V2500 International Aero Engines

V2500 Propulsion System — Nacelle

# SERVICE BULLETIN

Date: August 28, 1998

Subject: Transmittal of Revision 1 to Service Bulletin Number V2500-NAC-71-0098

Service Bulletin Revision History:

| Event | Date |
|---|---|
| Basic Issue | Jun. 07/96 |
| Revision 1 | Aug. 28/98 |

Reasons for Issuance of Revision

(1) To revise the effectivity statement on page 2.

Effect on Past Compliance

None.

List of Effective Pages:

| Page No. | Rev. No. | Date |
|---|---|---|
| 1 and 2 | 1 | Aug. 28/98 |
| 3 thru 14 | Basic | Jun. 07/96 |

V2500 International Aero Engines

V2500 Propulsion System — Nacelle

# SERVICE BULLETIN

NACELLE - EXHAUST - GUIDE PIN, NO.1 OPEN LATCH INDICATOR, THRUST REVERSER - REPLACEMENT OF

MODEL APPLICATION

V2500-A1/A5

BULLETIN INDEX LOCATOR

71-00-00

Compliance Category Code

6

Internal Reference No.

JG/LL 93VN069

June 7, 1996

R Revision 1 - August 28, 1998

V2500-NAC-71-0098

1. Planning Information

A. Effectivity

(1) Aircraft:

(a) Airbus A320

(b) Airbus A321

(2) Nacelle:

R (a) V2500-A1 and A5 engine buildup unit cum units (C/U)
R prior to 336 and serial numbers prior to 0076001.

B. Reason

(1) Condition

The guide pin in the No. 1 latch indicator guide tube assembly may become loose.

(2) Background

Operators have experienced loose guide pins caused by a too small retainer pin.

(3) Objective

Install a larger guide pin retainer pin to eliminate guide pin looseness.

(4) Substantiation

The new parts have been installed on a test unit and performed satisfactorily.

(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.

C. Description

(1) The change introduced by this Bulletin is as follows:

Part 1

Part 1 of this Service Bulletin is for engines with a 740-0137-509 indicator assembly installed. Because this indicator assembly cannot be re-worked, Part 1 instructs the removal of the 740-0137-509 indicator and installation of the 740-0137-513 improved indicator.

Part 2

Part 2 of this Service Bulletin is for engines with a 740-0137-511 indicator assembly installed. The 740-0137-511 indicator assembly is removed from the engine. The attach rivets and the guide tube are removed from the assembly. The existing spring pin is removed from the guide tube, the spring pin holes enlarged, and a larger spring pin installed. The guide tube is installed on the indicator assembly with rivets. The indicator assembly is re-identified to the 740-0137-513 assembly, and installed on the engine.

D. Approval

The technical content of this Service Bulletin is covered by an

Airbus Industrie Modification which is under DGAC (Direction Generale de l'Aviation Civile -France) approval.

E. Compliance

Category 6

Accomplish when the Nacelle or system is disassembled sufficiently to afford access to the affected subassembly (i. e., accessories, components) and to all affected spare subassemblies.

F. Manpower

Estimated manhours to incorporate the intent of this bulletin on one engine buildup unit:

| VENUE | | ESTIMATED MANHOURS |
|---|---|---|
| Part 1 | | |
| (1) In Service | | Not Applicable |
| (2) In Shop | | |
| (a) To rework | | 0.75 M/Hrs |
| | Total | 0.75 M/Hrs |
| Part 2 | | |
| (1) In Service | | Not Applicable |
| (2) In Shop | | |
| (a) To rework | | 2.0 M/Hrs |
| | Total | 2.0 M/Hrs |

G. Material Cost and Availability

Modification kit not required. Parts are supplied as single line items. (Refer to Section 3, Material Information).

H. Tooling Cost and Availability

None required.

I. Weight and Balance

(1) Weight change ..... Negligible

(2) Moment arm ..... No effect

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

..... (Powerplant Station PPS 100.00)

J. Electrical Load Data

Not Affected

K. References — Chapter/Section

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

L. Other Publications Affected

| | |
|---|---|
| A320/V2500-A1 Engine Illustrated Parts Catalog (S-V2500-1IA) | 71-00-23 |
| A320/V2500-A5 Engine Illustrated Parts Catalog (S-V2500-2IA) | 71-00-23 |
| A320/V2500A1 Power Plant Illustrated Parts Catalog (PIP-V2500-1IA) | 71-00-23 |
| A320/A321/V2500A5 Power Plant Illustrated Parts Catalog (PIP-V2500-2IA) | 71-00-23 |

| | |
|---|---|
| A320/V2500A1 Power Plant Build-Up Manual | 72-00-00 |
| A320/V2500A5 Power Plant Build-Up Manual | 72-00-00 |

2. Accomplishment Instructions

A. Pre-requisite Instructions

None.

B. Rework or Modification Instructions - Part 1

(1) Remove the No. 1 open latch indicator assembly.

(a) Remove the two NAS6304-6 bolts and AN960-416 washers, two NAS6304-3 bolts, 740-0137-509 indicator assembly, and the 740-0136-27 shims from the engine. Keep the bolts and shims. Refer to Figure 1.

(2) Install the No. 1 open latch indicator assembly.

(a) Install the 740-0137-513 indicator assembly and 740-0137-27 shims on the engine with the two NAS6304-3 bolts, two NAS6304-6 bolts, and AN960-416 washers. Tighten the NAS6304-3 and NAS6304-6 bolts to a torque of 50-70 in-lbs (5.649-7.909 Nm).

C. Rework or Modification Instructions - Part 2

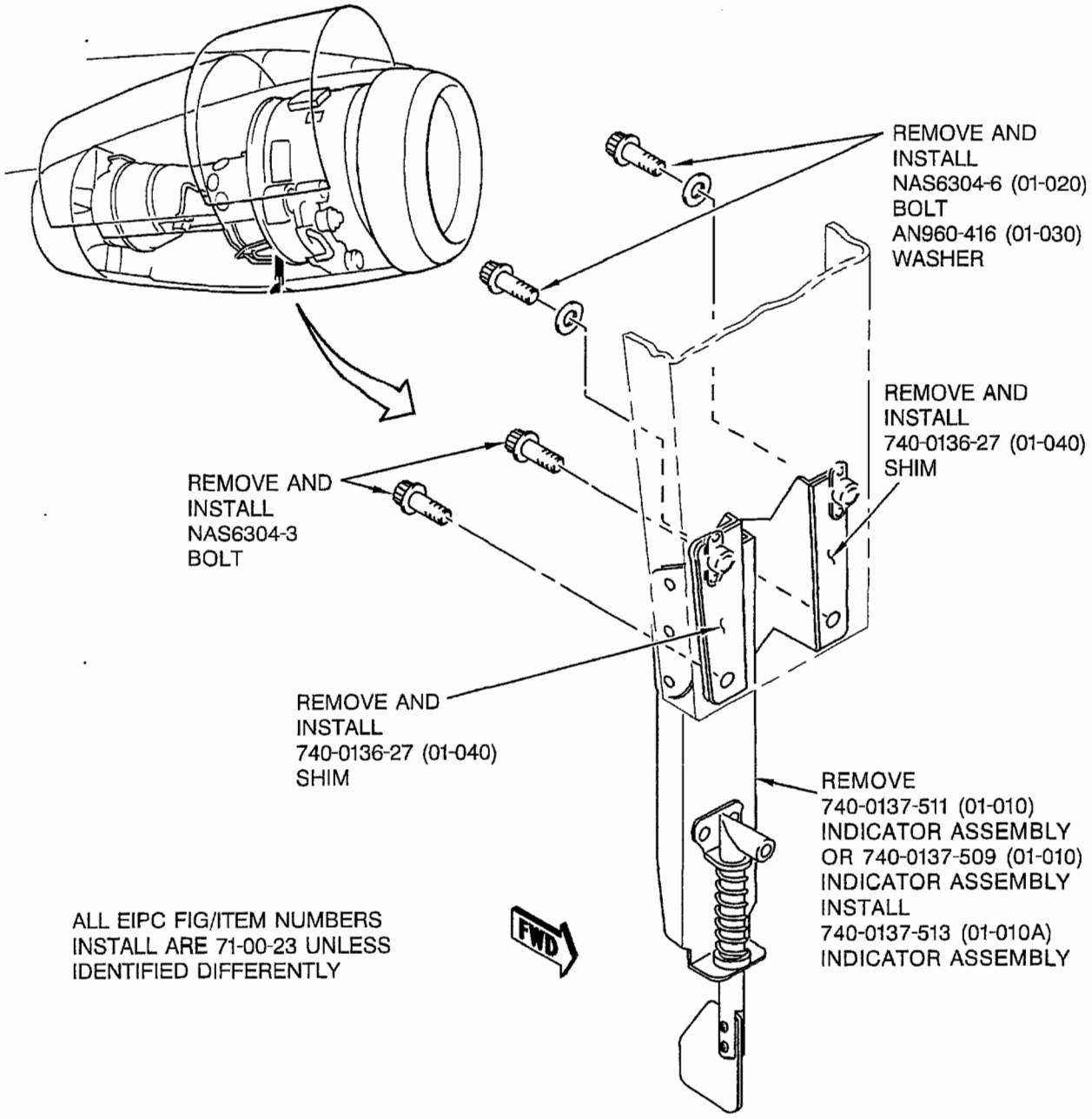
(1) Remove the No. 1 open latch indicator assembly.

(a) Remove the two NAS6304-6 bolts and AN960-416 washers, two NAS6304-3 bolts, 740-0137-511 indicator assembly, and the 740-0136-27 shims from the engine. Keep the bolts and shims. Refer to Figure 1.

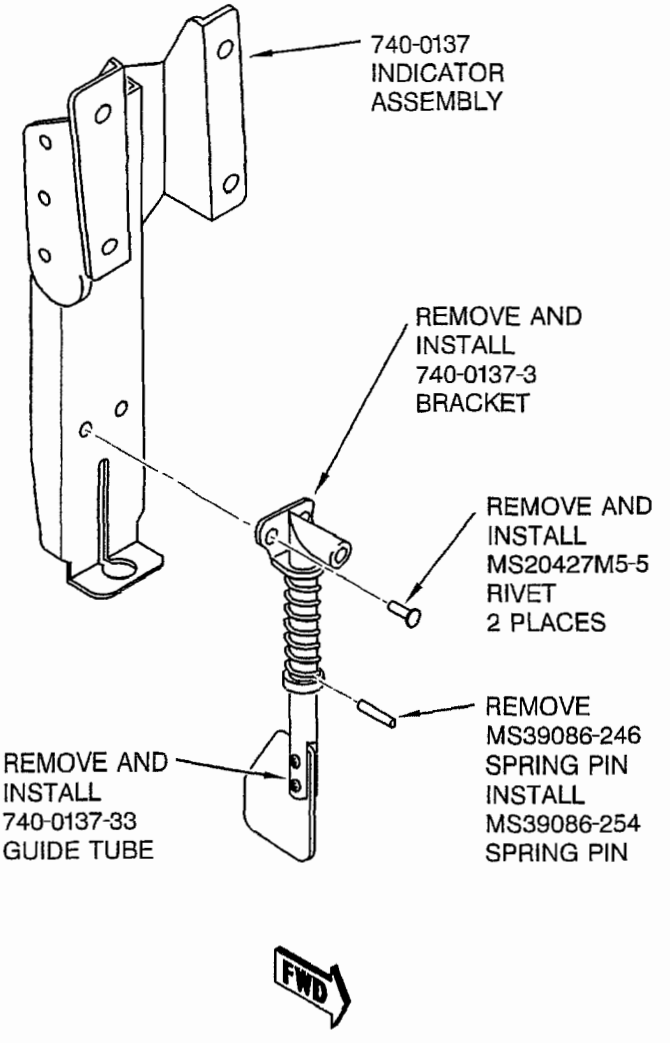
(2) Disassemble the No. 1 open latch indicator assembly.

(a) At the top end of the guide tube, drill out the two MS20427M5-5 rivets that attach the guide tube bracket to the indicator assembly with a 0.161-0.165 inch (4.089-4.191 mm) drill. Refer to Figure 2.

(b) Remove the guide tube, with the indicator flag and the




NO. 1 Open Latch Indicator Assembly Removal And Installation
Figure 1




Open Latch Indicator Disassembly
Figure 2

guide tube bracket attached, from the indicator assembly.

(3) Replace the guide tube spring pin.

(a) Compress the guide tube spring between the guide tube bracket and the AN960D616 washer and temporarily hold in place with safety wire.

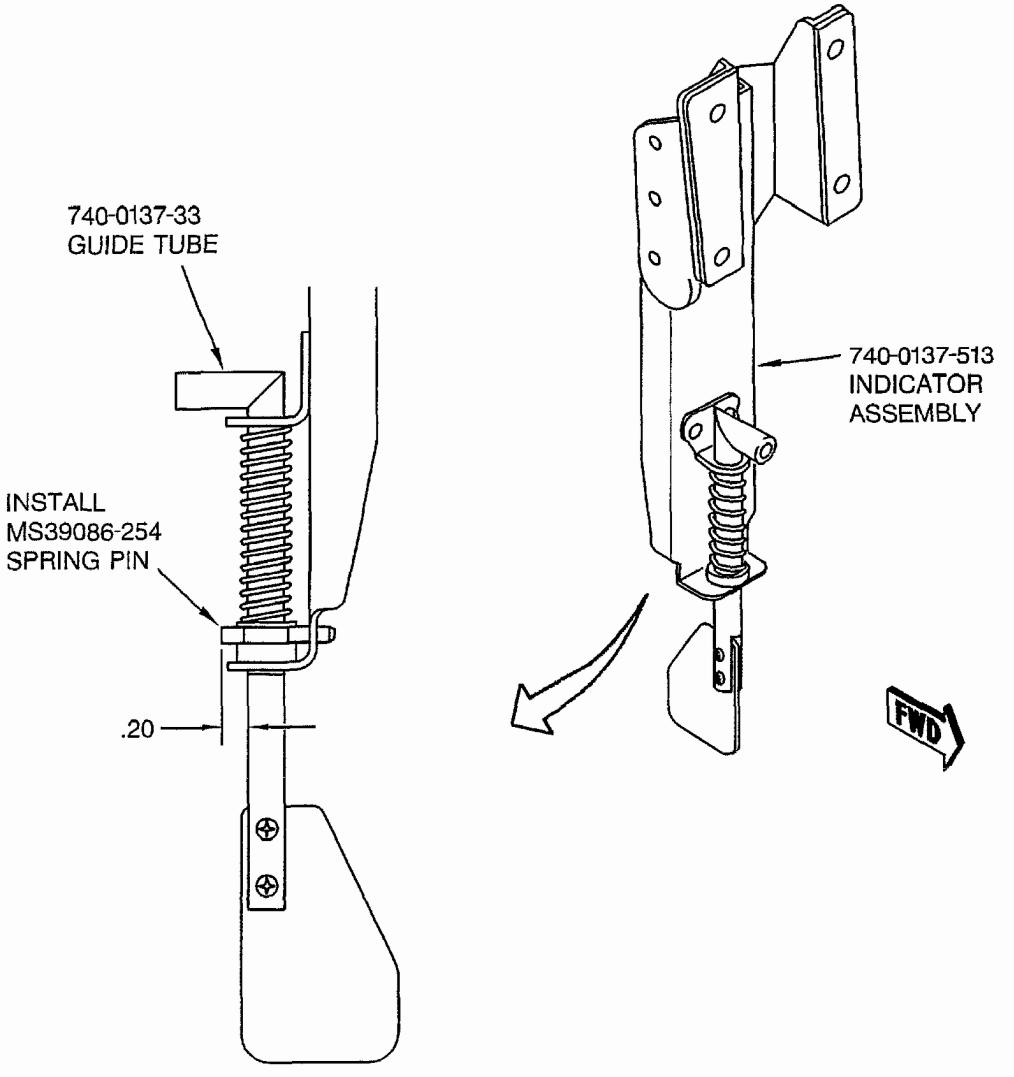
(b) Remove the MS39086-246 spring pin from the guide tube.

(c) Increase the diameter of the two spring pin holes in the guide tube to 0.185-0.192 in (4.699-4.877 mm). Remove the burrs from the holes.

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 THIS PRODUCT, CAREFULLY READ THE APPLICABLE 'MATERIAL SAFETY DATA SHEET' AND FOLLOW ALL LISTED SAFETY AND HEALTH PRECAUTIONS.

(d) Clean the spring pin holes in the guide tube with a lint free cloth (CoMat 02-099) and trichloroethane (CoMat 01-001). Wipe the surface dry before solvent becomes dry.

(e) Install a MS39086-254 spring pin into the guide tube. Make sure the spring pin separates the AN960D616 washer and 740-0137-9 spacer on the guide tube. Make sure the spring is in the correct position in the guide tube. Refer to Figure 3.




Spring Pin Installation
Figure 3

(4) Assemble the No. 1 open latch indicator assembly.

(a) Install the guide tube into the indicator assembly. Refer to Figure 2.

(b) Put the guide tube bracket against the indicator assembly and align the rivet holes. Hold the bracket in position.

(c) Attach the guide tube bracket to the indicator assembly with MS20427M5-5 rivets.

(d) Remove the safety wire and any other temporary fasteners from the indicator assembly.

(e) Identify the indicator assembly as the 740-0137-513 No. 1 open latch indicator assembly with ink (CoMat 06-073) and a rubber stamp. Refer to IAE V2500 Standard Practices/Processes Manual, Chapter 70-09-00.

(5) Install the No. 1 latch indicator assembly.

(a) Install the 740-0137-513 indicator assembly and 740-0137-27 shims on the engine with the two NAS6304-3 bolts, two NAS6304-6 bolts, and AN960-416 washers. Tighten the NAS6304-3 and NAS6304-6 bolts to a torque of 50-70 in-lbs (5.649-7.909 Nm).

C. Post-requisite Instructions

None.

D. Recording Instructions

(1) A record of accomplishment is necessary. Write in the applicable records that service bulletin V2500-NAC-71-0098 has been done.

3. Material Information

Applicability: For each V2500-A1/A5 Nacelle Thrust Reverser to incorporate this Bulletin.

A. Kits associated with this Bulletin:

None.

B. Parts affected by this Bulletin:

| NEW PART NO (ATA NO) | QTY | EST'D UNIT PRICE | KEYWORD | OLD PART NO (IPC NO) | INSTR/ DISPOS |
|---|---|---|---|---|---|
| Part 1 | | | | | |
| 740-0137-513 (71-00-23) | 1 | 958.00 | Indicator Assembly | 740-0137-509 (01-010) | (A)(B) (1D) |
| Part 2 | | | | | |
| 740-0137-513 (71-00-23) | 1 | 958.00 | Indicator Assembly | 740-0137-511 (01-010) | (A)(B) (1R) |
| MS39086-254 - - - | 1 | 14.00 | Pin | MS39086-246 - - - | (A)(B) (1D) |

C. Instructions/Dispositions Code Statements

(A) New part is available.

(B) Old part will no longer be available.

(1D) Discard old part.

(1R) Old part can be reworked to new configuration.

D. Materials required to incorporate this Service Bulletin:

| | |
|---|---|
| CoMat 01-001 | Trichloroethane |
| CoMat 02-099 | Lint Free Cloth |
| CoMat 06-073 | Metal Marking Ink |

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