

Date: July 25, 2000

Subject:Transmittal of Revision 5 to Service Bulletin Number V2500-NAC-71-0082

#### Service Bulletin Revision History:

Event	<u>Date</u>
Basic Issue	May 14/90
Revision 1	Aug. 03/90
Revision 2	Nov. 09/90
Revision 3	Sep. 25/91
Revision 4	Oct. 31/92
Revision 5	Jul. 25/00

#### Reasons for issuance of Revision:

- (1) To announce that operators no longer need to do the repetitive inspections instructed in V2500-NAC-71-0071 after they incorporate this service bulletin.
- (2) To change the aft engine mount identification method from vibro-etch to electro-etch.

#### Effect on Past Compliance:

(1) None.

#### **List of Effective Pages:**

Page No.	Rev No.	<u>Date</u>
1 thru 11	5	Jul. 25/00



NACELLE - POWER PLANT – MOUNTS - AFT ENGINE MOUNT BARREL NUTS - REPLACEMENT OF

#### **MODEL APPLICATION**

V2500-A1

#### **BULLETIN INDEX LOCATOR**

71-20-00

Compliance Category Code

Internal Reference No.

3

BC/DC-B 90VN029

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### **SERVICE BULLETIN**

#### 1. Planning Information

<u>NOTE</u>: After incorporation of this service bulletin, it is no longer necessary to continue to perform the inspection instructed in service bulletin V2500-NAC-71-0071.

#### A. Effectivity

(1) Airplane: Airbus A320

(2) Nacelle: V2500-A1 Nacelles

(a) Engine Buildup Units.

The intent of this Service Bulletin was incorporated at the manufacturer on Engine Buildup Units Serial No. 136 and on.

The following EBU Serial Numbers were not changed at the manufacturer. They can be modified by incorporating this Service Bulletin using Kit V2571082-551.

#### EBU Serial Number

1 thru 135

NOTE: The following Serial Numbers may be spares or part of an EBU.

(b) Aft Engine Mount Units

The intent of this Service Bulletin was incorporated at the manufacturer on Aft Engine Mount Serial No. 5052 and on.

The following Aft Engine Mount Serial Numbers were not changed at the manufacturer. They can be modified by incorporating this Service Bulletin using Kit V2571082-551.

Aft Engine Mount Serial Number

18 thru 136 and 5002 thru 5024

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Problem

# V2500 Propulsion System - Nacelle SERVICE BULLETIN

#### B. Reason

(1)

(1)						
	Aft engine mount barrel nuts have been found with cracks.					
(2)	Background					
	There have been several incidents of this problem in service.					
(3)	Objective					
	To provide an improved barrel nut.					
(4)	4) Substantiation					
	The new nut has been demonstrated to be an improved design. It incorporates design features similar to the aft engine mount barrel nuts of other programs.					
(5)	Effect of Bulletin on Workshop Procedures:					
	(a) Operation					
	Not affected					
	(b) Maintenance					

(c) Overhaul

Not affected

Not affected

(d) Repair schemes

Not affected.

(e) Interchangeability

Not affected.

(f) Fits and clearances

Not affected



#### C. Description

The change introduced by this Bulletin is as follows:

To remove the existing barrel nuts from the aft engine mount and replace with new improved barrel nuts.

#### D. Compliance

Category 3

Revenue service aircraft to accomplish within 50 flight hours from receipt of this Service Bulletin.

#### E. Approval

The part number changes and/or part modifications described in Paragraphs 2 and 3 of the Service Bulletin have been shown to comply with the applicable Federal Aviation Regulations and are FAA approved for the equipment model(s) listed.

#### F. Manpower

#### **VENUE**

#### **ESTIMATED MANHOURS**

#### (1) In Service

(a)	To gain access	0.25 M/Hrs
(b)	To embody	1.5 M/Hrs
(c)	To return to Nacelle to service	0.25 M/Hrs
	Total	2.0 M/Hrs

#### G. Weight and Balance

(1)	Weight change	None
(2)	Moment arm	No effect

(3) Datum Engine Front Mount Centreline (Powerplant Station PPS 100.0)

#### H. Electrical Load Data

Not affected.



#### I. References

Manual Chapter/Section

A320/A321 Aircraft Maintenance Manual 71-13-00 78-32-00

J. Other Publications Affected

Manual Chapter/Section

A320/V2500-A1 Power Plant Illustrated Parts 71-22-11

Catalog (PIP-V2500-1IA)

A320/A321 Aircraft Maintenance Manual 71-00-20

V2500 Power Plant Buildup Manual



### **SERVICE BULLETIN**

#### 2. Material Information

A. Material Cost and Availability

R The parts to accomplish this service bulletin are available from the supplier as individual line items.

R Operators with units listed in Paragraph 1.A. should submit a charge purchase order for the applicable

R quantity of parts. The purchase order must specify this service bulletin number and only the parts

listed herein. Delivery schedules will be furnished upon receipt of their written request:

Direct Purchase order to:

Rohr, Inc.

R

R

R 850 Lagoon Drive

Chula Vista, CA 91910-2098

U.S.A.

R Attn: Airline Account Manager – MZ 107A

(Ref. Service Bulletin No. V2500-NAC-71-0082)

#### B. Kits associated with this Bulletin:

Applicability: For each V2500-aft engine mount to incorporate this Bulletin.

NEW PART NO. (ATA NO.)	QTY	EST'D UNIT PRICE	KEYWORD	OLD PART NO. (IPC NO.)	INSTR/ DISPOS
V2571082-551 Consisting of:	1	THEE	Kit	<u>(11 0 110.)</u>	(A)
92707-1612	4		Nut, Barrel		

#### C. Parts affected by this Bulletin:

NEW PART NO. (ATA NO.)	<u>QTY</u>	EST'D UNIT <u>PRICE</u>	<u>KEYWORD</u>	OLD PART NO. (IPC NO.)	INSTR/ <u>DISPOS</u>
92707-1612 (71-22-11)	4		Nut. Barrel	83644-1612 (01-240)	(B)(1D)
740-2040-503 (71-22-11)	1		Mount, Aft Installation	740-2040-501 (01-010)	(2D)



- D. Instruction/Disposition Code Statements
  - (A) Kit is no longer available. Order parts individually.
  - (1D) Return old parts to:.

Rohr, Inc. 850 Lagoon Drive Chula Vista, CA 91912-2098 USA

Attn: Rework Crib

Bldg. 29

Ref. Service Bulletin V2500-NAC-71-0082

- (2D) Rework old part to new configuration.
- E. Materials Required to Incorporate this Service Bulletin:

CoMat 01-438 Solvent
CoMat 02-099 Lint free cloth
CoMat 06-073 Metal marking ink

MS20995N32 Lockwire MIL-L-25681 Lubricant

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

F. Tooling - Cost and Availability

None required.



#### 3. Accomplishment Instructions

#### A. Pre-requisite Instructions

- (1) Open the fan cowl doors as specified in the V2500 Aircraft Maintenance Manual, TASK 71-13-00-010-010.
- (2) Open the thrust reverser halves as specified in the V2500 Aircraft Maintenance Manual, TASK 78-32-00-010-010.
- (3) Find the aft engine mount assembly on top of the engine (Refer to Figure 1).
- B. Rework or Modification Instructions

<u>WARNING</u>: REMOVE AND REPLACE BOLTS ONE AT A TIME. FAILURE TO COMPLY COULD CAUSE INJURY OR DEATH.

(1) Mark the exposed end of each installed barrel nut with an 'X'.

NOTE: Use Black Opaque Ink, CoMat 06-073, Supp. Code 90217.

- (2) Remove barrel nuts as follows (Refer to Figure 1):
  - (a) Remove one only 83769H-16-14 bolt, VN936NP16C washer, 83644-1612 barrel nut, and SLR414N16B barrel nut retainer from aft engine mount.
  - (b) Identify the nut with the engine serial number code and nut position number on the end opposite the 'X' mark.
    - 1 The engine serial number code is the last three digits of the engine serial number.
    - The nut position number is the position of the indicator based on the following scheme:
  - (c) Retain bolt, washer, and retainer. Return the nut to Rohr. See paragraph 2.C..



### **SERVICE BULLETIN**

R R R R R

R

R

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.

- (3) Clean 83769H-16-14 bolt and fastener holes with a clean cloth (CoMat 02-099) made moist with solvent (CoMat 01-438) and wipe dry before the solvent dries. Make a visual inspection of the bolt. No cracks or thread damage is permitted.
  - (4) Mark new 92707-1612 nut at either end with an engine serial number code and a nut position number using black ink in the same way as paragraph 3.B.(2).
  - (5) Apply MIL-L-25681 lubricant to bolt threads, washer, and new 92707-1612 barrel nut.
  - (6) Install 83769H-16-14 bolt, VN936NP16C washer, 92707-1612 barrel nut, and SLR414N16B retainer in aft engine mount. The marks must be visible when the nut is installed. Torque the bolt to 480-520 lb-ft (650,8-705,0 N.M).
  - (7) Do paragraphs 3.B.(1) through 3.B.(6) again for the remaining three aft engine mount bolt locations.

#### C. Post-requisite Instructions

- (1) Close the thrust reverser halves as specified in the V2500 Aircraft Maintenance Manual, TASK 78-32-00-410-010.
- (2) Close the fan cowl doors as specified in the V2500 Aircraft Maintenance Manual, TASK 71-13-00-410-010.

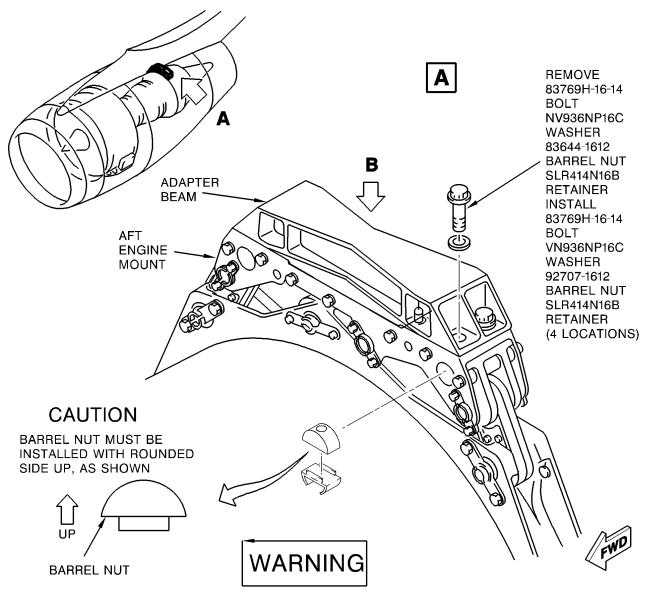
#### D. Recording Instructions

R R R (1) Re-identify Aft Mount Assembly from 740-2040-501 to 740-2040-503.

Use the electroetch method as instructed in the IAE V2500 Standard practices/Processes Manual (SPP-V2500-1IA) Chapter 70-09-00. Make the electroetch marks 0.002-0.003 inch (0,051-0,076 mm) deep. Do not use metal stamp or vibroetch methods to make a mark on the engine mount.



### **SERVICE BULLETIN**



REMOVE AND REPLACE BOLTS ONE AT A TIME FOR REPLACEMENT OF BARREL NUTS. FAILURE TO COMPLY COULD CAUSE INJURY OR DEATH.

VSB174

Removal and Installation of the Aft Engine Mount Barrel Nuts Figure 1 (sheet 1)

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#### LOOKING DOWN

EXAMPLE: '112/4' BEING A NUT USED ON ENGINE SERIAL NUMBER V0112 AT MOUNT POSITION 4.



**VSB766** 

Removal and Installation of the Aft Engine Mount Barrel Nuts Figure 1 (sheet 2)

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