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## V2500-A5 SERIES PROPULSION SYSTEMS SERVICE BULLETIN

Printed in Great Britain

This document transmits Revision 3 to Service Bulletin EV2500-73-CN01

### Document History

Service Bulletin Revision Status	Supplement Revision Status
Initial Issue Jan.17/01	
Revision 1 Jul.25/03	
Revision 2 Oct.26/06	

### Bulletin Revision 3

Remove	Incorporate	Reason for change
Pages 1 to 9 of the Service Bulletin	Pages 1 to 11 of the Service Bulletin	To update the Material Information and the Accomplishment Instruction.

# V2500-ENG-73-CN01

Transmittal - Page 1 of 2

CHECK THAT ALL PREVIOUS TRANSMITTALS HAVE BEEN INCORPORATED  
If any have not been received please advise Customer Data 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 3 are as follows:

<u>Page</u>		<u>Revision Number</u>	<u>Revision Date</u>
	Bulletin		
R	1	3	Feb.27/07
R	2	3	Feb.27/07
R	3	3	Feb.27/07
R	4	3	Feb.27/07
R	5	3	Feb.27/07
R	6	3	Feb.27/07
R	7	3	Feb.27/07
R	8	3	Feb.27/07
R	9	3	Feb.27/07
R	10	3	Feb.27/07
R	11	3	Feb.27/07

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ENGINE – CONVERSION OF V2500-A5 ENGINES FROM INSTALLATION ARRANGEMENT NUMBER AQ02 TO  
AQ03 STANDARD

1. Planning Information

A. Effectivity

- (1) Airbus A319  
V2522-A5, V2524-A5, V2527M-A5 Engines.
- (2) Airbus A320  
V2527-A5, V2527E-A5 Engines.
- (3) Airbus A321  
V2530-A5, V2533-A5 Engines.

B. Concurrent Requirements

None.

C. Reason

To enable IAE V2500-A5 engines configured to Installation Arrangement Number (IAN) AQ02 to be used by airlines operating engines to IAN AQ03 configuration.

- (1) Effect of Bulletin on:
  - (a) Operation  
Not affected
  - (b) Maintenance  
Not affected
  - (c) Overhaul  
Not affected
  - (d) Repair Schemes  
Not affected.
  - (e) Interchangeability  
Not affected.

(f) Fits and Clearances

Not affected.

D. Description

(1) This Service Bulletin details the changes necessary to convert V2500-A5 Engines from IAN AQ02 to AQ03 configuration as follows:

(a) The fuel meter supplied by Goodrich Engine Controls is replaced by a unit supplied by Woodward Governor Company located in the same position on the propulsion system. All attaching parts are unchanged.

(b) On embodiment of this conversion Service Bulletin the engine identification plate is to be endorsed AQ03 under 'Installation Arrangement'.

(2) This conversion from one certified engine configuration to another certified configuration is the responsibility of the operator and IAE using IAE V2500 Service Bulletins.

The intermix of engines on an aircraft is the responsibility of the airframe manufacturer, refer to Airbus Industrie.

When required new engine identification plates are available from IAE (See 2.A.).

E. Compliance

INFORMATION

This Service Bulletin is introduced for Record Purposes Only (RP0).

F. Approval

The part number changes and/or part modification described in section 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 gain access and make safe (fan cowl doors, C ducts and hold open rods)	1 hour 8 minutes
(b) To remove and re-fit FMU	5 hours
(c) To engrave data plate	30 minutes
(d) To return engine to flyable status	1 hour 16 minutes
Total	7 hours 54 minutes

(2) At overhaul

Not affected

NOTE: The parts affected by this Service Bulletin are accessible at overhaul

#### H. Material Price and Availability

(1) Modification kit not required, parts supplied as single line items

(2) For prices and availability of future spares, refer to IAE.

(3) The interchangeability of each unit is individually specified and is consistent with the amended interchangeability table attached (Refer to Figure 1).

#### 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

Power Plant Station (PPS) 100.

#### L. Electrical Load Data

This Service Bulletin does not affect the aircraft electrical load

#### M. Software Accomplishment Summary

Not applicable

**N. References****(1) IAE V2500 Service Bulletins:****(a) ENG-73-0151**

Engine Fuel and Control – Fuel Metering Unit – Introduction of a Woodward Governor Company Fuel Metering Unit with revised microswitches.

**(b) ENG-73-0171**

Engine Fuel and Control – Fuel Metering Unit – Introduction of a revised Fuel Metering Unit with supplementary SOV torque motor cap clamping.

**(c) ENG-73-0172**

Engine Fuel and Control – Fuel Metering Unit – Introduction of a Woodward Governor Company Switchable Fuel Metering Unit suitable for all V2500-A5 engine models.

**(d) ENG-73-0173**

Engine Fuel and Control – Fuel Metering Unit – Introduction of a TRW Lucas Aerospace Switchable Fuel Metering Unit suitable for all V2500-A5 engine models.

**(e) ENG-73-CN02**

Engine – Conversion of V2500-A5 engines from installation arrangement number AQ03 to AQ02 standard.

R (2) Internal reference No. 00VI012, 06VR990A.

(3) Engine Manual, 72-00-60, Removal and Installation-06, Config-2

(4) Aircraft Maintenance Manual, 73-22-52, Removal/Installation, Config-2

(5) ATA Locators – 72-32-85 and 73-22-52.

**0. Other Publications Affected**

R (1) For effect on Illustrated Parts Catalogue (IPC), refer to 2. Material  
R Information.

R (2) Aircraft Maintenance Manual – Chapter 80-13-51, TASK 80-13-51-991-901  
R Figure 502 (Sheet 1) – FMU interchangeability table.

R **NOTE:** The Aircraft Maintenance Manual table is to be updated in line with  
R the amended interchangeability table attached (Refer to Figure 1).

P. Interchangeability of Parts

Not affected.

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## 2. Material Information

### A. Parts required to accomplish the Service Bulletin:

All Engines

72-32-85

FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	MAT	OLD PART NO.	INSTR DISP
03-120	5A1465	1	Plate, Engine	—	5A1465	(B)(C)
	OR		Identification			(S1)
	5A1855	1	Plate, Engine	—	5A1855	(B)(C)
	OR		Identification			(S2)
	5A1874	1	Plate, Engine	—	5A1874	(B)(C)
	OR		Identification			(S3)
	5A1875	1	Plate, Engine	—	5A1875	(B)(C)
			Identification			(S4)

For V2522-A5, V2524-A5, V2527M-A5, V2527-A5 and V2527E-A5 Engines incorporating Service Bulletin V2500-ENG-73-0171:

73-22-52

FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	MAT	OLD PART NO.	INSTR DISP
01-100	8061-633	1	Meter, Fuel (VW773)	—	FMU550MK1	(A)(S5)

For V2522-A5, V2524-A5, V2527M-A5, V2527-A5 and V2527E-A5 Engines incorporating Service Bulletin V2500-ENG-73-0173:

73-22-52

FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	MAT	OLD PART NO.	INSTR DISP
01-100	8061-636	1	Meter, Fuel (VW773)	—	FMU560MK1	(A)(S5)

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For V2530-A5 and V2533-A5 Engines:

73-22-52

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	FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	MAT	OLD PART NO.	INSTR DISP
R	01-100	8061-632	1	Meter, Fuel	-	FMU530MK1	(A)(D)(S5)
	01-100	8061-632	1	Meter, Fuel	-	FMU530MK2	(A)(D)(S5)
	01-100	8061-637	1	Meter, fuel	-	FMU570MK1	(A)(D)(S5)

B. Parts to be reworked:

None

C. New production parts:

None.

D. Instructions disposition codes:

(A) Old unit may be used on other applications.

(B) New engine identification plate can be obtained through your International Aero Engines representative.

(C) Old engine identification plate must be returned to your International Aero Engines representative.

(D) New part is currently available.

(S1) Old and new parts are fully interchangeable.

(S2) Old and new parts are fully interchangeable.

(S3) Old and new parts are fully interchangeable.

(S4) Old and new parts are fully interchangeable.

(S5) Old and new parts are fully interchangeable (Refer to Service Bulletin V2500-ENG-73-CN02).

### 3. Accomplishment Instructions

#### A. Rework Instructions

None

#### B. Assembly Instructions

- (1) Installation of a Woodward Governor Fuel Metering Unit (FMU) to replace a Goodrich Engine Controls FMU

GOODRICH ENGINE CONTROLS	WOODWARD GOVERNOR
AQ02	AQ03

TABLE 1 (Installation Arrangement Numbers)

- (a) The revised FMU (73-22-52, 01-100) introduced by this Service Bulletin, is interchangeable. Remove and install in accordance with current overhaul procedures and maintenance practices (Engine Manual, 72-00-60, Removal and Installation-06, Config-2 and Aircraft Maintenance Manual, 73-22-52, Removal/Installation, Config-2).
- (b) The engine identification plate (72-32-85, 03-120) must be changed to show a different Installation Arrangement Number (IAN). Table 1 above gives the numbers that should be shown for the different configurations
- (i) Score out the existing IAN with a vibro engraving tool.
- (ii) In a space adjacent to INSTL ARR on the engine identification plate, vibro-engrave the correct number from the Woodward Governor column in Table 1.
- (iii) When this change to the engine identification plate has been completed, a new engine identification plate must be ordered on the attached proforma on page 10 of this Service Bulletin and returned to the local IAE Representative. The new engine identification plate must be used to replace and display information from the current engine identification plate. Refer to steps (a) and (b) above. This will make sure to have sufficient space on the engine identification plate for future changes to the IAN to be marked up.

#### C. Recording Instructions

- (1) A record of accomplishment is required.

R  
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- (2) An amendment to the record of accomplishment is required as follows:
- (a) Following conversion of engines which embody Service Bulletin V2500-ENG-73-0171, the accomplishment records for the engine should be changed to remove V2500-ENG-73-0171 and replace it with V2500-ENG-73-0151.
  - (b) Following conversion of engines which embody Service Bulletin V2500-ENG- 73-0173, the accomplishment records for the engine should be changed to remove V2500-ENG-73-0173 and replace it with V2500-ENG-73-0172.

International Aero Engines	Request For Data Plate Information DATA PLATE NUMBER.
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From	Name:	Date:     /     /
	Dept:     International Aero Engines AG	Tel. Ext
	M/S         121-10	

  

To:		

  

Present Take Off Rating	Revised Take Off Rating

  

Present Engine Type And Model	Revised Engine Type And Model

  

Present Installation Arrangement No	Revised Installation Arrangement No

  

Present EEC Program Plug	Revised EEC Program Plug

  

Type Certificate	Production Certificate

  

Name and Address of present Owner of Engine:	

  

Name of Previous Owner:	
Date of Transfer of Ownership:     /     /	

  

Name and Address of ultimate Owner of Engines:	

  

Reason for change:	

APPROVED: \_\_\_\_\_

DATE: \_\_\_\_\_

Proforma

AIRCRAFT MODEL / ENGINE TYPE			
	A319-131/V2522 A319-132/V2524	A319-133/V2527M	A320-232/V2527 A320-233/V2527E
FMU LUCAS	FMU550MK1 "COMMON" FLOW		FMU530MK1 "HIGH" FLOW
			FMU530MK2 "HIGH" FLOW
	FMU560MK1 "COMMON" FLOW* ←→		FMU570MK1 "HIGH" FLOW
FMU WOODWARD	8061-633 "COMMON" FLOW		8061-632 "HIGH" FLOW
	8061-636 "COMMON" FLOW* ←→		8061-637 "HIGH" FLOW

NOTE:  
FMUs marked thus \* are switchable between configuration standards indicated, to provide common or high flow as selected.

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FMU Interchangeability Table  
Figure 1

V2500-ENG-73-CN01

