



ENGINE - FUEL AND CONTROL - CDX MODIFIER ADJUSTMENT FOR DELIVERED ENGINES - CATEGORY
CODE 8 - MOD.ENG-72-0139

1. Planning Information

A. Effectivity

- (1) Aircraft: McDonnell Douglas MD-90
- (2) Engine: V2528-D5 Engines Serial No. V20007, V20009, V20010,
V20011, V20012, V20013

B. Reason

(1) Condition:

Performance analysis indicates that the indoor/outdoor stand corrections include an unintended fan duct leakage effect.

(2) Background:

Until the exact magnitude of the leakage effect is determined, delivered engines will have their EPR Modifiers adjusted, assuming the worst case duct leakage effect on stand corrections.

(3) Objective:

To adjust the EPR Modifier for the fan duct leakage effect.

(4) Substantiation

Performance analysis.

(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

V2500-ENG-72-0139



None.

C. Description

- (1) Remove the Data Entry Plug. Wire it to the correct EPR Modifier for the listed engine serial numbers. Mark and install the Data Entry Plug and the Engine Identification Plate.

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 F 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 8

Accomplish based upon experience with the prior configuration.

F. Manpower

Estimated Manhours to incorporate the full intent of this Bulletin:

Venue	Estimated Manhours
-------	--------------------

(1) In service

- | | |
|--|------------|
| (a) To gain access | 9 minutes |
| (b) To remove and modify the Data Entry Plug Assembly | 10 minutes |
| (c) Identify and install the data entry plug assembly | 5 minutes |
| (d) Change the EPR Modifier number on the engine identification plate. | 2 minutes |
| (e) Assemble and connect the Data Entry Plug Assembly. | 1 minute |
| (f) To return to flyable status | 10 minute |

TOTAL: 37 minutes

V2500-ENG-72-0139



SERVICE BULLETIN

- (2) At overhaul Not applicable

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

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

Special tools are not required to accomplish this Service Bulletin.

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) Internal Reference No.

94VC098

- (2) Other References

The V2500-D5 Engine Illustrated Parts Catalog (S-V2500-3IA),
Chapter/Section 73-22-35

The MD-90 Aircraft Maintenance Manual, Chapter/Section 73-21-35

The V2500 Engine Manual(E-V2500-3IA), Chapter/Section 71-00-00

L. Other Publications Affected

None.

V2500-ENG-72-0139



SERVICE BULLETIN

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 ENG FADEC GND PWR push button switch is OFF and install a warning notice.
- (3) Open the Fan Cowls by the approved procedure in Reference (2), Chapter/Section 71-13-00.

B. Removal Instructions

- (1) Remove the Data Entry Plug Assembly by the procedure given in Reference (2), Chapter/Section 73-21-35 Removal/Installation. See Figure 1.

C. Modification Instructions

- (1) Disassemble the Data Entry Plug Assembly as necessary to do the specified change to the EPR modifier.
 - (a) Use the procedure given in Reference (3), Chapter/Section 71-00-00, Testing-11.
- (2) Install the applicable jumper wires to do the change to EPR Modifier as specified in Table 1.
 - (a) Use the procedure given in Reference (3), Chapter/Section 71-00-00, Testing-11.

Table 1 EPR Modifier Changes		
Engine Serial Number	EPR Modifier Before Incorporation of This Service Bulletin	EPR Modifier After Incorporation of This Service Bulletin
V20007	09	10
V20009	09	10
V20010	08	09
V20011	10	11
V20012	09	10
V20013	09	10

V2500-ENG-72-0139



* Engine V20008's EPR Modifier does not require adjustment.

- (3) Make a mark on the backshell of the Data Entry Plug Assembly to show the new EPR Modifier by the procedure given in Reference (3), Chapter/Section 71-00-00, Testing-11.

D. Installation Instructions

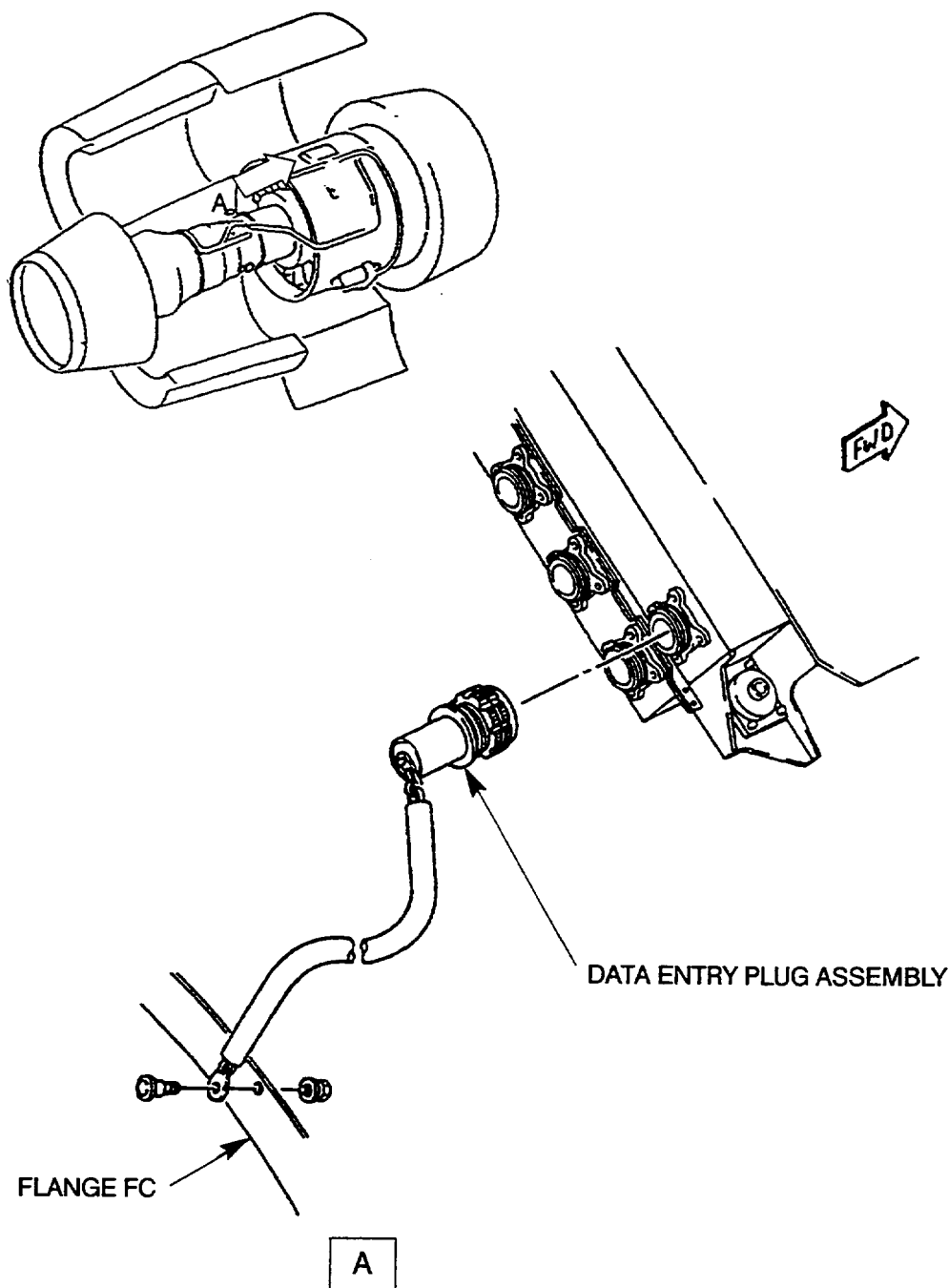
- (1) Install the Data Entry Plug Assembly by the procedure given in Reference (2), Chapter/Section 73-21-35 Removal/Installation.
- (2) Make a mark on the Engine Identification Plate to show the new EPR Modifier by the procedure given in Reference (2), Chapter/Section 73-21-35 Removal/Installation. See Figure 2.

E. Post-Requisite Instructions

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

F. Recording Instructions

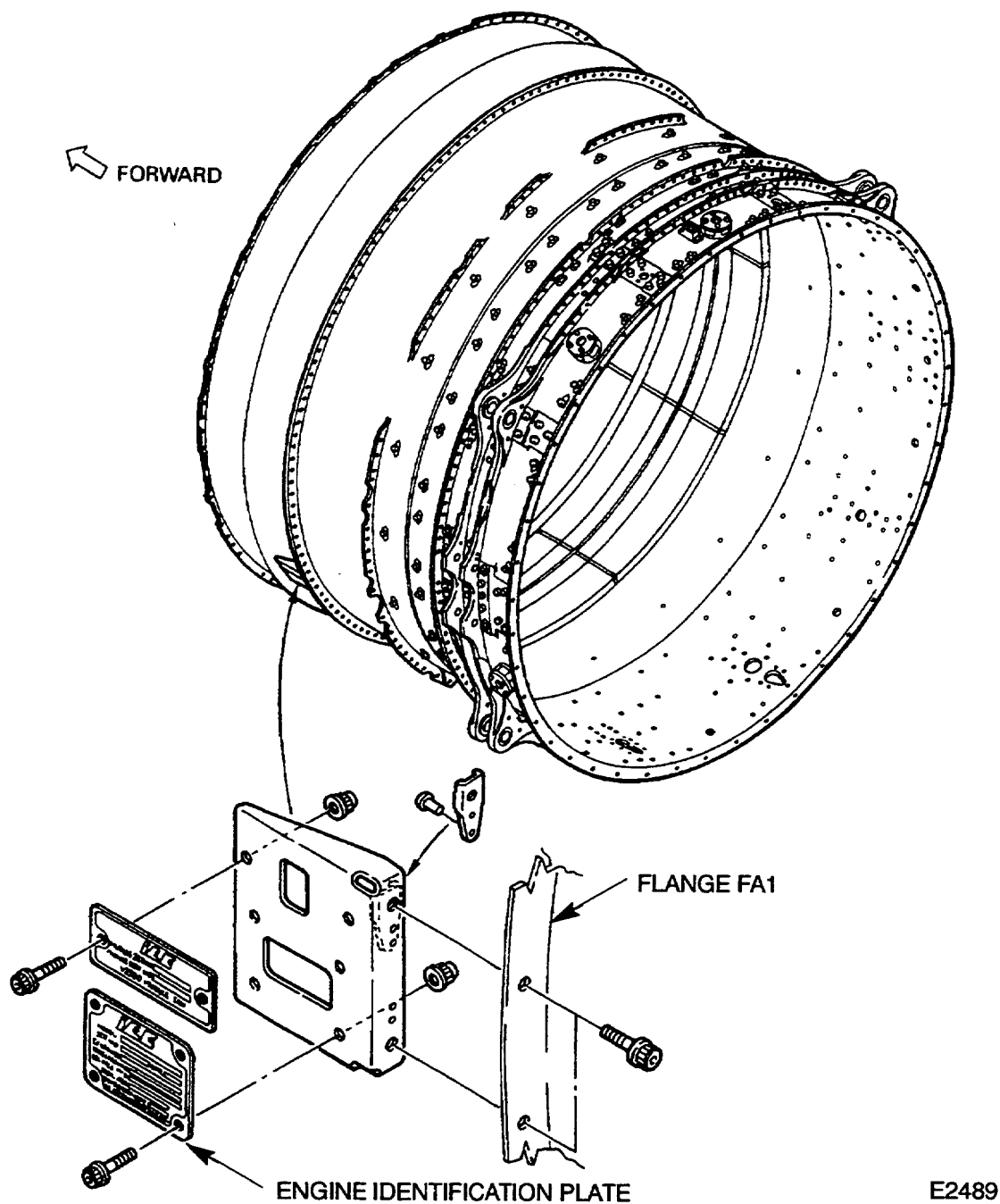
- (1) A record of accomplishment is necessary.



E2488

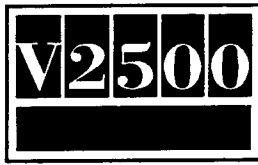
Location of the Data Entry Plug Assembly
Fig.1

V2500-ENG-72-0139



Location of the Engine Identification Plate
Fig.2

V2500-ENG-72-0139



SERVICE BULLETIN

3. Material Information

Applicability: For each V2500 Engine to incorporate this Bulletin.

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
------------------------------	-----	-----------------------------	---------	------------------------------	-----------------------------

Applicability: For each V2500 Engine to incorporate this Service Bulletin

5A9036 (72-32-85)	1		Plate, Engine Identification	- (03-120)	(A)
2A2315 (73-22-35)	A/R		Jumper Assy. (2 Pin)	- (01-145)	(A)

C. Consumable Materials

None.

D. Instructions/Disposition Code Statements:

(A) The new part is currently available.

NOTE: The estimated 1995 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.

V2500-ENG-72-0139