating sleeve rough with silicon carbide abrasive paper (CoMat 05-081).
- (6) Clean the mating surfaces of the brackets, doublers and translating sleeve with a lint free cloth (CoMat 02-099) and solvent (CoMat 01-438). Wipe the surfaces dry before the solvent becomes dry.
- (7) Apply a 0.010 inch (0.25 mm) thick layer of adhesive (CoMat 08-078) to the mating surfaces of the brackets and doublers.
- (8) Install the brackets and doublers with the fasteners. Wet install the fasteners with adhesive (CoMat 08-078). Refer to Figure 4.
- (9) Trim brackets and doublers to agree with the contour of the acoustic panels.
- (10) Clean the bare metal surfaces with a lint free cloth (CoMat 02-099) made moist with solvent (CoMat 01-438). Wipe the surfaces dry before the solvent becomes dry.
- 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 THE USE OF THIS PRODUCT, CAREFULLY READ THE APPLICABLE "MATERIAL SAFETY DATA SHEET" AND FOLLOW ALL LISTED SAFETY AND HEALTH PRECAUTIONS.
- (11) Apply conversion coating (CoMat 07-028) to the exposed aluminum areas. Refer to the manufacturer's instructions.

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WARNING:

SEALANT (COMAT 08-030) 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 THE USE OF THIS PRODUCT, CAREFULLY READ THE APPLICABLE "MATERIAL SAFETY DATA SHEET" AND FOLLOW ALL LISTED SAFETY AND HEALTH PRECAUTIONS.

- (12) Apply sealant (CoMat 08-030) to the edges of the brackets and doublers to make a smooth transition with the adjacent surfaces.
- 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 THE USE OF THESE PRODUCTS, CAREFULLY READ THE APPLICABLE "MATERIAL SAFETY DATA SHEET" AND FOLLOW ALL LISTED SAFETY AND HEALTH PRECAUTIONS.
- (13) Mix the catalyst (CoMat 07-139), epoxy primer (07-140) and thinner (CoMat 07-144). Refer to the manufacturer's instructions.
- (14) Apply the primer mix to the bare metal in the modification area.
- (15) Cure the primer. Refer to the manufacturer's instructions.
- (16) Apply topcoat paint to the translating sleeve outer skin as required.
- (17) Go to Paragraph 2.I.
- F. Modify the Upper Translating Sleeve (with maximum disbond)(kits V2578146-551 and V2578146-553 LH nacelle)(kits V2578146-552 and V2578146-554 RH nacelle)

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- (1) Remove the bonded rub strip 290-0570-90 (290-0570-91). Refer to Figure 5 (sheet 1).
- (2) Remove one fastener at the aft end of the fairing. Refer to Figure 5 (sheet 2).
- (3) Prepare the fastener holes for the 290-0652-7AJ (290-0652-8AJ) doubler and one fastener hole for the 290-0652-9 bracket. Refer to Figure 5.
  - (a) Hold the 290-0652-7AJ (290-0652-8AJ) doubler in position on the outer skin and drill the 0.125 inch (3.18 mm) diameter holes through the doubler, the outer skin, and the core. Do not drill through the inner skin. Refer to Figure 5.
  - (b) Put the 290-0652-9 bracket into position and make a mark for the aft upper fastener hole.
  - (c) At the position marked in step (b), drill a 0.125 inch (3.18 mm) diameter hole through the inner skin and the core. Do not drill through the outer skin.
  - (d) Remove the core to a diameter of 0.75 inch (19.05 mm) through the holes drilled in steps (a) and (c) at the locations shown in Figure 5 (sheet 3).
  - 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 THE USE OF THIS PRODUCT, CAREFULLY READ
    THE APPLICABLE "MATERIAL SAFETY DATA SHEET" AND
    FOLLOW ALL LISTED SAFETY AND HEALTH PRECAUTIONS.
  - (e) Clean the area around the holes with a clean lint free

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cloth (CoMat 02-099) made moist with solvent (CoMat 01-438). Rub the surfaces dry before the solvent becomes dry.

WARNING: ADHESIVE (COMAT 08-078) 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 THE USE OF THIS

PRODUCT, CAREFULLY READ THE APPLICABLE "MATERIAL SAFETY DATA SHEET" AND FOLLOW ALL LISTED SAFETY

AND HEALTH PRECAUTIONS.

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(f) Fill the holes with adhesive (CoMat 08-078). Make sure the holes are completely filled and there are as few voids as possible in the adhesive.

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Put adhesive (CoMat 08-078) into the space between (g) the skin and the core.

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Cure the adhesive under mechanical pressure for 2 hours at room temperature then for 2 hours at 200 + 10 degrees F or 24 hours at room temperature.

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(4) Put the brackets and doublers into position on the translating sleeve and drill the holes for the fasteners. Refer to Figure 5.

Some of the brackets and doublers are oversize and must trimmed after installion.

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Remove the brackets and doublers and countersink the holes (5) as required for the flush head fasteners.

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(6) Make the mating surfaces of the brackets, doublers, and translating sleeve rough.

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(7) Clean the mating surfaces of the brackets, doublers, and translating sleeve with a lint free cloth (CoMat 02-099)

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and solvent (CoMat 01-438). Wipe the surfaces dry before the solvent becomes dry.

- (8) Apply a 0.010 inch (0.25 mm) thick layer of adhesive (CoMat 08-078) to the mating surfaces of the brackets and doublers.
  - (9) Install the brackets and doublers with the fasteners. Wet install the fasteners with adhesive (CoMat 08-078). Refer to Figure 2.
    - (10) Trim the brackets and doublers to agree with the contours of the acoustic panels.
    - (11) Chamfer the aft edge of the 290-0652-7AJ (290-0652-8AJ) doubler.
    - (12) Clean the bare metal surfaces with a lint free cloth (CoMat 02-099) made moist with solvent (CoMat 01-438). Wipe the surfaces dry before the solvent becomes dry.
    - 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 THE USE OF THIS PRODUCT, CAREFULLY READ THE APPLICABLE "MATERIAL SAFETY DATA SHEET" AND FOLLOW ALL LISTED SAFETY AND HEALTH PRECAUTIONS.
- R (13) Apply conversion coating (CoMat 07-028) to the exposed aluminum areas. Refer to the manufacturer's instructions.

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WARNING:

SEALANT (COMAT 08-030) 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 THE USE OF THIS PRODUCT, CAREFULLY READ THE APPLICABLE "MATERIAL SAFETY DATA SHEET" AND FOLLOW ALL LISTED SAFETY AND HEALTH PRECAUTIONS.

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(14) Apply sealant (CoMat 08-030) to the edges of the brackets and doublers to make a smooth transition with the adjacent surfaces.

WARNING: CATALYST (COMAT 07-139), EPOXY PRIMER (COMAT 17-040), 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 THE USE OF THESE PRODUCTS, CAREFULLY READ THE APPLICABLE "MATERIAL SAFETY DATA SHEET" AND FOLLOW ALL LISTED SAFETY AND HEALTH PRECAUTIONS.

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(15) Mix the catalyst (CoMat 07-139), epoxy primer (CoMat 07-140) and thinner (CoMat 07-144). Refer to the manufacturer's instructions.

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(16) Apply the primer mix to the bare metal in the modification area.

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(17) Cure the primer. Refer to the manufacturer's instructions.

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(18) Apply topcoat paint to the translating sleeve outer skin as required.

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(19) Go to Paragraph 2.I.

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- G. Modify the Lower Translating Sleeve (no disbond)(kit V2578146-551 LH nacelle)(kit V2578146-552 RH nacelle)
  - (1) Remove the bonded rub strip 290-0590-100 (290-0590-101). Refer to Figure 6 (sheet 1).
  - (2) From the inner side of the translating sleeve, remove one rivet MS20426T5. Refer to Figure 6 (sheet 2).
  - (3) Make a chamfer on the acoustic panel. Refer to Figure 6.
  - 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 THE USE OF THIS PRODUCT, CAREFULLY READ THE APPLICABLE "MATERIAL SAFETY DATA SHEET" AND FOLLOW ALL LISTED SAFETY AND HEALTH PRECAUTIONS.
  - (4) Flush the bond repair area with solvent (CoMat 01-438) and force air dry for 30 minutes minimum. Repeat as necessary.
  - (5) Prepare two fastener holes for the 290-0653-7 (200-0653-8) bracket. Refer to Figure 6.
    - (a) Put the 290-0653-7 (290-0653-8) bracket into position and make marks for the fastener holes.
    - (b) At the positions marked in step (a), drill 0.125 inch (3.18 mm) holes through the inner skin and the core. Do not drill through the outer skin.
    - (c) Remove the core to a diameter of 0.75 inch (19,05 mm) through the holes drilled in step (a).
    - (d) Clean the area around the holes with a clean lint free cloth (CoMat 02-099) made moist with solvent (CoMat 01-438). Rub the surfaces dry before the solvent becomes dry.

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Not subject to the EAR per 15 C.F.R. Chapter 1, Part 734.3(b)(3).

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## Aero Engines SERVICE BULLETIN

WARNING: ADHESIVE (COMAT 08-078) 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 RECOM-MENDATIONS. PRIOR TO THE USE OF THIS PRODUCT, CAREFULLY READ THE APPLICABLE "MATERIAL SAFETY DATA SHEET" AND FOLLOW ALL LISTED SAFETY AND

HEALTH PRECAUTIONS.

- (e) Fill the holes with with adhesive (CoMat 08-078). Make sure the holes are completely filled and there are as few voids as possible.
- (f) Cure the adhesive under mechanical pressure for 2 hours at room temperature then for 2 hours at 200 + 10 degrees F.
- Put the brackets and doublers into position on the trans-(6) lating sleeve and drill the holes for the fasteners. Refer to Figure 6.

Some of the brackets and doublers are oversize and must be trimmed after installation.

- (7)Remove the brackets and doublers and countersink the holes as required for the flush head fasteners.
- Make the mating surfaces of the brackets, doublers, and translating sleeve rough with silicon carbide abrasive paper (CoMat 05-081).
- (9) Clean the mating surfaces of the brackets, doublers, and translating sleeve with a lint free cloth (CoMat 02-099) and solvent (CoMat 01-438). Wipe the surfaces dry before the solvent becomes dry.
- (10) Apply a 0.010 inch (0.25 mm) thick layer of adhesive (CoMat 08-078) to the mating surfaces of the brackets and doublers.

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R R



## Aero Engines SERVICE BULLETIN

- (11) Install the brackets and doublers with the fasteners. Wet install the fasteners with adhesive (CoMat 08-078). Refer to Figure 6.
- (12) Cure the adhesive under mechanical pressure for 2 hours at room temperature then for 2 hours at  $200 \pm 10$  degrees F.
- (13) Trim brackets and doublers to agree with the shape of the acoustic panels.
- (14) Clean the bare metal surfaces with a lint free cloth (CoMat 02-099) made moist with solvent (CoMat 01-438). Wipe the surfaces dry before the solvent becomes dry.
- 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 THE USE OF THIS PRODUCT, CAREFULLY READ THE APPLICABLE "MATERIAL SAFETY DATA SHEET" AND FOLLOW ALL LISTED SAFETY AND HEALTH PRECAUTIONS.
- (15) Apply conversion coating (CoMat 07-028) to the exposed aluminum areas. Refer to the manufacturer's instructions.
- WARNING: SEALANT (COMAT 08-030) 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 THE USE OF THIS PRODUCT, CAREFULLY READ THE APPLICABLE "MATERIAL SAFETY DATA SHEET" AND FOLLOW ALL LISTED SAFETY AND HEALTH PRECAUTIONS.
- (16) Apply sealant (CoMat 08-030) to the edges of the brackets and doublers to make a smooth transition with the adjacent surfaces.

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## Aero Engines SERVICE BULLETIN

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 THE USE OF THESE PRODUCTS, CAREFULLY READ THE APPLICABLE "MATERIAL SAFETY DATA SHEET" AND FOLLOW ALL LISTED SAFETY AND HEALTH PRECAUTIONS.

- (17) Mix the catalyst (CoMat 07-139), epoxy primer (CoMat 07-140) and thinner (CoMat 07-144). Refer to the manufacturer's instructions.
- (18) Apply the primer mix to the bare metal and fasteners in the modification area.
- (19) Cure the primer. Refer to the manufacturer's instructions.
- (20) Apply topcoat paint to the translating sleeve outer skin an required.
- (21) Go to Paragraph 2.I.

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V2500 Propulsion System — Nacelle

## Aero Engines SERVICE BULLETIN

- H. Modify the Lower Translating Sleeve (minimum disbond)(kit V2578146-551 - LH nacelle)(kit V2578146-552 - RH nacelle)
  - (1) Remove the bonded rub strip 290-0590-100 (290-0590-101). Refer to Figure 6 (sheet 1).
  - (2) From the inner side of the translating sleeve, remove one rivet MS20426T5. Refer to Figure 6 (sheet 2).
  - (3) Make a chamfer on the acoustic panel. Refer to Figure 6.
  - 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 THE USE OF THIS PRODUCT, CAREFULLY READ THE APPLICABLE "MATERIAL SAFETY DATA SHEET" AND FOLLOW ALL LISTED SAFETY AND HEALTH PRECAUTIONS.
  - (4) Flush the bond repair area with solvent (CoMat 01-438) and force air dry for 30 minutes minimum. Repeat as necessary.
  - (5) Prepare two fastener holes for the 290-0653-7 (200-0653-8) bracket. Refer to Figure 6.
    - (a) Put the 290-0653-7 (290-0653-8) bracket into position and make marks for the fastener holes.
    - (b) At the positions marked in step (a), drill 0.125 inch (3.18 mm) holes through the inner skin and the core. Do not drill through the outer skin.
    - (c) Remove the core to a diameter of 0.75 inch (19.05 mm) through the holes drilled in step (a).
    - (d) Clean the area around the holes with a clean lint free cloth (CoMat 02-099) made moist with solvent (CoMat 01-438). Rub the surfaces dry before the solvent becomes dry.

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Not subject to the EAR per 15 C.F.R. Chapter 1, Part 734.3(b)(3).



## Aero Engines SERVICE BULLETIN

WARNING:

ADHESIVE (COMAT 08-078) 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 THE USE OF THIS PRODUCT, CAREFULLY READ THE APPLICABLE "MATERIAL SAFETY DATA SHEET" AND FOLLOW ALL LISTED SAFETY AND HEALTH PRECAUTIONS.

- (e) Fill the holes with with adhesive (CoMat 08-078). Make sure the holes are completely filled and there are as few voids as possible.
- (f) Put adhesive (CoMat 08-078) into the space between the skin and the core.
- (g) Cure the adhesive under mechanical pressure for 2 hours at room temperature then for 2 hours at 200 ± 10 degrees F.
- (6) Put the brackets and doublers into position on the translating sleeve and drill the holes for the fasteners. Refer to Figure 6.

NOTE: Some of the brackets and doublers are oversize and must be trimmed after installation.

- (7) Remove the brackets and doublers and countersink the holes as required for the flush head fasteners.
- (8) Make the mating surfaces of the brackets, doublers, and translating sleeve rough with silicon carbide abrasive paper (CoMat 05-081).
- (9) Clean the mating surfaces of the brackets, doublers, and translating sleeve with a lint free cloth (CoMat 02-099) and solvent (CoMat 01-438). Wipe the surfaces dry before the solvent becomes dry.
- (10) Apply a 0.010 inch (0.25 mm) thick layer of adhesive (CoMat

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#### V2500 Propulsion System — Nacelle

#### Aero Engines SERVICE BULLETIN

08-078) to the mating surfaces of the brackets and doublers.

- (11) Install the brackets and doublers with the fasteners. Wet install the fasteners with adhesive (CoMat 08-078). Refer to Figure 6.
- (12) Cure the adhesive under mechanical pressure for 2 hours at room temperature then for 2 hours at  $200 \pm 10$  degrees F.
- (13) Trim brackets and doublers to agree with the shape of the acoustic panels.
- (14) Clean the bare metal surfaces with a lint free cloth (CoMat 02-099) made moist with solvent (CoMat 01-438). Wipe the surfaces dry before the solvent becomes dry.
- 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 THE USE OF THIS PRODUCT, CAREFULLY READ THE APPLICABLE "MATERIAL SAFETY DATA SHEET" AND FOLLOW ALL LISTED SAFETY AND HEALTH PRECAUTIONS.
- (15) Apply conversion coating (CoMat 07-028) to the exposed aluminum areas. Refer to the manufacturer's instructions.
- WARNING: SEALANT (COMAT 08-030) 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 THE USE OF THIS PRODUCT, CAREFULLY READ THE APPLICABLE "MATERIAL SAFETY DATA SHEET" AND FOLLOW ALL LISTED SAFETY AND HEALTH PRECAUTIONS.
- (16) Apply sealant (CoMat 08-030) to the edges of the brackets and doublers to make a smooth transition with the adjacent surfaces.

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Not subject to the EAR per 15 C.F.R. Chapter 1, Part 734.3(b)(3).



## Aero Engines SERVICE BULLETIN

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 THE USE OF THESE PRODUCTS, CAREFULLY READ THE APPLICABLE "MATERIAL SAFETY DATA SHEET" AND FOLLOW ALL LISTED SAFETY AND HEALTH PRECAUTIONS.

- R
- (17) Mix the catalyst (CoMat 07-139), epoxy primer (CoMat 07-140) and thinner (CoMat 07-144). Refer to the manufacturer's instructions.
- R
- (18) Apply the primer mix to the bare metal and fasteners in the modification area.
- R
- (19) Cure the primer. Refer to the manufacturer's instructions.
- R
- (20) Apply topcoat paint to the translating sleeve outer skin a required.
- R
- (21) Go to Paragraph 2.I.
- Replace the 290-0261-501 (290-0261-502) seal. I.
  - Remove the 290-0261-501 (290-0261-502) seal from the seal carrier on the thrust reverser fixed structure. The seal is attached to the adjacent seal with a plug seal. The plug seal is bonded to the seals with silicone rubber compound. Do not damage the adjacent seal during removal. Remove the splice plug. Refer to Figure 7.
  - Remove as much of the red sealant and clear silicone rubber (2) compound from the seal carrier as possible.
  - (3) Install the replacement 290-0261-501 (290-0261-502) seal on the seal carrier.

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## Aero Engines SERVICE BULLETIN

- (a) Make the mating surfaces of the seal and the seal carrier rough. Use silicon carbide abrasive paper (CoMat 05-081).
- (b) Clean the surfaces of the seal and the seal carrier with a lint free cloth (CoMat 02-099) and solvent (01-438).

# WARNING: PRIMER (COMAT 08-032) IS CLASSIFIED AS A HAZARD-OUS 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.

CAUTION: Do not apply primer (CoMat 08-032) to the seal.

- (c) Apply a thin layer of primer (CoMat 08-032) to the mating surface of the seal carrier. Refer to the manufacturer's instructions.
- (d) Cure the primer. Refer to the manufacturer's instructions.

# WARNING: SILICONE RUBBER COMPOUND (COMAT 08-031) 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.

(e) Apply the silicone rubber compound (CoMat 08-031) to the mating surfaces of the seal, the seal plug, and the seal carrier. Refer to the manufacturer's instructions.

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## Aero Engines SERVICE BULLETIN

- (f) Install the seal in the seal carrier and on the 290-0264-11 seal plug. Make sure the vent holes face upward.
- (g) Remove unwanted silicone rubber compound with a lint free cloth (CoMat 02-099) made moist with solvent (CoMat 01-438).

WARNING: SEALANT (COMAT 08-030) 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.

- (h) Fill the gap between the seal and the structure with sealant (CoMat 08-030). Refer to Figure 7.
- (i) Cure the silicone rubber compound. Refer to the manufacturer's instructions.
- J. Re-identify the translating sleeve assemblies as follows:

290-0650-507 as the 290-0650-509 290-0650-508 as the 290-0650-510 290-0651-507 as the 290-0651-509 290-0651-508 as the 290-0651-510

Use a rubber stamp and ink (CoMat 06-073). Refer to the IAE Standard Practices/Processes Manual, Chapter 70-09-00.

- K. Post-requisite Instructions
  - (1) Install the translating sleeve on the thrust reverser. Refer to the MD-90 Aircraft Maintenance Manual, Chapter 78-32-16, Page block 401.

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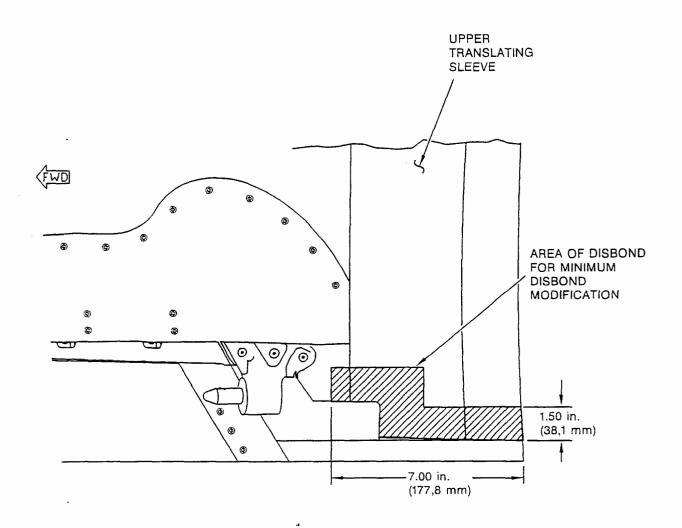
## Aero Engines SERVICE BULLETIN

#### L. 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-78-0146 has been done. Refer to the IAE V2500 Standard Practices/Processes Manual, Chapter 70-09-00.

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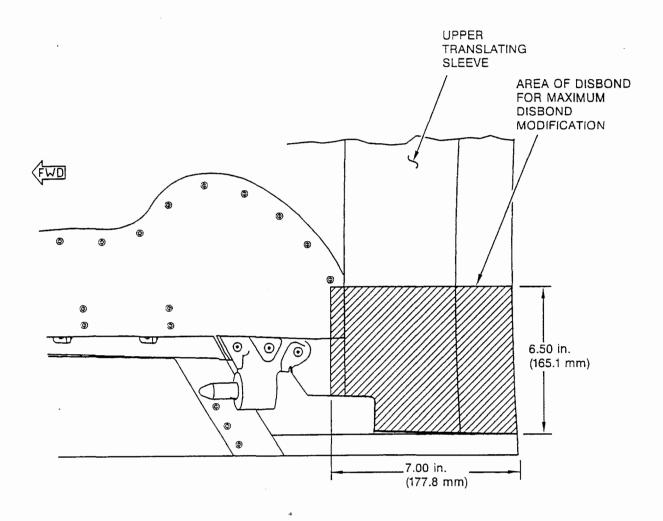
VSB588

Upper Translating Sleeve Disbond Examination Figure 1

V2500-NAC-78-014 F



# International Aero Engines SERVICE BULLETIN



VSB589

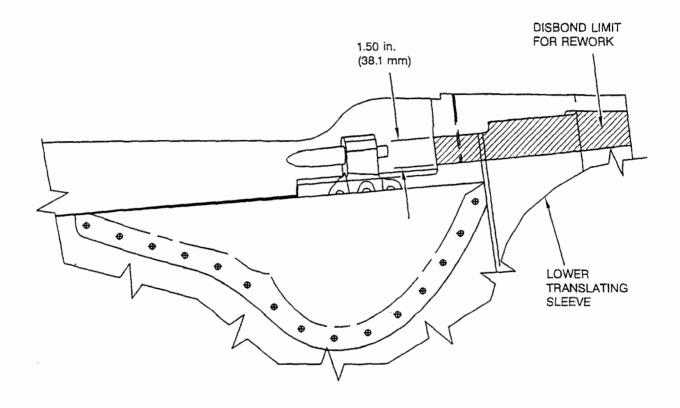
Upper Translating Sleeve Disbond Examination Figure 2

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# International Aero Engines SERVICE BULLETIN



VSB629

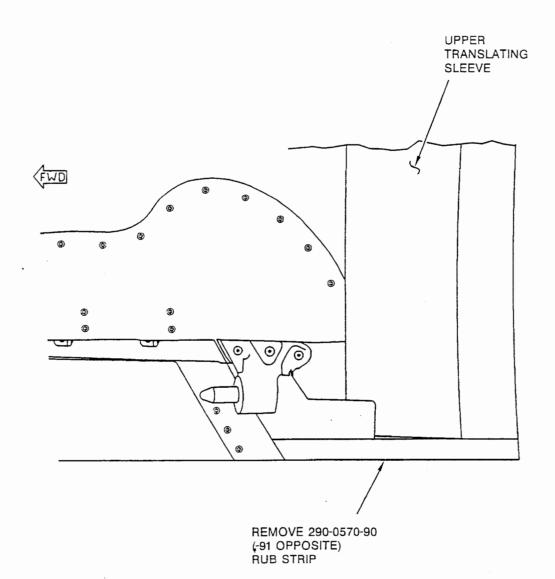
Lower Translating Sleeve Disbond Examination Figure 3

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## International Aero Engines SERVICE BULLETIN



BEFORE MODIFICATION

VSB565

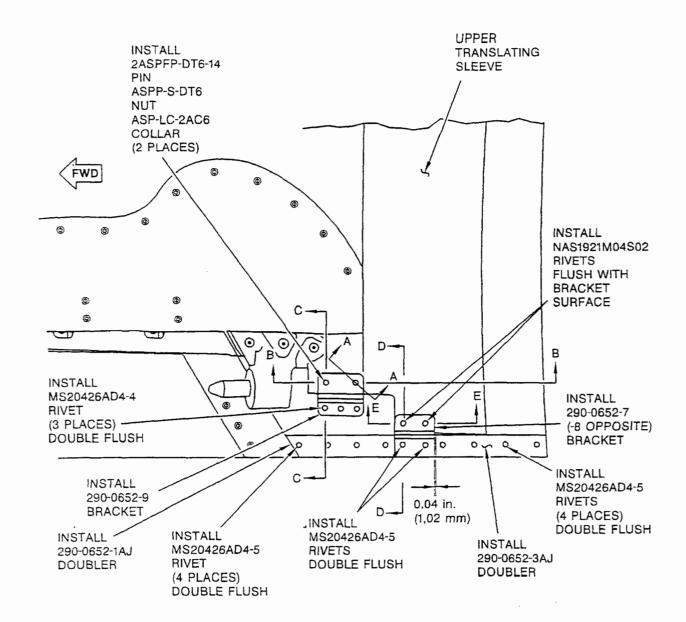
Upper Translating Sleeve Modification (with minimum disbond) Figure 4 (Sheet 1)

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## Aero Engines SERVICE BULLETIN



AFTER MODIFICATION

VSB566

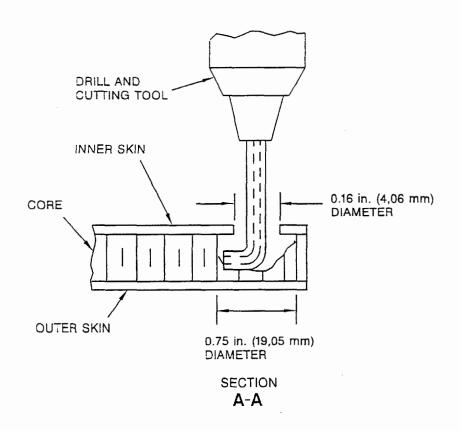
Upper Translating Sleeve Modification (with minimum disbond)
Figure 4 (Sheet 2)

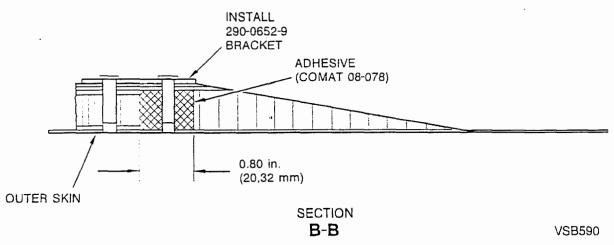
March 26, 1998

V2500-NAC-78-014 F



## Aero Engines SERVICE BULLETIN





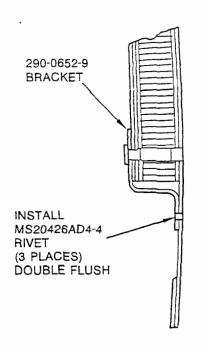
Upper Translating Sleeve Modification (with minimum disbond)
Figure 4 (Sheet 3)

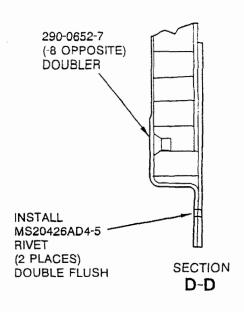
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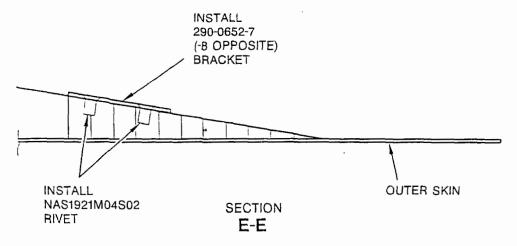


# Aero Engines SERVICE BULLETIN





SECTION C-C



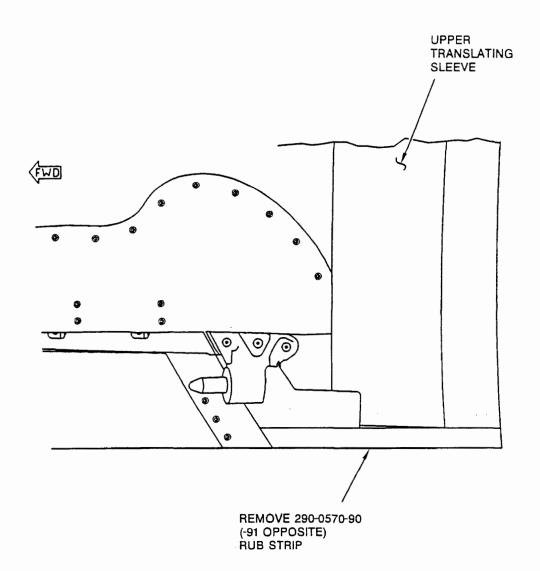
VSB591

Upper Translating Sleeve Modification (with minimum disbond)
Figure 4 (Sheet 4)

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BEFORE MODIFICATION

**VSB565** 

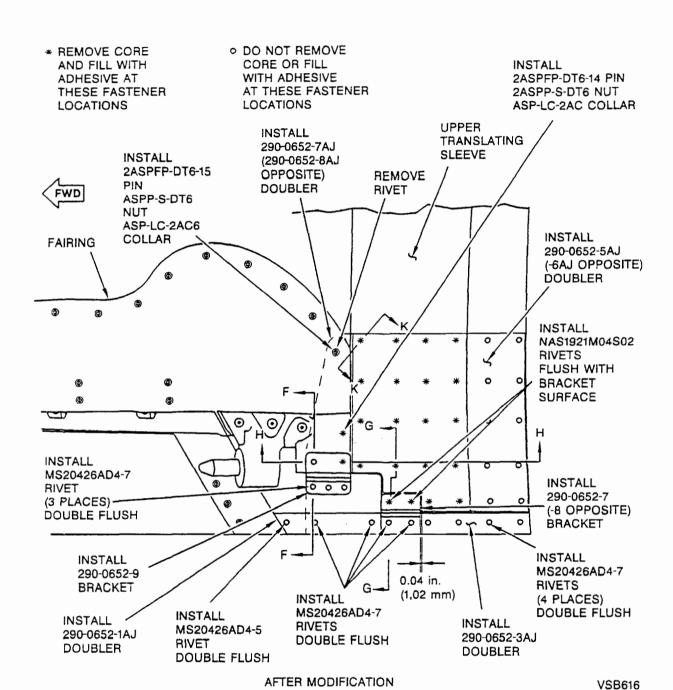
Upper Translating Sleeve Modification (with maximum disbond) Figure 5 (Sheet 1)

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# Aero Engines SERVICE BULLETIN

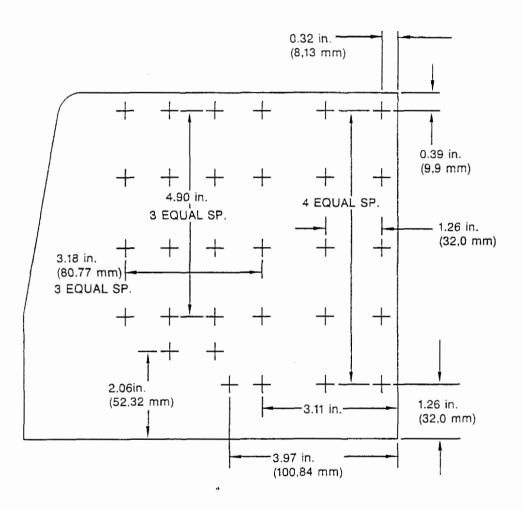


Upper Translating Sleeve Modification (with maximum disbond)
Figure 5 (Sheet 2)

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## **SERVICE BULLETIN**



290-0652-7AJ (-8 AJ OPPOSITE) DOUBLER

VSB632

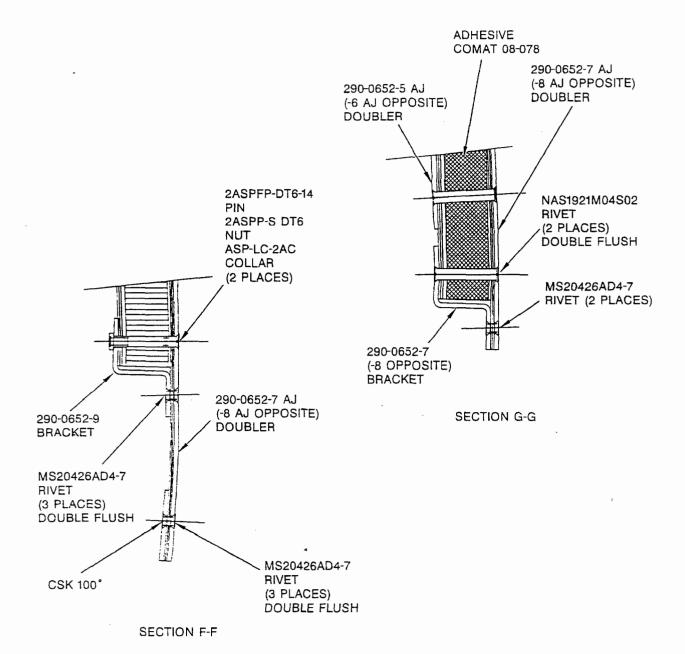
Upper Translating Sleeve Modification (with maximum disbond)
Figure 5 (Sheet 3)

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# Aero Engines SERVICE BULLETIN



VSB617

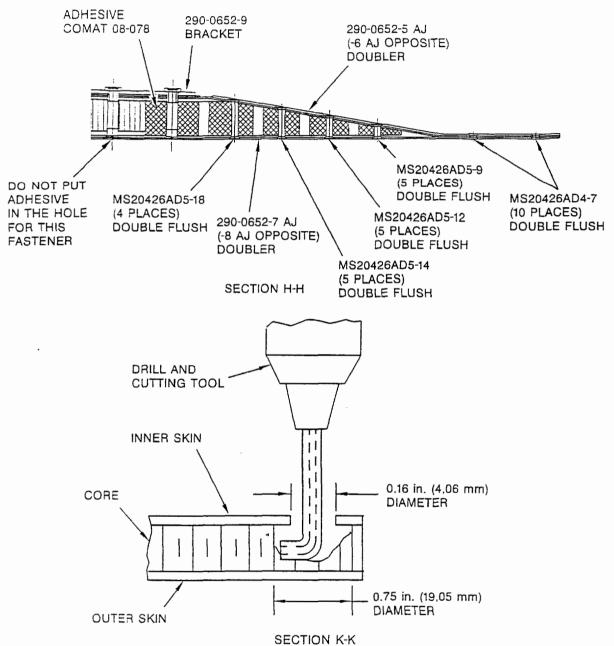
Upper Translating Sleeve Modification (with maximum disbond) Figure 5 (Sheet 4)

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## Aero Engines SERVICE BULLETIN



(TYPICAL AT ALL LOCATIONS MARKED  $\star$ )

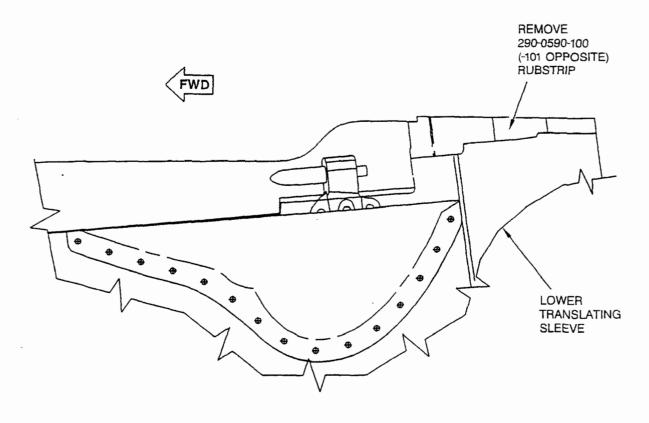
VSB618

Upper Translating Sleeve Modification (with maximum disbond)
Figure 5 (Sheet 5)

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# International Aero Engines SERVICE BULLETIN



BEFORE MODIFICATION

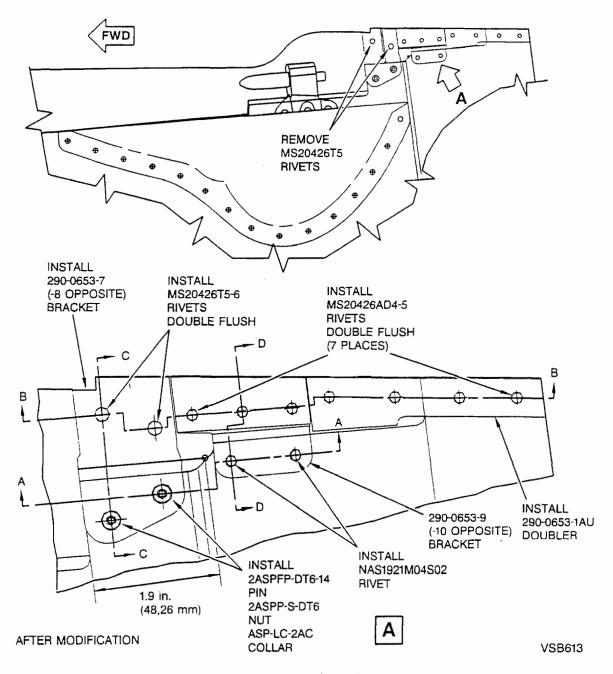
VSB612

Lower Translating Sleeve Modification (with no or minimum disbond) Figure 6 (Sheet 1)

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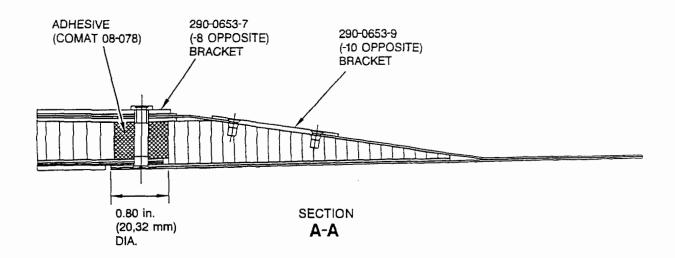
Lower Translating Sleeve Modification (with no or minimum disbond) Figure 6 (Sheet 2)

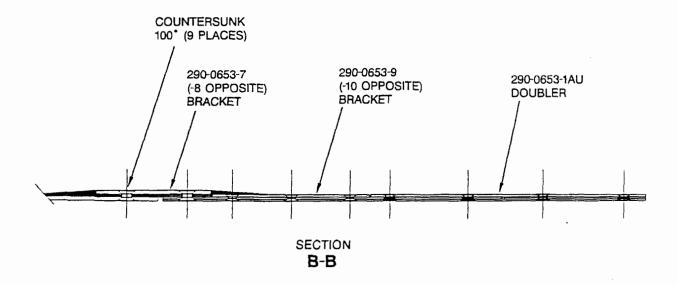
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R



## Aero Engines SERVICE BULLETIN





VSB614

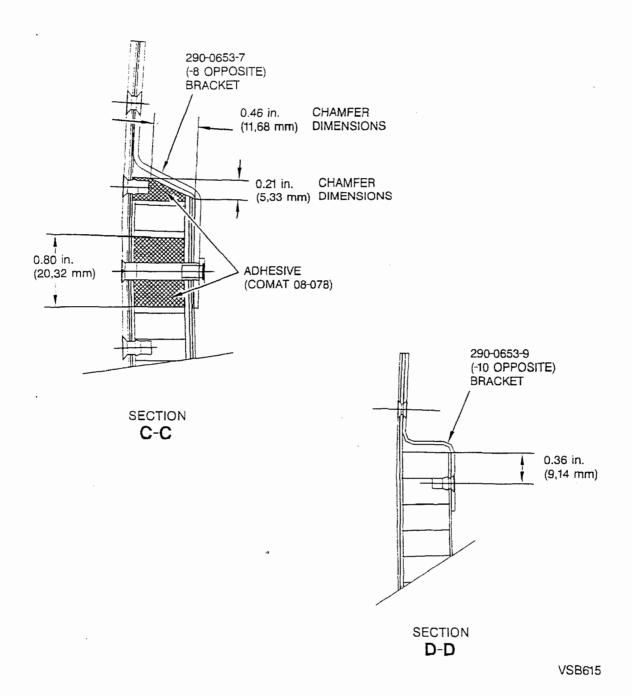
Lower Translating Sleeve Modification (with no or minimum disbond)
Figure 6 (Sheet 3)

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# Aero Engines SERVICE BULLETIN



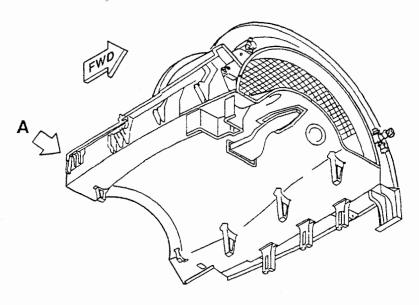
Lower Translating Sleeve Modification (with no or minimum disbond) Figure 6 (Sheet 4)

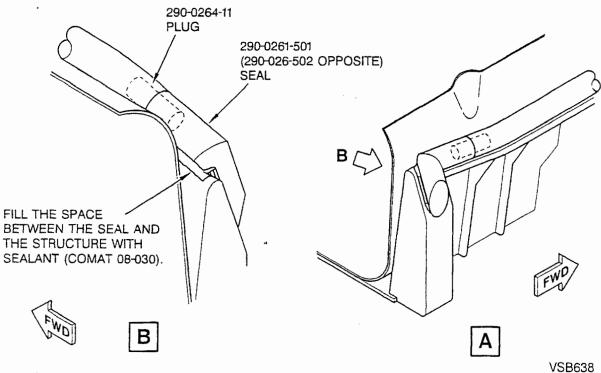
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# International Aero Engines SERVICE BULLETIN





Replace the Thrust Reverser Seal Figure 7

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# International Aero Engines SERVICE BULLETIN

### Material Information 3.

Applicability: For each V2500-D5 Nacelle to incorporate this

Bulletin.

### A. Kits associated with this Bulletin:

NEW PART NO. (ATA NO.)	OTY	EST'D UNIT PRICE	KEYWORD	OLD PART NO. (IPC NO.)	INSTR/ DISPOS
V2578146-551 consisting of:			Kit (LH Nacelle)		(A)
290-0261-501 290-0264-11 290-0652-1AJ 290-0652-7 290-0652-7 290-0653-1AU 290-0653-7 290-0653-7 290-0653-9 ASP-LC-2AC6 ASPP-S-DT6 2ASPFP-DT6-14 MS20426AD4-5 MS20426T5-6 NAS1921M04S02	1 1 1 1 1 1 1 1 4 4 4 20 2		Seal Plug Bracket Bracket Doubler Doubler Bracket Bracket Collar Nut Pin Rivet Rivet Rivet		
V2578146-552 consisting of:		d	Kit (RH Nacelle)		(A)
290-0261-502 290-0264-11 290-0652-1AJ 290-0652-3AJ 290-0652-8	1 1 1 1		Seal Plug Bracket Bracket Doubler		

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NEW PART NO.		EST'D UNIT		OLD PART NO.	INSTR/
(ATA NO.)	OTY	PRICE	KEYWOR	D (IPC NO.)	DISPOS
•					
290-0652-9	1		Doubler		
290-0653-1AU	1		Doubler		
290-0653-8	1		Bracket		
290-0653-10	1		Bracket		
ASP-LC-2AC6	4		Collar		
ASPP-S-DT6	4		Nut		
2ASPFP-DT6-14	4		Pin		
MS20426AD4-5	20		Rivet		
MS20426T5-6	2		Rivet		
NAS1921M04S02	4		Rivet		
V2578146-553			Kit (LH		
Consisting			Nacelle)		
of:			,		
290-0652-5AJ	1		Doubler		
290-0652-7AJ	1 1		Doubler		
ASP-LC-2AC6	2		Collar		
ASPP-S-DT6	2		Nut		
2ASPFP-DT6-15	3		Pin		
MS20426AD4-7	22				
MS20426AD4-9	5		Rivet		
MS20426AD4-9	5		Rivet Rivet		
MS20426AD5-14	5				
MS20426AD5-14 MS20426AD5-18	6		Rivet		
M320420AD3-10	O		Rivet		
V2578146-554			Kit (RH		
Consisting			Nacelle)		
of:					
290-0652-6AJ	1		Doubler		
290-0652-8AJ	1		Doubler		
ASP-LC-2AC6	2		Collar		
ASPP-S-DT6	2		Nut		
2ASPFP-DT6-15	2		Pin		
MS20426AD4-7	22		Rivet		
MS20426AD4-9	5		Rivet		
	J		KTASC		
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NEW PART NO. (ATA NO.)	OTY	EST'D UNIT PRICE	KEYWORD	OLD PART NO. (IPC NO.)	INSTR/ DISPOS
MS20426AD5-12	5		Rivet		
MS20426AD5-14	5		Rivet		
MS20426AD5-18	4		Rivet		

### Parts Affected by this Bulletin: в.

	NEW PART NO. (ATA NO.)	OTY	EST'D UNIT PRICE	KEYWORD	OLD PART NO. (IPC NO.)	INSTR/ DISPOS
R R R	290-0003-537 (78-32-05)	1		Thrust Reverser, LH Upper	290-0003-529 (01-005)	(B)(C)(1D) (S1)
R R R	290-0003-539 (78-32-06)	1		Thrust Reverser, RH Upper	290-0003-531 (01-005)	(B)(C)(1D) (S1)
R R R	290-0003-533 (78-3 <sup>2</sup> -07)	1		Thrust Reverser, LH Lower	290-0003-525 (01-005)	(B)(C)(1D) (S1)
R R R	(290-0003-535 (78-32-08)	1		Thrust Reverser RH Lower	290-0003-527 (01-005)	(B)(C)(1D) (S1)
	290-0650-509 (78-32-16)	1		Translating Sleeve, LH Upper	290-0650-507 (01-001)	(B)(C)(1D) (S1)
	290-0650-510 (78-32-16	1		Translating Sleeve, RH Upper	290-0650-508 (01-002)	(B)(C)(1D) (S1)
	290-0651-509 (78-32-16)	1		Translating Sleeve, LH Lower	290-0651-507 (02-001)	(B)(C)(1D) (S1)
	290-0651-510 (78-32-16)	1		Translating Sleeve, RH Lower	290-0651-508 (02-002)	(B)(C)(1D) (S1)

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- C. Instruction/Disposition Code Statements
  - (A) Kit will be available April 1998.
  - (B) Old part will no longer be available.
  - (C) New part is currently available.
  - (1D) Old part can be re-worked to new part configuration.
  - (S1) New part may be used in place of old part but not vice versa.

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 Service Bulletin:

CoMat 01-438	Solvent
CoMat 02-099	Lint Free Cloth
CoMat 05-081	Silicon Carbide Abrasive Paper
CoMat 06-073	Metal Marking Ink
CoMat 07-028	Chromate Conversion Coating for Aluminum
CoMat 07-139	Catalyst
CoMat 07-140	Epoxy Primer
CoMat 07-144	Thinner
CoMat 08-030	Sealant
CoMat 08-031	Silicone Rubber Compound
CoMat 08-032	Primer
CoMat 08-078	Adhesive

NOTE: To identify the consumable materials, refer to the Overhaul Processes and Consumable Index PCI-V2500-11A.

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