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

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V2500-A1/A5 SERIES PROPULSION SYSTEMS SERVICE BULLETIN

This document transmits the Initial Issue of Service Bulletin EV2500-71-0197

Bulletin Initial Issue

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	Pages 1 to 10 of the Service Bulletin	Initial issue

V2500-ENG-71-0197

CHECK THAT ALL PREVIOUS TRANSMITTALS HAVE BEEN INCORPORATED
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LIST OF EFFECTIVE PAGES

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ENGINE – POWER PLANT – EEC HARNESS FAN/CORE – INTRODUCTION OF AN ELECTRICAL INSPECTION CHECK FOR CONNECTOR SOCKET MATERIAL – NON-MODIFICATION SERVICE BULLETIN

1. Planning Information

A. Effectivity

(1) Airbus A320

(a) V2500-A1 Engines

(b) V2500-A5 Engines from V10015 to V10063 (fan) and from V10015 to V10080 (core)

(2) Airbus A321 Engines

V2500-A5 Engines, from V10015 to V10063 (fan) and from V10015 to V10080 (core)

(3) ATA Locator 71-00-00

B. Reason

During the assembly of the harnesses, a small number of harness connectors may have been installed with sockets of incorrect material. These sockets may lead to incorrect readings being recorded in the aircraft Centralised Fault Display System (CFDS) memory.

C. 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.

D. Approval

The compliance statement and the procedures described in paragraph 3.A. Action of this Service Bulletin have been shown to comply with the applicable Federal Aviation Regulations and are FAA-APPROVED for the engine models listed.

E. References

(1) A320 Aircraft Maintenance Manual, Chapter/Section 71-50-00.

(2) A321 Aircraft Maintenance Manual, Chapter/Section 71-50-00.

(3) Vendor Component Maintenance Manual.

(4) All Representatives Wire No.036 issue 2.

(5) Internal reference 94VR728

2. Material Information

A. None.

3. Accomplishment Instructions

A. Action

(1) The following harness part numbers and serial numbers are listed below for engine harnesses which require to be inspected.

On A5 engines (fan), a quantity of engine serial numbers are listed along with harness serial numbers. These numbers are purely for information only and should be fully investigated.

(a) A1 Engines (Fan)

Part No.6A5553 Serial No.0011

Part No.6A5553 Serial No.0014

(b) A1/A5 Engines (Core)

Part No.6A5554 Serial No.0037

Part No.6A5554 Serial No.0038

Part No.6A5554 Serial No.0041

(c) A5 Engines (Fan)

Part No.6A5556 Serial No.0018

Part No.6A5556 Serial No.0019 Engine No.V10022

Part No.6A5556 Serial No.0021 Engine No.V10025

Part No.6A5556 Serial No.0023 Engine No.V10023

Part No.6A5556 Serial No.0025 Engine No.V10021

Part No.6A5556 Serial No.0027 Engine No.V10031

Part No.6A5556 Serial No.0029 Engine No.V10032

Part No.6A5556 Serial No.0030 Engine No.V10027

B. Equipment

(1) The equipment required to accomplish this Service Bulletin is as follows:

Digital Millivolt Meter - with unit operating in DC200 millivolt range.

Copper Leads - length as required.

Slave Copper Pin - Part No.ESC30P16BC.

Hand Held Soldering Iron - with a copper nib which operates at 350 deg.C. plus or minus 10 deg.C.

C. General

(1) This inspection check is done to make sure that the socket installed on the harness in the assembled connector is made of the correct material.

(2) The inspection check uses a heat source to produce a temperature difference across a socket, this causes a different electrical output depending on the material of the socket being examined.

(3) The heat source is to be applied to the socket (female) contact only (i.e. the accessory/unit end of the harness) during this inspection check.

(4) The hot soldering iron must only make contact with the slave pin for a very short time. This is to prevent any heat soak effect, but give the necessary electrical continuity.

D. Procedure

(1) Disconnect the harness connections at the necessary locations. Refer to Figures 1, 2 and 3.

(2) For each circuit, install the slave pin into the socket to be examined (see list under heading Action). Refer to Figure 4.

(3) Connect the cathode (-) lead of the digital millivolt meter to the corresponding pin, as specified in the EEC/bifurcation connector. Refer to Figures 4 and 5.

CAUTION: YOU MUST ONLY LET THE HOT SOLDERING IRON MAKE CONTACT WITH THE SLAVE PIN FOR A VERY SHORT TIME. THIS IS TO PREVENT ANY HEAT SOAK EFFECT, BUT GIVE THE NECESSARY ELECTRICAL CONTINUITY.

(4) Use the hot soldering iron as the anode (+) contact of the digital millivolt meter. Touch the rear of the slave pin with the hot soldering iron momentarily and write down the reading displayed on the digital millivolt meter. Refer to Figure 5.

(5) Compare the reading written down in step (4) with the table under the heading Readings.

E. Readings

(1) The digital millivolt meter reading for each circuit check is to be compared to the table that follows for further action.

Meter Reading	Action
(a) + (positive value)	Replace the socket (refer to Repair VRS3903)
(b) - (negative value)	Accept
(c) None of the above	Advise IAE of details

(2) During socket replacement, the pins on the mating sensor should be examined. If distress in excess of that allowed in the appropriate Vendor Component Maintenance Manual (CMM) is found, the sensor should also be replaced to prevent possible damage to the harness connector sockets.

DISCONNECTION POINTS				
ACCESSORY	EEC CONNECTOR	BIFURCATION PANEL CONNECTOR	CIRCUIT NUMBER	HARNESS
IDG OIL TEMP (4015KS-A)	4000KS-J4 4000KS-J10		1 2	FAN HARNESS (6A5553) (6A5556)
ACOC OIL TEMP (4016KS-A)	4000KS-J4 4000KS-J10		3 4	
FCOC FUEL TEMP (4017KS-A)	4000KS-J4 4000KS-J10		5 6	
	4000KS-J4	4008VC-A	7 8	
	4000KS-J10	4009VC-A	9 10 11	
T3 SENSOR (4006VC-A)		4008VC 4009VC	12 13	CORE HARNESS (6A5554)
EGT HARNESS (4007VC-A)		4008VC 4009VC	14 15	

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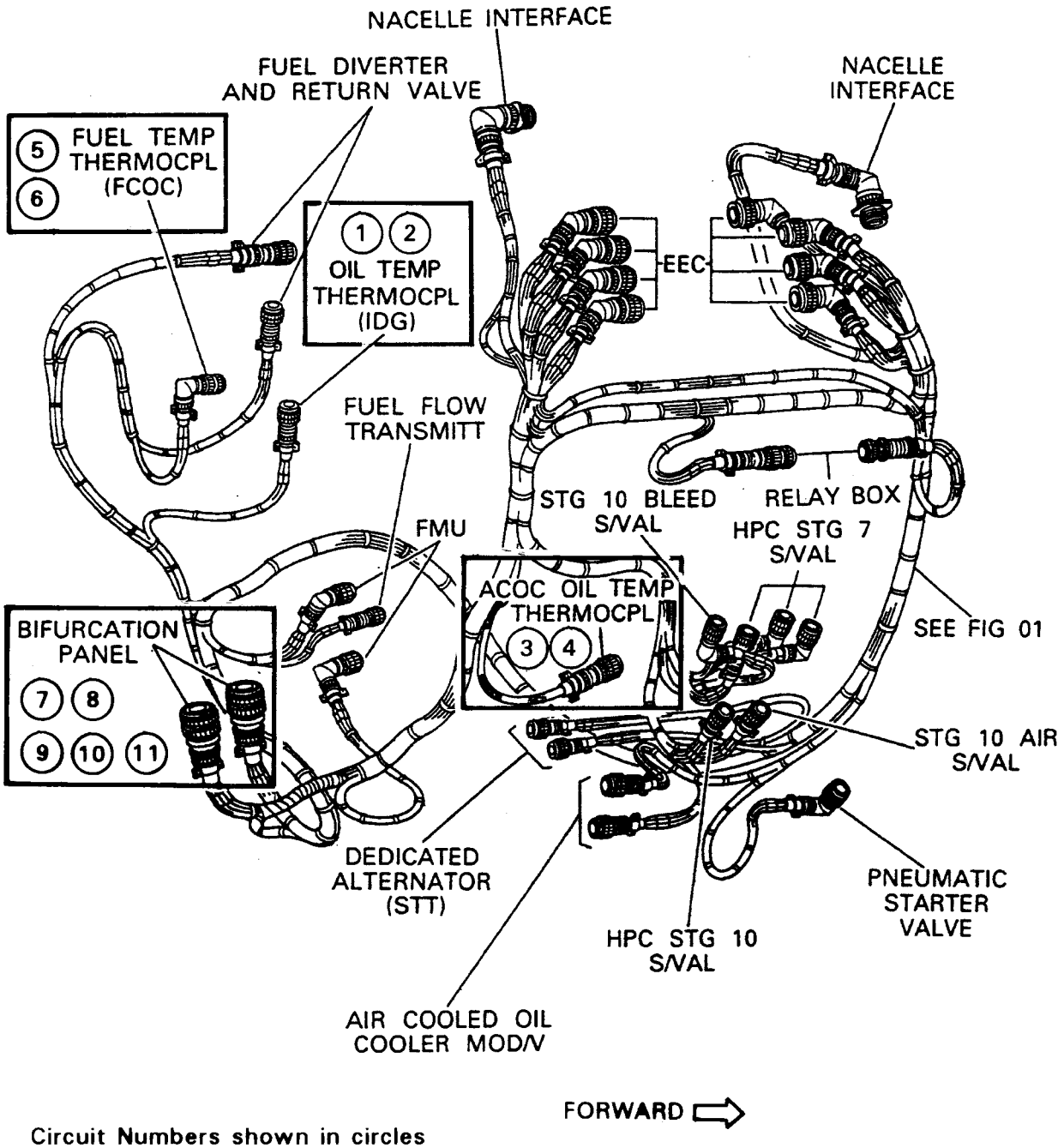
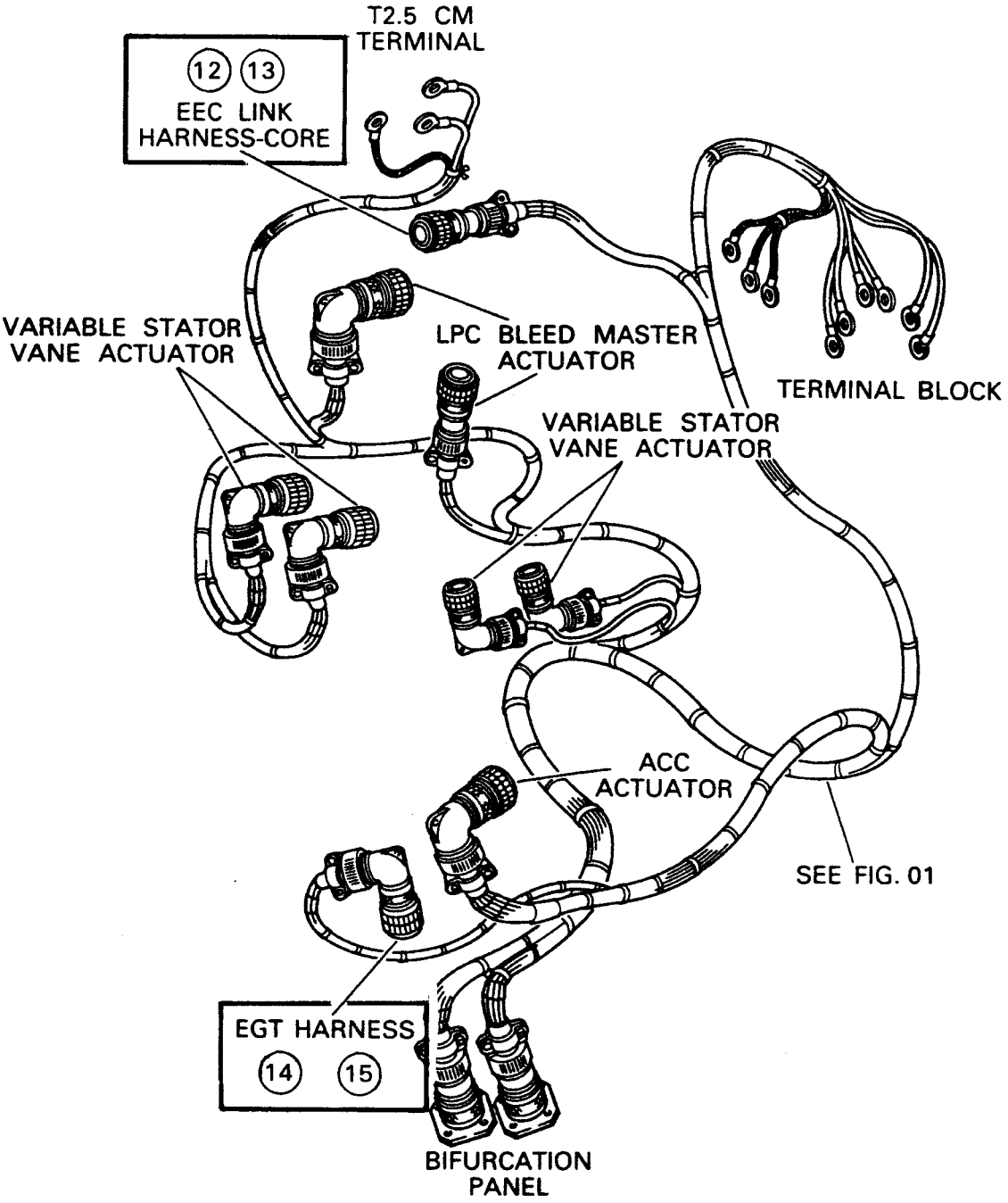
Disconnect points for EEC fan/core harnesses
Figure 1



EEC fan harness connections
Figure 2



EEC core harness connections
Figure 3

CIRCUIT NUMBER	CATHODE (-)		HOT ANODE (+)		CHANNEL	DIGITAL METER RECORD
	CONNECTOR	PIN	CONNECTOR	SLAVE PIN IN SOCKET No.		
1	4000KS-J4	j	4015KS-A	2	A	
2	4000KS-J10	j	4015KS-A	5	B	
3	4000KS-J4	Z	4016KS-A	2	A	
4	4000KS-J10	Z	4016KS-A	5	B	
5	4000KS-J4	C	4017KS-A	2	A	
6	4000KS-J10	C	4017KS-A	5	B	
7	4000KS-J4	Y	4008VC-A	27	A	
8	4000KS-J4	A	4008VC-A	25	A	
9	4000KS-J10	Y	4009VC-A	42	B	
10	4000KS-J10	A	4009VC-A	26	B	
11	4000KS-J10	W	4009VC-A	41	B	
12	4008VC	25	4006VC-A	9	A	
13	4009VC	26	4006VC-A	7	B	
14	4008VC	27	4007VC-A	2	A	
15	4009VC	42	4007VC-A	6	B	

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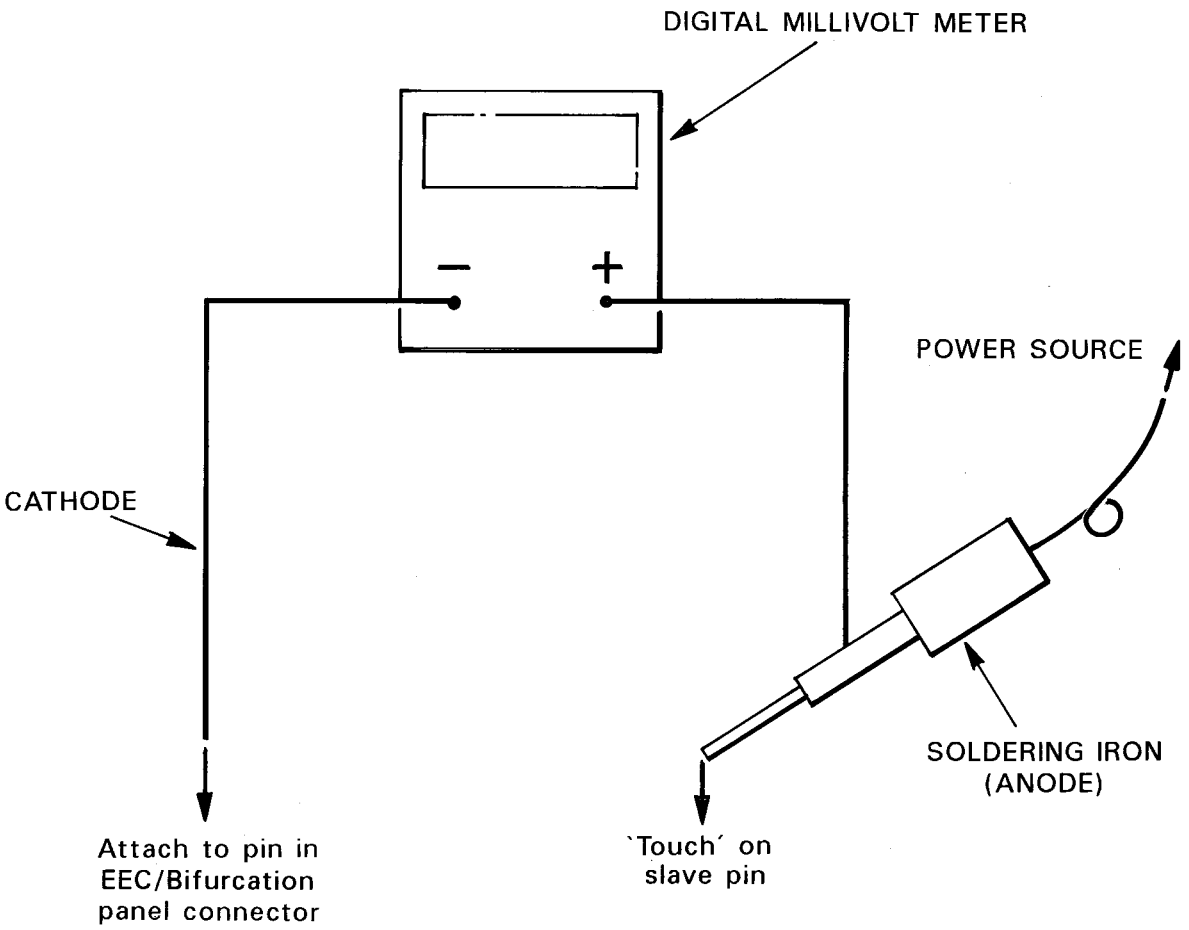
Connections for cathode and anode
Figure 4



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Arrangement of the equipment to do the inspection check
Figure 5