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AERO ENGINES AG

RR-DERBY

628, HEBRON AVENUE, GLASTONBURY,  
CONNECTICUT, 06033-2595, USA  
TELEX: 4436031 INTLAERO  
TELEPHONE: (203) 652 - 1558

DATE                      Oct.12/90

P.O. BOX 31, DERBY  
TELEGRAMS - ROYCAR DERBY  
TELEX - 37645  
TELEPHONE - DERBY 242424

Subject: Transmittal of Revision 2 to Service Bulletin No. V2500-ENG-73-0015

Service Bulletin Revision History:

Event	Date
Basic Issue	June 1/90
Revision 1	Aug.10/90
Revision 2	Oct.19/90

Reason for Issuance of Revision:

1.F Manpower revised to new format showing layout of manhours

Effect on Past Compliance:

None

List of Effective Pages:

Bulletin Page No.	Rev. No.	Effective Date
R 1	2	Oct.19/90
2	1	Aug.10/90
3	Basic	June 1/90
R 4,4A and 4B	2	Oct.19/90
5	1	Aug.10/90
6 to 9	Basic	June 1/90
10	1	Aug.10/90
11 to 20	Basic	June 1/90

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Transmittal  
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if any have not been received please advise Technical Publications Department, Rolls-Royce plc, Derby, England

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V2500 Propulsion System — Engine

# SERVICE BULLETIN

ENGINE - FUEL AND CONTROL - INCORPORATE A NEW ELECTRONIC ENGINE CONTROL (EEC)  
CONFIGURATION AND REWORK THE DATA ENTRY PLUG ASSEMBLY  
TO THE SCN11E SOFTWARE CONFIGURATION

## MODEL APPLICATION

V2500-A1

## BULLETIN INDEX LOCATOR

73-22-00

### Compliance Category Code

4

### Internal Reference No.

89VA228A  
89VA129A  
89VA129B

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ENGINE - FUEL AND CONTROL - INCORPORATE A NEW ELECTRONIC ENGINE CONTROL (EEC) CONFIGURATION AND REWORK THE DATA ENTRY PLUG ASSEMBLY TO THE SCN11E SOFTWARE CONFIGURATION

## 1. Planning Information

### A. Effectivity

- (1) Aircraft: Airbus A320
- (2) Engine: V2500-A1 Engine between Serial No.s V0014 and V0121.

R        NOTE: This Service Bulletin must be incorporated concurrently on both  
R        the engines on the aircraft.

### B. Reason

#### (1) Condition

The current Electronic Engine Control (EEC) software (SCN10D) does not interface with the A320 Aircraft Computer software for engines that require additional conditional monitoring equipment. The Data Entry Plug (DEP) Assemblies that are installed, do not permit the multiple alternate take-off rating (bump) level requirements of the new SCN11E software.

#### (2) Background

EEC software (SCN10D) and the interface with the airframe computers has caused incorrect EEC Fault Messages. Freezing of the Pb line has caused incorrect Pb indication. This, along with the requirements for the Category III Auto-landings, multiple alternate take-off rating (bump) level requirements, and an increase in approach idle speed of 2.5 percent of redline, has led to the incorporation of the SCN11E software and the new DEP Assembly. There are two part number DEP Assemblies, one for engines with the 66 sq.in. 2.5 Bleed and the other for engines with the 44 sq.in. 2.5. Bleed.

#### (3) Objective

To replace the EEC with one that has SCN11E Software and the DEP with one that has the correct alternate take-off rating (bump) level.



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(4) Substantiation

Flight testing of the EEC SCN11E software and the new DEP Assembly.

(5) Affects 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

- (1) To make sure engines that require additional condition monitoring equipment will interface correctly with the airframe software as follows:

- (a) A new Electronic Engine Control with SCN11E software.
- (b) A new Data Entry Plug Assembly with the multiple alternate take-off rating (bump) level requirements for the SCN11E Software.

D. Approval

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

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.



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## F. Manpower

Estimated Manhours to incorporate the intent of this Bulletin:

<u>Venue</u>		<u>Estimated Manhours</u>
R	(1) In Service	TOTAL: 1 hour 43 minutes
	(a) To gain access	
R	(i) Install warning notices	5 minutes
R	(ii) Open the fan cowls ..	17 minutes
R	(iii) Remove EEC .. ..	22 minutes
R	TOTAL	<u>44 minutes</u>
	(b) To embody	
R	(i) Rework the data entry	
R	plug .. ..	8 minutes
R	TOTAL	<u>8 minutes</u>
	(c) To return engine to flyable status	
R	(i) Install the EEC ..	27 minutes
R	(ii) Close the fan cowls ..	19 minutes
R	(iii) Remove the warning	
R	notices .. ..	5 minutes
R	TOTAL	<u>51 minutes</u>
R	(2) At overhaul	TOTAL: 8 minutes
R	(a) To gain access	Not applicable
R		(Parts are accessible at overhaul)
R	(b) To embody	
R	(i) Rework the data entry	
R	plug .. ..	8 minutes
R	TOTAL	<u>8 minutes</u>
R	Remarks: These manhours are for engine serial numbers: V0014 through V0096	
R	except V0034, V0039, V0051, V0053, V0054, V0055, V0060, V0061,	
R	V0081 and V0085.	



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R	(3)	In service	TOTAL: 1 hour 46 minutes
R	(a)	To gain access	
R	(i)	Install warning notices	5 minutes
R	(ii)	Open the fan cowls ..	17 minutes
R	(iii)	Remove the EEC .. ..	23 minutes
R		TOTAL	<u>45 minutes</u>
R	(b)	To embody	
R	(i)	Rework the data entry	
R		plug .. .. .	9 minutes
R		TOTAL	<u>9 minutes</u>
R	(c)	To return to flyable	
R		status	
R	(i)	Install the EEC ..	28 minutes
R	(ii)	Close the fan cowls ..	19 minutes
R	(iii)	Remove the warning	
R		notices .. .. .	5 minutes
R		TOTAL	<u>52 minutes</u>
R	(4)	At overhaul	
R	(a)	To gain access	Not applicable
R			(Part are accessible at overhaul)
R	(b)	To embody	
R	(i)	Rework the data entry	
R		plug .. .. .	9 minutes
R		TOTAL	<u>9 minutes</u>
R	Remarks:	These manhours are for engine serial numbers: V0034, V0039, V0051, V0053, V0054, V0055, V0058, V0060, V0061, V0081, V0085 and V0097 through V0121.	



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## G. Material Price and Availability

- (1) Modification Kit not required.
- (2) See "Material Information" section for prices and availability of future spares.

## H. Tooling - price and availability

The following tool is required to accomplish Sub-division 2 of this Service Bulletin:

### Special Tools:

<u>Tool No.</u>	<u>Qty.</u>	<u>Description</u>	<u>Function</u>	<u>Avail</u>
IAE1J12018	1	EEC Harness Wrench	Torque Data Entry Plug	(1)

### Standard Tools:

NOTE: The standard tools that follow are necessary to do the modification in this Service Bulletin.

TG-70	1	Strap Wrench	Torque the Data Entry Plug Backshell Nut	(2)
-------	---	--------------	--	-----

- (1) Indicates that Tool Design Aperture Cards are currently available from IAE.
- (2) The tool can be purchased from the following supplier:

Daniels Manufacturing Corp. 6103 Anno Ave. Orlando, FL USA 3280-5033

Printed in Great Britain





# SERVICE BULLETIN

## I. Weight and Balance

- |     |               |    |    |    |   |
|-----|---------------|----|----|----|---|
| (1) | Weight change | .. | .. | .. | None  |
| (2) | Moment arm    | .. | .. | .. | No effect   |
| (3) | Datum         | .. | .. | .. | Engine front mount centreline<br>(Powerplant Station P.P.S.100) |

## J. Electrical Load Data

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

## K. References

- R
- (1) Hamilton Standard Service Bulletin EEC150-73-14.
  - (2) V2500 Engine Illustrated Parts Catalog.
  - (3) A320 Aircraft Maintenance Manual.
  - (4) V2500 Standard Practices Manual.

## L. Other Publications Affected

- (1) The V2500 Illustrated Parts Catalog, Chapter/Section 73-22-34, Fig.1 and Chapter/Section 73-22-35, Fig.1 to add the new parts.

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## 2. Accomplishment Instructions

### A. Pre-Requisite Instructions

- (1) On the aircraft panel 115VU, put a warning notice to tell the persons not to start the engine.
- (2) On the aircraft panel 50VU, make sure that the ON legend on the EDG FADEC GND PWR push button switch is OFF and install a warning notice.
- (3) Open the Fan Cowls by the use of the approved procedures in Reference (3), Chapter/Section 71-13-00, (TASK 71-13-00-010-010).

### B. Removal Instructions

- (1) Remove the lockwire from the Data Entry Plug Backshell and the Connector.

NOTE: It is not necessary to remove the lockwire and loosen the Backshell Nut on the Data Entry Plug for the engine serial numbers given in the rework instruction in Step C. Do Steps (3) and (4) for these engines.

- (2) Loosen the Backshell Nut, but do not remove the Backshell. Use TG-70 Strap Wrench or equivalent.
- (3) Disconnect the Data Entry Plug Assembly from the EEC. Use the IAE1J12018 EEC Harness Wrench. Refer to Fig.1.

NOTE: Do not remove the Data Entry Plug Connecting Chain from Flange FC to do the modification specified.

- (4) Remove the 2A2039 Electronic Engine Control by the approved procedure in Reference (3), Chapter/Section 73-22-34, Removal/Installation. Refer to Fig.1.

### C. Rework Instructions (For Engine Serial Numbers V0014 thru V0096 except V0034, V0039, V0051, V0053, V0054, V0055, V0058, V0060, V0061, V0081 and V0085).

NOTE: It is not necessary to disassemble these DEP's. It is necessary to identify these Data Entry Plugs with the correct part number and rating number and replace the Engine Identification Plates.



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- (1) Identify 5A9298 Data Entry Plug (See Reference (2), Chapter/Section 73-22-35, Fig/Item No.01-100) as follows:

ProcedureSupplementary Information

- (a) Identify the Data Entry Plug Backshell with the New Part Number as follows:

Refer to Fig.2, requirements

- (i) Mark out the Old Part Number (5A9298). Use the vibration peen method

Use the procedure in Reference (4), Control No./TASK 70-09-00-400-501.

Old Part No.New Part No.

5A9298

5A0431

- (ii) Mark the New Part Number (5A0431) adjacent to the Old Part Number location. Use the vibration peen method

Identify by the approved procedure in Reference (4), Control No./TASK 70-09-00-400-501.

Old Rating  
NumberNew Rating  
Number

1

1-00

- (iii) Vibro-peen -00 after the Rating Number now on the Data Entry Plug Backshell

Identify by the approved procedure in Reference (4), Control No./TASK 70-09-00-400-501

- (2) Replace the 5A9036 Engine Identification Plate (See Reference (2), Chapter/Section 72-32-85, Fig/Item No.03-120) as follows:

ProcedureSupplementary Information

- (a) Remove the four bolts that hold the Engine Identification Plate to the bracket located on the fan case at the 9 o'clock position

Refer to Fig.3, requirements

NOTE: Give the old Engine Identification Plate to your IAE Representative.

- (b) Get the new 5A9036 Engine Identification Plate marked with the engine serial number, data entry plug part number, and take-off rating, from your IAE Representative

Refer to Fig.3, requirements



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**CAUTION:** MAKE SURE THE DATA ON THE NEW ENGINE IDENTIFICATION PLATE IS CORRECT FOR THE ENGINE YOU INSTALL IT ON.

- (c) Install the new Engine Identification Plate to the bracket with the 4W0102 Bolts (4 off) Refer to Fig.3, requirements
- (d) Torque the bolts between 32 - 36 lbfin (3,61 - 4,07 Nm) Refer to Fig.3, requirements
- D. Rework Instructions (For Engine Serial Numbers V0034, V0039, V0051, V0053, V0054, V0055, V0058, V0060, V0061, V0081 and V0085)
- (1) Do a modification to 5A9298 Data Entry Plug (See Reference (2), Chapter/Section 73-22-35, Fig/Item No.01-100) and identify as follows:

Procedure

Supplementary Information

- (a) Remove the Connector Assembly from the Backshell Refer to Fig.4, requirements
- (b) Remove the Anti-Vibration Rubber Refer to Fig.4, requirements

**NOTE:** Give the old Connector Assembly to your IAE Representative.

- (c) Get the new Connector Assembly from your IAE Representative

**CAUTION:** MAKE SURE THE NEW CONNECTOR ASSEMBLY IS CORRECT FOR THE ENGINE YOU INSTALL IT ON. THE NEW CONNECTOR ASSEMBLY IS NOT IDENTIFIED WITH THE ENGINE SERIAL NUMBER.

- (d) Align and install the Anti-Vibration Rubber on the Jumper ends of the new Connector Assembly Refer to Fig.4, requirements
- (e) Install the Connector Assembly and Anti-Vibration Rubber into the Backshell and tighten the Backshell Nut with your fingers Refer to Fig.4, requirements
- (f) Identify the Data Entry Plug Backshell with the New Part Number as follows: Refer to Fig.5, requirements



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- (i) Mark out the Old Part Number (5A9298). Use the vibration peen method
- Use the procedure in Reference (4), Control No./TASK 70-09-00-400-501

<u>Old Part No.</u>	<u>New Part No.</u>
5A9298	5A0431

- (ii) Mark the New Part Number (5A0431) adjacent to the Old Part Number location. Use the vibration peen method
- Identify by the approved procedure in Reference (4), Control No./TASK 70-09-00-400-501

<u>Old Rating Number</u>	<u>New Rating Number</u>
1	1-01

- (iii) Vibro-peen -01 after the Rating Number now on the Data Entry Plug Backshell
- Identify by the approved procedure in Reference (4), Control No./TASK 70-09-00-400-501

- (2) Replace the 5A9036 Engine Identification Plate (See Reference (2), Chapter/Section 72-32-85, Fig/Item No.03-120) as follows:

ProcedureSupplementary Information

- (a) Remove the four bolts that hold the Engine Identification Plate to the bracket located on the fan case at the 9 o'clock position
- Refer to Fig.3, requirements

NOTE: Give the Old Engine Identification Plate to your IAE Representative.

- (b) Get the new 5A9036 Engine Identification Plate marked with the engine serial number, data entry plug part number, and take-off rating, from your IAE Representative
- Refer to Fig.3, requirements

CAUTION: MAKE SURE THE DATA ON THE NEW ENGINE IDENTIFICATION PLATE IS CORRECT FOR THE ENGINE YOU INSTALL IT ON.

- (c) Install the new Engine Identification Plate to the bracket with the 4W0102 Bolts (4 off)
- Refer to Fig.3, requirements
- (d) Torque the bolts between 32 - 36 lbfin (3,61 - 4,07 Nm)
- Refer to Fig.3, requirements



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## E. Rework Instructions (For Engine Serial Numbers V0097 through V0121)

- (1) Do a modification to 5A0357 Data Entry Plug (See Reference (2), Chapter/Section 73-22-35, Fig/Item No.01-100) and identify as follows:

<u>Procedure</u>	<u>Supplementary Information</u>
(a) Remove the Connector Assembly from the Backshell	Refer to Fig.4, requirements
(b) Remove the Anti-Vibration Rubber	Refer to Fig.4, requirements

NOTE: Give the old Connector Assembly to your IAE Representative.

- (c) Get the new Connector Assembly from your IAE Representative

CAUTION: MAKE SURE THE NEW CONNECTOR ASSEMBLY IS CORRECT FOR THE ENGINE YOU INSTALL IT ON. THE NEW CONNECTOR ASSEMBLY IS NOT IDENTIFIED WITH THE ENGINE SERIAL NUMBER.

(d) Align and install the Anti-Vibration Rubber on the Jumper ends of the new Connector Assembly	Refer to Fig.4, requirements
(e) Install the Connector Assembly and Anti-Vibration Rubber into the Backshell and tighten the Backshell Nut with your fingers	Refer to Fig.4, requirements
(f) Identify the Data Entry Plug Backshell with the New Part Number as follows:	Refer to Fig.6, requirements
(i) Mark out the Old Part Number (5A0357). Use the vibration peen method	Use the procedure in Reference (4), Control No./TASK 70-09-00-400-501

<u>Old Part No.</u>	<u>New Part No.</u>
5A0357	5A0432

(ii) Mark the New Part Number (5A0432) adjacent to the Old Part Number location. Use the vibration peen method	Identify by the approved procedure in Reference (4), Control No./TASK 70-09-00-400-501
--	--

<u>Old Rating Number</u>	<u>New Rating Number</u>
1	1-00

R



# SERVICE BULLETIN

- (iii) Vibro-peen -00 after the Rating Number now on the Data Entry Plug Backshell Identify by the approved procedure in Reference (4), Control No./TASK 70-09-00-400-501
- (2) Replace the 5A9036 Engine Identification Plate (See Reference (2), Chapter/Section 72-32-85, Fig/Item No.03-120) as follows:

## Procedure

## Supplementary Information

- (a) Remove the four bolts that hold the Engine Identification Plate to the bracket located on the fan case at the 9 o'clock position Refer to Fig.3, requirements

NOTE: Give the Old Engine Identification Plate to your IAE Representative.

- (b) Get the new 5A9036 Engine Identification Plate marked with the engine serial number, data entry plug part number, and take-off rating, from your IAE Representative Refer to Fig.3, requirements

CAUTION: MAKE SURE THE DATA ON THE NEW ENGINE IDENTIFICATION PLATE IS CORRECT FOR THE ENGINE YOU INSTALL IT ON.

- (c) Install the new Engine Identification Plate to the bracket with the 4W0102 Bolts (4 off) Refer to Fig.3, requirements
- (d) Torque the bolts between 32 - 36 lbf·in (3,61 - 4,07 Nm) Refer to Fig.3, requirements

## F. Installation Instructions

- (1) Install 2A2189 Electronic Engine Control by the approved procedure in Reference (3), Chapter/Section 73-22-34, Removal/Installation by Fig.1 except as follows:
- (a) Tighten and torque all the EEC Electrical Harness Connectors to 32 lbf·in (3,6 Nm). Use the IAE1J12018 EEC Harness Wrench. See Reference (4), Chapter/Section 70-41-00, (TASK 70-41-00-400-501).
- (2) Connect the Data Entry Plug Assembly the the EEC. Refer to Fig.1.
- (3) Tighten and torque the Data Entry Plug Assembly to 32 lbf·in (3,6 Nm). Use the IAE1J12018 EEC Harness Wrench. See Reference (4), Chapter/Section 70-41-00, (TASK 70-41-00-400-501).



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- (4) Tighten and torque the Backshell to 53 - 58 lbf·in (5,99 - 6,55 Nm) with a TG-70 Strap Wrench or equivalent. See Reference (4), Chapter/Section 70-41-00, (TASK 70-41-00-400-501).
- (5) Safety the Backshell to the Connector with CoMat 02-138 Lockwire. See Reference (3), Chapter/Section, 70-41-11, (TASK 70-41-11-911-012).

## G. Post-Requisite Instructions

- (1) Close the Fan Cowls by use of the approved procedure in Reference (3), Chapter/Section 71-13-00, (TASK 71-13-00-410-010).
- (2) Remove the warning notices.

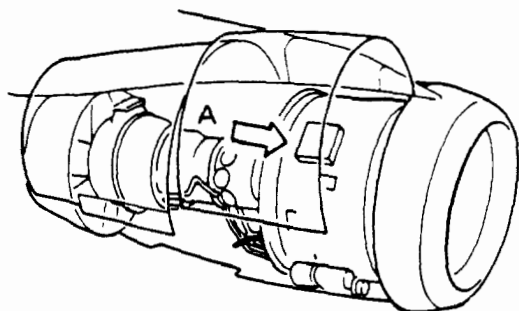
## H. Recording Instructions

- (1) A record of accomplishment is necessary.

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# SERVICE BULLETIN

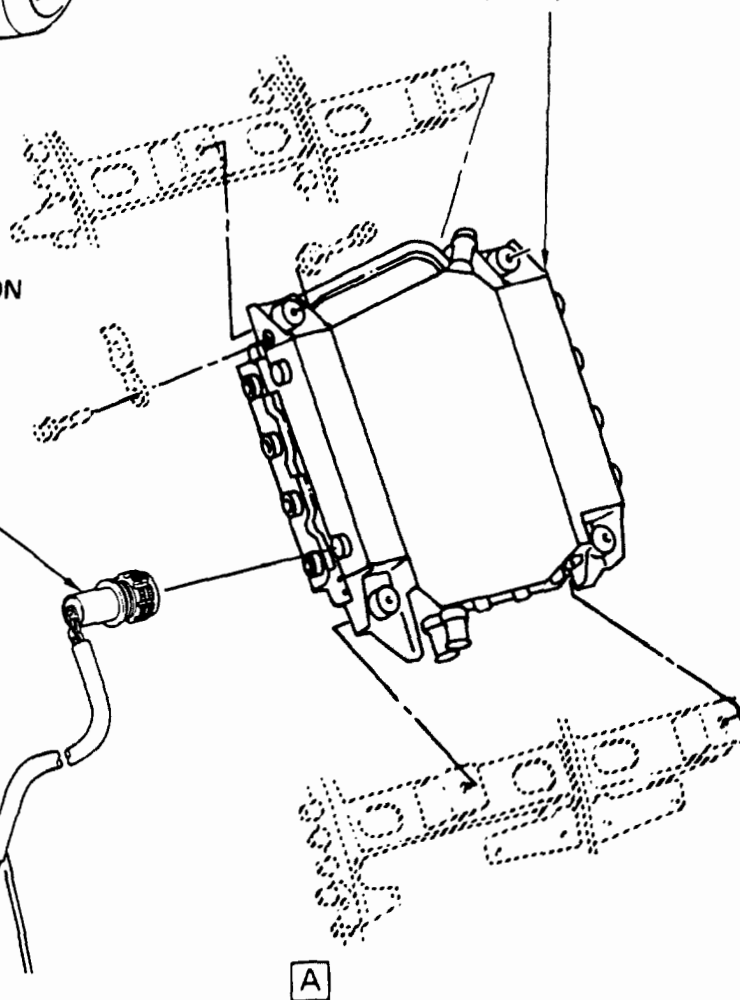


REMOVE PN 2A2039 ELECTRONIC  
ENGINE CONTROL AND INSTALL  
PN 2A2189 (1 Off)

REMOVE PN 5A9298 OR  
5A0357 DATA ENTRY PLUG  
ASSEMBLY, DO A MODIFICATION  
AND INSTALL PN 5A0431 OR  
PN 5A0432 DATA ENTRY PLUG  
ASSEMBLY (1 Off)

DO NOT REMOVE THE  
CONNECTING CHAIN

FLANGE FC



19650

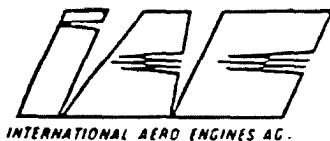
Location of electronic engine control and  
data entry plug assembly

Fig.1

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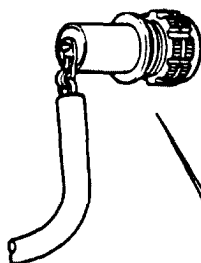
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IDENTIFY PN DEP ASSY 5A9298  
TO PN DEP ASSY 5A0431

DEP ASSY 5A9298  
S/N J1YA XXXX  
RATING No. 1  
EPR MOD. No. XX  
ENG. S/NVXXXX

IDENTIFY RATING No.  
TO ADD -00

NOTE: WHEN THE NEW IDENTIFICATION MARK IS  
MADE USE A MINIMUM AMOUNT OF SPACE.  
IT IS POSSIBLE THAT MORE MARKS WILL  
BE NECESSARY AT A DIFFERENT TIME.

19728

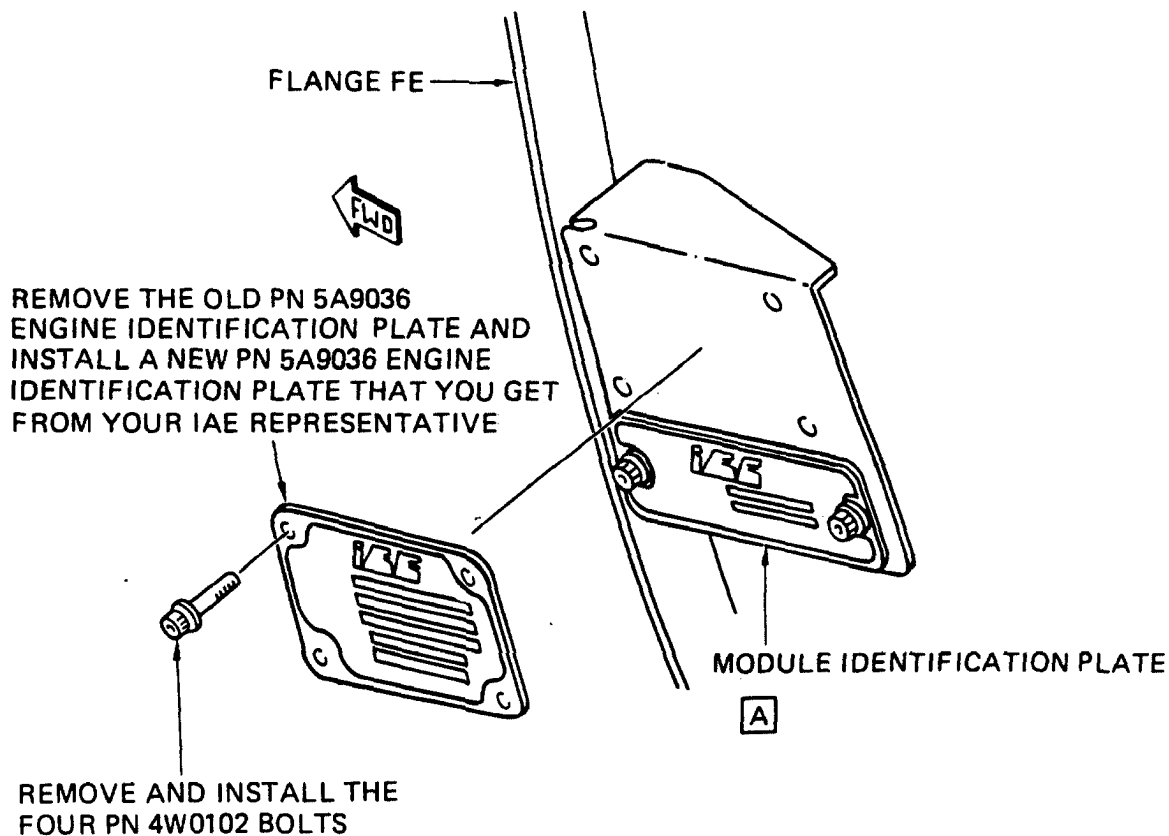
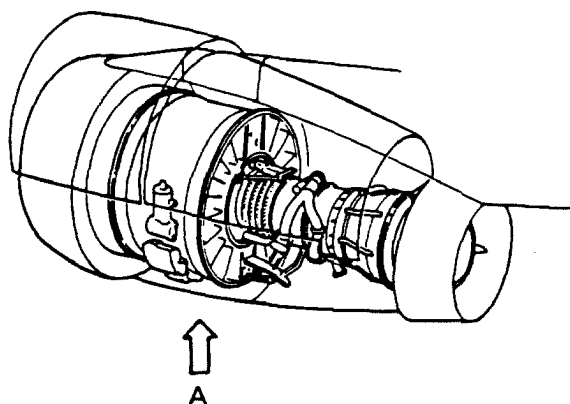
Identification of 5A9298 data entry plug assembly  
with no modification  
Fig.2

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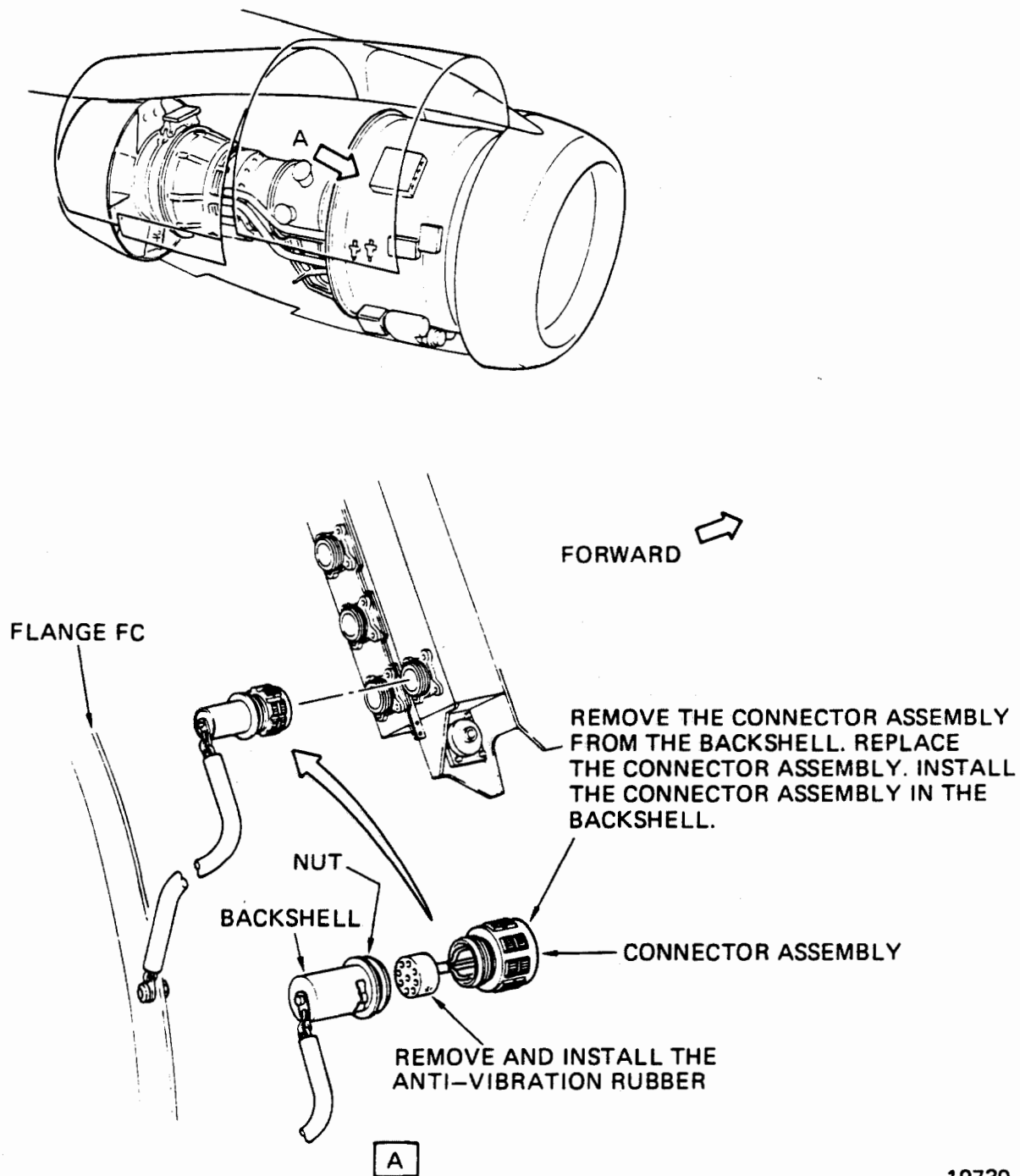
# SERVICE BULLETIN



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Location of the engine identification plate  
Fig.3

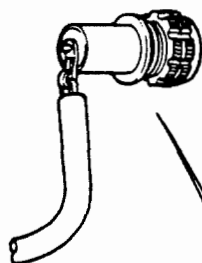
# SERVICE BULLETIN



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Data entry plug assembly  
Fig.4

# SERVICE BULLETIN



IDENTIFY PN DEP ASSY 5A9298  
TO PN DEP ASSY 5A0431

DEP ASSY 5A9298  
S/N J1YA XXXX  
RATING No. 1  
EPR MOD. No. XX  
ENG. S/NVXXXX

IDENTIFY RATING No.  
TO ADD - 01

NOTE: WHEN THE NEW IDENTIFICATION MARK IS  
MADE USE A MINIMUM AMOUNT OF SPACE.  
IT IS POSSIBLE THAT MORE MARKS WILL  
BE NECESSARY AT A DIFFERENT TIME.

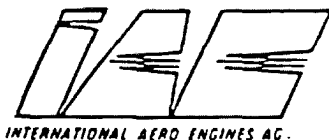
19731

Identification of 5A9298 data entry plug assembly  
with a modification  
Fig.5

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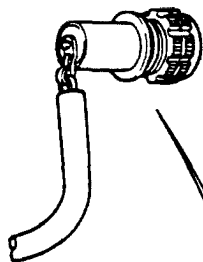
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# SERVICE BULLETIN



IDENTIFY PN DEP ASSY 5A0357  
TO PN DEP ASSY 5A0432

DEP ASSY 5A0357  
S/N J1YA XXXX  
RATING No. 1  
EPR MOD. No. XX  
ENG. S/NVXXXX

IDENTIFY RATING No.  
TO ADD -00

NOTE: WHEN THE NEW IDENTIFICATION MARK IS  
MADE USE A MINIMUM AMOUNT OF SPACE.  
IT IS POSSIBLE THAT MORE MARKS WILL  
BE NECESSARY AT A DIFFERENT TIME.

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Identification of 5A0357 data entry plug assembly  
with a modification

Fig.6

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## 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
2A2189 (73-22-34)	1		Control - Electronic Engine	2A2039 (01-280)	(S1)(1D)
5A0431 (73-22-35)	1		Plug Assembly, Data Entry	5A9298 (01-100)	(S1)(2D)
or					
5A0432 (73-22-35)	1		Plug Assembly, Data Entry	5A0357 (01-100)	(S1)(2D)

### Expendable Parts:

5A9036 (73-32-85) (03-120)	1		Plate, Engine Identification	(A)(B)
----------------------------------	---	--	---------------------------------	--------

### C. Instruction/Disposition Code Statements:

- (S1) New parts coded (S1) must replace old parts coded (S1) as a COMPLETE SET per engine. A set is one Electronic Engine Control and the applicable Data Entry Plug.
- (1D) Replace the used part with the new part. New part can be purchased from and used parts returned (for modification, Reference (4)) to the following vendor:

Hamilton Support Systems  
Customer Service Center  
97 Newberry Road  
East Windsor, CT USA 06088  
HSD P/L 798300-8-032, L12  
or  
Pratt and Whitney Overhaul/Repair Center Europe (PWORCE)  
Maastricht Airport  
P.O. Box 269  
6190 AG BEEK  
The Netherlands  
HSD P/L 798300-8-032, L12



V2500 Propulsion System — Engine

# SERVICE BULLETIN

- (2D) A modification can be done to the Old Part and it can be identified as the New Part Number. The DEP detail Connector Assembly is removed and replaced. Get the New Connector Assembly from your IAE Representative. Give the Old Connector Assembly to the IAE Representative.
- (A) Return the Old Part to your IAE Representative.
- (B) Get the New Part from your IAE Representative.

NOTE: The estimated 1990 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.

Printed in Great Britain





# SERVICE BULLETIN

CIRCULATE PROMPTLY

V2500, A320

ENGINE FUEL AND CONTROL - EEC150-1 - ELECTRONIC ENGINE CONTROL -  
INCORPORATION OF NEW SOFTWARE CONFIGURATION

1. Planning Information

A. Effectivity

All Hamilton Standard Electronic Engine Controls  
Model EEC150-1 Not Incorporating Part Number

798300-8-032  
798300-10-032  
798300-14-032

B. Reason

- (1) Objective. This Service Bulletin gives instructions for incorporating new software in the EEC150-1 to enhance engine performance and fault annunciation.
- (2) Problem. Not Applicable
- (3) Observation. Not Applicable
- (4) Background. Not Applicable
- (5) Substantiation. Not Applicable

C. Description

Processor board assemblies are removed from the unit. New software is incorporated by reprogramming the EPROMs. After EPROM reprogramming, the unit is reassembled and tested.

D. Compliance

Category 4 - Accomplish at first visit of an Electronic Engine Control to a maintenance shop.



# SERVICE BULLETIN

**E. Approval**

The part number changes and/or part modifications described in Paragraph 2. of this Service Bulletin have been shown to comply with the applicable Federal Aviation Regulations and are FAA-Approved for the Electronic Engine Controls listed.

**F. Manpower**

Approximately 8 man-hours are required to reprogram each unit. This includes disassembly, assembly and testing.

**G. Material - Cost and Availability**

None

**H. Tooling**

None

**I. Weight and Balance**

None

**J. Electrical Load Data**

Not affected

**K. Reference**

IAE Service Bulletin No. V2500-ENG-73-0015  
Component Maintenance Manual 73-22-34 (TR73-2)

**L. Other Publications affected**

Component Maintenance Manual 73-22-34 (TR73-2)  
Illustrated Parts Catalog 73-22-34

**2. Accomplishment Instructions**

- A. Reprogram the EEC using the following instructions or return the EEC for reprogramming to:**

Pratt & Whitney Overhaul/Repair Center Europe (PWORCE)  
Maastricht Airport  
P.O. Box 269  
6190 AG BEEK  
The Netherlands



# SERVICE BULLETIN

- B. Determine the requirements for Service Bulletin incorporation by checking the units and spare assemblies for the following part numbers:

<u>Assembly</u>	<u>HS Part Number</u>
EEC150-1	798300-8-XXX 798300-10-XXX 798300-14-XXX
Processor/Input Module-Channel A	793610-X
Processor/Input Module-Channel B	793612-X

(XXX) - Indicates software configuration

**CAUTION:** OBEY THE ESDS PRECAUTIONS IN REPAIR 1 IN CMM 73-22-34. THE EEC150-1 CONTAINS ESDS COMPONENTS WHICH MAY BE EASILY DAMAGED.

- C. Reprogram the units according to REPAIR 5 (TR73-2) of Component Maintenance Manual 73-22-34. Use the program and version number shown below with the indicated checksums.

	<u>Channel A</u>	<u>Channel B</u>
Application Program:	Y805881	Y805882
Application Version Number:	E-059	E-059
Application Checksum:	C986	3B8D
.PAR Checksums:		
PN 798300-8-032	91E3	715A
PN 798300-10-032	AFBE	AE58
PN 798300-14-032	AFBE	AE58
Engine Trim Program:	Y806806	Y806806
Engine Trim Version Number:	259	259



# SERVICE BULLETIN

- D. Reidentify the assemblies as shown below. Refer to REPAIR 4 (TR73-2) of Component Maintenance Manual 73-22-34 for instructions to replace the identification plates.

<u>Assembly</u>	<u>New HS Part Number</u>	<u>New IAE Part Number</u>
EEC150-1	798300-8-032 L6	2A2189
	798300-8-032 L7	2A2189A
	798300-8-032 L12	2A2189B
	798300-10-032 L6	2A2166
	798300-10-032 L7	2A2166A
	798300-10-032 L12	2A2166B
	798300-10-032 L13	2A2166C
	798300-10-032 L14	2A2166D
	798300-14-032 L14	
Processor/Input Module-Channel A	793610-X-032	N/A
Processor/Input Module-Channel B	793612-X-032	N/A

### 3. Material Information

None

Hamilton Standard Internal Reference Number 198815-2  
Hamilton Standard Internal Identification Number EEC15073.14