P U B L I C A T I O N T R A N S M I T T A L

RR-DERBY

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DATE: Aug.14/01

V2500-A5 PROPULSION SYSTEMS SERVICE BULLETIN

This document transmits the Initial Issue of Service Bulletin EV2500-73-0172

Bulletin Initial Issue

Remove	Incorporate	Reason for change
	Pages 1 to 13 of the Service Bulletin	Initial issue

V2500-ENG-73-0172

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 are as follows:

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Bulletin		
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ENGINE FUEL AND CONTROL - FUEL METERING UNIT - INTRODUCTION OF A WOODWARD GOVERNOR COMPANY SWITCHABLE FUEL METERING UNIT SUITABLE FOR ALL V2500-A5 APPLICATIONS

1. Planning Information

A. Effectivity

(1) Airbus A319

V2522-A5, V2524-A5 and V2527M-A5 Engines prior to Serial No. V11025.

(2) Airbus A320

V2527-A5, V2527E-A5 Engines prior to Serial No. V11025.

(3) Airbus A321

V2530-A5, V2533-A5 Engines prior to Serial No. V11025.

B. Concurrent Requirements

V2522-A5, V2524-A5 & V2527M-A5 engines only

This Service Bulletin must only be fitted to engines which embody as a minimun IAE V2500 EEC software to Service Bulletin 73-0159 (see N.1). Higher standards of EEC software are also acceptable.

C. Reason

(1) Condition

There is a customer requirement to introduce a common Woodward Governor Company Fuel Metering Unit (FMU) with switchable Common Flow/High Flow maximum flow stop.

This allows the commonisation of the Airbus A319, A320 and A321 standards of FMU, which is considered logistically advantageous for mixed fleet operators.

(2) Background

See (1) Condition.

(3) Substantiation

The changes introduced by this Service Bulletin have been the subject of satisfactory engineering analysis, vendor rig testing and trial engine installation of a representative unit.

(4) Objective

Incorporation of the changes introduced by this Service Bulletin (Modification) is designed to satisfy customer requirements.

(5) Effect of Bulletin on:

(a) Operation

Not affected

(b) Maintenance

Affected

(c) Overhaul

Affected

(d) Repair Schemes

Not affected

(e) Interchangeability

Affected (See 1.N)

(f) Fits and Clearances

Not affected

D. Description

(1) This Service Bulletin introduces a Woodward Governor Company FMU similar to the existing unit except for a switchable Common Flow/High Flow maximum fuel flow stop assembly. This allows the unit to be switched to suit all V2500-A5 model applications.

The changes introduced are:

(a) The external single set fuel flow stop mechanism has been deleted.

(b) An external switchable two position maximum fuel flow stop has been introduced which can be set for either A319/A320 or A321 aircraft applications.

(c) A single reversible nameplate is introduced which, in conjunction with the stop setting letter and FMU dataplate directive, will facilitate clear unambiguous identification of each flow setting.

(d) A security seal system is introduced onto the above switchable fuel flow stop and the reversible nameplate.

(e) To facilitate installation of the security seal lock wire, the two existing retaining cap screws have been replaced by lockwire compatible equivalents.

(2) Existing FMUs may be reworked - refer to vendor Service Bulletins 83724-73-0004 and 83724-73-0005

(3) Units incorporating this Service Bulletin will be identified by a new type number (see 2.A.).

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 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

Not affected

(2) At overhaul

Not affected

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

H. Material Price and Availability

For prices and availability of future spares, refer to 2. Material Information

I. Tooling Price and Availability

Special tools are not required to accomplish this Service Bulletin

J. Industry Support Information

Not applicable

K. Weight and Balance

(1) Weight Change

Plus 0.1 lb (+0.05 kg)

(2) Moment Arm

16.5 in (419 mm) forwards of datum.

(3) Datum

Engine Front Mount Centreline (Power Plant Station PPS 100).

L. Electrical Load Data

This Service Bulletin has no effect on the aircraft electrical load

M. Software Accomplishment Summary

Not applicable

N. References

(1) Internal reference 00VI001

(2) The following IAE V2500 Service Bulletin must be fitted prior to or concurrently with this Service Bulletin as the minimum technical standard of EEC software:

73-0159 PROVIDE A NEW ELECTRONIC ENGINE CONTROL WITH SCN14/S SOFTWARE

(3) Engine Manual, 72-00-60, Removal-06, Config-02 and Installation-06, Config-02

(4) Aircraft Maintenance Manual, 73-22-52, Removal/Installation, Config-02

(5) Woodward Governor Company Service Bulletin 83724-73-0004 and Service Bulletin 83724-73-0005

(6) Aircraft Modification No's. 31492 and 31494.

(7) Airbus Service Bulletin A320-73-1074.

O. Other Publications Affected

(1) Illustrated Parts Catalogue (IPC), 2IB, 5IB, 6IB, 7IB, 73-22-52 will be revised.

(2) Airbus Illustrated Parts Catalogue, 73-22-52

(3) Engine Manual, 72-00-60, Rework 001

(4) Aircraft Maintenance Manual, 73-22-52, Adjustment/Test, Config-02

P. Interchangeability of Parts

Not affected.

2. Material Information

A. New production parts

PART NO.	QTY	UNIT PRICE US DOLLARS
8061-636	1	Price on application
8061-637	1	Price on application

B. Vendor units affected by this 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 ITEM NO.	NEW PART NO.	QTY	PART TITLE	MAT	OLD PART NO.	INSTR DISP
01100	8061-636	1	Meter, fuel (V6650 3)	-	8061-633	(A) (S1) (1D)

V2530-A5 and V2533-A5 Models only

73-22-52

FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	MAT	OLD PART NO.	INSTR DISP
01100	8061-637	1	Meter, fuel (V6650 3)	-	8061-632	(A) (S1) (1D)

C. Instructions disposition codes:

(A) New standard of unit will be made available from July 2001.

(S1)Old and new units are freely and fully interchangeable.

(1D) Old standard of unit may be reworked.

3. Accomplishment Instructions

A. Rework Instructions

Refer to Woodward Governor Company Service Bulletin 83724-73-0005

B. FMU Switching Instructions

CAUTION: LOCKWIRE FRAGMENTS WILL BE LIBERATED DURING THE REWORK PROCEDURE. ALL SUCH FRAGMENTS MUST BE RECOVERED

(1) FMU switching on engine installed FMU

It is recommended that the engine harness is disconnected from the FMU and flowmeter to provide sufficient working space (Refer to Engine Manual, 72-00-60, Removal-06).

Before you change the setting, make sure that the FMU part number and stop setting letter correctly match each other. Report mismatch to your local quality representative.

FMU PART NUMBER	POSITION SETTING LETTER
FMU 8061-636	O
FMU 8061-637	X

(a) To switch 8061-636 to 8061-637, carry out switch procedure in accordance with Woodward Governor Company Service Bulletin 83724-73-0004

(b) To switch 8061-637 to 8061-636, carry out switch procedure in accordance with Woodward Governor Company Service Bulletin 83724-73-0004

(c) Re-connect harness in accordance with Engine Manual, 72-00-60, Installation-06

(2) FMU switching on aircraft engine installed FMU

(a) Gain access to the engine, (refer to AMM 71-13-00). Take associated protective actions to avoid injury to persons and damage to engine.

(b) It is recommended that the engine harness be disconnected from the FMU and flowmeter to provide sufficient space to work (Refer to AMM 73-22-52)

(c) The fuel system must be de-pressurised before the switching procedure is carried out. Disconnect the fuel pipe 73-11-49, 06100 at the fuel pump end and allow the fuel to drain (Refer to AMM 73-22-52).

NOTE: Fuel cannot be re-used

(d) Before you change the setting, make sure that the FMU part number and stop setting letter correctly match each other. Report mismatch to your local quality representative.

FMU PART NUMBER	POSITION SETTING LETTER
FMU 8061-636	O
FMU 8061-637	X

(i) To switch 8061-636 to 8061-637, carry out switch procedure in accordance with Woodward Governor Company Service Bulletin 83724-73-0004

(ii) To switch 8061-637 to 8061-636, carry out switch procedure in accordance with Woodward Governor Company Service Bulletin 83724-73-0004

(e) Re-connect engine harness and LP fuel tube (Refer to AMM 73-22-52)

(f) Close access to the engine (Refer to AMM 71-13-00)

(g) Do an 'idle' check (Refer to AMM 71-00-00) or a wet motor leak (Refer to AMM 71-00-00)

(h) Do the operational tests of the starter and FMU (Refer to AMM 80-13-51)

(i) Do the operational FADEC test as per AMM 73-22-00.

(3) FMU switching on removed unit

(a) To switch 8061-636 to 8061-637, carry out switch procedure in accordance with Woodward Governor Company Service Bulletin 83724-73-0004

(b) To switch 8061-637 to 8061-636, carry out switch procedure in accordance with Woodward Governor Company Service Bulletin 83724-73-0004

C. Assembly Instructions

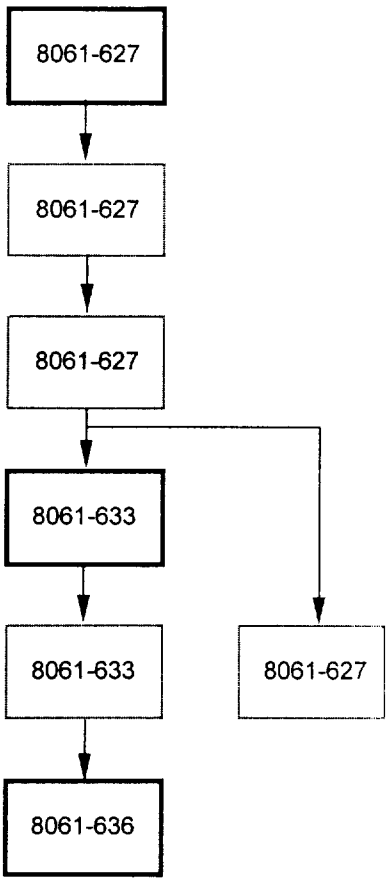
The part introduced by this Service Bulletin is interchangeable. Remove and install in accordance with current overhaul procedures and maintenance practices (Engine Manual, 72-00-60, Removal-06, Config-2 and Installation-06, Config-2 and Aircraft Maintenance Manual, 73-22-52, Removal/Installation, Config-2).

D. Recording Instructions

(1) A record of accomplishment is necessary. Refer to vendor service bulletin.

V2522-A5 and V2524-A5 FMU Family Tree *

Service Bulletin Number	Unit Mod Plate Endorsement
V2500-ENG-73-0097 Introduction of Woodward Governor Company (WGC) Fuel Metering Unit (FMU)	**NONE**
V2500-ENG-73-0101 Introduction of WGC FMU with strengthened housing	**ENG-73-0101**
V2500-ENG-73-0136 Introduction of WGC FMU with revised servovalve cover	**ENG-73-0136**
V2500-ENG-73-0158 Introduction of WGC FMU with revised max fuel flow stop (A319)	**NONE**
V2500-ENG-73-0151 Introduction of WGC FMU with revised microswitch	**ENG-73-0151**
V2500-ENG-73-0172 Introduction of a WGC switchable FMU suitable for all V2500-A5 engine models	**NONE**

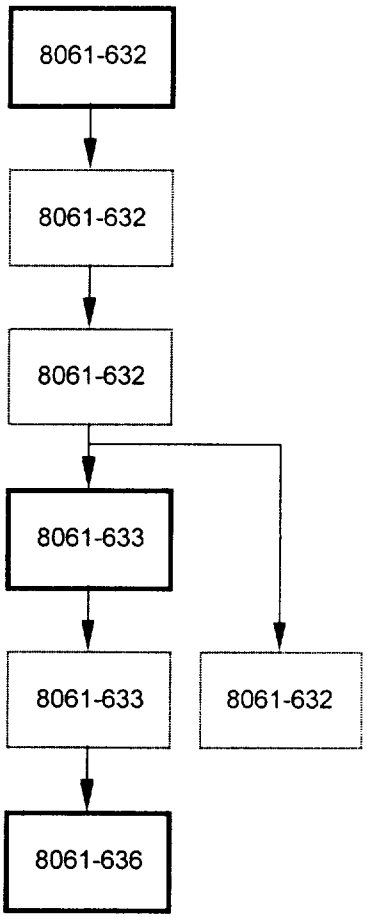


* This family tree is not intended to represent the combination of modifications fitted to units in service

V2522-A5 and V2524-A5 FMU family tree
Fig 1

V2527-A5 and V2527E-A5 FMU Family Tree *

Service Bulletin Number	Unit Mod Plate Endorsement
V2500-ENG-73-0087 Introduction of Woodward Governor Company (WGC) Fuel Metering Unit (FMU)	**NONE**
V2500-ENG-73-0101 Introduction of WGC FMU with strengthened housing	**ENG-73-0101**
V2500-ENG-73-0136 Introduction of WGC FMU with revised servovalve cover	**ENG-73-0136**
V2500-ENG-73-0157 Introduction of WGC FMU with revised max fuel flow stop (A320)	**NONE**
V2500-ENG-73-0151 Introduction of WGC FMU with revised microswitch	**ENG-73-0151**
V2500-ENG-73-0172 Introduction of a WGC switchable FMU suitable for all V2500-A5 engine models	**NONE**



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

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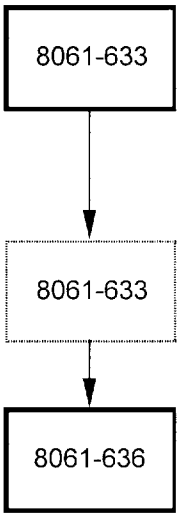
V2527-A5 and V2527E-A5 FMU family tree
Fig 2

V2527M-A5 FMU Family Tree *

Service Bulletin Number	Unit Mod Plate Endorsement
V2500-ENG-73-0158 Introduction of Woodward Governor Company (WGC) Fuel Metering Unit (FMU) with revised max fuel flow stop (A319)	**NONE**
V2500-ENG-73-0151 Introduction of a WGC FMU with revised microswitch	**ENG-73-0151**
V2500-ENG-73-0172 Introduction of a WGC switchable FMU suitable for all V2500-A5 engine models	**NONE**

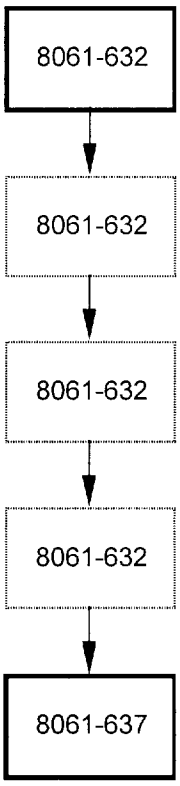


* This family tree is not intended to represent the combination of modifications fitted to units in service

V2527M-A5 FMU family tree
Fig 3

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

Service Bulletin Number	Unit Mod Plate Endorsement
V2500-ENG-73-0087 Introduction of Woodward Governor Company (WGC) Fuel Metering Unit (FMU)	**NONE**
V2500-ENG-73-0101 Introduction of WGC FMU with strengthened housing	**ENG-73-0101**
V2500-ENG-73-0136 Introduction of WGC FMU with revised servovalve cover	**ENG-73-136**
V2500-ENG-73-0151 Introduction of WGC FMU with revised microswitch	**ENG-73-0151**
V2500-ENG-73-0172 Introduction of WGC switchable FMU suitable for all V2500-A5 engine models	**NONE**



* 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
Fig 4

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WOODWARD
SERVICE BULLETIN

Fuel and Control - Fuel Metering Unit (FMU) - Introduction of New Models 8061-636 and 8061-637 and Conversion Instructions

1. Planning Information

A. Effectivity

This Service Bulletin affects the following Fuel Metering Units manufactured by Woodward Aircraft Engine Systems: 8061-636 and 8061-637. The following V2500-A5 engine models are affected: V2522, V2524, V2527, V2527M, V2527E, V2530, and V2533.

B. Concurrent Requirements

Not applicable.

C. Reason

This Service Bulletin introduces FMU models 8061-636/8061-637 and provides instructions that allow either unit to be reset to the alternative model.

D. Description

New models, 8061-636 and 8061-637 are introduced for use on the V2500-A5 engine series.

FMU model 8061-636 and 8061-637 are mechanically identical and only differ by their respective maximum fuel flow stop settings.

Model 8061-636 will be used on V2522, V2524, V2527, V2527M, and V2527E engine models.

Model 8061-637 will be used on V2530 and V2533 engine models.

Model 8061-636 may be converted into 8061-637 (and vice versa) as described in the Accomplishment Instructions of this document.

E. Compliance

Category code 7 in accordance with customer requirements.

F. Approval

S/B 83724-73-0004 has been technically approved by IAE on August 13, 2001 in accordance with appropriate FAR regulations and is FAA approved for those units listed herein.

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G. Manpower

An estimated 20 minutes is required to perform this service bulletin.

H. Weight and Balance

Not applicable.

I. 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 S/B 83724-73-0005.

IAE S/B V2500-ENG-73-0172.

SAE AS567, Safety Cable, Safety Wire, Key Washers, and Cotter Pins for Propulsion Systems.

L. Other Publications Affected.

None.

2. Material Information

A. Material - Price and Availability

Not applicable. All materials needed are commercially available.

B. Industry Support Information

Not applicable.

C. Material Necessary for Each Aircraft/Engine/Component

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Materials

Material	Description	Quantity	Source
Seal	P/N 67	2	Stoffel Seals Corporation Nyack, NY
Safety Wire	0.020 inch (0,51 mm) ±0.001 inch (0,03 mm) SAE AS567	As Required (3 feet maximum)	Commercially Available
Safety Wire	0.025 inch (0,64 mm) ±0.001 inch (0,03 mm) SAE AS567	As Required (3 feet maximum)	Commercially Available

D. Material Necessary for Each Spare

Materials

Material	Description	Quantity	Source
Seal	P/N 67	2	Stoffel Seals Corporation Nyack, NY
Safety Wire	0.020 inch (0,51 mm) ±0.001 inch (0,03 mm) SAE AS567	As Required (3 feet maximum)	Commercially Available
Safety Wire	0.025 inch (0,64 mm) ±0.001 inch (0,03 mm) SAE AS567	As Required (3 feet maximum)	Commercially Available

E. Reidentified Parts

Not applicable.

F. Tooling - Price and Availability

Tools

Description	Source
WT-140418	Woodward Aircraft Engine Systems

G. Other

Not applicable.

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3. Accomplishment Instructions

A. Converting from 8061-636 to 8061-637

NOTE: The FMU fuel system must be de-pressurized before instructions can be accomplished.

WARNING: BE CAREFUL WHEN REMOVING SAFETY WIRE. IF SAFETY WIRE IS PULLED WITH FORCE FROM THE COMPONENTS, IT CAN CAUSE INJURY TO PERSONS.

(1) Remove safety wire from plug assembly (10, sheet 1)

(2) Pull out pin (5) from plug assembly (10).

CAUTION: DO NOT EXCEED 50 LB. IN. (5,65 N.m) OF TORQUE DURING THIS PROCEDURE.

(3) Use hex tool to rotate detent (15) clockwise until there is sufficient clearance between the top of the detent (15) and the cap (20) to allow movement of the cap.

(4) Insert a hex tool into the larger internal hex on shaft (25). Rotate counterclockwise until the letter X is centered in the switch window.

(5) Using a hex tool, rotate detent (15) counterclockwise and torque counterclockwise to 19-22 lb. in. (2,15-2,48 N.m). Ensure that detent (15) prevents cap (20) from rotating.

(6) Install pin (5) into its original location. Be sure pin (5) is secure in the hexagon. Pin (5) should be pushed in until it springs/clicks fully into place.

(7) Remove safety wire from screw (30, sheet 2).

(8) Remove 2 screws (30) from nameplate (35).

(9) Inspect nameplate (35) for damage. If damage is excessive, replace nameplate (35) as shown in REPAIR section of CMM 73-28-06.

NOTE: It is normal for the nameplate to have some markings and material deformation caused by the screws.
Nameplate has identification markings on both sides.

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(10) Attach nameplate (35), with side indicating part number 8061-637 visible, with 2 screws (30). If run-on torque is less than 10 oz. in. (0,07 N.m), replace 2 screws (30). If run-on torque still is inadequate, then replace inserts as shown in REPAIR section of CMM 73-28-06. Torque 2 screws (30) to 5.5-6.0 lb. in. (0,62-0,68 N.m).

(11) Confirm that the letter X shows in the switch window and confirm that the nameplate (35) indicates the part number is 8061-637.

(12) Install 0.025 inch (0,64 mm) safety wire into eyelet of pin (5, sheet 3). Bend wire back on itself.

(13) Twist the 2 wires (using standard double twist method) per SAE AS567, or equivalent. Route the twisted wire under pin (5) and around the plug assembly (10). Be sure that wire is as taut as possible.

(14) Use one strand of safety wire to loop through the eyelet of pin (5). Twist the wire pair again to be sure that the wire is firmly attached to the eyelet of pin (5).

(15) Attach one seal (40) per SAE AS567, or equivalent, and apply end twists. Use WT-140418assembly tool to crimp seal (40) or use method in CMM 73-28-06 ASSEMBLY. Tie down the pigtail of the safety wire to the safety wire underneath.

(16) Install 0.020 inch (0,51 mm) safety wire in screw (30, sheet 4).

(17) Twist and loop safety wire underneath LP pump inlet boss. Route twisted safety wire back over the top of the LP pump inlet boss.

(18) Stop twist of the wires at intersection where the two wires meet. Loop the two wire strands around the twisted safety wire.

(19) Twist the wire, after the loop, such that the two sets of safety wire are attached. Install one seal (40) per SAE AS567. Use WT-140418assembly tool to crimp seal (40) or use method in CMM 73-28-06 ASSEMBLY.

(20) Finish wire twists and tie down safety wire to screw (30).

(21) Do the checks that follow:

- Check nameplate to make sure part number 8061-637 is visible.
- Make sure the stop setting letter is X.
- Make sure the lock pin is fully installed.
- Make sure the FMU serial number on nameplate and modification plate match.
- Check to be sure both seals are correctly installed.
- Check to be sure that seals bear either the # or W mark. These are the only acceptable marks.

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NOTE: The W mark will only be used by the original equipment manufacturer.

- Where applicable refer to the IAE SB 73-0172 for additional engine related checks.

B. Converting from 8061-637 to 8061-636

NOTE: The FMU fuel system must be de-pressurized before instructions can be accomplished.

WARNING: BE CAREFUL WHEN REMOVING SAFETY WIRE. IF SAFETY WIRE IS PULLED WITH FORCE FROM THE COMPONENTS, IT CAN CAUSE INJURY TO PERSONS.

(1) Remove safety wire from plug assembly (10, sheet 1)

(2) Pull out pin (5) from plug assembly (10).

CAUTION: DO NOT EXCEED 50 LB. IN. (5,65 N.m) OF TORQUE DURING THIS PROCEDURE.

(3) Use hex tool to rotate detent (15) clockwise until there is sufficient clearance between the top of the detent (15) and the cap (20) to allow movement of the cap.

(4) Insert a hex tool into the larger internal hex on shaft (25, sheet 1). Rotate clockwise until the letter O is centered in the switch window.

(5) Using a hex tool, rotate detent (15) counterclockwise and torque counterclockwise to 19-22 lb. in. (2,15-2,48 N.m). Ensure that detent (15) prevents cap (20) from rotating.

(6) Install pin (5) into its original location. Be sure pin (5) is secure in the hexagon. Pin (5) should be pushed in until it springs/clicks fully into place.

(7) Remove safety wire from screw (30, sheet 2).

(8) Remove 2 screws (30) from nameplate (25).

(9) Inspect nameplate (35) for damage. If damage is excessive, replace nameplate (35) as shown in REPAIR section of CMM 73-28-06.

NOTE: It is normal for the nameplate to have some markings and material deformation caused by the screws.
Nameplate has identification markings on both sides.

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(10) Attach nameplate (35), with the side indicating item number 8061-636 visible, with 2 screws (30). If run-on torque is less than 10 oz. in. (0,07 N.m), replace 2 screws (30). If run-on torque still is inadequate, then replace inserts as shown in REPAIR section of CMM 73-28-06. Torque 2 screws (30) to 5.5 - 6.0 lb. in. (0,62-0,68 N.m).

(11) Confirm that the letter O is showing in the switch window, and confirm that the nameplate (35) indicates the part number is 8061-636.

(12) Install 0.025 inch (0,64 mm) safety wire into eyelet of pin (5, sheet 3). Bend wire back on itself.

(13) Twist the 2 wires (using standard double twist method) per SAE AS567, or equivalent. Route the twisted wire under pin (5) and around the plug assembly (10). Be sure that wire is as taut as possible.

(14) Use one strand of safety wire to loop through the eyelet of pin (5). Twist the wire pair again to be sure that the wire is firmly attached to the eyelet of pin (5).

(15) Attach one seal (40) per SAE AS567, or equivalent, and apply end twists. Use WT-140418assembly tool to crimp seal (40) or use method in CMM 73-28-06 ASSEMBLY. Tie down the pigtail of the safety wire to the safety wire underneath.

(16) Install 0.020 inch (0,51 mm) safety wire in screw (30, sheet 4).

(17) Twist and loop safety wire underneath LP pump inlet boss. Route twisted safety wire back over the top of the LP pump inlet boss.

(18) Stop twist of the wires at intersection where the two wires meet. Loop the two wire strands around the twisted safety wire.

(19) Twist the wire, after the loop, such that the two sets of safety wire are attached. Install one seal (40) per SAE AS567. Use WT-140418assembly tool to crimp seal (40) or use method in CMM 73-28-06 ASSEMBLY.

(20) Finish wire twists and tie down safety wire to screw (30).

(21) Do the checks that follow:

- Check nameplate to make sure part number 8061-636 is visible.
- Make sure the stop setting letter is O.
- Make sure the lock pin is fully installed.
- Make sure the FMU serial number on nameplate and modification plate match.
- Check to be sure both seals are correctly installed.
- Check to be sure that seals bear either the # or W mark. These are the only acceptable marks.

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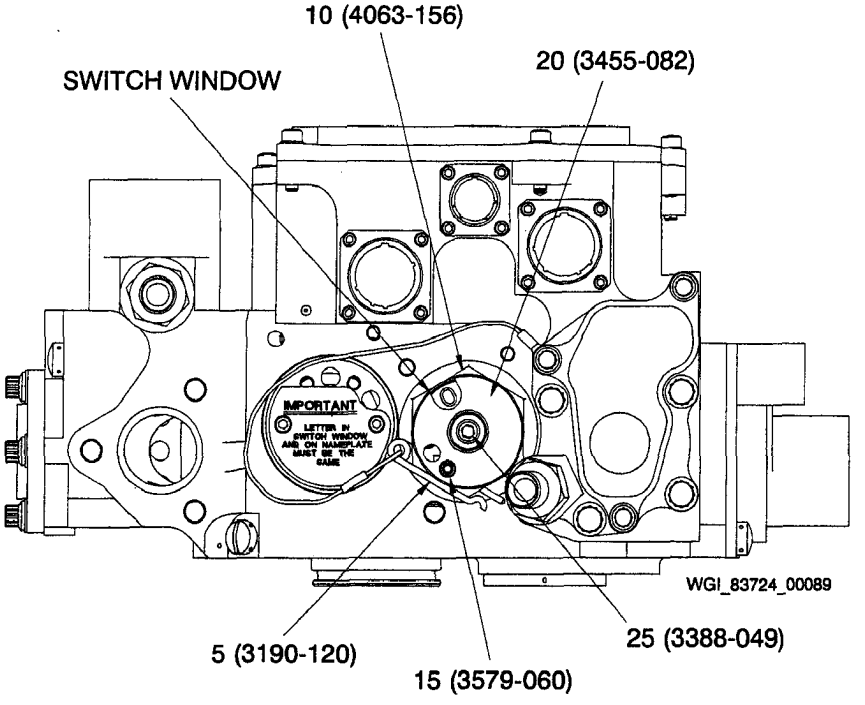
NOTE: The W mark will only be used by the original equipment manufacturer.

- Where applicable refer to the IAE SB 73-0172 for additional engine related checks.



Conversion Procedures
(Sheet 1 of 4)

LEGEND
5 PIN (P/N 3190-120)
10 PLUG ASSEMBLY (P/N 4063-156)
15 DETENT (P/N 3579-060)
20 CAP (P/N 3455-082)
25 SHAFT (P/N 3388-049)
30 SCREW (2) (P/N 218814)
35 NAMEPLATE (P/N 3082-308)
40 SEAL (2) (P/N 218006)

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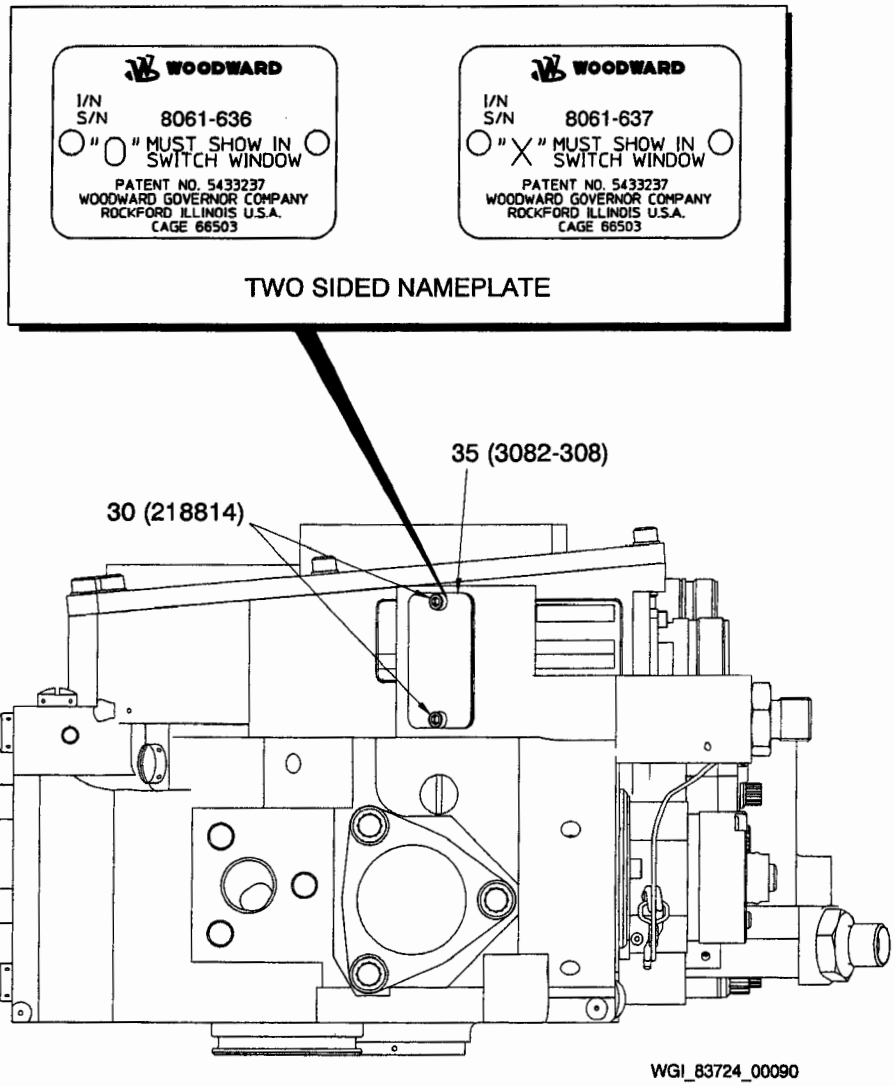

Conversion Procedures
(Sheet 2 of 4)

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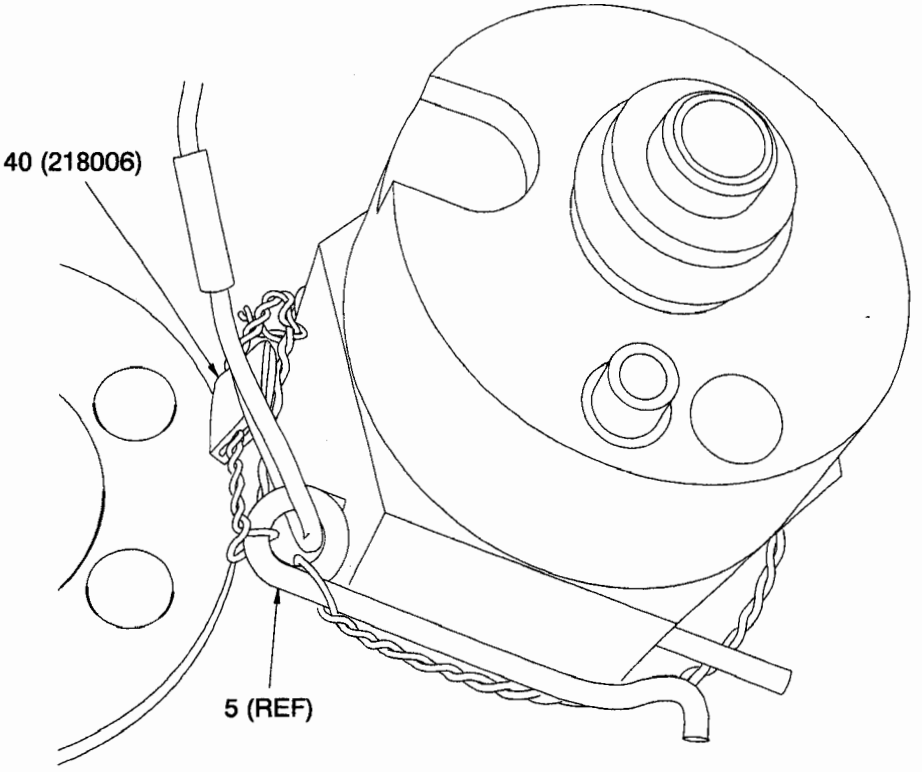

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Conversion Procedures
(Sheet 3 of 4)

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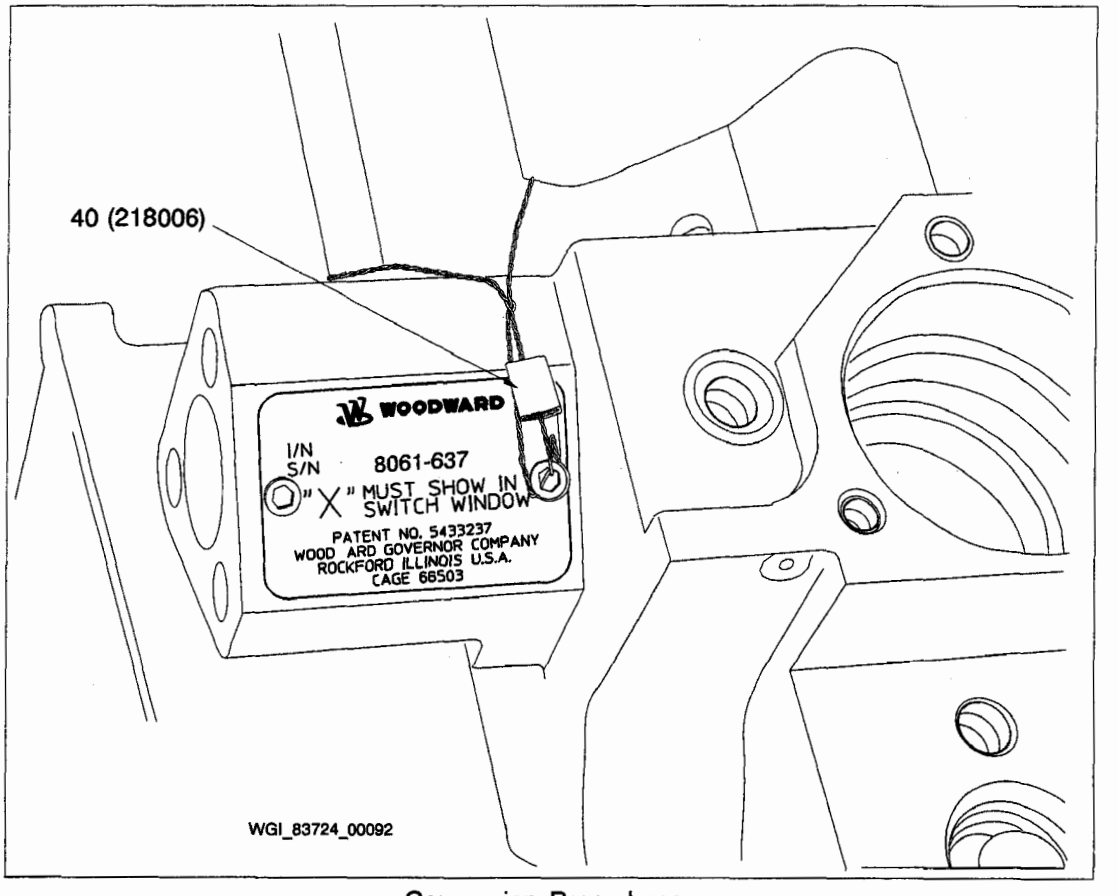

Conversion Procedures
(Sheet 4 of 4)

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WOODWARD
SERVICE BULLETIN

FUEL and CONTROL - FUEL METERING UNIT (FMU) - Rework of 8061-627, 8061-632 or 8061-633 into 8061-636 or 8061-637

1. Planning Information

A. Effectivity

The following Fuel Metering Units manufactured by Woodward Aircraft Engine Systems are affected by this Service Bulletin: 8061-627, 8061-632, 8061-633, 8061-636 and 8061-637. The following V2500-A5 engine models are affected: V2522, V2524, V2527, V2527M, V2527E, V2530, and V2533.

B. Concurrent Requirements

Not applicable.

C. Reason

This Service Bulletin provides instructions for reworking model 8061-627, 8061-632 or 8061-633 into model 8061-636 or 8061-637.

D. Description

New models, 8061-636 and 8061-637, are introduced for use on the V2500-A5 engine series.

Models 8061-627, 8061-632, 8061-633, 8061-636 and 8061-637 FMU's are similar except for the fuel metering valve hardware and settings for the maximum fuel flow stop.

This Service Bulletin is written so that models 8061-627, 8061-632, 8061-633 can be reworked into model 8061-636 or 8061-637. This may be beneficial to mixed fleet operators as models 8061-636 and 8061-637 are the "switchable FMU". The setting change procedure for the switchable FMU is described in S/B 83724-73-0004.

E. Compliance

No action is required by the operator.

F. Approval

S/B 83724-73-0005 has been technically approved by IAE on August 8, 2001 in accordance with appropriate FAR regulations and is FAA approved for those units listed herein.

G. Manpower

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P.O. Box 405
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An estimated 8 hours is required to perform this service bulletin.

H. Weight and Balance

The weight of the FMU is increased by 0.13 lb.

I. 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 S/B 83724-73-0004.

IAE S/B V2500-ENG-73-0172.

L. Other Publications Affected

Not applicable.

2. Material Information

A. Material - Price and Availability

Contact Woodward Aircraft Engine Systems for part availability, pricing, and estimated turnaround time for the conversion effort.

B. Industry Support Information

Not applicable.

C. Material Necessary for Each Aircraft/Engine/Component

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

Materials Needed

Part Number	Quantity
189948	3 feet maximum
218006	2
218814	2
219320	3 feet maximum
3082-308	1
5400-016	1
4063-156	1
3388-049	1
3240-059	1
3579-060	1
3455-082	1
3266-076	1
3081-964	1
3003-582	4 maximum
1032-402	2
1609-630	1
3127-028	1
3003-359	0.010 inch (0,25 mm) maximum
1354-240	1
1037-340	3
1037-304	2
218856	2
218789	1
218400	3
182748	1
182798	1
182618	1

D. Material Necessary for Each Spare

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USA

Materials Needed

Part Number	Quantity
189948	3 feet maximum
218006	2
218814	2
219320	3 feet maximum
3082-308	1
5400-016	1
4063-156	1
3388-049	1
3240-059	1
3579-060	1
3455-082	1
3266-076	1
3081-964	1
3003-582	4 maximum
1032-402	2
1609-630	1
3127-028	1
3003-359	0.010 inch (0,25 mm) maximum
1354-240	1
1037-340	3
1037-304	2
218856	2
218789	1
218400	3
182748	1
182798	1
182618	1

E. Reidentified Parts

Not applicable.

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Rockton, Illinois 61072-0405
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3. Accomplishment Instructions

(1) Remove the FMU from the engine and return to the address shown below:

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One Woodward Way
Rockton, IL 61072-0405
USA

(2) Disassemble FMU as told in CMM 73-28-06 DISASSEMBLY.

(3) Assemble FMU as told in CMM 73-28-06 ASSEMBLY.

(4) Test the FMU to the requirements for the applicable model, 8061-636 or 8061-637, as told in CMM 73-28-06 TESTING AND FAULT ISOLATION.

(5) Safety cable as told in CMM 73-28-06 ASSEMBLY.

(6) Replace nameplate(s) 3082-284 with 3082-308 and mark with new part number requirements per CMM 73-28-06 REPAIR.

(7) Do not mark the Service Bulletin dataplate.