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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

DATER May. 18/01

V2500-A1/A5 SERIES PROPULSION SYSTEMS SERVICE BULLETIN

This document transmits Revision 1 to Service Bulletin EV2500-73-0138

Document History

Service Bulletin Revision Status Supplement Revision Status

Initial Issue Nov.20/98

Bulletin Revision 1

Remove Incorporate Reason for change

Pages 1 to 5 of the Pages 1 to 5 of the To clarify the concurrency

Service Bulletin Service Bulletin statement

V2500-ENG-73-0138

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 © Rolls-Royce plc (date as above) Printed in Great Britain

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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>	Revision Date	
				Prir
Bul	letin			tec
R	1	1	May 18/01	₹.
R	2	1	May 18/01	ଦୁ
R	3	1	May 18/01	reat
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R	5	1	May 18/01	tain
	6		Nov.20/98	
	7		Nov.20/98	



<u>ENGINE FUEL AND CONTROL - DEDICATED ALTERNATOR STATOR - INTRODUCTION OF AN ENGINE DEDICATED ALTERNATOR WITH REVISED ELECTRICAL CONNECTORS</u>

1. Planning Information

A. Effectivity

- (1) Airbus A319
 - (a) V2522-A5, V2524-A5 Engines prior to Serial No.V10550
- (2) Airbus A320
 - (a) V2500-A1 Engines prior to Serial No.V0362
 - (b) V2527-A5, V2527E-A5 Engines prior to Serial No.V10550
- (3) Airbus A321
 - (a) V2530-A5, V2533-A5 Engines prior to Serial No.V10550
- (4) ATA Location

73-22-00

B. Concurrent Requirements

- R (1) This Service Bulletin must be installed with one of the IAE V2500 Service Bulletins that follow:
- R EITHER
- R (a) ENG 71-0219, (Refer to 1.L. (3)).
- R OR
- R (b) ENG 71-0220 (A5 only) and ENG 71-0221 (A1 only), (Refer to 1.L.(1) and R (2))
- R (2) This Service Bulletin can only be installed to engines that have the V2500 R Service Bulletin that follows embodied:
- R ENG 73-0093 (Refer to 1.L.(3)(b))

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C. Reason

(1) Problem

Burning of the pins of the connectors for the Engine Dedicated Alternator (EDA) stator can occur.

The problem is caused by the design of the interface connectors for Loom-A and Loom-B, which cannot resist the vibrations that occur at this location.

(2) Evidence

The pin burning has been found on in-service engines.

(3) Substantiation

A satisfactory engineering analysis has been done on the changes introduced by this Service Bulletin. In addition, an identical modification has been successfully incorporated on V2500-D5 Engines.

(4) Objective

R

The purpose of this Service Bulletin (Modification) is 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

Affected (Refer to 2.B.)

(f) Fits and Clearances

Not affected

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D. <u>Description</u>

- (1) This Service Bulletin includes the installation of an EDA Stator that has had B.F. Goodrich Modification 32993 embodied.
- (2) The changes introduced are as follows:
 - (a) A revised EDA Stator is introduced. The two receptacles have been changed from MIL-C-38999 Series III types to ESC10 (MIL-C-83723 Series III) types which have a revised attachment flange.
- (3) Existing Unison (B.F. Goodrich) EDA Stators, Type-430110, can be returned to vendor for rework.
- (4) Units that have had this modification embodied, will be identified by a new type number (Refer to 2.B.).

E. Compliance

Category Code 6

R This Service Bulletin can be accomplished when the subassembly (that is: modules, accessories, components, build groups) is disassembled sufficiently to get access to the affected parts.

F. Approval

The part number changes and/or part modifications are given in Section 2 and 3 of this Service Bulletin. They comply with the applicable Federal Aviation Regulations and are FAA-APPROVED for the engine models listed.

G. Manpower

Estimate of manhours necessary to embody this Service Bulletin in full:

- (1) In Service
 - (a) To gain access

16 minutes

(b) To replace engine dedicated alternator

34 minutes

(c) To return the engine to a serviceable status

20 minutes

(d) Total: 1 hour 10 minutes

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(2) At Overhaul

(a) To replace engine dedicated alternator

34 minutes

(b) Total: 34 minutes

NOTE: It is possible to get access to the parts affected by this

Service Bulletin at overhaul.

H. Material - Price and Availability

A modification kit is not necessary

I. Tooling - Price and Availability

Special tools are not necessary

J. Weight and Balance

(1) Weight Change

None

(2) Moment Arm

Not affected

(3) Datum

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

K. Electrical Load Data

This Service Bulletin does not affect the aircraft electrical load.

- L. References
 - (1) A1 Model only
 - (a) ENG 71-0221

Powerplant - Electrical harnesses - EEC harness - Fan - Introduction of revised engine dedicated alternator connectors (New Production)

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- (2) A5 Model only
 - (a) ENG 71-0220

Powerplant - Electrical harnesses - EEC harness - Fan - Introduction of revised engine dedicated alternator connectors (New Production)

- (3) A1 and A5 Models
 - (a) ENG 71-0219

Powerplant - Electrical harnesses - EEC harness - Fan - Introduction of revised engine dedicated alternator connectors (Rework)

(b) ENG 73-0093

Engine dedicated alternator drive gear assembly - Introduction of revised standard of attaching bolts for the engine dedicated alternator (EDA)

- (4) A1/A5 Engine Manual (EM), Chapter/Section 72-00-60, Removal-05/Installation-05.
- (5) A319/A320/A321 Aircraft Maintenance Manual (AMM), Chapter/Section 73-22-38, Removal/Installation.
- (6) Airbus Aircraft Modification No.28065.
- (7) Internal Reference No.

EC96VI008B

- M. Other Publications Affected
- R Illustrated Parts Catalogue (IPC), Chapter/Section 73-22-38.

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2. Material Information

A. Kits necessary for this Service Bulletin:

None

B. New production parts:

PART NO.	QTY	UNIT PRICE
		US DOLLARS
430153	1	13323.00

<u>NOTE</u>: The unit prices, if shown, are an estimate and they are given for the purpose of planning only. For actual prices, refer to the IAE Price Catalogue or contact IAE's spare parts sales department.

C. Vendor units affected by this Service Bulletin:

(1) The unit type number changes that follow have been allocated to identify units that embody this Service Bulletin:

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FIG	NEW			OLD	
ITEM	PART			PART	INSTR
NO.	NO.	QTY	PART TITLE	NO.	DISP
01–100	430153	1	Generator, stator - Alternator (V83311)	430110	(A)(B)(S1) (1D)

D. <u>Instructions disposition codes:</u>

- (A) Old unit will be discontinued.
- (B) New unit will be available from December 1998.
- (S1) Old and new parts are not interchangeable.
- (1D) Old units can be returned to vendor for rework.

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