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## V2500-A5 SERIES PROPULSION SYSTEMS SERVICE BULLETIN

Printed in Great Britain

This document transmits Revision 2 to Service Bulletin EV2500-73-CN02

### Document History

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

### Bulletin Revision 2

Remove	Incorporate	Reason for change
Pages 1 to 7 of the Service Bulletin	Pages 1 to 9 of the Service Bulletin	To extend the Effectivity and to update the Accomplishment Instruction.

# V2500-ENG-73-CN02

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 2 are as follows:

<u>Page</u>		<u>Revision Number</u>	<u>Revision Date</u>
	Bulletin		
R	1	2	Oct.26/06
R	2	2	Oct.26/06
R	3	2	Oct.26/06
R	4	2	Oct.26/06
R	5	2	Oct.26/06
R	6	2	Oct.26/06
R	7	2	Oct.26/06
R	8	2	Oct.26/06
R	9	2	Oct.26/06

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

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1. Planning Information

A. Effectivity

(1) Airbus A319

V2522-A5, V2524-A5, V2527M-A5 Engines.

(2) Airbus A320

V2527-A5, V2527E-A5 Engines.

R (3) Airbus A321

R V2530-A5, V2533-A5 Engines.

B. Concurrent Requirements

None

C. Reason

To enable IAE V2500-A5 engines configured to Installation Arrangement Number (IAN) AQ03 to be used by airlines operating engines to IAN AQ02 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 V2500A5 Engines from IAN AQ03 to AQ02 configuration as follows:

(a) The fuel meter supplied by Woodward Governor Company is replaced by a unit supplied by Goodrich Engine Controls 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 AQ02 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.

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.

**R (e) ENG-73-CN01**

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

**R (2) Internal reference No. 00VI013, 06VR990.**

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

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

**R (5) ATA Locators – 72-32-85 and 73-22-52.****0. Other Publications Affected**

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

**P. Interchangeability of Parts**

Not affected.

## 2. Material Information

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

All Engines

72-32-85

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

R For V2522-A5, V2524-A5, V2527M-A5, V2527-A5 and V2527E-A5 Engines incorporating  
R Service Bulletin V2500-ENG-73-0151:

73-22-52

	FIG	NEW	QTY	PART TITLE	MAT	OLD	INSTR
	ITEM	PART				PART	DISP
	NO.	NO.				NO.	
R	01-100	FMU550MK1	1	Meter, Fuel (VK0131)	-	8061-633	(A)(S5)

R For V2522-A5, V2524-A5, V2527M-A5, V2527-A5 and V2527E-A5 Engines incorporating  
R Service Bulletin V2500-ENG-73-0172:

73-22-52

	FIG	NEW	QTY	PART TITLE	MAT	OLD	INSTR
	ITEM	PART				PART	DISP
	NO.	NO.				NO.	
R	01-100	FMU560MK1	1	Meter, Fuel (VK0131)	-	8061-636	(A)(S5)

R For V2530-A5 and V2533-A5 Engines:

R 73-22-52

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

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B. Parts to be reworked:

None

C. New production parts:

None.

D. Instructions disposition codes:

- R (A) Old unit may be used on other applications.
- R (B) New engine identification plate can be obtained through your International Aero Engines representative.
- R (C) Old engine identification plate must be returned to your International Aero Engines representative.
- R (D) New part is currently available.
- R (S1) Old and new parts are fully interchangeable.
- R (S2) Old and new parts are fully interchangeable.
- R (S3) Old and new parts are fully interchangeable.
- R (S4) Old and new parts are fully interchangeable.
- R (S5) Old and new parts are fully interchangeable (Refer to Service Bulletin V2500-ENG-73-CN01).



### 3. Accomplishment Instructions

#### A. Rework Instructions

None

#### B. Assembly Instructions

- R (1) Installation of a Goodrich Engine Controls Fuel Metering Unit (FMU) to  
R replace a Woodward Governor FMU
- |   |                          |                   |
|---|--------------------------|-------------------|
| R | GOODRICH ENGINE CONTROLS | WOODWARD GOVERNOR |
| R | AQ02                     | AQ03              |
- R TABLE 1 (Installation Arrangement Numbers)
- R (a) The revised FMU (73-22-52, 01-100) introduced by this Service  
R Bulletin, is interchangeable. Remove and install in accordance with  
R current overhaul procedures and maintenance practices (Engine Manual,  
R 72-00-60, Removal and Installation-06, Config-2 and Aircraft  
R Maintenance Manual, 73-22-52, Removal/Installation, Config-2).
- R (b) The engine identification plate (72-32-85, 03-120) must be changed to  
R show a different Installation Arrangement Number (IAN). Table 1 above  
R gives the numbers that should be shown for the different  
R configurations
- R (i) Score out the existing IAN with a vibro engraving tool.
- R (ii) In a space adjacent to INSTL ARR on the engine identification  
R plate, vibro-engrave the correct number from the Goodrich  
R Engine Controls colum in Table 1.
- R (iii) When this change to the engine identification plate has been  
R completed, a new engine identification plate must be ordered on  
R the attached proforma on page 9 of this Service Bulletin and  
R returned to the local IAE Representative. This will make sure  
R any other changes to the IAN can be done without a decrease in  
R space on the engine identification plate.

#### C. Recording Instructions

- R (1) A record of accomplishment is required.
- R (2) An amendment to the record of accomplishment is required as follows:
- R (a) Following conversion of engines which embody Service Bulletin  
R V2500-ENG-73-0151, the accomplishment records for the engine should be  
R changed to remove V2500-ENG-73-0151 and replace it with  
R V2500-ENG-73-0171.



R  
R  
R  
R

- (b) Following conversion of engines which embody Service Bulletin V2500-ENG- 73-0172, the accomplishment records for the engine should be changed to remove V2500-ENG-73-0172 and replace it with V2500-ENG-73-0173.

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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:	

bmi0000131

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

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

R

Proforma

