V2500 International Aero Engines

V2500 Propulsion System — Nacelle

SERVICE BULLETIN

NACELLE - EXHAUST - THRUST REVERER - PIN, QUICK RELEASE - HOLD OPEN, PRESSURE RELIEF DOOR - RELOCATION OF

MODEL APPLICATION

V2500-D5

BULLETIN INDEX LOCATOR

78-32-00

Compliance Category Code

4

Internal Reference No.

JG/AC 95VN955

January 17, 1996

V2500-NAC-78-0124

1. Planning Information

A. Effectivity

(1) Aircraft: MD-90

(a) Nacelle: V2500-D5 production nacelles with serial numbers 0006001, 0007001, 0021001 thru 0076001 and 0081001 thru 0084001.

B. Reason

(1) Condition

The forward quick release pin used to hold the lanyard on the pressure relief door can be installed in the wrong hole which can cause the pressure relief door to inadvertently open.

(2) Background

Operators have experienced inadvertent pressure relief door openings in flight.

(3) Objective

Provide for proper installation of the pressure relief door forward lanyard quick release pin.

(4) Substantiation

Testing of relocated pressure relief door forward quick release pin installation was successful.

(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

The rivet that attaches the forward quick release pin lanyard to the track assembly will be drilled out, the rivet hole in the track assembly filled with a rivet, and the rivet hole in the heat shield covered with sealant. The quick release pin will be relocated and a hole drilled in the track assembly for attachment of the quick release pin lanyard. The lanyard will then be attached to the track assembly at the new location with a rivet.

D. Approval

Incorporation of this Service bulletin must be accomplished only in conjunction with Douglas Aircraft Company Service Bulletin 78-011 which has received exclusive FAA approval for MD-90 Series aircraft.

E. Compliance

Category 4

Accomplish at the first visit or 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

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

VENUE		ESTIMATED MANHOURS
(1) In Service		
	(a) To gain access	0.1 M/Hrs
	(b) To rework	1.0 M/Hrs
	(c) To return to service	0.1 M/Hrs
(2) In Shop		Not Applicable
	Total	1.2 M/Hrs

G. Material - Cost and Availability

None.

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	Chapter/Section
IAE V2500 Standard Practices/Processes Manual (SPP-V2500-1IA)	70-09-00
Overhaul Processes and Consumable Index (PCI-V2500-1IA)	

L. Other Publications Affected

MD-90 Engine Illustrated Parts Catalog (S-V2500-3IA)	78-32-09

2. Accomplishment Instructions

A. Prerequisite Instructions

(1) Open the thrust reverser pressure relief door.

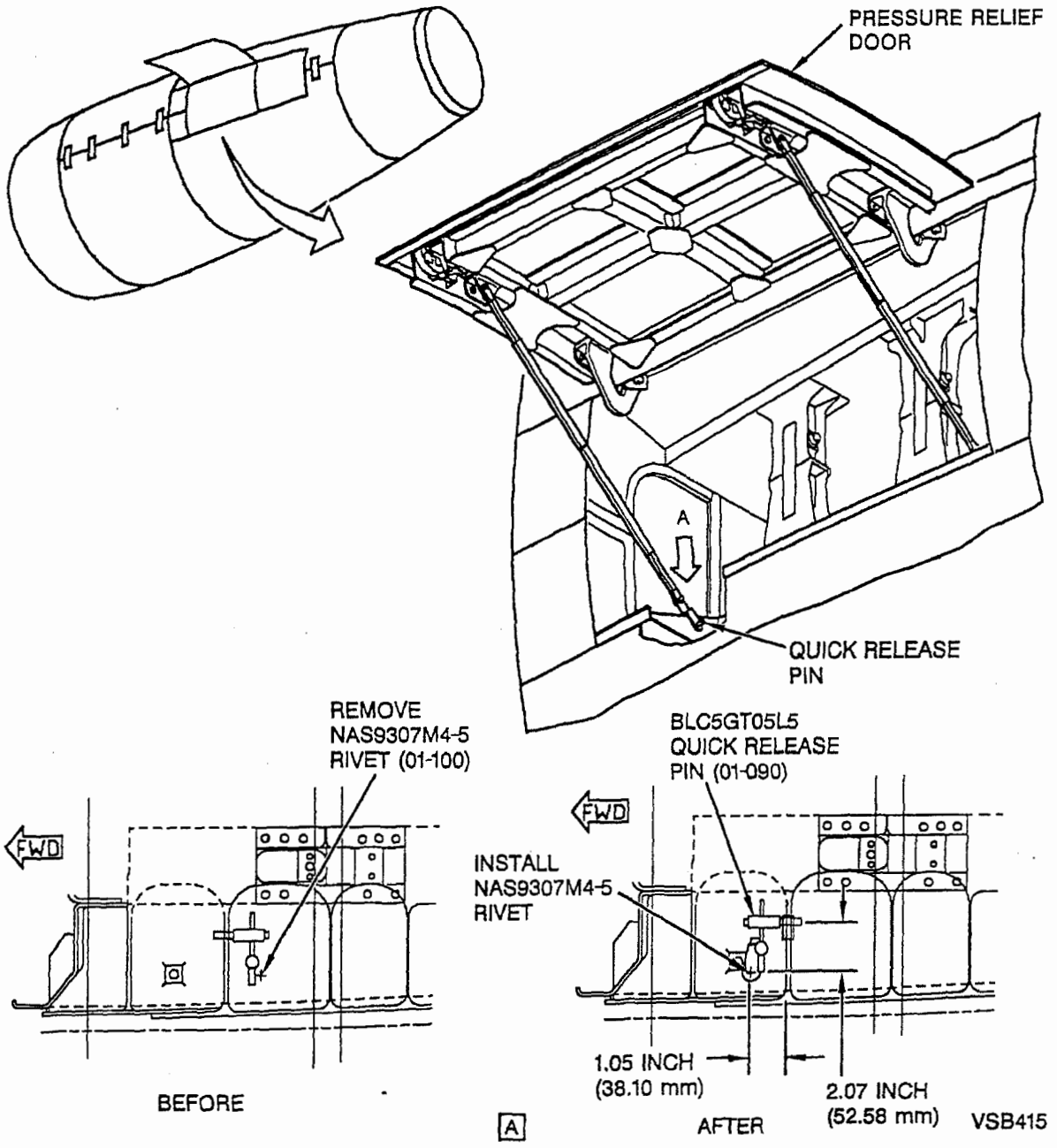
B. Rework or Modification Instructions

(1) Use a 0.128-0.134 inch (3.251-3.404 mm) diameter drill to remove the NAS9307M-4-5 rivet that attaches the forward BLC5GT05L5 quick release pin lanyard to the track assembly. Remove the quick release pin. Refer to Figure 1.

WARNING: 1.1.1 TRICHLOROETHANE VAPORS ARE HARMFUL. USE IN A WELL-VENTILATED AREA. AVOID PROLONGED BREATHING OF VAPOR AND PROLONGED OR REPEATED CONTACT WITH SKIN. OVEREXPOSURE MAY CAUSE HEADACHE, DIZZINESS OR DROWSINESS. VAPOR IS HEAVIER THAN AIR AND MAY REPLACE OXYGEN IN A CONFINED AREA. SMOKING AND ARC WELDING SHOULD BE AVOIDED WHEN USING THIS SOLVENT; VAPORS OF DECOMPOSITION MAY CAUSE SERIOUS BODILY HARM. PROTECTIVE GLOVES SHOULD BE WORN DURING USE. MAY CAUSE DERMATITIS BY REMOVING SKIN OILS. PRIOR TO USE OF PRODUCT, CAREFULLY READ THE APPLICABLE 'MATERIAL SAFETY DATA SHEET' AND FOLLOW ALL LISTED SAFETY AND HEALTH PRECAUTIONS.

(2) Clean around the rivet holes in the track beam and heat shield with lint free cloth (CoMat 02-099) and trichloroethane (CoMat 01-001). Wipe surface dry before solvent becomes dry.

(3) Fill the rivet hole in the track assembly with a NAS9307-4-5 rivet.



QUICK RELEASE PIN RELOCATION
FIGURE 1

WARNING: DOW CORNING 1200 PRIMER IS FLAMMABLE AND VAPOR IS HARMFUL. USE IN A WELL VENTILATED AREA. WORK PERFORMED IN CONFINED AREAS REQUIRES THE USE OF ADDITIONAL FORCED MECHANICAL VENTILATION. AVOID BREATHING OF VAPOR OR PROLONGED OR REPEATED CONTACT WITH SKIN. MAY CAUSE IRRITATION TO SKIN, EYES, NOSE, AND THROAT. HIGH CONCENTRATION MAY CAUSE IMPAIRED JUDGEMENT. PROTECTIVE GLOVES SHOULD BE WORN DURING USE. MAY CAUSE DERMATITIS BY REMOVING SKIN OILS.

(4) Stir the primer (CoMat 08-032) fully. Apply a thin layer of primer to the exposed edges of the rivet hole in the heat shield.

(5) Dry the primer (CoMat 08-032) at room temperature, for a minimum of 2 hours and a maximum of 24 hours, at a moisture level equivalent to a minimum of 50 percent relative humidity at 77 deg F (25 deg C).

NOTE: The primed surfaces should have a faintly visible pink color. If there is no visible color, the primer film may not be continous. If the color is quite bright, streaky bright or chalky, the primer is to thick.

WARNING: USE SEALANT ONLY IN AREAS WITH GOOD VENTILATION. TAKE PRECAUTIONS TO PREVENT MATERIAL FROM COMING INTO COTACT WITH SKIN. PRIOR TO USE OF THIS PRODUCT, CAREFULLY READ THE APPLICABLE 'MATERIAL SAFETY DATE SHEET' AND FOLLOW ALL LISTED SAFETY AND HEALTH PRECAUTIONS.

(6) Mix the sealant (CoMat 08-030). Refer to the manufacturer's instructions.

(7) Fill the rivet hole in the heat shield with sealant (CoMat 08-030).

(8) Cure the sealant (CoMat 08-030) for two hours at room temperature, approximately 72 def F (22 deg C), before it is moved. Allow 24 hours at room temperature to cure fully.

NOTE: Fully cured silicone sealant may not be necessary under repair conditions. The uncured sealant is structurally and functionally acceptable.

(9) Use a 0.128-0.134 inch (3.251 3.404 mm) diameter drill to drill a hole in the track assembly for the NAS9307M-4-5 rivet as shown in Figure 1.

(10) Attach the quick release pin lanyard to the track assembly with a NAS9307M-4-5 rivet (CR3523P-4-5 or CR3523-4-5 rivets may be substituted for the NAS9307M-4-5 rivet).

C. Post-requisite Instructions

(1) Close the thrust reverser latch access and pressure relief doors.

D. Recording Instructions

A record of accomplishment is necessary. Metal stamp, vibroetch, or electroetch on thrust reverser data plate that Service Bulletin V2500-NAC-78-0124 has been done. Refer to IAE V2500 Standard Practices Manual, Chapter 70-09-00.

3. Material Information

Applicability: For each nacelle to incorporate this Bulletin.

A. Kits associated with this Bulletin:

None.

B. Parts affected by this Bulletin:

None.

C. Expendables required to incorporate this Bulletin:

PART NO.	ATA LOCATION	QTY
BLC5GT05L	78-32-09, 01-090	1
*NAS9307M4-5	78-32-09, 01-100	1

* CR3523P-4-5 or CR3523-4-5 rivets may be substituted for the NAS9307M-4-5 rivet.

D. Instructions/Disposition Code Statements:

(A) Remove part and reinstall same part number at new location.

(B) Remove part and reinstall same part number at new location.

NOTE: The estimated 1996 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 incorporated this bulletin:

CoMat 01-001	Trichloroethane
CoMat 02-099	Cloth
CoMat 08-030	Sealant
CoMat 08-032	Primer

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