

POWER PLANT - ELECTRICAL HARNESS - EEC HARNESS - FAN - INTRODUCTION OF REVISED ENGINE DEDICATED ALTERNATOR CONNECTORS (NEW PRODUCTION) - CATEGORY CODE 7 - MOD.ENG-71-0220

Printed in Great Britain

1. Planning Information

A. Effectivity

- (1) Aircraft: (a) Airbus A319.  
(b) Airbus A320.  
(c) Airbus A321.
- (2) Engines: (a) V2522-A5 Engines prior to Serial No. V10550.  
(b) V2524-A5 Engines prior to Serial No. V10550.  
(c) V2527-A5 Engines prior to Serial No. V10550.  
(d) V2527E-A5 Engines prior to Serial No. V10550.  
(e) V2530-A5 Engines prior to Serial No. V10550.  
(f) V2533-A5 Engines prior to Serial No. V10550.

B. Concurrent Requirements

This Service Bulletin must only be installed to engines that have IAE V2500 Service Bulletin ENG 73-0138 embodied. (Refer to 1.L.(2)).

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.

Also, the EEC fan harness assembly may have insufficient length to the Fuel Temperature Sensor connector.

(2) Evidence

The problem has been found on engines in service.

(3) Substantiation

A satisfactory engineering analysis and successful incorporation of a similar modification on V2500-D5 engines, have been done on the changes introduced by this Service Bulletin.

(4) Objective

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The purpose of this Service bulletin is to maintain reliability.

(5) Effect of Bulletin on:

(a) Operation

Not affected.

(b) Maintenance

Affected.

(c) Overhaul

Affected.

(d) Repair Schemes

Not affected.

(e) Interchangeability

Affected. (Refer to 2.C.).

(f) Fits and Clearances

Not affected.

D. Description

- (1) This Service Bulletin introduces a revised EEC Fan Harness assembly. To prevent pin burning the connectors at the EDA interface have been revised. In addition, to make it easier to install the harness, the length of the harness has been increased.
- (2) The opportunity has also been taken to replace the Harco Laboratories thermocouple harness sub-assembly with standard items. The thermocouple harness, between the FCOC and EEC, has become an integral part of the main EEC Fan harness assembly.
- (3) The changes to the EEC Fan harness assembly are as follows:
  - (a) Revised connectors are introduced at positions 4005EV-A and 4005EV-B. To prevent backing-off, the locking mechanism has been made finer.
  - (b) The quantity of contact sockets is increased from 10 to 12.
  - (c) The quantity of blanking plugs at connector 4005EV-A is increased from 2 to 4.

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- (d) The quantity of blanking plugs at connector 4005EV-B is increased from 2 to 4.
- (e) Revised backshells are introduced for the revised connectors.
- (f) The thermocouple harness sub-assembly between the FCOC and EEC is now redundant. The features of this harness have become an integral part of the EEC Fan harness assembly.
- (g) The length of the revised thermocouple limb-harness has increased by 25,0 mm towards the FCOC terminal block.

**E. Compliance**

Category Code 7.

This Service bulletin can be accomplished when there are no existing parts remaining.

**F. Approval**

The part number changes and/or part modification are given in sections 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      Not applicable.
- (2) At overhaul    No additional time is necessary to embody this Service Bulletin.

NOTE: It is possible to get access to the parts affected by this Service Bulletin at overhaul.

**H. Material – Price and Availability**

- (1) A modification kit is not necessary.
- (2) Refer to 2 Material Information for prices and availability of future spares.

**I. Tooling – Price and Availability**

Special tools are not necessary.

**J. Weight and Balance**

- (1) Weight Change

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None.

- (2) Moment Arm

Not effected.

- (3) Datum

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

K. Electrical Load Data

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

L. Reference

- (1) Internal Reference No.

EC98VR015

- (2) Other references

This Service Bulletin must be installed at the same time as the IAE V2500 Service bulletin that follows:

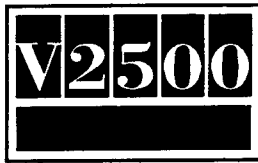
ENG 73-0138      ENGINE FUEL AND CONTROL – DEDICATED ALTERNATOR  
(STATOR) – INTRODUCTION OF REVISED RECEPTACLES.

A5 Engine Manual (EM), Chapter/Section 72-00-32, Removal-02 and  
Installation-04 CONFIG-2.

Airbus aircraft modification No. 28065

M. Other Publications Affected

- (1) Component Maintenance Manual Electrical Harnesses and Cables  
(CMM-V2500-EHC-1IA), Chapter/Section 71-51-41 Cleaning and  
Inspection/Check.
- (2) A5 Engine Manual (EM), Chapter/Section 72-00-32 Removal-02 and  
Installation-04 CONFIG-2.
- (3) Illustrated Parts Catalogue (IPC), Chapter/Section 71-51-41.



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2. Material Information

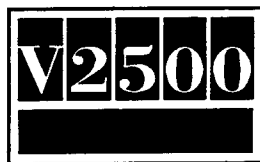
## A. Kits necessary for this Service Bulletin:

None.

## B. Parts affected by this Service Bulletin:

NEW PART No. (ATA No.)	QTY	EST'D UNIT PRICE (\$)	PART TITLE	OLD PART No. (IPC No.)	INSTR DISP
6A7450 (71-51-41)	1	54910.00	.Harness assy-EEC fan	6A7399 (01-005)	(A)(S1)
ESC65E12 (71-51-41)	1	143.00	..Clamp, backshell (VU1653)	92H1-13-8JCCAD (03-490)	(B)(E)
- (71-51-41)	1		..Clamp, backshell assy (VU0419)	388HS104E13 (03-490)	(E)
- (71-51-41)	1		..Clamp, backshell assy (VU2824)	272E13 (03-490)	(E)
ESC65E12 (71-51-41)	1		..Clamp, backshell (VU1653)	92H1-13-8JCCAD (03-510)	(B)(E)
- (71-51-41)	1		..Clamp, backshell assy (VU0419)	388HS104E13 (03-510)	(E)
- (71-51-41)	1		..Clamp, backshell assy (VU2824)	272E13 (03-510)	(E)
2A1442 (71-51-41)	2	6.08	..Separator	- (03-742)	(B)(C)
2A1443 (71-51-41)	4	2.12	..Sleeve	- (03-743)	(B)(C)
U440271 (71-51-41)	1		..Sleeve (Bulk stk U323940)	- (03-804)	(B)(C) (G)
or					
U440272 (71-51-41)	1		..Sleeve (Bulk stk HS032WE)	- (03-804)	(B)(C) (H)
U440052 (71-51-41)	1		..Sleeving (Bulk stk 3109016)	- (03-808)	(B)(C) (J)

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or

U440273 (71-51-41)	1	..Sleeve (Bulk stk SP0E64)	- (03-808)	(B)(C) (K)
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U440266 (71-51-41)	1	..Sleeving (Blk stk 1025604)	- (03-810)	(B)(C) (L)
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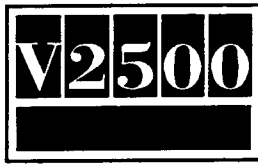
or

U440274 (71-51-41)	1	..Sleeve (Bulk stk SP0E95)	- (03-810)	(B)(C) (M)
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ESC10SE61212SN0 (71-51-41)	1	382.00	..Connector (VU1653)	T3K121398SN1259 (04-490)	(B)(E)
(71-51-41)	1		..Connector assy (V14283)	MT938T13K98S901 (04-490)	(E)
ESC30S20BC (71-51-41)	12		..Contact, socket (VU1653)	5A9290 (04-495)	(B)(F) (1D)(3D)
ESC36-20 (71-51-41)	4		..Plug, sealing (VU1653)	MS27488-20 (04-509)	(B)(2D)
ESC10SE61212S60 (71-51-41)	1	149.00	..Connector (VU1653)	T3K121398SA1259 (04-510)	(B)(E)
- (71-51-41)	1		..Connector assy (V14283)	1017689 (04-510)	(E)
ESC30S20BC (71-51-41)	12	2.33	..Contact, socket (VU1653)	5A9290 (04-515)	(B)(F) (1D)(3D)
ESC36-20 (71-51-41)	4		..Plug, sealing (VU1653)	MS27488-20 (04-529)	(B)(2D)
UP12110 (71-51-41)	2		..Terminal	- (04-882)	(B)(C)
UP12111 (71-51-41)	2		..Terminal	- (04-884)	(B)(C)
322320 (71-51-41)	2		..Terminal (VK1636)	- (04-886)	(B)(C)
- (71-51-41)	2		..Lead assy, thermocouple (V7M726)	HAB22416 (04-900)	(E)

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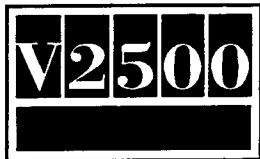
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NOTE: The unit prices, if shown, are an estimate and they are given for the purposes of planning only. For information about actual prices, refer to the IAE Price Catalogue or contact IAE's spare parts sales department.

**C. Instruction Disposition Codes:**

- (A) New part will be available from January 1999.
- (B) New part is currently available.
- (C) Additional.
- (E) Old part becomes redundant after this Service Bulletin has been embodied.
- (F) Indentation level has changed from 3 dot (...) to 2 dot (..).
- (G) Alternative to reference spare U323940.
- (H) Alternative to reference spare HS032WE.
- (J) Alternative to reference spare TFER1-4X.
- (K) Alternative to reference spare 3106065.
- (L) Alternative to reference spare TFER3-8X.
- (M) Alternative to reference spare U324097.
- (S1) Old and new parts are not interchangeable.
- (1D) Quantity increased from 10 to 12.
- (2D) Quantity increased from 2 to 4.
- (3D) Old part can be used at other locations.



3. Accomplishment Instructions

A. Rework Instructions

None

B. Assembly Instructions

For the correct removal/installation procedures refer to the:

- (1) A5 engine Manual (EM), Chapter/Section 72-00-32. Removal -02 and Installation-04 CONFIG-2.

C. Recording Instructions

A record of accomplishment is necessary.