

# V2500 Propulsion System - Nacelle **SERVICE BULLETIN**

NACELLE - EXHAUST - COMMON NOZZLE ASSEMBLY, STRUT ATTACH BOLTS -  
REPLACEMENT OF

## MODEL APPLICATION

V2500-D5

## BULLETIN INDEX LOCATOR

78-00-00

### Compliance Category Code

4

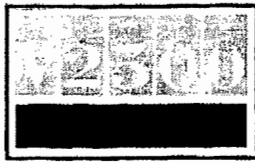
### Internal Reference No.

JG 98VN807

January 22, 1999

**V2500-NAC-78-0165**

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## **V2500 Propulsion System - Nacelle SERVICE BULLETIN**

### **NACELLE - EXHAUST - COMMON NOZZLE ASSEMBLY, STRUT ATTACH BOLTS - REPLACEMENT OF**

#### **1. Planning Information**

##### **A. Effectivity**

###### **(1) Aircraft**

**(a) Boeing MD90**

###### **(2) Nacelle**

**(a) V2500-D5 common nozzle assembly serial numbers prior to 0246001.**

##### **B. Reason**

###### **(1) Condition**

**Operators have found loose CNA struts and damage to the CNA inner and outer skins caused by the strut attach bolts.**

###### **(2) Background**

**The CNA strut attach bolts can be too long and interfere with an internal part of the struts and/or the shanks of the bolts can interfere with and damage the strut nutplates. This can result in a loose strut even though the attach bolts are properly tightened.**

###### **(3) Objective**

**To provide strut attach bolts of the correct length.**

###### **(4) Substantiation**

**Trial installation of the correct length bolts has proven successful.**



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### (5) Effect of Bulletin on:

(a)	Removal/Installation	Affected
(b)	Disassembly/Assembly	Affected
(c)	Cleaning	Not Affected
(d)	Inspection/Check	Not Affected
(e)	Repair	Not Affected
(f)	Testing	Not Affected

### C. Description

The CNA strut fit is examined, and, if found loose, the CNA skins are repaired. The CNA strut attach bolts are removed. CNA strut attach bolts of the correct length are installed.

### D. Approval

Incorporation of this Service Bulletin must be accomplished only in conjunction with Boeing Service Bulletin MD90 78-034 which has received exclusive FAA approval for MD-90 Series aircraft.

### E. Compliance

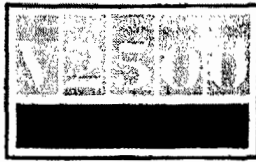
Category 4

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	
(a)	To gain access	0.0 M/Hrs.
(b)	To rework	0.5 M/Hrs.
(c)	To return to service	<u>0.0 M/Hrs.</u>
Total		0.5 M/Hrs.

NOTE: Manhours provided for planning purposes only.



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### G. Material Cost and Availability

The parts to accomplish this service bulletin are available from the supplier as kit V2578165-551 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 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 Account Manager – MZ 107A  
(Ref. Service Bulletin No. V2500-NAC-78-0165)

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

### H. Tooling - Cost and Availability

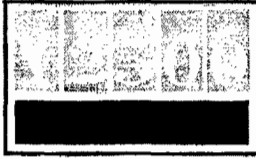
None required.

### 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.



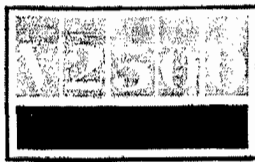
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### K. References

Manual	Chapter/Section
IAE V2500 Standard Practices/Processes Manual (SPP-V2500-11A)	70-09-00
Overhaul Processes and Consumable Index (PCI-V2500-11A)	

### L. Other Publications Affected

Manual	Chapter/Section
MD90/V2500D5 Common Nozzle Component Maintenance Manual (CMM-CN-V2500-31A)	70-09-00



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### 2. Accomplishment Instructions

#### A. Pre-requisite Instructions

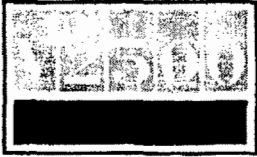
- (1) Examine the top and bottom CNA struts for fit.
  - (a) If the CNA strut is loose, the strut attach bolt holes on the CNA inner and/or outer skins may have been damaged. You must examine the CNA inner and outer skins for damage and do any required repairs before you continue with this Service Bulletin. Refer to the MD90/V2500D5 Common Nozzle Component Maintenance Manual (CMM-CN-V2500-31A) Inspection/Check-06.

#### B. Rework or Modification Instructions

- (1) Remove the four NAS8704U23 or NAS8704U24 CNA strut attach bolts from the top and bottom of the CNA. Refer to Figure 1.
- (2) Find the proper length CNA strut attach bolt(s).
  - (a) Install one NAS8704U22 bolt in each of the struts. Torque the bolts to 50 to 60 inlb (5,7 to 6,8 Nm). Refer to Figure 1.
  - (b) Measure the distance (dimension X) from the surface of the CNA outer skin to the nutplate at each of the attach bolt locations that do not have bolts installed. Refer to Figure 1.
    - 1 If the distance is 1.348 to 1.394 inch (34.24 to 35.41mm), use a NAS8704U22 bolt.
    - 2 If the distance is 1.395 to 1.478 inch (35.43 to 37.54 mm), use a NAS8704U23 bolt.
  - (c) Remove the bolts installed in step 2(a).
  - (d) Repeat steps (2)(a) through (2)(c) for the two remaining strut attach bolt locations.
- (3) Apply anaerobic compound sealant (Loctite 242) (CoMat 04-008) or Loctite 272 to the threads of the four bolts chosen in step (2). Refer to the manufacturer's instructions.
- (4) Install the four CNA strut attach bolts. Torque the bolts to 50 to 60 inlb (5,7 to 6,8 Nm).

#### C. Post-requisite instructions

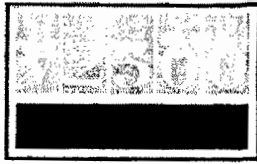
None.



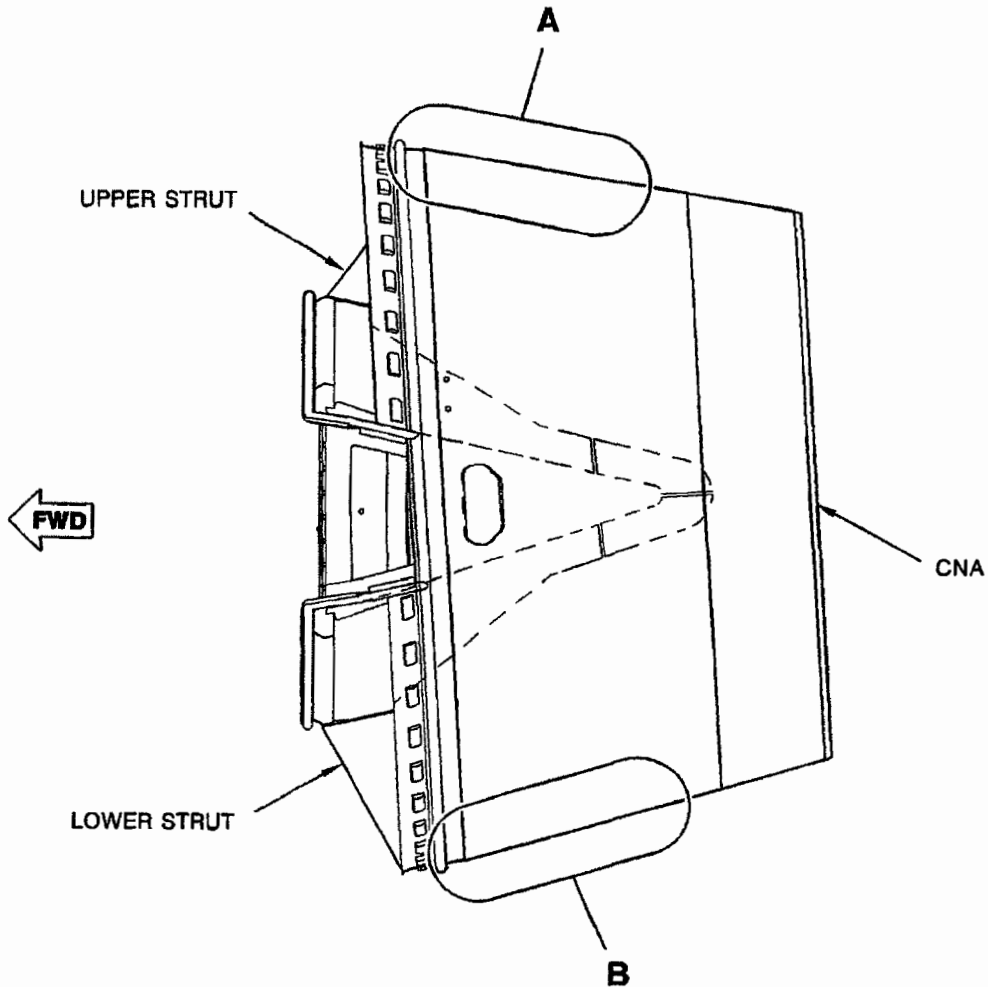
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### D. Recording Instructions

A record of accomplishment is necessary. Write in the applicable records and metal stamp, vibroetch, or electro etch on the common nozzle assembly data plate that Service Bulletin V2500-NAC-78-0165 has been done. Refer to IAE V2500 Standard Practices/Processes Manual, Chapter 70-09-00.



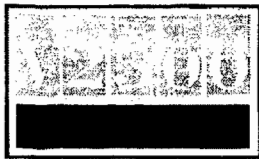
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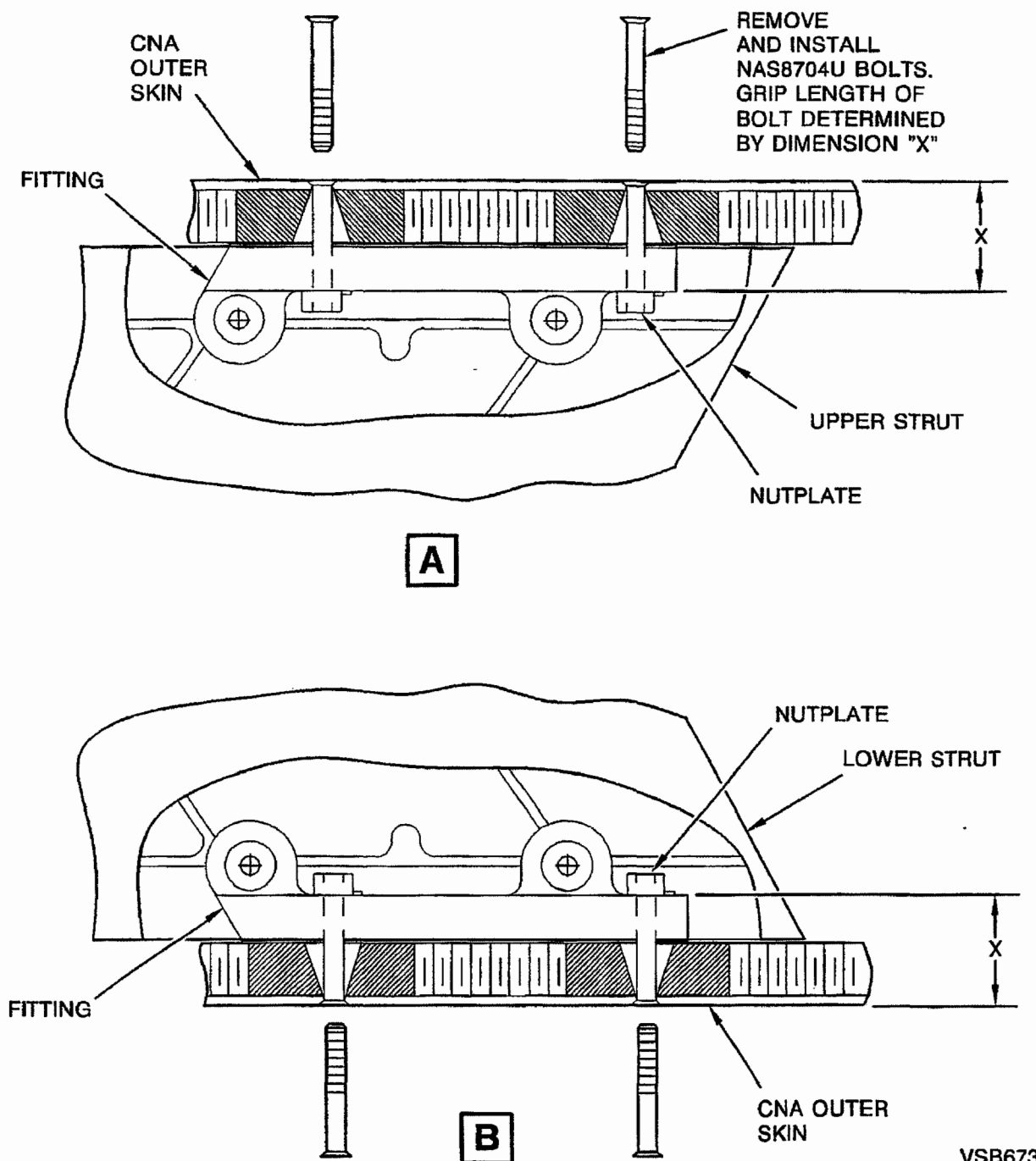
VSB672

CNA Strut Attach Bolt Replacement  
Figure 1 (Sheet 1)



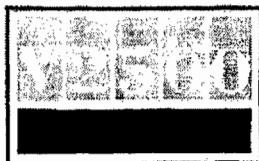


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VSB673

CNA Strut Attach Bolt Replacement  
Figure 1 (Sheet 2)



## V2500 Propulsion System - Nacelle SERVICE BULLETIN

### 3. Material Information

**Applicability:** For each V2500-D5 common nozzle assembly to incorporate this Bulletin.

#### A. 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>
V2578165-551 Consisting of:	1		Kit		(A)
NAS8704U22	4		Bolt		
NAS8704U23	4		Bolt		

#### B. 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>
NAS8704U (78-11-11)	4		Bolt (-22 or -23 grip length to be determined at installation)	NAS8704U24 (05-310)	(B)

#### C. Instruction/Disposition Code Statements

(A) Kit will be available January 1999

(B) Grip length (-22 or -23) of NAS8704U bolt to be determined at installation.

#### D. Materials Required to Incorporate this Service Bulletin:

CoMat 04-008      Anaerobic Compound Sealant (Loctite 242)  
(Loctite 272, Alternate for Loctite 242)

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