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DATE: Nov. 8/05

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#### V2500-A5/D5 SERIES PROPULSION SYSTEM SERVICE BULLETIN

This document transmits Revision 1 to Service Bulletin EV2500-73-0191 and Revision 1 to the Supplement

## **Document History**

Printed in Great Britain

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# **Bulletin Revision 1**

Remove Incorporate Reason for change
All pages of the Page 1 and 2 of the To revise Vendor Service
Summary Bulletin reference.
All pages of the Pages 1 to 17 of the To revise Vendor Service
Service Bulletin Service Bulletin Bulletin reference.

### <u>Supplement Revision 1</u>

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V2500-ENG-73-0191

CHECK THAT ALL PREVIOUS TRANSMITTALS HAVE BEEN INCORPORATED
If any have not been received please advise Publication Services, Rolls-Royce plc, Derby, England

# LIST OF EFFECTIVE PAGES

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

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| R        | 1          | 1                      | Nov.8/05             |
| R        | 2          | 1                      | Nov.8/05             |
| R        | 3          | 1                      | Nov.8/05             |
| R        | 4          | 1                      | Nov.8/05             |
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| R        | 14         | 1                      | Nov.8/05             |
| R        | 15         | 1                      | Nov.8/05             |
| R        | 16         | 1                      | Nov.8/05             |
| R        | 17         | 1                      | Nov.8/05             |
|          | Supplement |                        |                      |
| R        | 1          | 1                      | Nov.8/05             |



# ENGINE FUEL AND CONTROL - FUEL METERING UNIT - INTRODUCTION OF REVISED DYNAMIC SEALS AND VALVE PUSHRODS

# **SUMMARY**

#### 1. PLANNING

A. EFFECTIVITY

Engine Serial No.

V2500-A5 V10001 to V12224 V2500-D5 V20001 to V20285

**B. CONCURRENT REQUIREMENTS** 

None.

C. REASON/PROBLEM

Problem

The FMU has experienced unscheduled removals due to excessive dry drain leakage.

The problem has been attributed to a loss of sealing efficiency of the Inner Dynamic Seal in the Pressure Raising Valve (PRV).

Evidence

The problem has been experienced on engines in service.

Substantiation

The changes introduced by this modification have been the subject of significant satisfactory engineering analysis and successful vendor trials.

Objective

Incorporation of this modification is designed to maintain unit reliability.

- D. DESCRIPTION
- 1. This modification covers the fitment to engines of an FMU supplied by Woodward Aircraft Engine Systems (WAES) incorporating design changes to prevent dry drain leakage.

The changes introduced are a revised Woodward (WAES) FMU similar to the existing unit except for the following changes:

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- a) The Pressure Raising Valve (PRV) inner and outer seals have been changed from Shamban Double Delta Seals to Greene Tweed Advancap Seals.
- b) A revised PRV Pushrod has been introduced without Teflon coating and with a smoother surface finish.
- c) In order to prevent any possible future problems, the opportunity has been taken to remove the Teflon coating from the Overspeed Valve (OSV) pushrod.
- 2. Existing units may be returned to the vendor and reworked to incorporate this modification.
- 3. Units incorporating this modification will be identified by endorsement of the modification plate with 83724-73-0191.

#### E. COMPLIANCE

Category Code 6

Accomplish when the sub-assembly (ie. Modules, accessories, components, build groups) is disassembled sufficiently to afford access to the affected part and to all affected spare parts.

#### F. MANPOWER

In service - Not applicable.

At overhaul - Not affected.

G. INTERCHANGEABILITY OF PARTS

Not affected.

#### MATERIAL INFORMATION

#### A. PARTS PRICES

For prices and availability of future spares see Woodward Service Bulletin 83724-73-0191.

SUMMARY V2500-ENG-73-019



# ENGINE FUEL AND CONTROL - FUEL METERING UNIT - INTRODUCTION OF REVISED DYNAMIC SEALS AND VALVE PUSHRODS

## 1. Planning Information

## A. Effectivity

(1) Airbus A319

V2522-A5, V2524-A5, V2527M-A5 Engines prior to Serial No. V12225.

(2) Airbus A320

V2527-A5, V2527E-A5 Engines prior to Serial No. V12225.

(3) Airbus A321

V2530-A5, V2533-A5 Engines prior to Serial No. V12225.

(4) Boeing - Longbeach Division MD-90

V2525-D5, V2528-D5 Engines prior to Serial No. V20286.

# B. Concurrent Requirements

None.

# C. <u>Reason</u>

#### (1) Problem

The FMU has experienced unscheduled removals due to excessive dry drain leakage.

The problem has been attributed to a loss of sealing efficiency of the Inner Dynamic Seal in the Pressure Raising Valve (PRV).

#### (2) Evidence

The problem has been experienced on engines in service.

#### (3) Substantiation

The changes introduced by this modification have been the subject of significant satisfactory engineering analysis and successful vendor trials.

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(4) Objective

Incorporation of this modification is designed to maintain unit reliability.

- (5) 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 modification covers the fitment to engines of an FMU supplied by Woodward Aircraft Engine Systems (WAES) incorporating design changes to prevent dry drain leakage.

The changes introduced are a revised Woodward (WAES) FMU similar to the existing unit except for the following changes:

- (a) The Pressure Raising Valve (PRV) inner and outer seals have been changed from Shamban Double Delta Seals to a Greene Tweed Advancap Seals.
- (b) A revised PRV Pushrod has been introduced without Teflon coating and with a smoother surface finish.
- (c) In order to prevent any possible future problems, the opportunity has been taken to remove the Teflon coating from the Overspeed Valve (OSV) pushrod.



- (2) Existing units may be returned to the vendor and reworked to incorporate this modification.
- (3) Units incorporating this modification will be identified by endorsement of the modification plate with 83724-73-0191.

#### E. Compliance

Category 6

Accomplish when the sub-assembly (ie. Modules, accessories, components, build groups) is disassembled sufficiently to afford access to the affected part and to all affected spare parts.

#### F. Approval

The part number transactions shown in section 2. Material Information 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

Not applicable.

(2) At overhaul

Not affected.

<u>NOTE</u>: The parts affected by this Service Bulletin are accessible at overhaul.

#### H. Material Price and Availability

Modification kit not required; parts supplied as single line items.

For prices and availability of future spares see Woodward Service Bulletin 83724-73-0191.

# I. Tooling Price and Availability

Special tools are not required.

#### J. <u>Industry Support Information</u>

None.

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## K. Weight and Balance

(1) Weight Change

None.

(2) Moment Arm

Not affected.

(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

(1) IAE V2500 Service Bulletins:

ENG-73-0108: Commonisation of Woodward Governor Company fuel meter.

ENG-73-0157: Introduction of WGC FMU with revised max fuel flow stop (A320).

ENG-73-0158: Introduction of WGC FMU with revised max fuel flow stop (A319).

ENG-73-0172: Introduction of a WGC switchable FMU for all V2500-A5 engine models.

- (2) Woodward Service Bulletin 83724-73-0191 Revision 1.
  - (3) IAE Engineering Change Number 04VI005.
  - (4) ATA Locator 73-22-52.
  - (5) Engine Manual, 72-00-60, Removal/Installation.
  - (6) Component Maintenance Manual, 73-22-52 Removal/Installation.

# O. Other Publications Affected

None.

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# P. <u>Interchangeability of Parts</u>

Not affected.

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# 2. Material Information

# A. <u>Vendor units affected by this Service Bulletin:</u>

Applicability: For each V2500 engine to incorporate the Bulletin.

The type of equipment affected by this modification is listed below for information only:

V2522-A5, V2524-A5, V2527-A5, V2527E-A5 and V2527M-A5 Models only

73-22-52

| FIG<br>ITEM<br>NO. | NEW<br>PART<br>NO. | QTY | PART TITLE            | MAT | OLD<br>PART<br>NO. | INSTR<br>DISP   |
|--------------------|--------------------|-----|-----------------------|-----|--------------------|-----------------|
| 01-100             | 8061-636           | 1   | .Meter, fuel (V66503) | -   | 8061-636           | (A)(S1)<br>(1D) |

V2530-A5 and V2533-A5 Models only

73-22-52

| FIG<br>ITEM<br>NO. | NEW<br>PART<br>NO. | QTY | PART TITLE            | MAT | OLD<br>PART<br>NO. | INSTR<br>DISP   |
|--------------------|--------------------|-----|-----------------------|-----|--------------------|-----------------|
| 01-100             | 8061-637           | 1   | .Meter, fuel (V66503) | -   | 8061-637           | (A)(S1)<br>(1D) |

V2522-A5 and V2524-A5 Models (pre-service bulletin ENG-73-0172 and incorporating ENG-73-0158)

73-22-52

| FIG<br>ITEM<br>NO. | NEW<br>PART<br>NO. | QTY | PART TITLE            | MAT | OLD<br>PART<br>NO. | INSTR<br>DISP |
|--------------------|--------------------|-----|-----------------------|-----|--------------------|---------------|
| 01-100             | 8061-633           | 1   | .Meter, fuel (V66503) | -   | 8061-633           | (A)(S1)       |

V2527-A5 and V2527E-A5 Models (pre-service bulletin ENG-73-0172 and incorporating ENG-73-0157)

73-22-52



| FIG<br>ITEM<br>NO. | NEW<br>PART<br>NO. | QTY      | PART TITLE                  | MAT      | OLD<br>PART<br>NO. | INSTR<br>DISP   |
|--------------------|--------------------|----------|-----------------------------|----------|--------------------|-----------------|
| 01-100             | 8061-633           | 1        | .Meter, fuel (V66503)       | -        | 8061-633           | (A)(S1)<br>(1D) |
| V2527M-            | A5 Models (        | pre-serv | ice bulletin ENG-73-0172)   |          |                    |                 |
| 73-22-5            | 2                  |          |                             |          |                    |                 |
| FIG<br>ITEM<br>NO. | NEW<br>PART<br>NO. | QTY      | PART TITLE                  | MAT      | OLD<br>PART<br>NO. | INSTR<br>DISP   |
| 01–100             | 8061-633           | 1        | .Meter, fuel (V66503)       | -        | 8061-633           | (A)(S1)<br>(1D) |
| V2530-A            | 5 and V2533        | -A5 Mode | ls (pre-service bulletin EN | G-73-017 | 2)                 |                 |
| 73-22-5            | 2                  |          |                             |          |                    |                 |
| FIG<br>ITEM<br>NO. | NEW<br>PART<br>NO. | QTY      | PART TITLE                  | MAT      | OLD<br>PART<br>NO. | INSTR<br>DISP   |
| 01–100             | 8061-632           | 1        | .Meter, fuel (V66503)       | -        | 8061-632           | (A)(S1)<br>(1D) |
| V2525-D            | 5 and V2528        | -D5 Mode | ls                          |          |                    |                 |
| 73-22-5            | 2                  |          |                             |          |                    |                 |
| FIG<br>ITEM<br>NO. | NEW<br>PART<br>NO. | QTY      | PART TITLE                  | MAT      | OLD<br>PART<br>NO. | INSTR<br>DISP   |
| 01–100             | 8061-632           | 1        | .Meter, fuel (V66503)       | -        | 8061-632           | (A)(S1)<br>(1D) |
| V2522-A            | 5 and V2524        | -A5 Mode | ls (pre-service bulletin EN | G-73-015 | 8)                 |                 |
| 73-22-5            | 2                  |          |                             |          |                    |                 |
| FIG<br>ITEM<br>NO. | NEW<br>PART<br>NO. | QTY      | PART TITLE                  | MAT      | OLD<br>PART<br>NO. | INSTR<br>DISP   |
| 01–100             | 8061-627           | 1        | .Meter, fuel (V66503)       | -        | 8061-627           | (A)(S1)<br>(1D) |

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V2527-A5 and V2527E-A5 Models (pre-service bulletin ENG-73-0157)

73-22-52

| FIG<br>ITEM<br>NO. | NEW<br>PART<br>NO. | QTY | PART TITLE            | MAT | OLD<br>PART<br>NO. | INSTR<br>DISP   |
|--------------------|--------------------|-----|-----------------------|-----|--------------------|-----------------|
| 01-100             | 8061-632           | 1   | .Meter, fuel (V66503) | -   | 8061-632           | (A)(S1)<br>(1D) |

V2525-D5 and V2528-D5 Models (pre-service bulletin ENG-73-0108)

73-22-52

| FIG<br>ITEM<br>NO. | NEW<br>PART<br>NO. | QTY | PART TITLE            | MAT | OLD<br>PART<br>NO. | INSTR<br>DISP   |
|--------------------|--------------------|-----|-----------------------|-----|--------------------|-----------------|
| 01-100             | 8061-626           | 1   | .Meter, fuel (V66503) | -   | 8061-626           | (A)(S1)<br>(1D) |

# B. <u>Instructions disposition codes:</u>

- (A) New standard of unit will be made available from November 2005.
- (S1) Old and new units are freely and fully interchangeable.
- (1D) Old standard of unit may be reworked.

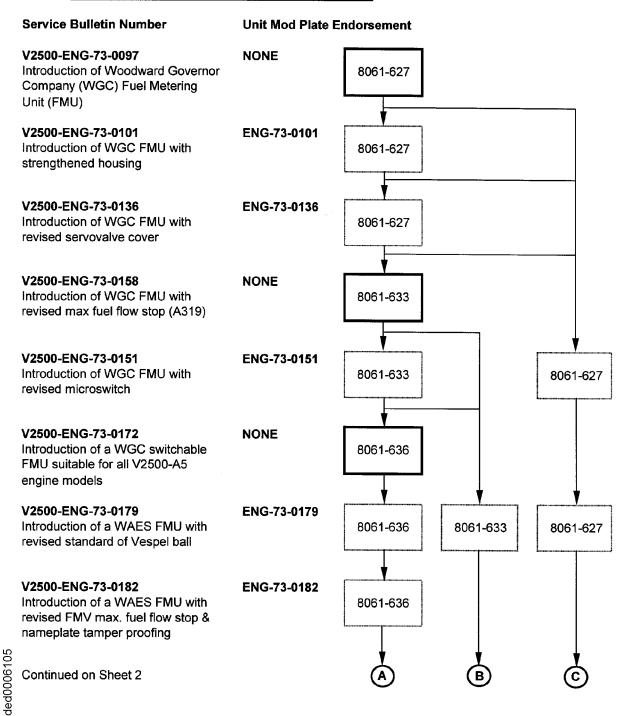


# 3. Accomplishment Instructions

- A. Removal/Installation Instructions
  - (1) For removal and installation instructions refer to Engine Manual, Chapter/Section 72-00-60, Removal/Installation, or Aircraft Maintenance Manual, Chapter/Section 73-22-52, Removal/Installation.
- B. Recording Instructions
  - (1) A record of accomplishment is necessary. Refer to Vendor Service Bulletin 83724-73-0191.

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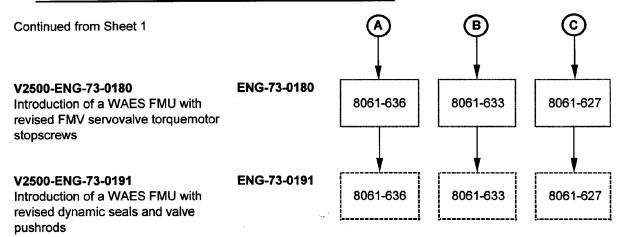
# V2522-A5 and V2524-A5 FMU Family Tree \*



V2522-A5 and V2524-A5 FMU Family Tree Chart 1 (sheet 1 of 2)

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# V2522-A5 and V2524-A5 FMU Family Tree \* (Cont.)

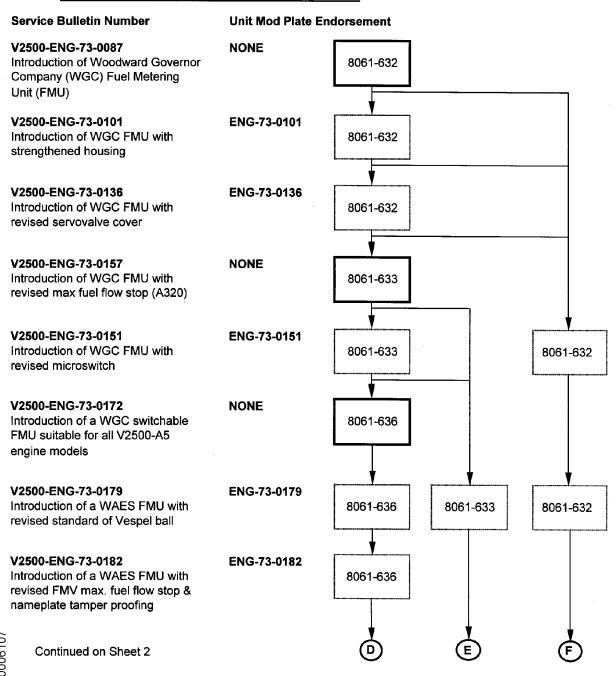


\* This family tree is not intended to represent the combination of modifications fitted to units in service

V2522-A5 and V2524-A5 FMU Family Tree Chart 1 (sheet 2 of 2)

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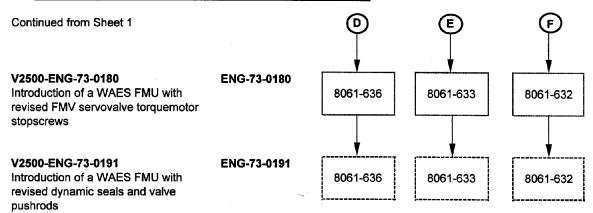
# V2527-A5 and V2527E-A5 FMU Family Tree \*



V2527-A5 and V2527E-A5 FMU Family Tree Chart 2 (sheet 1 of 2)

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# V2527-A5 and V2527E-A5 FMU Family Tree \* (Cont.)



\* This family tree is not intended to represent the combination of modifications fitted to units in service

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V2527-A5 and V2527E-A5 FMU Family Tree Chart 2 (sheet 2 of 2)

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# V2527M-A5 FMU Family Tree \*

# Service Bulletin Number **Unit Mod Plate Endorsement** V2500-ENG-73-0158 NONE Introduction of Woodward Governor 8061-633 Company (WGC) Fuel Metering Unit (FMU) with revised max fuel flow stop (A319)V2500-ENG-73-0151 ENG-73-0151 Introduction of a WGC FMU with 8061-633 revised microswitch V2500-ENG-73-0172 NONE Introduction of a WGC switchable 8061-636 FMU suitable for all V2500-A5 engine models V2500-ENG-73-0179 ENG-73-0179 Introduction of a WAES FMU with 8061-636 8061-633 revised standard of Vespel ball V2500-ENG-73-0182 ENG-73-0182 Introduction of a WAES FMU with 8061-636 revised FMV max. fuel flow stop & nameplate tamper proofing V2500-ENG-73-0180 ENG-73-0180 Introduction of a WAES FMU with 8061-636 8061-633 revised FMV servovalve torquemotor stopscrews V2500-ENG-73-0191 ENG-73-0191 Inroduction of a WAES FMU with 8061-636 8061-633 revised dynamic seals and valve pushrods

\* This family tree is not intended to represent the combination of modifications fitted to units in service

V2527M-A5 FMU Family Tree Chart 3 (sheet 1 of 1)

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# **V2530-A5 and V2533-A5, FMU Family Tree \***

Service Bulletin Number **Unit Mod Plate Endorsement** V2500-ENG-73-0087 NONE Introduction of Woodward Governor 8061-632 Company (WGC) Fuel Metering Unit (FMU) V2500-ENG-73-0101 ENG-73-0101 Introduction of WGC FMU with 8061-632 strengthened housing V2500-ENG-73-0136 ENG-73-136 Introduction of WGC FMU with 8061-632 revised servovalve cover V2500-ENG-73-0151 ENG-73-0151 Introduction of WGC FMU with 8061-632 revised microswitch V2500-ENG-73-0172 NONE Introduction of WGC switchable 8061-637 FMU suitable for all V2500-A5 engine models V2500-ENG-73-0179 ENG-73-0179 Introduction of a WAES FMU with 8061-632 8061-637 revised standard of Vespel ball V2500-ENG-73-0182 ENG-73-0182 Introduction of a WAES FMU with 8061-637 revised FMV max. fuel flow stop & nameplate tamper proofing V2500-ENG-73-0180 ENG-73-0180 Introduction of a WAES FMU with 8061-637 8061-632 revised FMV servovalve torquemotor stopscrews Continued on Sheet 2

> V2530-A5 and V2533-A5 FMU Family Tree Chart 4 (sheet 1 of 2)

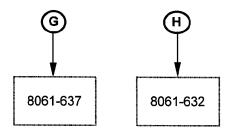
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# ENG-73-0191

V2530-A5 and V2533-A5, FMU Family Tree \* (Cont.)

V2500-ENG-73-0191
Introduction of a WAES FMU with revised dynamic seals and valve pushrods



\* This family tree is not intended to represent the combination of modifications fitted to units in service

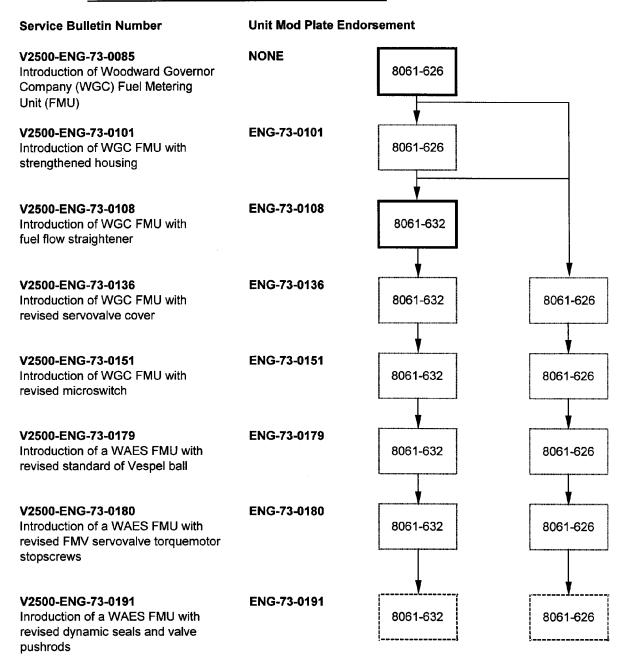
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V2530-A5 and V2533-A5 FMU Family Tree Chart 4 (sheet 2 of 2)

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# V2525-D5 and V2528-D5 FMU Family Tree \*



\* This family tree is not intended to represent the combination of modifications fitted to units in service

V2525-D5 and V2528-D5 FMU Family Tree Chart 5 (sheet 1 of 1)

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V2500-ENG-73-0191

I



# ENGINE FUEL AND CONTROL - FUEL METERING UNIT - INTRODUCTION OF REVISED DYNAMIC SEALS AND VALVE PUSHRODS

# SUPPLEMENT - PRICES AND AVAILABILITY

<u>NOTE</u>: For prices and availability of future spares see Woodward Service Bulletin 83724-73-0191.

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Supplement Page 1 of 1



ENGINE FUEL and CONTROL - FUEL METERING UNIT (FMU) - Incorporation of Pressure Raising Valve switch activation rod and dry drain seals, and Overspeed Valve switch activation rod.

## 1. Planning Information

### A. Effectivity

This Service Bulletin affects the following Fuel Metering Units manufactured by Woodward Aircraft Engine Systems: 8061-626, 8061-627, 8061-632, 8061-633, 8061-636 and 8061-637.

The V2500-A5 &-D5 engines are affected.

## B. Concurrent Requirements

Not applicable.

## C. Reason

Objective: To inform users a product improvement is being introduced for dry drain leakage.

Condition: Several field returns for dry drain leakage on the V2500 FMU have been attributed to a combination of the Pressure Raising Valve dynamic seal (1391-578) wear and PTFE coating on the switch activation rod (3365-066).

Cause: Premature seal wear has been caused by the interaction of the PTFE coating on the Pressure Raising Valve switch activation rod and material of the Pressure Raising Valve dynamic dry drain seals. Testing has shown the PTFE coating on the switch rods tends to sheath off and collect at the seal location, thus allowing conditions to exist that can cause or contribute to dry drain leakage.

Improvement: The dry drain seal material has been changed from PTFE to carbon filled PTFE and the PTFE coating on the switch rods has been removed. As part of the product improvement, the similarly designed Overspeed switch activation rod (3330-072) will also have the PTFE coating removed. The Overspeed dynamic dry drain seals (1390-332) are not being changed to carbon filled PTFE.

Substantiation: Engineering test and evaluation has confirmed that the proposed design will provide better performance in endurance for dry drain leakage.

#### D. Description

This Service Bulletin introduces new replacement parts for the pressure raising valve dry drain seals, switch activation rod and overspeed valve switch activation rod. This Service Bulletin is applicable to all Woodward V2500 FMU's.

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# E. Compliance

Category 7 - Do at customer convenience/option. Recommended that this Service Bulletin be accomplished, when convenient, during a normal shop visit.

#### F. Approval

S/B 83724-73-0191 has been technically approved by IAE on August 8, 2005 in accordance with appropriate FAR regulations and is FAA approved for those units listed herein.

# G. Manpower

An estimated 1 hour, not including test, is required to perform this service bulletin.

# H. Weight and Balance

There is no change in weight and balance.

#### Electrical Load Data

Not applicable.

#### J. Software Accomplishment Summary

Not applicable.

#### K. References

Woodward Aircraft Engine Systems Component Maintenance Manual 73-28-06.

Woodward Aircraft Engine Systems Engineering Change E/C R-1063518 (for internal use only).

IAE V2500 Service Bulletin Number V2500-ENG-73-0191.

#### L. Other Publications Affected

Not applicable.

# 2. <u>Material Information</u>

# A. Material - Price and Availability

Issued Aug 10/2005 Revision 1: Nov 08/2005

Contact Woodward Aircraft Engine Systems for part availability and pricing.

Woodward Aircraft Engine Services One Woodward Way Rockton, IL 61072-0405 USA Telephone: 815-624-4400

B. Industry Support Information

Not applicable.

C. Material Necessary for Each Aircraft/Engine/Component

Material Necessary for Each Aircraft/Engine/Component

| Part Name                                    | Replacement Part<br>Number | IPL Figure and Item<br>Number  | Number of Replacement<br>Parts Needed for<br>Affected Units |
|--|----------------------------|--|---|
| Pressure Raising Valve dry drain seals       | 1391-006                   | 02-190<br>02-200<br>02-210<br>02-220<br>OR<br>02A-190<br>02A-200<br>02A-210<br>02A-220 | 2   |
| Pressure Raising Valve switch activation rod | 3100-1024                  | 02-120<br>OR<br>02A-120  | 1   |
| Overspeed Valve switch activation rod        | 3100-1025                  | 06-010   | 1   |

D. Material Necessary for Each Spare

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# Material Necessary for Each Spare

| Part Name                                    | Replacement Part<br>Number | IPL Figure and Item<br>Number  | Number of Replacement<br>Parts Needed for<br>Affected Units |
|--|----------------------------|--|---|
| Pressure Raising Valve dry drain seals       | 1391-006                   | 02-190<br>02-200<br>02-210<br>02-220<br>OR<br>02A-190<br>02A-200<br>02A-210<br>02A-220 | 2   |
| Pressure Raising Valve switch activation rod | 3100-1024                  | 02-120<br>OR<br>02A-120  | 1   |
| Overspeed Valve switch activation rod        | 3100-1025                  | 06-010   | 1   |

#### E. Reidentified Parts

# Reidentified Parts

| Part Name                                    | Old Part Number | Replacement Part Number |
|--|-----------------|-------------------------|
| Pressure Raising Valve dry                   | 1391-578        | 1391-006                |
| drain seals                                  | 182650          |                         |
| Pressure Raising Valve switch activation rod | 3365-066        | 3100-1024               |
| Overspeed Valve switch activation rod        | 3330-072        | 3100-1025               |

F. Tooling - Price and Availability

Not applicable.

# 3. Accomplishment Instructions

(1) Disassemble the FMU as specified in CMM 73-28-06 to gain access to the Pressure Raising Valve switch activation rod.

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- (2) Remove the Pressure Raising Valve switch activation rod, P/N 3365-066, as specified in CMM 73-28-06.
- (3) Disassemble the FMU as specified in CMM 73-28-06 to gain access to the Pressure Raising Valve dry drain seals.
- (4) Remove the Pressure Raising Valve dry drain seals, P/N 1391-578 (2x) and P/N 182650 (2x), as specified in CMM 73-28-06. Install the Pressure Raising Valve dry drain seals, P/N 1391-006 (2x), per CMM 73-28-06.
- (5) Install the Pressure Raising Valve switch activation rod, P/N 3100-1024, per CMM 73-28-06.
- (6) Disassemble the FMU as specified in CMM 73-28-06 to gain access to the Overspeed Valve switch activation rod.
- (7) Remove the Overspeed Valve switch activation rod, P/N 3330-072, as specified in CMM 73-28-06.
- (8) Install the Overspeed Valve switch activation rod, P/N 3100-1025, per CMM 73-28-06.
- (9) Assemble the FMU as specified in CMM 73-28-06.
- (10) Test the FMU as specified in CMM 73-28-06 TESTING AND FAULT ISOLATION.
- (11) Mark the Service Bulletin dataplate 73-0191.

83724-73-019<sup>2</sup>