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DATE ~~R~~ Jan. 7/03

## V2500-A5 PROPULSION SYSTEMS SERVICE BULLETIN

Printed in Great Britain

This document transmits Revision 2 to Service Bulletin EV2500-73-0158

Document History

Service Bulletin Revision Status  
 Initial Issue            Oct.25/99  
 Revision 1                Jun.21/02

Supplement Revision Status

Bulletin Revision 2

Remove  
 All pages of the  
 Service Bulletin

Incorporate  
 Pages 1 to 7 of the  
 Service Bulletin

Reason for change  
 To revise 1.B. Concurrent  
 Requirements and 1.N.  
 References.

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CHECK THAT ALL PREVIOUS TRANSMITTALS HAVE BEEN INCORPORATED

If any have not been received please advise Publication Services, Rolls-Royce plc, Derby, England

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# LIST OF EFFECTIVE PAGES

The effective pages to this Service Bulletin following incorporation of Revision 2 are as follows:

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ENGINE FUEL AND CONTROL – FUEL METERING UNIT – INTRODUCTION OF A WOODWARD GOVERNOR  
COMPANY FUEL METERING UNIT WITH REVISED MAXIMUM FUEL FLOW STOP (AIRBUS A319-131/132  
AND 133 APPLICATIONS)

1. Planning Information

A. Effectivity

(1) Airbus A319-131/132

R (a) V2522-A5 Engines prior to Serial No. V10650, excluding V10603, V10605,  
R V10623, V10629, V10632, V10638, V10639 and V10647

R (b) V2524-A5 Engines prior to Serial No. V10650, excluding V10584, V10585,  
V10595, V10597, V10608, V10610, V10611, V10612, V10615, V10616,  
R V10619, V10622, V10623, V10624, V10630, V10638, V10639, V10643,  
V10645, V10646 and V10648

(2) Airbus A319-133

V2527M-A5 Engines prior to Serial No. V10650

(3) ATA Locator 73-00-00

B. Concurrent Requirements

R (1) V2522-A5, V2524-A5 and V2527M-A5 Engines

R This Service Bulletin must only be incorporated on engines which embody  
R either IAE V2500 modification 99VZ002 (IAE Service Bulletin 73-0159) or  
R IAE V2500 modification 99VZ009 (IAE Service Bulletin 73-0160) (see 1.N.  
R References).

R (2) V2527M-A5 Engines only

R With the introduction of the above model, the Data Entry Plug must be  
R re-wired in accordance with IAE Service Bulletin ENG-72-0285 (see 1.N.  
R References).

C. Reason

(1) Condition

(a) A Woodward Governor Company Fuel Metering Unit with a revised maximum  
flow potential is required for the new IAE V2500 engine model  
V2527M-A5 which has been introduced for Airbus A319 Corporate Jet  
applications.

(b) For airlines which operate A319 and A320 mixed fleets, it would be an  
advantage for these airlines to have a single common FMU.

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Not subject to the EAR per 15 C.F.R. Chapter 1, Part 734.3(b)(3).



(2) Background

Refer to (1) Condition

(3) Substantiation

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

(4) Objective

R Incorporation of this Service Bulletin (Modification) is designed to  
R satisfy airframe requirements.

(5) Effect of Bulletin on:

(a) Operation

Not affected

(b) Maintenance

Not affected

(c) Overhaul

Not affected

(d) Repair Schemes

Not affected.

(e) Interchangeability

R Affected (see 1.P. Interchangeability of Parts and 1.N. References).

(f) Fits and Clearances

Not affected.

(6) Supplemental Information

R This Service Bulletin is considered 'Essential' for V2527M-A5 engines with  
R an Installation Arrangement Number (IAN) AQ03 For Airbus A319-133  
R aircraft.



D. Description

- (1) This Service Bulletin introduces a revised Woodward Governor Company FMU for revenue service, the changes are as follows:
  - (a) A revised pre-set maximum flow stop
  - (b) The two position low flow/high flow feature has been deleted and the associated setting instruction for new production engine pass-off testing has been deleted.
- (2) Existing FMU's can be reworked – Refer to Woodward vendor Service Bulletin at 1.N.(4).
- (3) Units that embody this Service Bulletin will be identified by a new type number (Refer to 2.B.).

E. Compliance

Category Code 7

Accomplish when supply of superseded parts has been depleted

F. Approval

The part number changes and/or part modification described in sections 2 and 3 of this Service Bulletin have been shown to comply with the applicable Federal Aviation Regulations and are FAA approved for the engine models listed.

G. Manpower

(1) In Service

(a) To get access	16 minutes
(b) To embody	3 hours 06 minutes
(c) To return engine to a serviceable status	20 minutes
Total	3 hours 42 minutes

(2) At Overhaul

To embody	2 hours 10 minutes
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NOTE: The part affected by this Service Bulletin are accessible at overhaul

H. Material Price and Availability

A modification kit is not necessary



For prices and availability of future spares refer to the IAE Price Catalogue or contact the IAE spare parts sales department

I. Tooling Price and Availability

Special tools are not required

J. Industry Support Information

None

K. Weight and Balance

(1) Weight Change

None

(2) Moment Arm

No effect

(3) Datum

Engine front mount centreline (Power Plant Station PPS 100).

L. Electrical Load Data

The aircraft electrical load is not affected by this Service Bulletin

M. Software Accomplishment Summary

Not applicable

N. References

R (1) V2522-A5, V2524-A5 and V2527M-A5 Engines

R Either of the following IAE V2500 Service Bulletins must be fitted prior  
R to or concurrently with this Service Bulletin:

R ENG 73-0159 - To provide a new electronic engine control with A5SCN14/S  
R software (EC99VZ002)

R ENG 73-0160 - To provide a new electronic engine control with A5SCN14B/S  
R software (EC99VZ009)

(2) The IAE Service Bulletins that follow can be embodied on the new vendor unit introduced by this Service Bulletin:

73-0101 Engine fuel and control - Fuel metering unit - Introduction of revised fuel meter with integral housing strengthening feature - EC96VI012



73-0136 Engine fuel and control - Fuel metering unit - Introduction of a Woodward fuel metering unit with revised servo valve cover - EC98VI002

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- R (3) V2527M-A5 Engines
- R 72-0285 - Provide instructions to change the V2500-A5 engine rating by  
R modifying the Data Entry Plug
- (4) Refer to Vendor Service Bulletin:  
SB-83724-73-0003 - Conversion of 8061-627 into 8061-633
- R (5) Refer to Airbus Service Bulletin A320-73-1071.
- R (6) Refer to Airbus Aircraft Modification 28006.
- (7) Internal reference 98VI009

0. Other Publications Affected

- (1) V2500 Engine Illustrated Parts Catalogue (IPC), 73-22-52
- (2) V2500 Engine Manual, 72-00-60, Removal and Installation 06 Config-02
- (3) V2500 Aircraft Maintenance Manual, 73-22-52, Removal/Installation Config-02

P. Interchangeability of Parts

Affected (Refer to 2. Material Information)



## 2. Material Information

### A. The kit required consists of the following parts:

None

### B. Units affected by this Bulletin:

The type of equipment affected by this Service Bulletin is listed for information only

73-22-52

FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	MAT	OLD PART NO.	INSTR DISP
01100	8061-633	1	Meter, fuel unit (V66503)	-	8061-627	(A)(S1) (1D)

### C. Instructions disposition codes:

(A) New standard of unit is currently available

(S1) Old and new standards of unit are only interchangeable on engines which embody either Service Bulletin 73-0159 or 73-0160, until the limitations described in EADS Airbus aircraft modification apply (see 1.N. References)

(1D) Old unit can be reworked and re-identified to the new part number (V2522-A5 and V2524-A5 models only)





### 3. Accomplishment Instructions

#### A. Rework Instructions

Woodward units 8061-627 can be modified free of charge to 8061-633 by returning the units to the address listed below for the attention of the Customer Support Manager.

The free of charge purchase order must quote the IAE tracking number S541UI and write 'For upgrade to 8061-633'

The Woodward Customer Support Center  
Woodward Governor Company  
5001 N  
Second street  
Rockford  
IL 61125-7001  
USA

#### B. Assembly Instructions

For the correct Removal/Installation procedures refer to the:

- (1) A5 Engine Manual (EM), 72-00-60, Removal/Installation-06, Config-02 or
- (2) A319 Aircraft Maintenance Manual (AMM), 73-22-52, Removal/Installation, Config-02

#### C. Recording Instructions

A record of accomplishment is required. Refer to the vendor Service Bulletin

