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V2500-A5/D5 SERIES PROPULSION SYSTEMS SERVICE BULLETIN

This document transmits Revision 1 to Service Bulletin EV2500-73-0101 and the Initial Issue of the Supplement

Document History

Printed in Great Britain

Service Bulletin Revision Status Supplement Revision Status Initial Issue Mar.28/97

Bulletin Revision 1

Remove Incorporate Reason for change

Summary instructions/disposition

codes in Material

Information and to revise

to current format

Pages 1 to 5 of the Pages 1 to 6 of the To correct part numbers and

Service Bulletin Service Bulletin instructions/disposition

codes in Material

Information and to revise

to current format

Supplement Initial Issue

Remove Incorporate Reason for change

V2500-ENG-73-0101

CHECK THAT ALL PREVIOUS TRANSMITTALS HAVE BEEN INCORPORATED If any have not been received please advise Customer Data Services, Rolls-Royce plc, Derby, England © Rolls-Royce plc (date as above) Printed in Great Britain

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

Page 1

To correct part numbers and instructions/disposition codes in Material Information and to revise to current format

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LIST OF EFFECTIVE PAGES

The effective pages to this Service Bulletin following incorporation of Revision 1 to the Bulletin and the Initial Issue of the Supplement are as follows:

| | <u>Page</u> | | <u>Revision Number</u> | Revision Date | | |
|--------------------------|-------------|--------|------------------------|---------------|--|--|
| | | | | | | |
| | Sı | ummary | | | | |
| | R | 1 | 1 | Mar.24/06 | | |
| | R | 2 | 1 | Mar.24/06 | | |
| | Bulletin | | | | | |
| | R | 1 | 1 | Mar.24/06 | | |
| .⊑ | R | 2 | 1 | Mar.24/06 | | |
| ri: | R | 3 | 1 | Mar.24/06 | | |
| ш ₩ | R | 4 | 1 | Mar.24/06 | | |
| Ě | R | 5 | 1 | Mar.24/06 | | |
| ਜ਼ ਹ | R | 6 | 1 | Mar.24/06 | | |
| Printed in Great Britain | Supplement | | | | | |
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ENGINE FUEL AND CONTROL - FUEL METERING UNIT - INTRODUCTION OF REVISED FUEL METERING
UNIT WITH INTEGRAL HOUSING STRENGTHENING FEATURE

SUMMARY

R 1. PLANNING

| R A. | EFFECTIVITY |
|------|-------------|
|------|-------------|

R Aircraft

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R

R (a) Airbus A319
R (b) Airbus A320
R (c) Airbus A321

(d) McDonnell Douglas MD-90

R Engines

(a) V2522-A5 Engines prior to Serial No.V10227 R V2524-A5 Engines prior to Serial No.V10227 R (b) R V2527-A5 Engines prior to Serial No.V10243 R (d) V2530-A5 Engines prior to Serial No.V10243 V2533-A5 Engines prior to Serial No.V10243 R (e) V2525-D5 Engines prior to Serial No.V20135 R (f) V2528-D5 Engines prior to Serial No.V20135 R

- R B. CONCURRENT REQUIREMENTS
- R None.
- R C. REASON/PROBLEM
- R Condition
- R There is a requirement to rationalize the manufacture of the Fuel Metering
- R Unit.
- R Objective
- R Incorporation of this Service Bulletin is designed to simplify unit
- R manufacture.
- R Substantiation
- R The changes introduced by this Service Bulletin have been the subject of
- R satisfactory engineering analysis, successful vendor cyclic pressure test and
- R finite element analysis.
- R D. DESCRIPTION
- R 1. This Service Bulletin covers the fitment to engines of a Fuel Metering
- R Unit incorporating Woodward Governor Company Mod WG60105-73-0101.

Mar 28/97 R Mar.24/06 SUMMARY V2500-ENG-73-0101

Page 1 of 2



- R 2. The current standard of Fuel Metering Unit has a housing strengthening plate secured by four bolts. This Service Bulletin introduces a revised Fuel Metering Unit similar to the existing item except for a revised housing.
- R The changes introduced by this Service Bulletin are as follows:
 - a) The housing strengthening plate and four attaching bolts are deleted.
 - b) A revised housing is introduced with an integral machined strengthening feature.
- R 3. Units incorporating this Service Bulletin will be identified by endorsement of the modification plate with ENG 73-0101.
- R E. COMPLIANCE
- R Category Code 7
- R Accomplish when supply of superseded parts has been depleted.
- R F. MANPOWER
- R In service Not applicable.
- R At overhaul Not affected.
- R 2. MATERIAL INFORMATION
- R A. PARTS PRICES
- R For prices and availability of future spares see Woodward Service Bulletin
- R V2500-73-0101.

Mar 28/97 R Mar.24/06



ENGINE FUEL AND CONTROL - FUEL METERING UNIT - INTRODUCTION OF REVISED FUEL METERING UNIT WITH INTEGRAL HOUSING STRENGTHENING FEATURE

1. Planning Information

A. Effectivity

- (1) Aircraft (a) Airbus A319
 - (b) Airbus A320
 - (c) Airbus A321
 - (d) McDonnell Douglas MD-90
- (2) Engines (a) V2522-A5 Engines prior to Serial No.V10227
 - (b) V2524-A5 Engines prior to Serial No.V10227
 - (c) V2527-A5 Engines prior to Serial No.V10243
 - (d) V2530-A5 Engines prior to Serial No.V10243
 - (e) V2533-A5 Engines prior to Serial No.V10243
 - (f) V2525-D5 Engines prior to Serial No.V20135
 - (g) V2528-D5 Engines prior to Serial No.V20135

B. Concurrent Requirements

None.

C. Reason

(1) Condition

There is a requirement to rationalize the manufacture of the Fuel Metering Unit.

(2) Background

See (1) Condition.

(3) Objective

Incorporation of this Service Bulletin is designed to simplify unit manufacture.

(4) Substantiation

The changes introduced by this Service Bulletin have been the subject of satisfactory engineering analysis, successful vendor cyclic pressure test and finite element analysis.

Mar 28/97 R Mar.24/06 V2500-ENG-73-0101



| R | (5) | Effect of Bulletin on: |
|---|-----|------------------------|
| R | | (a) Operation |
| R | | Not affected. |
| R | | (b) Maintenance |
| R | | Not affected. |
| R | | (c) Overhaul |
| R | | Not affected. |
| R | | (d) Repair Schemes |
| R | | Not affected. |
| R | | (e) Interchangeability |
| R | | Not affected. |

(6) Supplemental Information

Not affected.

(f) Fits and Clearances

None.

D. <u>Description</u>

R

- (1) This Service Bulletin covers the fitment to engines of a Fuel Metering Unit incorporating Woodward Governor Company Mod WG60105-73-0101.
- (2) The current standard of Fuel Metering Unit has a housing strengthening plate secured by four bolts. This Service Bulletin introduces a revised Fuel Metering Unit similar to the existing item except for a revised housing.

The changes introduced by this Service Bulletin are as follows:

- (a) The housing strengthening plate and four attaching bolts are deleted.
- (b) A revised housing is introduced with an integral machined strengthening feature.
- (3) Units incorporating this Service Bulletin will be identified by endorsement of the modification plate with ENG 73-0101.

Mar 28/97 R Mar.24/06 V2500-ENG-73-0101



E. Approval

The part number changes and/or part modifications 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

R Category Code 7.

Accomplish when supply of superseded parts has been depleted.

G. Manpower

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

- R (1) In service
- R Not applicable.
- R (2) At overhaul
- R Not affected.

H. Material - Price and Availability

- (1) Modification kit is not required.
- R (2) For prices and availability of spares see Woodward Service Bulletin R V2500-73-0101.

I. Tooling - Price and Availability

Special tools are not required.

J. Weight and Balance

- R (1) Weight Change
- R None.
- R (2) Moment Arm
- R No effect.
- R (3) Datum
- R Engine front mount centreline (Power Plant Station PPS 100).

Mar 28/97 R Mar.24/06 V2500-ENG-73-0101



K. Electrical Load Data

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

L. References

- R (1) Internal Reference No. EC96VIO12.
- R (2) ATA Locator 73-22-52.
- R (3) Vendor Service Bulletin:
- R Woodward Governor Company SB V2500-73-0101.

M. Other Publications Affected

R Illustrated Parts Catalogue will be revised.



2. Material Information

A. <u>Kits associated with this Bulletin:</u>

None

B. Parts affected by this Bulletin:

R Applicability: For each V2500 Engine to incorporate this Bulletin.

R 73-22-52

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R V2522-A5 and V2524-A5 Models

| R R R | FIG ITEM NO. | NEW PART NO. | QTY | PART TITLE | MAT | OLD PART NO. | INSTR DISP | | |
|---------------|----------------------------------------|--------------------|-----|-------------|-----|--------------------|----------------|--|--|
| R R | 01-100 | 8061-627 | 1 | Meter, Fuel | - | 8061-627 | (A)(B) (S1) | | |
| R | V2527-A5, V2530-A5 and V2533-A5 Models | | | | | | | | |
| R R R | FIG ITEM NO. | NEW PART NO. | QTY | PART TITLE | MAT | OLD PART NO. | INSTR DISP | | |
| R R | 01-100 | 8061-632 | 1 | Meter, Fuel | - | 8061-632 | (A)(B) (S1) | | |
| R | V2525-D5 and V2528-D5 Models | | | | | | | | |
| R R R | FIG ITEM NO. | NEW PART NO. | QTY | PART TITLE | MAT | OLD PART NO. | INSTR DISP | | |
| R | 01-100 | 8061-626 | 1 | Meter, Fuel | _ | 8061-626 | (A)(B) | | |

C. <u>Instructions/Disposition Code Statements</u>

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

Mar 28/97 R Mar.24/06

R

V2500-ENG-73-0101

(S1)



3. Accomplishment Instructions

A. Rework Instructions

None.

B. Assembly Instructions

Refer to Vendor Service Bulletin.

- C. Recording Instructions
 - (1) A record of accomplishment is necessary. Refer to Vendor Service Bulletin.



ENGINE FUEL AND CONTROL - FUEL METERING UNIT - INTRODUCTION OF REVISED FUEL METERING UNIT WITH INTEGRAL HOUSING STRENGTHENING FEATURE

<u>SUPPLEMENT - PRICES AND AVAILABILITY</u>

R <u>NOTE</u>: For prices and availability of future spares see Woodward Service Bulletin

V2500-73-0101.

R

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Mar 28/97 R Mar 24/06 V2500-ENG-73-0101
Supplement Page 1 of 1

WOODWARD GOVERNOR COMPANY
One Woodward Way
P.O. Box 405
Rockton, Illinois 61072-0405
USA

Engine Fuel and Control - Fuel Metering Unit - Introduction of New Housing Assembly

1. Planning Information

A. Effectivity

The following aircraft are affected by this Service Bulletin: Airbus A319, A320, and A321 and McDonnell Douglas MD90.

The following engine models manufactured by International Aero Engines are affected by this Service Bulletin: V2522-A5, V2524-A5, V2525-D5, V2527-A5, V2527E-A5, V2528-D5, V2530-A5, and V2533-A5.

The following Fuel Metering Units manufactured by Woodward Governor Company are affected by this Service Bulletin: 8061-627 and 8061-632.

B. Concurrent Requirements

Not Applicable

C. Reason

This Service Bulletin introduces a new housing assembly that has the strengthening plate manufactured as an integral part of the housing instead of attached by screws.

This design change will improve manufacturing, assembly, and disassembly cycles by eliminating the plate attached by screws.

The changes introduced by this Service Bulletin have been shown, by engineering assessment, test, and fit and check, to be equivalent to the existing housing assembly.

D. Description

This Service Bulletin introduces a new Fuel Metering Unit housing assembly. This housing assembly was created by Woodward Governor Company engineering change number R-807014-13.

The new housing assembly has the strengthening plate machined as an integral part of the housing assembly. This eliminates the need for the strengthening plate and mounting screws.

The new housing assemblies will be identified by the number 73-0101 on the modification plate.

E. Compliance

V2500-73-0101



WOODWARD GOVERNOR COMPANY
One Woodward Way
P.O. Box 405
Rockton, Illinois 61072-0405

No action is required by the operator. The existing housing assemblies are equivalent and will not be replaced.

F. Approval

The contents of this Service Bulletin have been agreed to by Woodward Governor Company, Rolls-Royce plc, and International Aero Engines.

G. Manpower

Not Applicable

H. Weight and Balance

There is no change in weight and balance.

I. Electrical Load Data

Not Applicable

J. Software Accomplishment Summary

Not Applicable

K. References

Woodward Governor Company engineering change number R-807014-13 and Component Maintenance Manual number 73-28-06.

L. Other Publications Affected

Rolls-Royce Service Bulletin ENG-73-0101.

2. Material Information

Not Applicable

3. Accomplishment Instructions

(1) Not Applicable

V2500-73-0101