

 ${\tt NACELLE-EXHAUST-PROXIMITY~SWITCH,~THRUST~REVERSER~ACTUATOR-INSPECTION/RE-IDENTIFICATION~OR~REPLACEMENT~OF}\\$

MODEL APPLICATION

V2500-A1 V2500-A5

BULLETIN INDEX LOCATOR

78-00-00

Compliance Category Code

Internal Reference No.

6 JG 99VN002A

V2500-NAC-78-0174

June 29, 1999



V2500 Propulsion System - Nacelle

SERVICE BULLETIN

NACELLE - EXHAUST - PROXIMITY SWITCH. THRUST REVERSER ACTUATOR -INSPECTION/REPLACEMENT OF

1. Planning Information

A. Effectivity

- (1) Aircraft
 - Airbus A319 (a)
 - (b) Airbus A320
 - Airbus A321 (c)
- (2) Nacelle
 - V2500-A1/A5 thrust reversers with cum unit and serial numbers prior to 1280001. (a)

NOTE: The intent of this service bulletin was done by the manufacturer to thrust reversers with the following serial numbers prior to delivery:

> 1027002,1027003, 1047002, 1047003, 1063002, 1063003, 1091002, 1091003, 1119002, 1119003, 1138001, 1139003, 1140001, 1141001, 1167002, 1167003, and 1270001 through 1279001.

B. Reason

(1) Condition

> Some thrust reversers and thrust reverser actuators were delivered with proximity switches which can cause spurious thrust reverser indications on the cockpit display.

(2) Background

> The proximity switch supplier made minor changes to the switch circuitry which caused spurious thrust reverser indications on the cockpit display on some installations.

(3) Objective

> To provide thrust reverser actuator proximity switches which eliminate the possibility of spurious thrust reverser indications on the cockpit display.

(4) Substantiation



By analysis and ground test.

(5) Effect of Bulletin on:

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

C. Description

The serial number of the actuator proximity switch is examined, switches of the proper configuration are re-identified and switches which are not of the proper configuration are replaced with a switch of the correct configuration.

D. 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.

E. Compliance

Category 6

Accomplish when the nacelle subassembly (i.e. accessories, components) is disassembled sufficiently to afford access to the affected part and to all affected spare parts.



V2500 Propulsion System - Nacelle

SERVICE BULLETIN

F. Manpower

VENUE ESTIMATED MANHOURS (1) In Service Not applicable 0.25 M/Hrs (a) To gain access (b) To inspect part number and serial number 0.25 M/Hrs (c) To replace the switch (if required) 0.50 M/Hrs (d) To return to service 0.25 M/Hrs Maximum total M/Hrs 1.25 M/Hrs In Shop (2) 0.25 M/Hrs. (a) To inspect part number and serial number To replace the switch (if required) (b) 0.25 M/Hrs.

<u>NOTE</u>: Manhours provided for planning purposes only.

G. Material Cost and Availability

If, upon examination, you find a switch that has part number 8-527-01 (Lucas p/n CH250112) and a serial number that is 7884 or higher, contact Lucas Aerospace for disposition as follows:

Maximum total M/Hrs

Neil Tranter
Principal Product Support Engineer (Nacelles)
Lucas Aerospace
Stafford Road
Fordhouses
Wolverhampton WV10 7EH
England

Telephone 44-1902-624832 Fax 44-1902-644673

e-mail neil.tranter@lucasvarity.com

H. Tooling - Cost and Availability

None required.

I. Weight and Balance

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0.50 M/Hrs.



(1) Weight change
 (2) Moment arm
 (3) Datum
 (4) Engine Front Mount Centreline (Powerplant Station PPS 100.0)

J. Electrical Load Data

Not affected.

K References

| <u>Manual</u> | Chapter/Section |
|---|----------------------|
| A320/A321 Aircraft Maintenance Manual | 71-11-11 78-31-15 |
| IAE Standard Practices/Processes Manual (SPP-V2500-1IA) | 70-09-00 |
| Airbus Aircraft Modification Number 24259 | |
| Airbus Aircraft Modification Number 27948 | |

L. Other Publications Affected

| <u>Manual</u> | Chapter/Section |
|--|-----------------|
| A320/V2500-A1 Engine Illustrated Parts Catalog (S-V2500-1IA) | 78-31-15 |
| A320/V2500-A5 Engine Illustrated Parts Catalog (S-V2500-2IA) | 78-31-15 |
| A320/V2500-A1 Power Plant Illustrated Parts Catalog (PIP-V2500-1IA) | 78-31-15 |
| A320/A321/V2500-A5 Power Plant Illustrated Parts Catalog (PIP-V2500-2IA) | 78-31-15 |



2. Accomplishment Instructions

A. Pre-Requisite Instructions

- (1) To do this service bulletin for actuators installed on aircraft, open the fan cowl doors. Refer to the A320/A321 Aircraft Maintenance Manual, Chapter 71-11-11, Page Block 201.
- (2) Remove the proximity switch. Refer to the A320/A321 Aircraft Maintenance Manual, Chapter 78-31-15.

B. Re-Work or Modification Instructions

<u>NOTE</u>: This procedure is the same for actuators installed on aircraft and spare actuators.

- (1) Examine the part number and serial number of the proximity switch on the locking actuator.
 - (a) If the part number of the switch is 8-527-03, it is not necessary to re-identify or replace the proximity switch. Proceed to the Recording Instructions.
 - (b) If the part number of the switch is 8-527-01 and the serial number is 7883 or lower, it is necessary to re-identify the proximity switch. Refer to Paragraph (2)
 - (c) If the part number of the switch is 8-527-01 and the serial number is 7884 or higher, replace the proximity switch with a switch with part number 8-257-03. Refer to the A320/A321 Aircraft Maintenance Manual, Chapter 78-31-15.
- (2) Re-identify the proximity switch.
 - (a) Re-identify the 8-527-01 proximity switch (with serial number 7883 or lower) as the 8-527-01T. Use vibroetch method. Refer to the IAE V2500 Standard Practices/Processes Manual, Chapter 70-09-00.

C. Recording Instructions

A record of accomplishment is necessary. Write in the applicable records that Service Bulletin V2500-NAC-78-0174 has been done.



D. Post-Requisite Instructions

NOTE: If you install the original switch and associated shims and attach hardware on the same actuator from which they were removed, it is not necessary to adjust the proximity sensor after installation.

- (1) Install the proximity switch. Refer to the A320/A321 Aircraft Maintenance Manual, Chapter 78-31-15.
- (2) For components installed on aircraft, close the fan cowl doors. Refer to the A320/A321 Aircraft Maintenance Manual, Chapter 71-11-11, Page Block 201.



3. Material Information

Applicability: For each V2500-A1/A5 thrust reverser to incorporate this Bulletin.

A. Kits associated with this Bulletin:

None.

B. Parts affected by this Bulletin:

| NEW PART NO. | | EST'D UNIT | | OLD PART NO. | INSTR/ |
|---------------------------------------|------------|--------------|----------------|----------------------------------|---------------|
| (ATA NO.) | <u>QTY</u> | <u>PRICE</u> | <u>KEYWORD</u> | (IPC NO.) | <u>DISPOS</u> |
| 8-527-01T (78-31-15) (78-31-15) | 4 | | Switch | 8-527-01 (01-100) (02-100) | (A)(B)(C)(1D) |
| 8-527-03 (78-31-15) (78-31-15) | 4 | | Switch | (01-100) (02-100) | (D) |

C. Instruction/Disposition Code Statements

- (A) New part is available.
- (B) Old part will no longer be available.
- (C) Old part number, 8-527-01 (Lucas p/n CH250112), switch (with serial number 7883 or lower) can be re-identified as 8-527-01T.
- (D) Part number 8-527-03 (Lucas p/n CH251441) is alternate for 8-527-01T.
- (1D) Old parts may no longer be used. Use the new part to replace old and new parts.
- D. Materials Required to Incorporate this Service Bulletin:

None.