V2500 International Aero Engines

V2500 Propulsion System — Nacelle

SERVICE BULLETIN

NACELLE - EXHAUST - COMMON NOZZLE ASSY - BIFURCATION FAIRING - MODIFICATION OF

MODEL APPLICATION

V2500-D5

BULLETIN INDEX LOCATOR

78-32-00

Compliance Category Code

4

Internal Reference No.

JG/DC 95VN808

January 2, 1996

V2500-NAC-78-0116

1. Planning Information

A. Effectivity

(1) Aircraft: McDonnell Douglas MD-90.

(a) Nacelle: V2500-D5 Nacelle Common Nozzle Assemblies Serial Numbers 0021001 through 0053001.

B. Reason

(1) Condition

Cracking may exist at the aft-most fastener hole locations of the CNA Bifurcation Fairing.

(2) Background

Operators in the field have found units to exhibit this condition.

(3) Objective

The changes incorporated in this Bulletin are intended to eliminate cracking of the fairing at the aft-most fastener locations.

(4) Substantiation

A trial assembly of a configuration similiar to production was successfully fitted to a mock-up unit.

(5) Impact of Bulletin on Workshop Procedures:

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

(6) Supplemental Information

None.

C. Description

Remove the existing aft-most attaching rivets from the bifurcation fairings at the 90 degree and 270 degree radial locations, trim the aft portion of the bifurcation fairings, install rivets to fill existing holes, install fasteners removed for access, and apply primer and sealant to the trimmed edges.

D. Approval

Incorporation of this Service Bulletin must be accomplished only in conjuction with Douglas Aircraft Company Service Bulletin 78-010 which has received exclusive FAA approval for MD-90 Series Aircraft.

E. Compliance

Category 4

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

F. Manpower

Estimated manhours to incorporate the full intent of this Bulletin:

VENUE		ESTIMATED MANHOURS
(1)	In Service	
(a)	To gain access	Not Applicable
(a)	To rework	4.0 M/Hrs.
(c)	To return nacelle to service	Not Applicable
	Total	4.0 M/Hrs.

G. Material - Cost and Availability

The parts to accomplish this Service Bulletin are available from the supplier as kit V2578116-551 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 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 price, if they desire to incorporate the change.

Direct Purchase order to:
Rohr Inc.
P.O. Box 878
Chula Vista, CA 91912
U.S.A.
Attn: Manager, Spare Sales, Bldg. 107A
(Ref. Service Bulletin No V2500-NAC-78-0116)

H. Tooling - Cost and Availability

None required.

I. Weight and Balance

(1) Weight change .....None

(2) Moment arm .....None

(3) Datum .....Front Engine Mount Centerline

.....(Power Plant Station (PPS) 100.00)

J. Electrical Load Data

Not Applicable

K. References

Overhaul Processes and Consumable Index
(PCI-V2500-1IA)

IAE V2500 Standard Practices/Processes Manual 70-09-00
(SPP-V2500-1IA)

L. Other Publications Affected

None

2. Accomplishment Instructions

A. Prerequisite Instructions

None.

B. Modification Instructions - Common Nozzle Assy

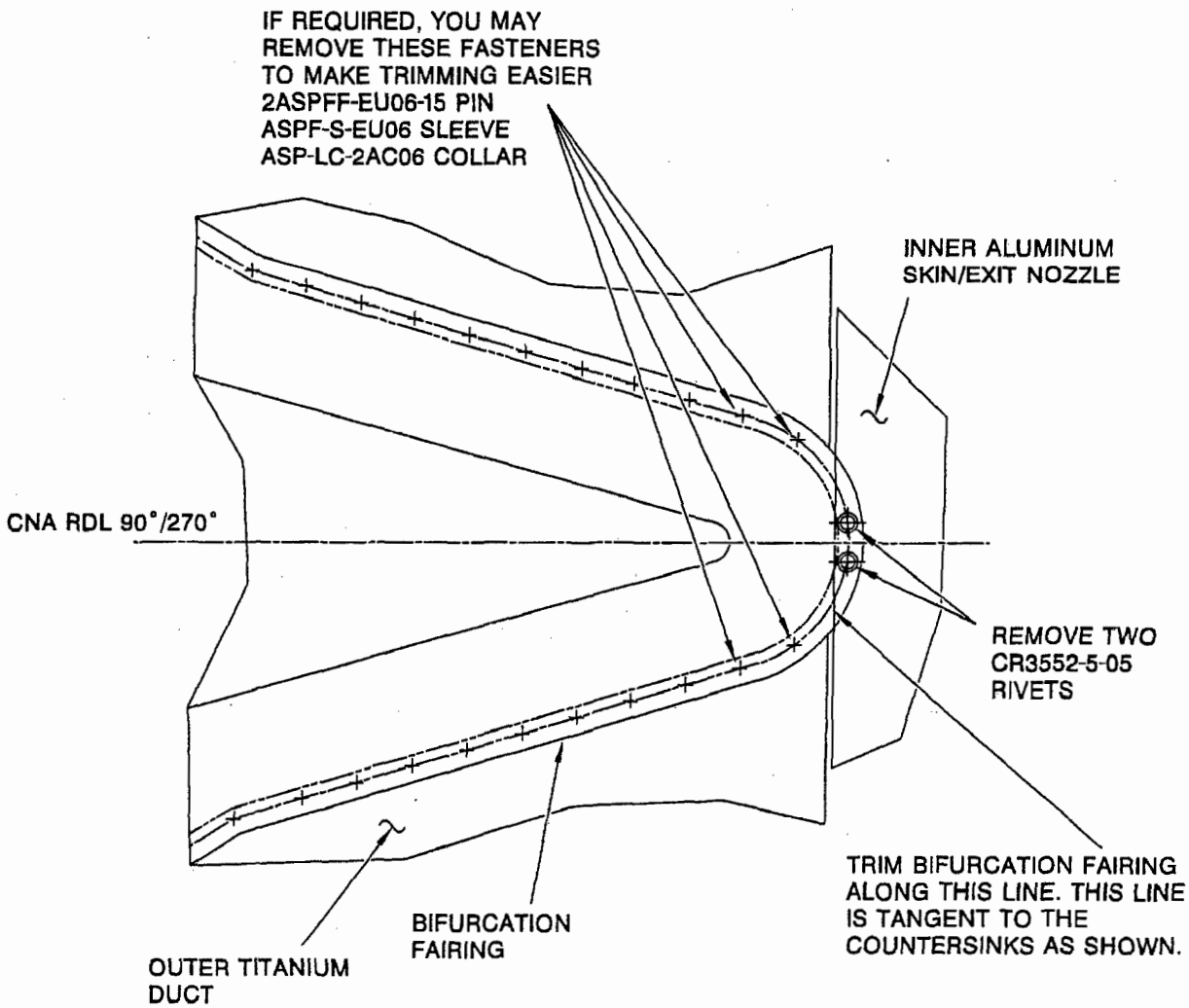
(1) Find the CNA bifurcation fairing inside the CNA at the 90 degree radial location.

(2) Use a (0.156in.) (3,962 mm) diameter drill and remove the two aft-most CR3552-5-05 rivets. Refer to Figure 1.

(3) If necessary, you may remove the four adjacent ASPFF-EU06-15 pins, ASPF-S-EU06 sleeves, and ASP-LC-2AC06 collars for access before you trim the fairing. Refer to Figure 1.

CAUTION: YOU MAY NEED TO PUT A STEEL SHEET UNDER THE FAIRING TO PREVENT DAMAGE TO THE EXIT NOZZLE WHILE YOU TRIM THE FAIRING.

(4) Trim the aft portion of the bifurcation fairing as shown in Figure 1.



VIEW LOOKING FROM INSIDE OF CNA

VSB396

CNA Bifurcation Fairing Trim
Figure 1

WARNING: DO NOT GET THE CONVERSION COATING ON YOUR SKIN OR IN YOUR EYES. PUT ON PROTECTIVE CLOTHING, GOGGLES AND A FACE MASK. USE IN A WELL VENTILATED AREA. DO NOT BREATHE THE GAS. IF YOU GET THE CONVERSION COATING ON YOUR SKIN YOU MUST FLUSH IT AWAY WITH WATER IMMEDIATELY. IF YOU GET THE CONVERSION COATING IN YOUR EYES, FLUSH IT AWAY WITH WATER FOR AT LEAST 15 MINUTES, THEN GET MEDICAL AID IMMEDIATELY. DO NOT LET THE MATERIALS USED TO APPLY OR REMOVE THE CONVERSION COATING BECOME DRY BECAUSE THEY CAN CAUSE A FIRE. ALL SUCH MATERIALS MUST BE FULLY FLUSHED IN COLD WATER AND THEN DISCARDED.

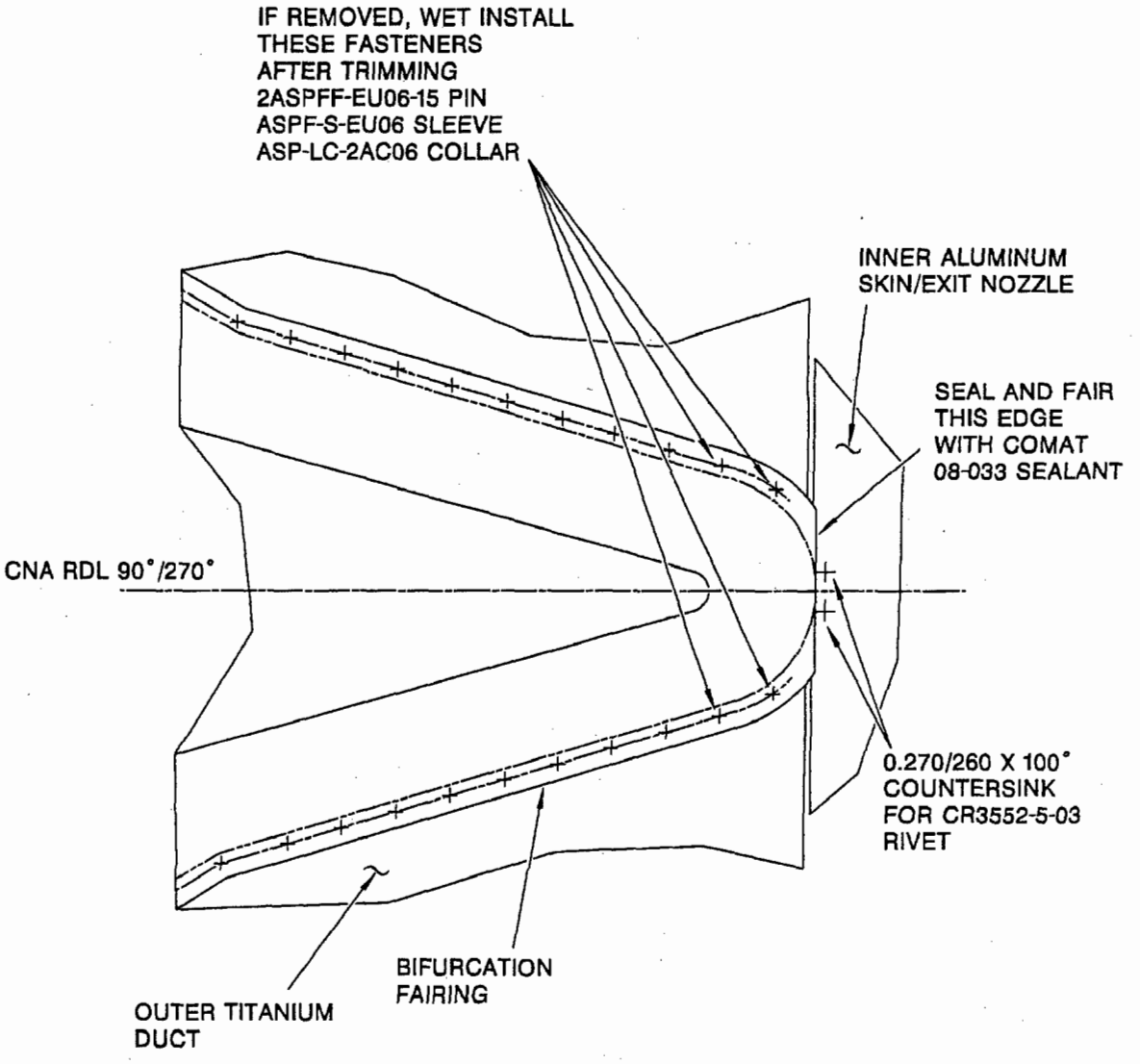
(5) Mix the conversion coating in a ratio of 0.4-0.5 ounce conversion coating (CoMat 07-106) to 1.0 gallon of demineralized water.

(6) Apply the conversion coating to the trimmed area on the bifurcation fairing for two to five minutes. Keep the surface wet with fresh solution. Do not allow the solution to dry.

(7) Rinse the conversion coating from all surfaces with clean water and dry with a lint free cloth (CoMat 02-099).

(8) Install the fasteners as follows:

(a) Countersink the two existing rivet holes in the exit nozzle to 0.270in. (6,858 mm) +0/-0.010in. (0,254 mm) diameter by 100 degrees.



VIEW LOOKING FROM INSIDE OF CNA

VSB397

CNA Bifurcation Fairing Trimmed Edge Sealing and Fastener Location
Figure 2

WARNING: 463-6-27 BASE, X337 CONVERTER, AND TL52-66 THINNER ARE FLAMMABLE AND VAPOR IS HARMFUL. INHALATION OF SPRAY MIST MAY CAUSE SERIOUS BODILY HARM. AVOID SOURCES OF IGNITION. USE ONLY IN AREAS WITH ADEQUATE VENTILATION. WORK PERFORMED IN CONFINED AREA REQUIRES THE USE OF ADDITIONAL FORCED MECHANICAL VENTILATION. AVOID BREATHING OF VAPOR AND CONTACT WITH SKIN AND EYES. MAY CAUSE IRRITATION TO SKIN AND EYES. SEVERE OVEREXPOSURE MAY CAUSE FATIGUE, WEAKNESS, CONFUSION, HEADACHE, DIZZINESS, DROWSINESS, AND IMPAIRED JUDGMENT. USE REGULATORY AGENCY APPROVED RESPIRATORY PROTECTION FOR SPRAY APPLICATIONS. THIS PRODUCT CONTAINS LEAD, A CUMULATIVE POISON. WASH HANDS WELL BEFORE EATING, DRINKING, OR SMOKING. PROTECTIVE GLOVES SHOULD BE WORN DURING MIXING APPLICATION. PROLONGED OR REPEATED CONTACT WITH THIS EPOXY PRIMER MAY RESULT IN A PERMANENT SKIN ALLERGY TO 463-6-27 BASE AND X337 CONVERTER. PRIOR TO USE OF THIS PRODUCT, CAFEFULLY READ THE "MATERIAL SAFETY DATA SHEET" AND FOLLOW ALL LISTED SAFETY AND HEALTH PRECAUTIONS.

(b) Mix the primer base (CoMat 07-071), primer converter (CoMat 07-067), and thinner (CoMat 07-066). Refer to the manufacturer's instructions.

(c) Wet install the two CR3552-5-03 rivets with the primer mix to fill the existing rivet holes. Refer to Figure 2.

(d) If previously removed, wet install the 2ASPFF-EU06-15 pins, ASPF-S-EU06 sleeves, and ASP-LC-2AC06 collars with primer mix as shown in Figure 2.

WARNING: DO NOT GET THE SEALANT ON YOUR SKIN OR IN YOUR EYES. PUT ON PROTECTIVE CLOTHING, GOGGLES AND A FACE MASK. USE IN A WELL VENTILATED AREA. DO NOT BREATHE THE GAS. IF YOU GET THE SEALANT ON YOUR SKIN OR IN YOUR EYES, WIPE IT AWAY. GET MEDICAL AID IF YOUR SKIN OR EYES BECOME IRRITATED.

(9) Seal and fair the trimmed edges of the bifurcation fairing as follows:

(a) Apply the primer (CoMat 08-032) to the trimmed edges. Refer to the manufacturer's instructions.

(b) Mix the sealant (CoMat 08-033). Refer to the manufacturer's instructions.

(c) Apply the sealant (CoMat 08-033) to the trimmed edges. Remove any unwanted sealant with a lint free cloth (CoMat 02-099). Refer to Figure 2.

(10) Do modification instruction steps (2) through (10) above for the CNA Bifurcation Fairing at the 270 degree radial location.

C. Post-requisite Instructions

None.

D. Recording Instructions

A record of accomplishment is necessary. Write in applicable records and metal stamp, vibroetch, or electroetch on CNA data plate that Service Bulletin V2500-NAC-78-0116 has been done. Refer to IAE V2500 Standard Practices/Processes Manual, Chapter 70-09-00.

3. Material Information

Applicability: For each V2500 nacelle to incorporate this Bulletin.

A. Kits associated with this Bulletin:

NEW PART NO (ATA NO)	QTY	EST'D UNIT PRICE	KEYWORD	OLD PART NO (IPC NO)	INSTR/ DISPOS
V2578116-551 Consisting of:					(A)
2ASPFF-EU06-15	8		Pin		
2ASPF-S-EU06	8		Sleeve		
ASP-LC-2AC06	8		Collar		
CR3552-5-03	4		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
290-1201-503 (78-11-11)	1		Common Nozzle Assembly	290-1201-503 (05-005)	(B)

C. Instructions/Disposition Code Statements:

(A) Kit will be available December 1995.

(B) Rework old part with no part number change.

NOTE: The estimated 1995 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. Consumables Required to Incorporate This Bulletin

CoMat 02-099	Lint Free Cloth
CoMat 07-066	Thinner
CoMat 07-067	Primer Converter
CoMat 07-071	Primer Base
CoMat 07-106	Chromate Conversion Coating 1000 for Aluminum
CoMat 08-032	Primer
CoMat 08-033	Sealant

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