



ENGINE - FUEL AND CONTROL - ENGINE FUEL AND CONTROL - FUEL METERING UNIT INTRODUCTION
OF FUEL METERING UNIT WITH REVISED MICROSWITCH AND PLUNGER RETURN SPRING - LUCAS SB
530-73-8002 - CATEGORY CODE 7 - MOD.ENG-73-0099

See Vendor Bulletin 530-73-8002

1. Planning Information

A. Effectivity

- (1) Aircraft: (a) Airbus A320
(b) Airbus A321
(c) McDonnell Douglas MD-90
- (2) Engines: (a) V2527-A5 Engines prior to Serial No.V10273
(b) V2530-A5 Engines prior to Serial No.V10273
(c) V2533-A5 Engines prior to Serial No.V10273
(d) V2525-D5 Engines prior to Serial No.V20157
(e) V2528-D5 Engines prior to Serial No.V20157

B. Concurrent Requirements

None.

C. Reason

(1) Condition

Cross check or single channel microswitch faults of the Fuel Metering Unit (FMU) can occur.

The problem is attributed to either insufficient force margin of the Overspeed Valve (OSV) and Pressure Raising/Shut-off Valve (PRSOV) "top hat" plunger return spring or the presence of a polymer deposit on the microswitch platinum contacts.

(2) Background

There have been 13 incidents of this problem reported by operators on in-service engines.

(3) Objective

Incorporation of this Service Bulletin is designed to maintain unit reliability.

(4) Substantiation

V2500-ENG-73-0099

**SERVICE BULLETIN**

The changes introduced by this Service Bulletin have been the subject of satisfactory engineering analysis and successful vendor rig testing of a representative configuration.

(5) Effect 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.

D. Description

(1) This Service Bulletin covers the fitment to engines of an FMU incorporating Lucas Aerospace Mod CP8002.

(2) The changes introduced by this Service Bulletin are as follows:

(a) This Service Bulletin introduces a reviewed FMU similar to the existing item except for the following:

(i) Revised OSV and PRSP0V microswitches are introduced, similar to the existing items except the material of the contacts has changed from Platinum to Gold alloy.

(ii) The "Top Hat" plunger return spring has been increased in stiffness. This has been achieved by a combination of reduced free length/number of coils and increased wire diameter.

(3) Units incorporating this Service Bulletin will be identified by endorsement of the modification plate with CP8002.

E. Approval

The part number changes and/or part Service Bulletin described in Section 2 and 3 of this Service Bulletin has been shown to comply with the applicable Federal Aviation Regulations and are FAA-APPROVED for the Engine Model listed.

F. Compliance

Category code 7.

Accomplish when supply of superseded parts has been depleted.

V2500-ENG-73-0099



SERVICE BULLETIN

G. Manpower

Estimated man hours to incorporate the full intent of this bulletin.

Venue	Estimated Manhours
(1) In service	Refer to Vendor Bulletin
(2) At overhaul	Refer to Vendor Bulletin

H. Material - Price and Availability

- (1) Modification kit is not required
- (2) See "Material Information" section for prices and availability of spares.

I. Tooling - Price and Availability

Specia tools are not required

J. Weight and Balance

- (1) Weight change None
- (2) Moment arm No effect
- (3) Datum Engine front mount
(Power Plant Station - PPS 100)

K. Electrical Load Data

This Service Bulletin has no effect on the aircraft electrical load.

L. References

- (1) Internal Reference No.
EC96VI006
- (2) Other References
Vendor service bulletin Lucas S.B.530-73-8002.
The V2500 Engine Manual, Chapter/Section 70-00-61.
The Aircraft Maintenance Manual, Chapter/Section, 73-22-52.

M. Other Publications Affected

- (1) The V2500 Illustrated Parts Catalog will be revised.

V2500-ENG-73-0099



2. Accomplishment Instructions

A. Rework Instructions

Refer to Vendor Service Bulletin,

B. Assembly Instructions

Refer to Vendor Service Bulletin.

C. Recording Instructions

- (1) A record of accomplishment is necessary. Refer to vendor service bulletin.

3. Material Information

Applicability: For each V2500 Engine 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.)	Instructions Disposition
FMU530MK2 (73-22-52)	1	Vendor	Meter Unit, Fuel	FMU530MK2 (01100)	(A)(B)(S1)

C. Instructions/Disposition Code Statements

- (A) New part is currently available.
- (B) Old part will be discontinued.
- (S1) Old and new parts are freely and fully interchangeable.

