V2500 International Aero Engines

Date: July 29/98

Subject: Transmittal of Revision 1 To Service Bulletin Number V25000-ENG-73-0132.

Service Bulletin Revision History:

Event	Date
Basic Issue	April 16, 1998
Revision 1	July 29, 1998

Reason For Issuance Of Revision:

(1) Edit correction paragraph 2. G. Accomplishment Instructions and paragraph 3. D. Material Information.

(2) Update paragraph 2. I. Accomplishment Instructions to allow remarking of the Engine Identification Plate to indicate the new DEP EPR Mod Number.

Effect on Prior Compliance:

None.

List of Effective Pages:

Bulletin Page No.	Rev. No.	Effective Date
1	1	Jul. 29/98
2 to 4	Basic	Apr. 16/98
5 and 6	1	Jul. 29/98
7 to 13	Basic	Apr. 16/98
14	1	Jul. 29/98

V2500 International Aero Engines

SERVICE BULLETIN

ENGINE - FUEL AND CONTROL - SELECTIVE REPROGRAMMING OF THE DATA ENTRY PLUG ASSEMBLY

MODEL APPLICATION

V2522-A5
V2524-A5
V2527-A5
V2527E-A5
V2530-A5
V2533-A5

BULLETIN INDEX LOCATOR

73-22-00

Compliance Category Code

4

Internal Reference No.

89VC089B, 89VC089C

April 16/98
Revision 1 July 29/98

1. Planning Information

A. Effectivity

(1) Aircraft: Airbus A319, A320, A321

(2) Engine: V2500-A5 Engine Serial No. V10198, V10199, V10201, V10203, V10204, V10207, V10210, V10212, V10213, V10217, V10219, V10221, V10222, V10224, V10225, V10228

B. Reason

(1) Condition:

The Data Entry Plug Assembly in some service engines since the first V2533-A5 is not wired for the correct EPR modifier class.

(2) Background:

The production data processed after calibration checks to the Test Bed for the V2533-A5 Rating has shown that some engines do not have the correct EPR Modifier class wired into the Data Entry Plug Assembly.

(3) Objective:

To rewire the Data Entry Plug Assemblies in the effected engines to change the EPR Modifier class.

(4) Substantiation

Considered not necessary.

(5) Effects 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.

C. Description

The engines with the incorrect EPR Modifier class wired into the Data Entry Plug must be rewired.

(1) Determine the EPR Mod No. change for each engine from Table 1.

(2) Determine the Data Entry Plug jumper connections for the desired EPR Modifier from Table 2.

(3) Wire the current EEC Data Entry Plug to the appropriate engine Corrected EPR Modifier No.

(4) Mark the Data Entry Plug with the new EPR Mod.

(5) Install a New Engine Identification Plate with the new EPR Modifier already marked.

D. Approval

The Part Number Changes and/or part modifications described in Section 2 and 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.

The 'compliance' statement and the procedures described in paragraph E 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 maintenance action or the reason for engine removal.

F. Manpower

Estimated Manhours to incorporate the full intent of this Bulletin:

Venue	Estimated Manhours
(1) In service	21 minutes
(2) At overhaul	21 minutes

NOTE: The parts affected by this Service Bulletin are accessible at overhaul.

(a) To do a modification of the Data Entry Plug Assembly	13 minutes
(b) To identify Data Entry Plug Assembly	3 minutes
(c) To mark and install the Engine Identification Plate	5 minutes
TOTAL	21 minutes

G. Material - Price and Availability

(1) Modification kit is not required. Parts are supplied as single line items.

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

H. Tooling - Price and Availability

Tool No.	Qty	Description	Function	Avail
IAE2P16369	1	Tester	Electrical test	(1)

(1) Indicates that tool design aperture card is currently available from IAE.

I. Weight and Balance

(1)	Weight change	None
(2)	Moment arm	No effect
(3)	Datum	Engine Front mount Centerline (Power Plant station (PPS) 100)

J. Electrical Load Data

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

K. References

(1) V2500-A5 Engine Illustrated Parts Catalog (S-V2500-2IA), Chapter/Section 73-22-35, (Figure Item No. 01-100), and Chapter/Section 72-32-85, (Figure Item No. 03-120).

(2) Aircraft Maintenance Manual, Chapter/Section 73-22-35, Repairs, Replace the Jumpers, Contacts or Connector - VRS 3500, and Removal/Installation, Installation of the Data Entry Plug Assembly; and Chapter/Section, 73-22-34, Operational Test of the EEC.

(3) V2500 Standard Practices/Processes Manual(SSP-V2500-1IA), 70-09-00, Marking of Parts.

(4) IAE Service Bulletin:

None.

L. Other Publications Affected

None.

2. Accomplishment Instructions

A. Remove the Data Entry Plug by the procedure given in Reference (2), Chapter/Section 73-22-35, Repairs, VRS3500.

B. Disassemble the Data Entry Plug Assembly, PN 2A3106, Reference (1), Chapter/Section 73-22-35, Figure/Item No. 01-100) by the procedure specified in Reference(2), Chapter/Section 73-22-35, Repairs, VRS3500 and Figure 2.

NOTE: Note:
The Data Entry Plug Assembly can be disassembled as necessary to permit the installation of the necessary jumper wires.

C. Make two copies of Figure 5, Contact Hole Locations.

(1) Find the Current EPR Mod No. and the Corrected EPR Mod No. for each specific engine from Table 1.

(2) Mark the existing jumper connections from the Data Entry Plug Connector on one copy of the figure.

(3) Find the jumper pin connections, from Table 2, for the Current EPR Mod No. and highlight these on the copy made in C. (1).

(4) Find the jumper pin connections, from Table 2, for the Corrected EPR Mod No. and highlight these on the second copy of the figure.

(5) Determine the jumper pin changes required from these two copies, for the target EPR Modifier, and any new jumpers needed, (Reference (1), Chapter/Section 73-22-35, Figure/Item No. 01-100), and Figure 2.

D. Modify the Data Entry Plug Connector by the procedure specified in Reference (2), Chapter/Section 73-22-35, Repairs, VRS3500.

E. Assemble the Data Entry Plug Assembly by the procedure specified in Reference (2), Chapter/Section 73-22-35, Repairs, VRS3500 and Figure 2.

F. Do a check of the wiring, using electrical tester IAE2P16369, by the procedure specified in Reference (2), Chapter/Section 73-22-35, Repairs VRS3500.

NOTE: A continuity check of the jumper pin connections can be used as an alternate means to do this check, if the IAE2P16369 Electrical Tester specified is not available.

G. Mark the Data Entry Plug Backshell with the new EPR Mod by the procedure given in Reference (3), Chapter/Section 70-09-00, Marking of Parts and Figure 3. Use the vibration peen method.

H. Install the Data Entry Plug by the procedure given in Reference (2), Chapter/Section 73-22-35, Repairs, VRS3500.

I. Mark the Engine Identification Plate with the new EPR Mod by the procedure given in Reference (3), Chapter/Section 70-90-00, Marking of Parts and Figure 4, Using the vibration peen method; or install a new Engine Identification Plate, PN 5A1465, Reference (1), Chapter/Section 72-32-85, Figure Item No. 03-120, and Figure 4 as follows:

NOTE: The new Engine Identification Plate MUST be obtained from your International Aero Engines Representative, and the old Engine Identification Plate MUST be returned to this same representative.

(1) Remove the four bolts (4W0102), that hold the Engine Identification Plate to the bracket.

(2) Give the old Engine Identification Plate to your IAE Representative.

(3) Get the new Engine Identification Plate from your IAE Representative.

(4) Install the new Engine Identification Plate with the 4W0102 bolts (4 off).

(5) Torque the bolts between 32 to 36 lbfin (3.61 to 4.07Nm).

J. Check the data entry plug wiring by interrogating the MCDU and comparing the output EEC CONFIGURATION information output to the Data Plate information, when the EEC and DEP are installed on the aircraft. Use the procedure specified in Reference (2), Chapter/Section 73-22-35, Installation and Figure 6.

NOTE: Note:
If this does not agree, the Data Entry Plug must be corrected or replaced; until then the aircraft can not be dispatched.

K. Do an operational test of the EEC by the procedure given in Reference (2), Chapter/Section 73-22-34, Operational Test of the EEC.

Engine Serial Number	Current EPR Mod No.	Corrected EPR Mod No.
V10198	9	8
V10199	9	8
V10201	6	7
V10203	9	8
V10204	6	7
V10207	9	8
V10210	11	10
V10212	5	7
V10213	11	10
V10217	9	8
V10219	9	8
V10221	10	9
V10222	9	8
V10224	9	8
V10225	9	8
V10228	10	9

Affected Engines EPR Modifier No. Changes

Table 1

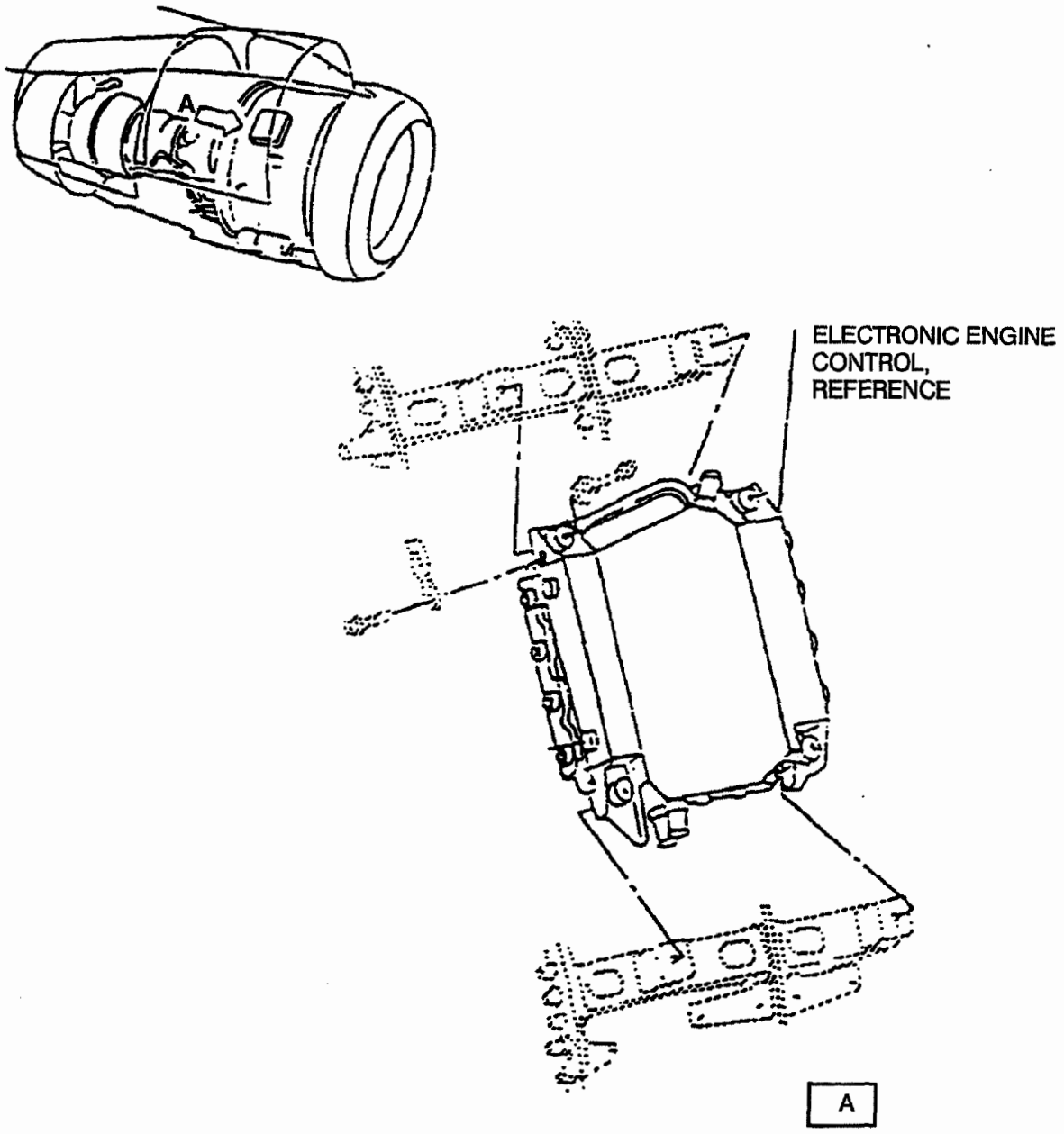
For DEP Part Number 2A3106 (CL01):

EPR Modifier	Jumper Connections Channel A	Channel B	Jumper Type	No. Reqd
04	None	g* to r	2 pin	1
05	Z* to a	None	2 pin	1
06	Z* to m	None	2 pin	1
07	Z* to m c* to a	g* to r	2 pin	3
08	None	g* to P	2 pin	1
09	Z* to a	g* to r j* to P	2 pin	3
10	Z* to m	g* to r j* to P	2 pin	3
11	Z* to m c* to a	g* to P	2 pin	3

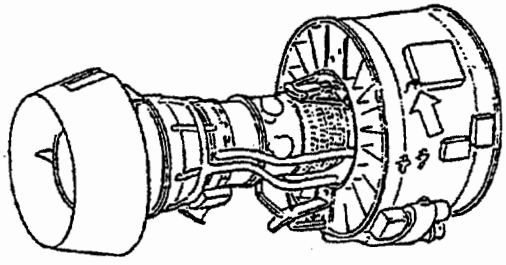
*Note: In some cases, connector holes g and Z are used in the variant number wiring and connector holes c and j are used in the engine serial number wiring. Determine which holes are to be connected for engine serial number. EPR modifier and variant number wiring before you select the required jumpers.

Data Entry Plug Pin Selection Procedure for EPR Modifier No.

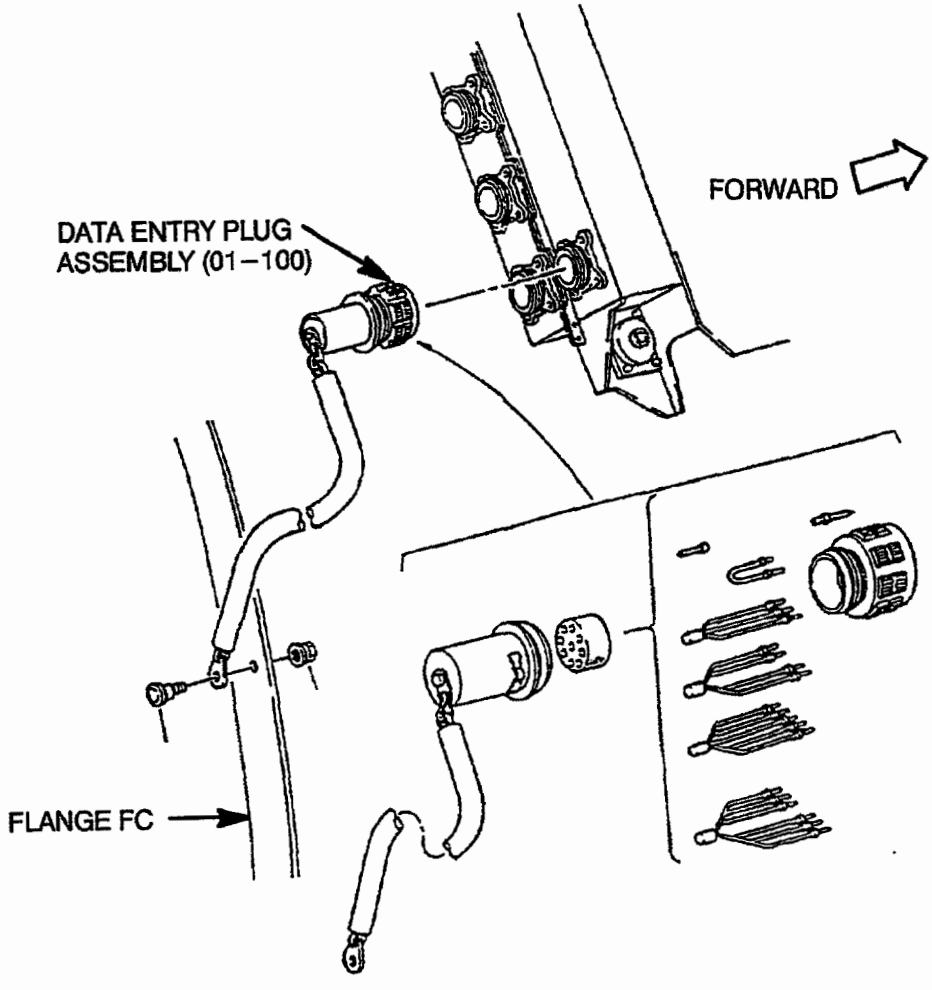
Table 2.



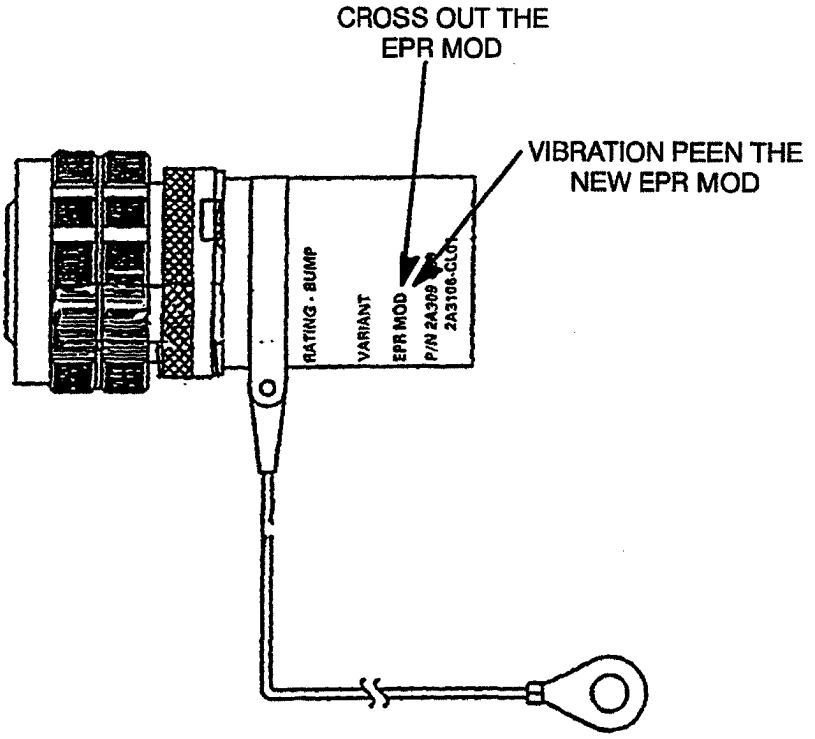
Location of the Electronic Engine Control
Figure 1



STARBOARD UPPER REAR

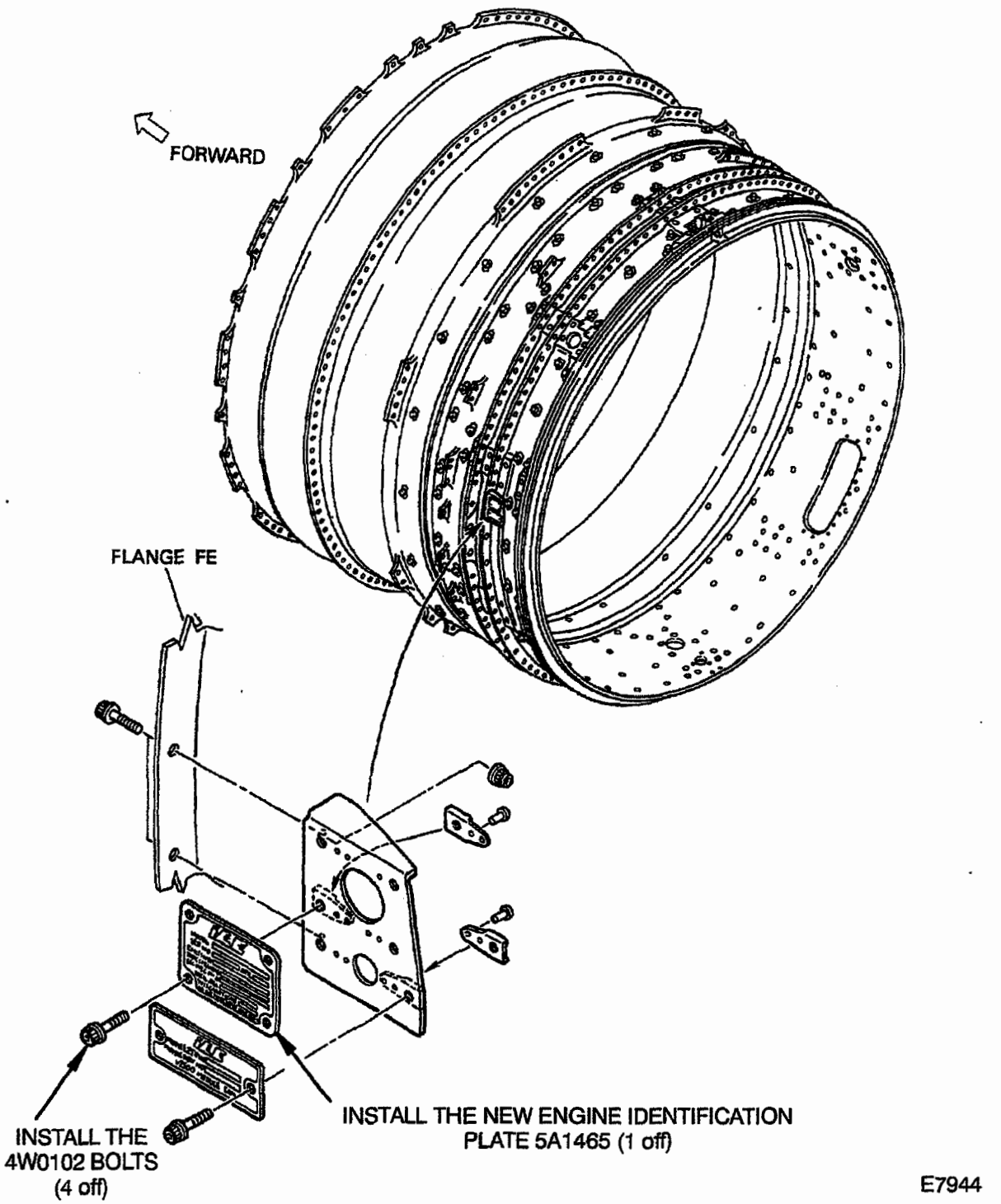


Data Entry Plug Assembly
Figure 2

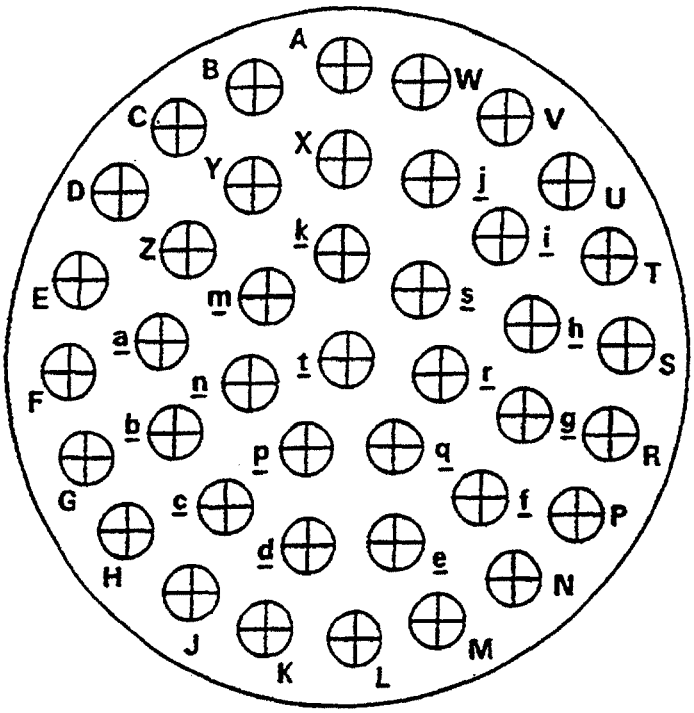


E7943

Identification Of The Data Entry Plug Assembly To the New Part Number
Figure 3



Location of the Engine Identification Plate
Figure 4



NOTE: Upper case I, O, and Q are not used.
Lower case l and o are not used.

ENGINE NO. _____

RATING – BUMP _____

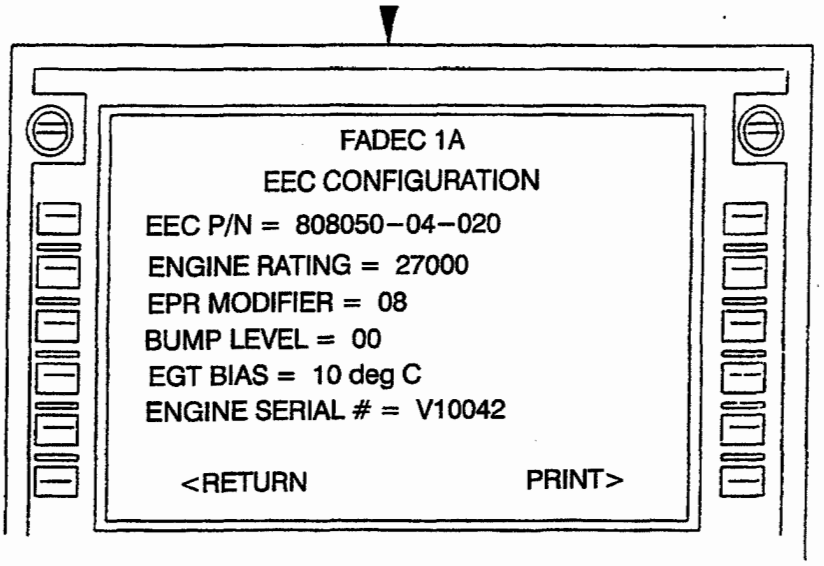
VARIANT _____

EPR MOD. _____

P/N 2A3106– CL01

E7945

Contact Hole Locations
Figure 5



MCDU Interrogation Of EEC Configuration
Figure 6

3. Material Information

A. Kit 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
5A1465 (72-32-85)	1		Engine Identification Plate	5A1465 (03-120)	(A)

C. Consumable Materials

None.

D. Instructions/Disposition Code Statements:
(A) The new Engine Identification Plate can be obtained through your International Aero Engines Representative.