July 24/98

Subject: Transmittal of Revision 1 to Service Bulletin No. V2500-ENG-73-0084

### Service Bulletin Revision History:

Event

Date

Basic Issue

Nov.8/96 July 24/98

Revision 1

### Reason for Issuance of Revision:

- (1) To add Airbus comments
- (2) To correct part number at 2.B.(2) and 3.B.
- (3) Editorial changes to bring Service Bulletin up to latest standards

### Effect on Past Compliance:

None

### List of Effective Pages:

Bulletin		Rev.	Effective	
Page	No.	No .	Date	
1 to	6	1	July 24/98	
7		Basic issue	Nov.8/96	
8		1	July 24/98	

ENGINE - FUEL AND CONTROL - FUEL SYSTEM TUBES -INTRODUCTION OF RE-ALIGNED LP FUEL TUBE ASSEMBLY PRODUCED FROM STAINLESS STEEL MATERIAL

### MODEL APPLICATION

V2500-A1

V2522-A5

V2524-A5

V2527-A5

V2530-A5

### BULLETIN INDEX LOCATOR

73-00-00

Compliance Category Code

Internal Reference No.

EC96VR002

6

## ENGINE - FUEL AND CONTROL - FUEL SYSTEM TUBES - INTRODUCTION OF RE-ALIGNED LP FUEL TUBE ASSEMBLY PRODUCED FROM STAINLESS STEEL MATERIAL

### 1. Planning Information

- A. Effectivity
  - (1) Aircraft:
    - (a) Airbus A319
    - (b) Airbus A320
    - (c) Airbus A321
  - (2) Engine:
    - (a) V2500-Al Engines prior to Serial No.V0362
    - (b) V2522-A5 Engines prior to Serial No.V10185
    - (c) V2524-A5 Engines prior to Serial No.V10185
    - (d) V2527-A5 Engines prior to Serial No.V10185
    - (e) V2530-A5 Engines prior to Serial No.V10185
- B. Concurrent Requirements

Prior to or concurrently with V2500-ENG-73-0061 Service Bulletin.

C. Reason

R

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(1) Condition

Wear of the Fuel Cooled Oil Cooler (FCOC) to diverter valve tube assembly can occur where the tube engages with the seal housing on the FCOC. In extreme cases this has resulted in fuel leaks.

The problem is caused by a combination of the mis-alignment of the tube and seal housing and the frettage resistance of the material not being sufficient.

(2) Background

The condition has been found on both Al and A5 in-service engines.



(3) Objective

R To prevent fuel leaks from the fuel tube assembly between the FCOC and R IDG.

(4) Substantiation

R A satisfactory trial installation on a production engine has been done R on the changes introduced by this Service Bulletin.

(5) Effect of Bulletin on Workshop Procedures:

Removal/Installation Not Affected Disassembly/Assembly Not Affected Cleaning Affected Inspection/Check Not Affected Repair Not Affected Testing Not Affected

(6) Supplemental Information

None.

#### D. Description

This Service Bulletin introduces a revised LP fuel tube assembly between R the FCOC and the diverter valve with the changes that follow: R

- The tube material has been changed from titanium to stainless steel.
- The ferrule has been revised to contain a centralising spigot to control alignment to the FCOC mounted seal housing.
- The length of the tube assembly has been increased so that more of R R the ferrule goes into the FCOC mounted seal assembly.
  - The tube assembly will be produced with more tightly controlled tolerances at the tube end locations. This will make sure that the tube is manufactured correctly and as a result, reduce the possibility of misalignment.

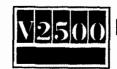
### E. Approval

R

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The part number changes and/or part modification are given in Section 2 and R 3 of this Service Bulletin. They comply with the applicable Federal R Aviation Regulations and are FAA-APPROVED for the engine models listed.



# International Aero Engines SERVICE BULLETIN

F. Compliance

Category Code 6

R This Service Bulletin can be ccomplished when the sub-assembly (That is

R modules, accessories, components, build groups) is disassembled

R sufficiently to get access to all the affected parts.

G. Manpower

R Estimate of manhours necessary to embody this Service Bulletin in full:

### Venue

### Estimated Manhours

(1) In service

Not applicable

(2) At Overhaul

To reduce the FCOC to diverter valve LP Fuel tube assembly 10 minutes

TOTAL

10 minutes

- R NOTE: It is possible to get access to the parts affected by this Service Bulletin at overhaul.
  - H. Material Price and Availability
- R (1) A modification kit not necessary.
- R (2) Refer to Section 3 Material Information for the prices and availability of future spares.
  - I. Tooling Price and Availability
- R Special tools are not necessary.
  - J. Weight and Balance
    - (1) Weight change .. .. Plus 0,201b. (0.091 Kg)
    - (2) Moment arm .. .. 10.0in. (254,0 mm) forward of datum
    - (3) Datum ..... Engine front mount centreline (Power Plant Station (PPS) 100)
  - K. Electrical Load Data

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

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### References

- V2500 Engine Manual (E-V2500-1IA)
- (2) V2500 Component Maintenance Manual (CMM-MECH-V2500-1IA)
- (3) Standard Practices/Process Manual (SPP-V2500-1IA)
- (4) V2500-ENG-73-0061 Service Bulletin
- R Aircraft Modification No.27820

### M. Other Publications Affected

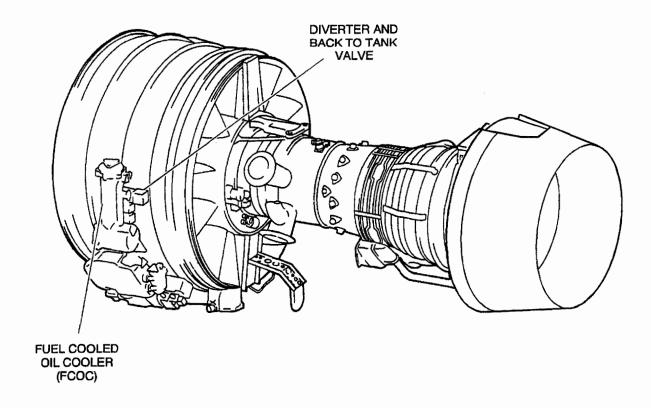
- The V2500 Engine Manual, (E-V2500-1IA), Chapter/Section, 72-00-32, to add new part.
- The Aircraft Maintenance Manual, Chapter/Section, 72-11-47, to add new part.



## 2500 International Aero Engines **SERVICE BULLETIN**

### Accomplishment Instructions

- Rework Instructions
  - (1) None.
- B. Assembly Instructions
- R (1) Before the new fuel tube is installed, make sure that the inner diameter of the 5W8201 mating seal housing has been inspected for frettage and R wear in accordance with the appropriate inspection check. (Refer to the Component Maintenance Manual, Chapter/Section 73-11-49, Inspection/Check-02.)
- (2) Install the new 6A6484 fuel tube. For the correct procedures, refer to R the A1/A5 Engine Manual (EM), Chapter/Section 72-00-32, Installation-20. R
  - C. Recording Instructions
    - (1) A record of accomplishment is necessary.



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General View Fig 1

V2500-ENG-73-0084



## International Aero Engines SERVICE BULLETIN

#### Material Information 3.

Applicability: For each V2500 Engine for which this Service Bulletin is R applicable.

Kits necessary for this Service Bulletin:

None

Parts affected by this Service Bulletin:

	New Part No.		Est'd Unit		Old	
					Part No.	Instructions
	(ATA No.)	Qty	Price (\$)	Keyword	(IPC No.)	Disposition
R.	6A6484 (73-11 <b>-</b> 49)	1	1004-00	Tube A/O - LP fuel FCOC to diverter valve	6A5343 (03-500)	(A)(B) (S1)(1D)

The unit prices, if shown, are an estimate and they are given for the purpose of planning only. For information about actual prices, refer to the IAE Price Catalog or contact IAE's Spare Parts Sales Department.

- Instructions/Disposition Code Statements:
  - New parts are currently available (A)
  - (B) Old parts are no longer available
- (S1) New part can replace old part but old part cannot replace new part
  - (1D) Old part becomes redundant on incorporation of this modification.

R