

**International Aero Engines****RR-DERBY**

400 MAIN STREET, MAIL STOP 121-10  
 EAST HARTFORD, CT 06108, USA.  
 TELEPHONE: 860 565 5515  
 FAX: 860 565 0600

P.O. BOX 31, DERBY  
 TELEGRAMS - 'ROYCAR' DERBY  
 TELEX - 37645  
 TELEPHONE - DERBY 242424

DATE ~~R~~ Feb.28/02**V2500-A1/A5 SERIES PROPULSION SYSTEMS SERVICE BULLETIN**

Printed in Great Britain

This document transmits Revision 1 to Service Bulletin EV2500-73-0163

Document History

Service Bulletin Revision Status  
 Initial Issue                  Jun.16/00

Supplement Revision Status

Bulletin Revision 1

Remove  
 All pages of the  
 Service Bulletin  
 All pages of  
 Appendix 1

Incorporate  
 Pages 1 to 8 of the  
 Service Bulletin  
 Page 1 and 2 of  
 Appendix 1

Reason for change  
 To update Material  
 Information  
 To update Material  
 Information

**V2500-ENG-73-0163**  
 Transmittal - Page 1 of 2

CHECK THAT ALL PREVIOUS TRANSMITTALS HAVE BEEN INCORPORATED

If any have not been received please advise Publication 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 1 are as follows:

<u>Page</u>	<u>Revision Number</u>	<u>Revision Date</u>
Bulletin		
R 1	1	Feb.28/02
R 2	1	Feb.28/02
R 3	1	Feb.28/02
R 4	1	Feb.28/02
R 5	1	Feb.28/02
R 6	1	Feb.28/02
R 7	1	Feb.28/02
R 8	1	Feb.28/02
Appendix 1		
R 1	1	Feb.28/02
R 2	1	Feb.28/02

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ENGINE – PROVIDE NEW ELECTRONIC ENGINE CONTROL SUPPORT SHIMS

1. Planning Information

A. Effectivity

(1) Airbus A319

V2522-A5, V2524-A5, V2527M-A5 Engines Serial No. V10001 thru V10661\*

\* This estimate of engine serial numbers will be revised, if necessary, when parts are installed in engines at Pratt and Whitney.

(2) Airbus A320

V2500-A1 Engines Serial No. V0001 thru V0361

V2527-A5, V2527E-A5 Engines Serial No. V10001 thru V10661\*

\* This estimate of engine serial numbers will be revised, if necessary, when parts are installed in engines at Pratt and Whitney.

(3) Airbus A321

V2530-A5, V2533-A5 Engines Serial No. V10001 thru V10661\*

\* This estimate of engine serial numbers will be revised, if necessary, when parts are installed in engines at Pratt and Whitney.

(4) ATA Locator

73-22-00

B. Concurrent Requirements

None.

C. Reason

(1) Condition

The Electronic Engine Control (EEC) mounts use an adjustable shim to meet the proper fit on the fan case. These shims present a risk of hand injury during mount assembly.



(2) Background

The shims are made of metal layers which are peeled away to obtain the proper thickness. The edges of these layers are sharp, and may cause hand injury during the handling process.

(3) Objective

The purpose of this Service Bulletin is to introduce a solid shim without sharp edges.

(4) Substantiation

- (a) Predicted stress levels are shown to be less than the maximum allowable steady stress for this material.
- (b) Analysis of EEC mount brackets shows stress levels below the maximum allowable steady stress for this material. Strain gauge testing of the lower EEC mount bracket has confirmed the accuracy of this analysis.

(5) Effect of Bulletin on:

(a) Removal/Installation

Not affected.

(b) Disassembly/assembly

Affected (See Supplemental Information)

(c) Cleaning

Not affected.

(d) Inspection/Check

Not affected.

(e) Repair

Not affected.

(f) Testing

Not affected.

(6) Supplemental Information

The new configuration has revised fit dimensions.



D. Description

Provide new shims for the installation of the Electronic Engine Control.

E. Compliance

Category Code 8.

Accomplish based upon experience with the prior configuration.

F. Approval

The part number changes and/or part modifications specified in the Accomplishment Instructions and Material Information sections of this Service Bulletin have been shown to comply with the applicable Federal Aviation Regulations and are FAA-APPROVED for the engine model(s) given.

The 'Compliance' statement and the procedures described in this Service Bulletin have been shown to comply with the applicable Federal Aviation Regulations and are FAA-APPROVED for the engine model listed.

G. Manpower

Estimated manhours to incorporate the full intent of this Service Bulletin:

(1) In Service

Not applicable.

(2) At Overhaul

Not applicable.

H. Weight and Balance

(1) Weight Change

None.

(2) Moment Arm

Not affected.

(3) Datum

Engine front mount centreline (Power Plant Station (PPS) 100).

I. Electrical Load Data

The aircraft electrical load is not affected by this Service Bulletin.



J. Software Accomplishment Summary

Not applicable.

K. References

- (1) IAE V2500 Service Bulletin V2500-ENG-70-0152 (Information - Engine - Introduce The Availability Of Shims To Assist In The Proper Installation Of The Electronic Engine Control (EEC)).
- (2) V2500 Engine Illustrated Parts Catalogs (S-V2500-1IA, S-V2500-2IA, S-V2500-2IB, S-V2500-5IA, S-V2500-5IB, S-V2500-6IA, S-V2500-6IB, S-V2500-7IA, S-V2500-7IB), Chapter/Section 73-22-34.
- (3) V2500 Engine Manual (E-V2500-1IA), Chapter/section 70-00-32.
- (4) The V2500 Standard Practices/Processes Manual, 70-00-00.
- (5) Internal Reference No. EC 98VA027

L. Other Publications Affected

- (1) V2500 Engine Illustrated Parts Catalogs (S-V2500-1IA, S-V2500-2IA, S-V2500-2IB, S-V2500-5IA, S-V2500-5IB, S-V2500-6IA, S-V2500-6IB, S-V2500-7IA, S-V2500-7IB), Chapter/Section 73-22-34.
- (2) The V2500 Overhaul Processes and Consumables Index.

M. Interchangeability of Parts

Old and new parts are directly interchangeable.

N. Information in the Appendix

Alternate Accomplishment Instructions (No).

Progression Charts (Yes).

Added Data (Yes).

Revised to Table of Limits (No).

Inspection Procedures (No).



## 2. Material Information

### A. Material – Price and Availability

- R (1) The estimated price of new material to do this Service Bulletin using new  
R replacement parts is US\$ 80.80.

There is no kit provided to do this Service Bulletin.

Part availability information is provided in material data  
Instructions-Disposition.

### B. Industry Support Program

Not applicable.

### C. The material data that follows is for each engine

NOTE: The prices shown are for estimating purposes only and as such are given  
in good faith without commercial liability for advanced planning  
purposes only. Refer to IAE Spares an/or current Price Catalog for  
current prices.

For V2500-A1, V2522-A5, V2524-A5, V2527-A5, V2527E-A5, V2527M-A5, V2530-A5,  
V2533-A5 Engines:

73-22-34

FIG ITEM NO.	NEW PART NO.	EST. PRICE US\$	QTY	PART TITLE	MAT	OLD PART NO.	INSTR DISP
R 01050	–	*	AR	Shim, laminated	–	2A1019	(S1)(B)
01050	2A3467	20.20	AR	Shim, 0.012	–	–	(S1)(A)

### D. Instruction Disposition Codes

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

(A) The new part is currently available.

(B) The old part will no longer be supplied.

### E. Tooling – Price and Availability

Special tools are not necessary.

### F. Re-identified Parts:

Not applicable.



**G. Other Material Information Data:**

Not applicable.





### 3. Accomplishment Instructions

#### A. Rework Instructions

None.

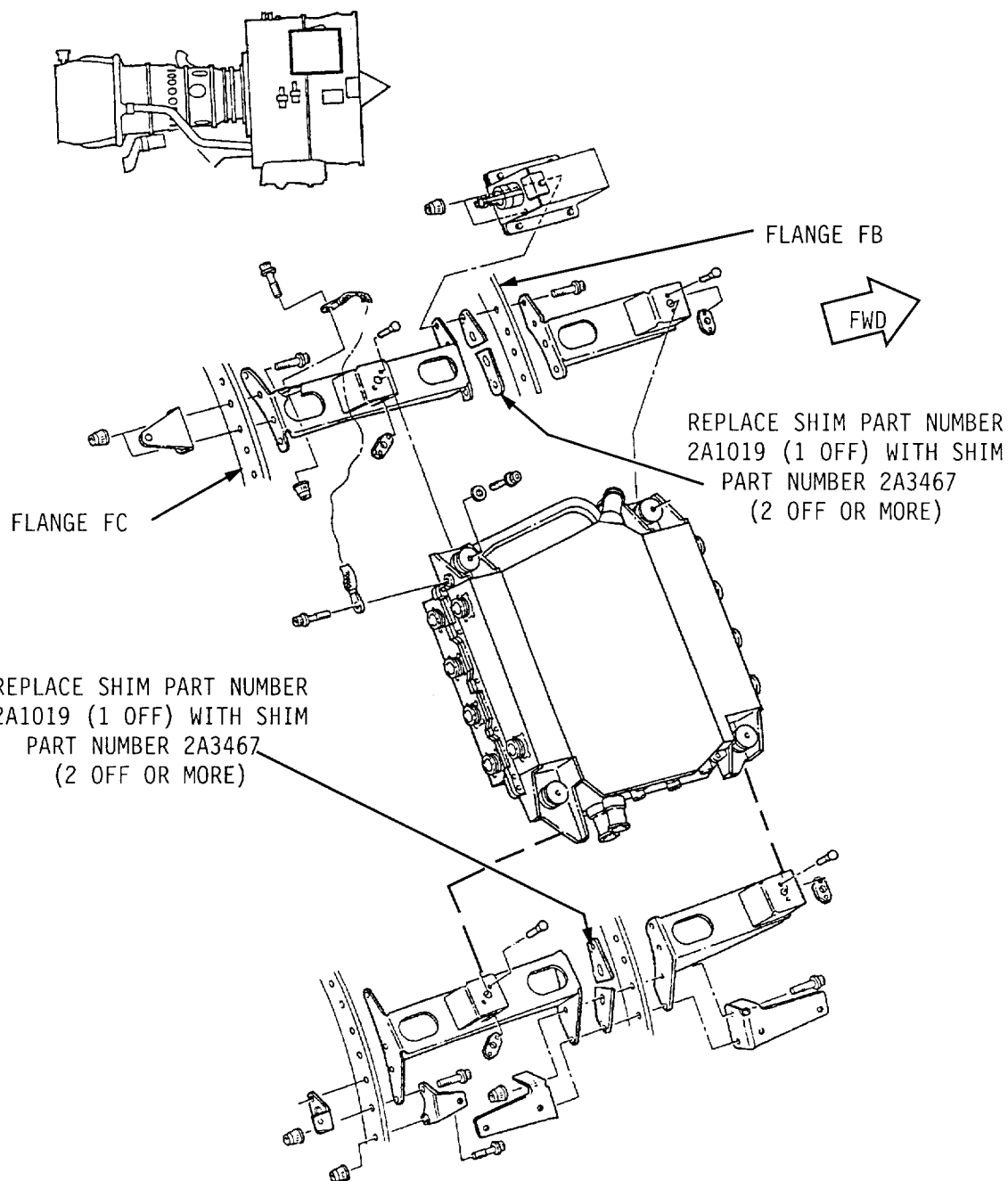
#### B. Assembly Instructions

- R (1) Replace the laminated shim 2A1019 (1 off) with Shims 2A3467 (2 off or more  
R as required). For the correct removal/installation procedures, refer to  
R Engine Manual 72-00-32.
- (2) Mount the EEC support W on Flange FC. Use standard procedures.
- (3) Measure the gap two places adjacent to bracket gussets between the forward surface of the EEC support W and flange FB.
- (4) Fill the gaps with shims as required to produce a clearance of 0.000 to 0.011 inch (0.000 to 0,279 mm.) loose fit.

#### C. Recording Instructions

A record of accomplishment is required.

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Location of Shims  
Fig.1

V2500-ENG-73-0163



**International Aero Engines**

**SERVICE BULLETIN**

APPENDIX 1

Parts Progression

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Jun 16/00  
R Feb.28/02

**V2500–ENG–73–0163**  
Appendix 1 – Page 1 of 2

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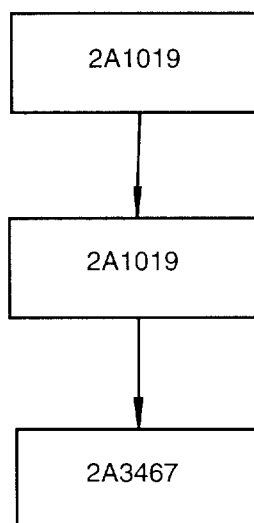
MODIFICATIONS

PART NUMBER CHANGE

BASELINE

V2500-ENG-70-0152  
INFORMATION – ENGINE – INTRODUCE  
THE AVAILABILITY OF SHIMS TO ASSIST  
IN THE PROPER INSTALLATION OF THE  
ELECTRONIC ENGINE CONTROL (EEC)

V2500-ENG-73-0163  
ENGINE – PROVIDE NEW ELECTRONIC  
ENGINE CONTROL SUPPORT SHIMS



R

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R

Family Tree – Electronic Engine Control Support Shims Ref. Catalog Sequence No.  
73-22-34. Fig. 01 Item 250  
Fig.2

**V2500-ENG-73-0163**

Appendix 1 – Page 2

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Jun 16/00  
R Feb.28/02