International Aero Engines

SERVICE BULLETIN

ENGINE - POWER PLANT - EEC HARNESS FAN - FCOC FUEL TEMPERATURE THERMOCOUPLE CONNECTOR WITH IMPROVED SOCKETS - CATEGORY CODE 4 - MOD.ENG-71-0160

1. Planning Information

A. Effectivity

(1) Aircraft: (a) Airbus A320
(b) Airbus A321

(2) Engine: (a) V2527-A5 Engines prior to Serial No.V10117
(b) V2530-A5 Engines prior to Serial No.V10117

B. Concurrent Requirements

None

C. Reason

(1) Condition

Loss of FCOC fuel temperature indication

(2) Background

Instances of FCOC fuel temperature indication loss on one or both EEC channels have occured. Cleaning or changing the FCOC thermocouple connector sockets defers the faults for a limited time before recurrance.

The existing FCOC fuel temperature connector sockets have a two-point contact arrangement with no positive retention feature.

(3) Objective

To eliminate occurances of FCOC fuel temperature indication loss by introducing sockets with an improved contact arrangement and a positive retention feature.

(4) Substantiation

Due to the minor nature of the change instructed by this Bulletin, testing is not considered necessary.

(5) Effect of Bulletin on Workshop Procedures:

Removal/Installation	Not Affected
Disassembly/Assembly	Not Affected
Cleaning	Not Affected
Inspection/Check	Not Affected
Repair	Not Affected
Testing	Not affected

(6) Supplemental Information

None

D. Description

This Service Bulletin introduces a new EEC fan harness with the existing two-point contact sockets in the FCOC fuel temperature connector (4017KS-A) replaced by four-point contact sockets with a napkin band retention feature. Existing harnesses may be reworked.

E. Approval

The part number changes and/or part modifications described in Section 2and 3 of this Service Bulletin have been shown to comply with the applicable Federal Aviation Regulations and are FAA-APPROVED for the engine model listed.

E. Compliance

Category Code 4.

Accomplish at the first visit of an engine or module to a maintenance base capable of compliance with the accomplishment instructions regardless of the planned maintenance action or the reason for engine removal.

G. Manpower

Estimated manhours to incorporate the full intent of this Bulletin:

Venue	Estimated Manhours
(1) In Service	
(a) To gain access	5 minutes
(b) To embody	20 minutes
(c) To return flyable status	15 minutes
Total:	40 minutes

(2) At Overhaul

(a) To embody 20 minutes

Total: 20 minutes

NOTE: Parts are accessible at overhaul

H. Material - Price and Availability

(1) Modification kit is not required.

(2) See "Material Information" section for prices and availability of future spares.

I. Tooling - Price and Availability

Special tools are not required.

J. Weight and Balance

(1) Weight change .. .. .. None

(2) Moment arm .. .. .. No effect

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

K. Electrical Load Data

This Service Bulletin has no effect on the aircraft electrical load.

L. References

(1) Internal Reference No.

EC94VR052

(2) Other references

A320/A321 Aircraft Maintenance Manual

Service Bulletin V2500-ENG-71-0157 (Engine - Powerplant - EEC Harness Fan/Core - Deletion of clipping at VSVA and PMA Harness Connectors and Introduction of Wire Locking to Secure Connectors).

Service Bulletin V2500-ENG-70-0367 (Information - Engine - To Announce the Availability of New Fan Case EEC and Core Ignition Supply Harnesses with Replacement Bakcshells, Cables and Bushes).

M. Other Publications Affected

(1) V2500 Engine Illustrated Parts Catalog (S-V2500-2IA), Chapter/Section 71-51-41.

(2) V2500 Component Maintenance Manual (CMM-EHC-V2500-1IA), 71-51-41, Cleaning, Inspection/Check, Testing and Repair.

2. Accomplishment Instructions

A. Prerequisite Instructions

(1) Open the left fan cowl door using the approved procedure in Reference (1), Chapter/Section 71-13-00.

B. Removal Instructions

(1) Disconnect the EEC Fan harness electrical connector (4017KS-A) from the fuel temperature thermocouple on the FCOC. Refer to Figure 1.

C. Rework Instructions

(1) Remove the ESC30S16NC sockets from contact positions 2 and 5 of the 4017KS-A selectrical connector and replace with the new BT4116-10PY165 or BT4116-10P sockets. USe the approved procedure in Reference (1), Chapter/Section 71-50-21.

(2) Remove the ESC30S16NA sockets from contact positions 3 and 6 of the 4017KS-A electrical connector and replace with the new BT4116-10RY165 or BT4116-10R sockets. Use the approved procedure in Reference (1), Chapter/Section 71-50-21.

(3) Cancel the existing EEC Fan Harness part number and identify with the new part number by applying two turns of V02-148 Adhesive Tape (Electrical) and marking the new part number using a black ball point pen.

Old Part No.	New Part No.
6A4504	6A5964
6A5556	6A5965
6A5652	6A5963

D. Assembly Instructions

(1) Connect the 4017KS-A electrical connector to the fuel temperature thermocouple on the FCOC and torque to 100 to 120lbfin (11,3 to 13,6 Nm). Refer to Figure 1.

E. Post Requisite Instructions

(1) Cose the left fan cowl door using the approved procedure in Reference (1), Chapter/Section 71-13-00.

(2) Do an operational test of the EEC using the approved procedures in Reference (1), Chapter/Section 73-22-34.

(3) Do an operational test of the FADEC system using the approved procedures in Reference (1), Chapter/Section 73-22-00.

F. Recording Instructions

(1) A record of accomplishment is required.

3. Material Information

Applicability: For each V2500 Engine to incorporate this Bulletin.

A. Kits associated with this Bulletin:

None

B. Parts affected by this Bulletin:

New Part No. (ATA No.)	Qty	Est'd Unit Price ($)	Keyword	Old Part No. (IPC No.)	Instructions Disposition
6A5963 (71-51-41)	1		. Harness Assy, EEC Fan	6A5652 (01-005)	(A)(B)(1D) (S1)
6A5965 (71-51-41)	1		. Harness Assy, EEC Fan	6A5556 (01-005)	(1D)(S1)
6A5964 (71-51-41)	1		. Harness Assy, EEC Fan	6A4504 (01-005)	(1D)(S1)
BT4116-10PY165 (71-51-41)	2		. . Contact, Socket	ESC30S16NC (04-427)	(A)(B)(C) (E)(S1)
BT4116-10P (71-51-41)	Ref		. . Contact, Socket	- (04-427)	(A)(C)(E) (S1)
BT4116-10RY165 (71-51-41)	2		. . Contact, Socket	ESC30S16NA (04-428)	(A)(B)(C)(F) (S1)
BT4116-10R (71-51-41)	Ref		. . Contact, Socket	- (04-428)	(A)(C)(F) (S1)

C. Instructions/Disposition Code Statements

(A) New part is currently available

(B) Old part will no longer be available

(C) New part required for rework

(1D) Old part can be reworked and re-identified to the new part number

(E) Alternative parts

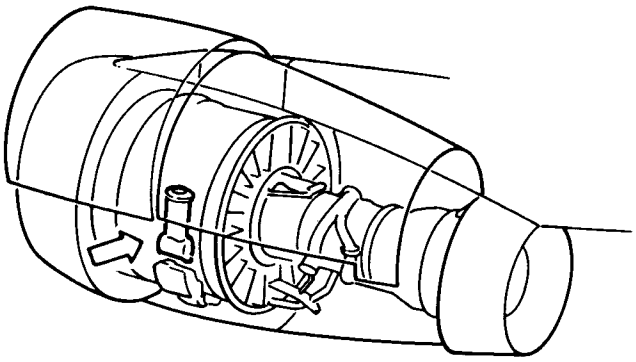
(F) Alternative parts

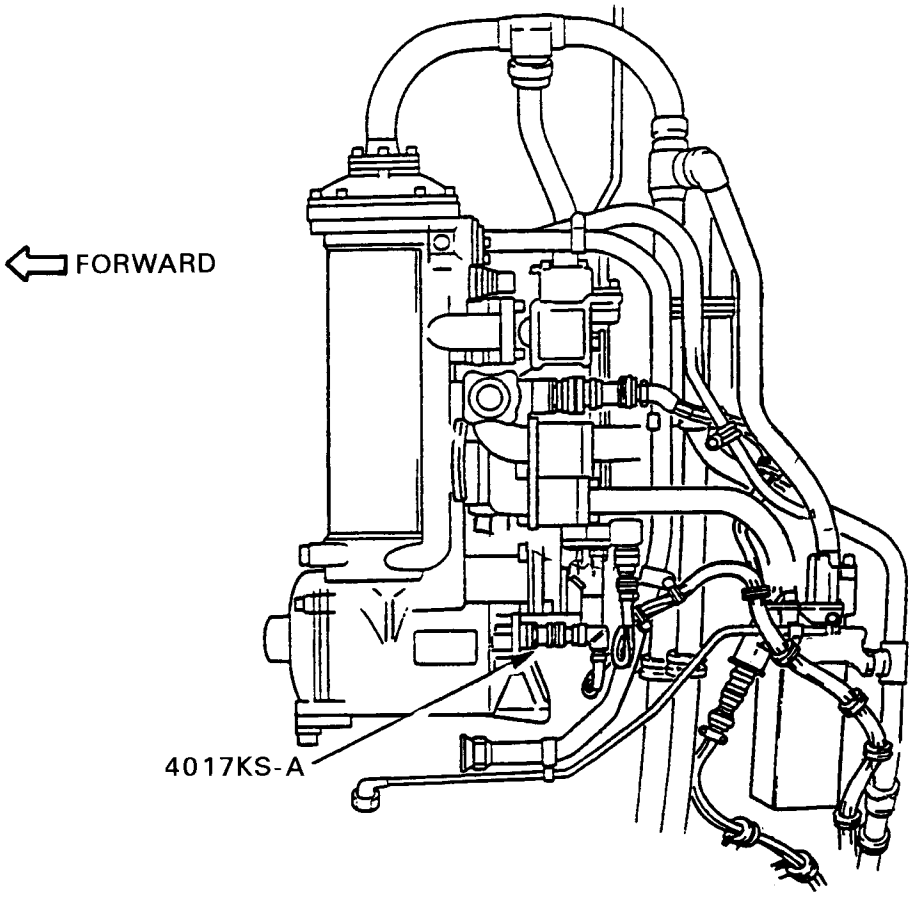
(S1) New part may be fitted in place of old part but no vice-versa

D. Consumable Materials

V02-148 Adhesive tape (electrical)

NOTE: The estimated 1994 unit prices shown are provided for planning purposes only and do not constitute a firm quotation. Consult the IAE Price Catalog or contact IAE's Spare Parts Sales Department for information concerning firm prices.

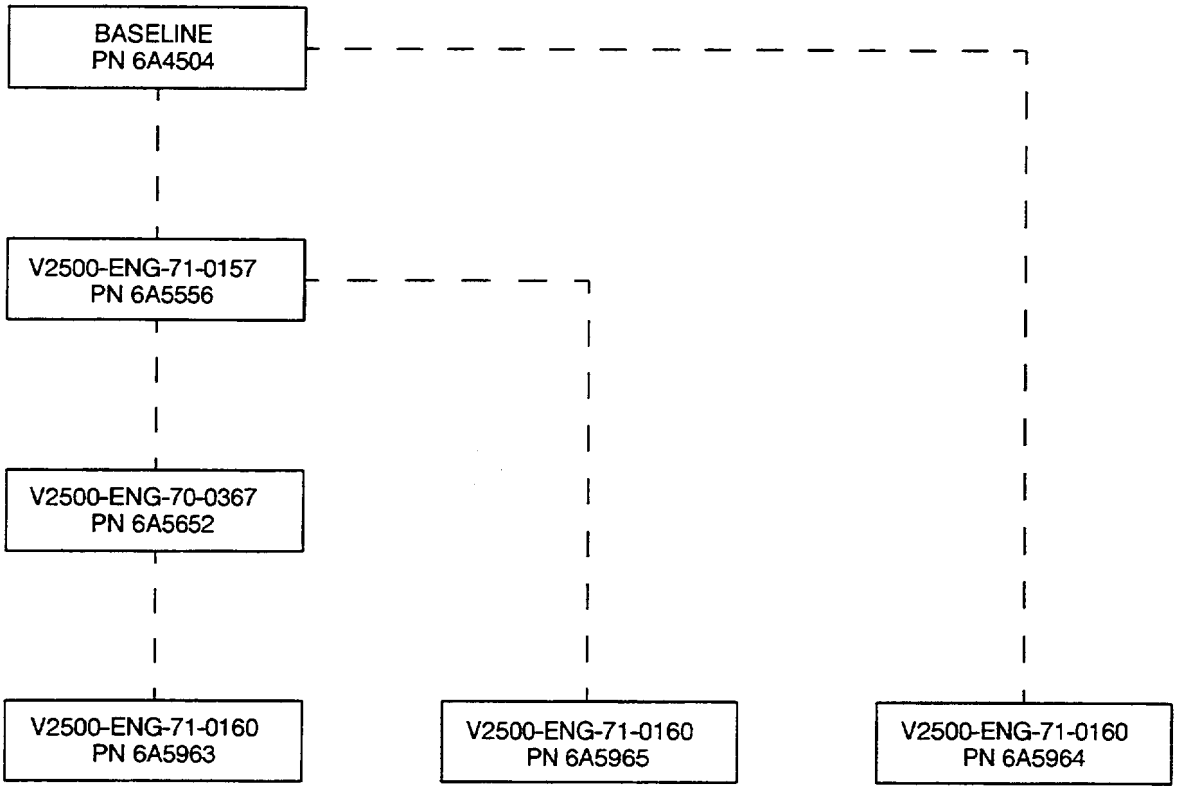




LEFT SIDE OF LP COMPRESSOR/INTERMEDIATE CASE MODULE

E3560

Location of 401KS-A connector
Fig.1



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Family tee - Harness assembly, E.E.C. fan Illustrated parts Catalog Ref, 71-51-41, Fig.01 Item 005
Fig.2

Printed in Great Britain