ENGINE - FUEL AND CONTROL - PROVIDE A NEW FUEL NOZZLE ASSEMBLY

MODEL APPLICATION

V2500-A1 V2522-A5 V2524-A5 V2527-A5 V2527E-A5 V2527M-A5 V2530-A5 V2533-A5 V2525-D5 V2528-D5

BULLETIN INDEX LOCATOR

73-00-00

Compliance Category Code

Internal Reference No.

97VA029

Apr.11/00

7

V2500-ENG-73-0149

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ENGINE - FUEL AND CONTROL - PROVIDE A NEW FUEL NOZZLE ASSEMBLY

1. Planning Information

A. Effectivity

(1) Aircraft: Airbus A319, A320, A321

McDonnell Douglas MD-90

(2) Engine: V2500-Al Engines Before Serial No. V0363

V2522-A5 Engines before Serial No. V10768 Except V10743, V10745, V10747, V10749, V10751, V10753, V10755, V01757, V10759, V10761, V10763, V10765, and V10767.

V2524-A5 Engines before Serial No. V10768 Except V10743, V10745, V10747, V10749, V10751, V10753, V10755, V01757, V10759, V10761, V10763, V10765, and V10767.

V2527-A5 Engines before Serial No. V10768 Except V10743, V10745, V10747, V10749, V10751, V10753, V10755, V01757, V10759, V10761, V10763, V10765, and V10767.

V2527E-A5 Engines before Serial No. V10768 Except V10743, V10745, V10747, V10749, V10751, V10753, V10755, V01757, V10759, V10761, V10763, V10765, and V10767.

V2527M-A5 Engines before Serial No. V10768 Except V10743, V10745, V10747, V10749, V10751, V10753, V10755, V01757, V10759, V10761, V10763, V10765, and V10767.

V2530-A5 Engines before Serial No. V10768 Except V10743, V10745, V10747, V10749, V10751, V10753, V10755, V01757, V10759, V10761, V10763, V10765, and V10767.

V2533-A5 Engines before Serial No. V10768 Except V10743, V10745, V10747, V10749, V10751, V10753, V10755, V01757, V10759, V10761, V10763, V10765, and V10767.

V2525-D5 Engines before Serial No. V20286

V2528-D5 Engines before Serial No. V20286

B. Concurrent Requirements

None.

C. Reason

(1) Condition:

It was found that the manufacturer could improve the process used to make this assembly.

(2) Background:

Small changes were made to the design of the assembly and the process used to manufacture the assembly. The changes, given in the Objective, will make it easier to manufacture this assembly.



(3) Objective:

Eliminate the baffle slot and cooling hole alignment requirement. Relax the lower outer heatshield tolerances. Reduce the material thinning allowance. Replace the outer swirler assembly with one having a machined spherical radius. Replace the fitting groove with a radius. Delete the external center body braze ring groove.

(4) Substantiation

Test sample demonstrated patternation was not affected. Structural analysis was successfully completed for the fitting and heatshield tolerance items. The fitting and center body brazes have been successfully requalified for engineering source approval.

(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

D. Description

(1) Install new Fuel Nozzle Assemblies.

E. 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.

F. Compliance

Category 7

Accomplish when supply of superseded parts has been depleted.

G. Manpower

Estimated Manhours to incorporate the full intent of this Bulletin:

Venue

Estimated Manhours

(1) In service

Not applicable

(2) At overhaul

Not applicable



$\sqrt{2500}$ International Aero Engines **SERVICE BULLETIN**

- H. Material Price and Availability
 - (1) Modification kit is not required. Parts are supplied as single line items.
 - See "Material Information" section for prices and availability of (2) future spares.
- I. Tooling Price and Availability Special tools are not required to accomplish this Service Bulletin.
- J. Weight and Balance
 - (1) Weight change

None

(2) Moment arm

No effect

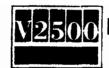
(3) Datum

Engine Front mount Centerline (Power Plant station (PPS) 100)

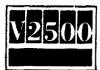
K. Electrical Load Data

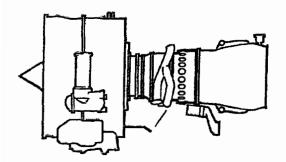
This Service Bulletin has no effect on the aircraft electrical load.

- L. References
 - The V2500-Al Engine Illustrated Parts Catalogs (S-V2500-1IA), (1) Chapter/Section 73-13-41 add the new parts.
 - The V2500-A5 Engine Illustrated Parts Catalogs (S-V2500-2IA, S-V2500-21B, S-V2500-51A, S-V2500-51B, S-V2500-61A, S-V2500-61B, S-V2500-7IA, S-V2500-7IB), Chapter/Section 73-13-41 add the new parts.
 - The V2500-D5 Engine Illustrated Parts Catalogs (S-V2500-3IA, S-V2500-3IB), Chapter/Section 73-13-41 add the new parts.
 - (4) The V2500 Engine Manual (E-V2500-1IA), 72-42-00 Assembly.
 - The V2500 Engine Manual (E-V2500-3IA), 72-42-00 Assembly.
- Other Publications Affected
 - The V2500 Component Maintenance Manual (FN-V2500-1IA, 73-13-41 (1) Cleaning to add the new part.
 - The V2500 Component Maintenance Manual (FN-V2500-1IA, 73-13-41 Inspection to add the new part.
 - (3) The V2500 Component Maintenance Manual (FN-V2500-1IA, 73-13-41 Repair to add the new part.
 - The V2500 Component Maintenance Manual (FN-V2500-1IA, 73-13-41 Testing to add the new part.

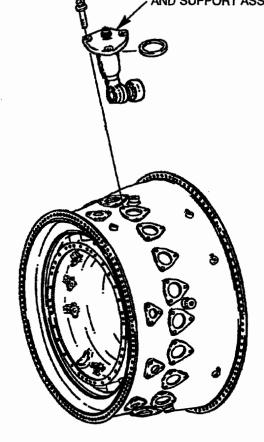


- 2. Accomplishment Instructions
 - Install the 2A3453 (V2500-A1) or 2A3448 (V2400-A5/D5) Fuel Nozzle And Support Assemblies (20 off) by the procedure specified in Reference !1), (2), or (3), Chapter/Section 72-42-00 Assembly.
 - B. Recording Instructions
 - (1) A record of accomplishment is necessary.





FOR V2500-A1 ENGINES
INSTALL THE 2A3453 FUEL NOZZLE
AND SUPPORT ASSEMBLIES (20 off)
FOR V2500-A5 AND V2500-D5 ENGINES
INSTALL THE 2A3448 FUEL NOZZLE
AND SUPPORT ASSEMBLIES (20 off)



E8094

Location of the Fuel Nozzle And Support Assemblies Figure 1



3. Material Information

Kit associated with this bulletin.

None

Parts affected by this bulletin.

Est'd Old Part No. Part No. Unit Instructions (IPC No.) Price(\$) (ATA No.) Qty <u>Keyword</u> Disposition

Applicability: For each V2500-Al Engine to incorporate this Service Bulletin

2A3453 2512.00 .Fuel Nozzle 2A1637 (S1)(A)(B)(73-13-41)& Support (01-020)Assy.

Applicability: For each V2522-A5, V2524-A5, V2527-A5, V2530-A5, V2533-A5, V2525-D5, and V2528-D5 Engine to incorporate this Service Bulletin

.Fuel Nozzle 2A3448 20 3207.00 2A2250 (S1)(A)(B)(73-13-41)& Support (01-020)Assy.

- C. Consumable Materials
- D. Instructions/Disposition Code Statements:

 - (S1)Old and New Parts are freely and fully interchangeable (A) The new part will be available approximately April, 2000.
 - (B) The old part will be supplied until stock is depleted.

The estimated unit prices, if 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.

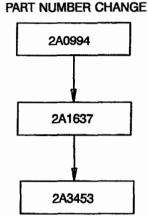


MODIFICATIONS

BASE LINE

V2500-ENG-70-0041 INFORMATION - TO ANNOUNCE THE AVAILABILITY OF FORGED RATHER THAN CAST FUEL NOZZLE AND SUPPORT ASSEMBLIES

V2500-ENG-73-0149
ENGINE - FUEL AND CONTROL - PROVIDE A
NEW FUEL NOZZLE ASSEMBLY



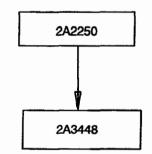
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Family Tree - Fuel Nozzle And Support Assembly (V2500-Al Only) Ref. Catalog Sequence No. 73-13-41. Fig. 1 Item 020 Figure 2

MODIFICATIONS

BASE LINE

PART NUMBER CHANGE



V2500-ENG-73-0149
ENGINE - FUEL AND CONTROL - PROVIDE A
NEW FUEL NOZZLE ASSEMBLY

E8096

Family Tree - Fuel Nozzle And Support Assembly (All Except V2500-Al)
Ref. Catalog Sequence No. 73-13-41. Fig. 1 Item 020
Figure 3