

# SERVICE BULLETIN

ENGINE FUEL AND CONTROL - FUEL SYSTEM AIR TUBES - INTRODUCTION OF REVISED EEC PIPE-SUPPORT BRACKET

# MODEL APPLICATION

V2500-A1 V2522-A5 V2524-A5 V2527-A5

V2527E-A5 V2530-A5

V2533-A5

## **BULLETIN INDEX LOCATOR**

73-22-00

Compliance Category Code

Internal Reference No.

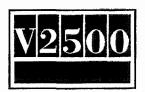
7

Mar. 5/99

EC98VR013

V2500-ENG-73-0140

Page 1 of 11



## SERVICE BULLETIN

# ENGINE FUEL AND CONTROL - FUEL SYSTEM AIR TUBES - INTRODUCTION OF REVISED EEC PIPE-SUPPORT BRACKET

PIPE-SUPPORT BRACKET	

1.	Flaming information	7

- A. Effectivity
  - (1) Aircraft:
    - (a) Airbus A319.
    - (b) Airbus A320.
    - (c) Airbus A321.
  - (2) Engines:
    - (a) V2500-A1 Engines prior to Serial No. V0362.
    - (b) V2522-A5 Engines prior to Serial No. V10575.
    - (c) V2524-A5 Engines prior to Serial No. V10575.
    - (d) V2527-A5 Engines prior to Serial No. V10575.
    - (e) V2527E-A5 Engines prior to Serial No. V10575.
    - (f) V2530-A5 Engines prior to Serial No. V10575.
    - (g) V2533-A5 Engines prior to Serial No. V10575.

#### B. Concurrent Requirements

None.

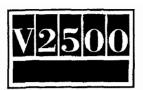
#### C. Reason

(1) Problem

A design review has shown that the manufacture of the EEC pipe support bracket can be improved.

(2) Evidence

(Refer to (1)).



# **SERVICE BULLETIN**

1	(3)	)	O	bi	e	С	ti	v	ε

The purpose of this Service Bulletin is to simplify manufacture.

#### (4) Substantiation

A satisfactory engineering analysis has been done on the changes introduced by this Service Bulletin.

#### (5) Effect of Bulletin on:

(a) Operation

Not affected.

(b) Maintenance

Not affected.

(c) Overhaul

Not affected.

(d) Repair Schemes

Not affected.

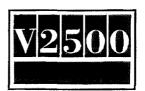
(e) Interchangeability

Not affected.

(f) Fits and Clearances

Not affected.

Mar. 5/99



#### SERVICE BULLETIN

#### D. Description

- (1) The EEC Pipe-support bracket is located between flanges FB and FC on the fancase. It supports tube assembly disconnects and the fancase and core ignition-harness assembly.
- (2) The EEC Pipe-support bracket has been revised, the changes introduced are as follows:
  - (a) The method of manufacture has changed. The component is fabricated by spot and fillet welding, not rivets which are deleted.
  - (b) The material has changed from Titanium (TCA) to Stainless Steel (EBM).
  - (c) The profile of the bracket has changed from triangular to rectangular.
  - (d) Due to the profile change the anti-rotation lug and anchor nut used to attach clip point CP1007 has been deleted and an additional Spur-bracket has been welded on.
  - (e) The number of holes for attaching the L-Shaped fixing bracket at flange FB have decreased from three to two. In addition, the slots have been changed to holes.
- (3) A revised L-Shaped fixing bracket is introduced, the changes are as follows:
  - (a) The material is changed from Titanium (TCA) to Stainless Steel (EBM).
  - (b) The number of holes on the support face has been increased from three to four, two for the revised EEC Pipe-support bracket and two for the existing UP11228 bracket. In addition, the holes have been changed to slots.
  - (c) To make the manufacture easier, minor changes have been made to the geometry and profile of the bracket.
- (4) The quantity of fasteners that attach the EEC Pipe-support bracket to the L-Shaped fixing bracket have decreased from three to two. In addition, as the holes have changed to slots, washers have been introduced. The nut has changed from a clip nut to a standard nut.
- (5) The fasteners that attach the existing bracket (UP11228) also attach the EEC Pipe-support bracket. As bracket UP11228 is attached to the L-Shaped fixing bracket two seperate nuts, bolts and washers are introduced.
- (6) Clip Point CP1007 has a revised washer and the clip nut is changed to a standard nut. The opportunity has been taken to revise the clip in line with current design practices.



#### SERVICE BULLETIN

_	$\sim$	• •
	( '^	11000
P.,	Comp	HALICE
	~~~~	

Category Code 7.

This Service Bulletin can be accomplished when there are no old parts remaining.

#### F. Approval

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

#### G. Manpower

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

(1) In Service

Not applicable.

(2) At Overhaul

No additional time is necessary to embody this Service Bulletin.

NOTE: It is possible to get access to the parts affected by this Service Bulletin at overhaul.

#### H. Material - Price and Availability

- (1) A modification kit is not necessary.
- (2) Refer to 3. Material Information for prices and availability of future spares.
- I. Tooling Price and Availability

Special tools are not necessary.

- J. Weight and Balance
  - (1) Weight Change

None.

(2) Moment Arm

Not affected.

(3) Datum

Engine front mount centreline (Power Plant Station (PPS) 100).



# SERVICE BULLETIN

#### K. Electrical Load Data

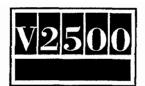
This Service bulletin does not affect the aircraft electrical load.

# L. References

- (1) Internal reference: EC 98VR013.
- (2) A1/A5 Engine Manual, Chapter/Section 72-00-32 Removal-03 CONFIG 1 and Installation-03 CONFIG 2.

#### M. Other Publications Affected

- (1) Illustrated Parts Catalogue (IPC), Chapter/Sections 71-51-44, 71-51-49 and 73-22-49.
- (2) A1/A5 Engine Manual, Chapter/Section 72-00-32 Removal-03 CONFIG 1 and Installation-03 CONFIG 2.
- (3) Component Maintenance Manual (CMM), Miscellaneous Mechanical, Cleaning-01 and Inspection/Check-04 CONFIG 1.



# **SERVICE BULLETIN**

# 2. Material Information

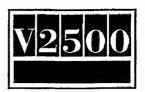
A. Kits necessary for this Service Bulletin:

None.

Mar. 5/99

# B. Parts affected by this Service Bulletin:

NEW PART No. (ATA No.)	QTY	EST'D UNIT PRICE	PART TITLE	OLD PART No. (IPC No.)	INSTR DISP
4W2621 (71-51-44)	1	0.80	.Washer (CP1007)	5W1086 (01-191)	(A) (S1) (1D)
AS62501 (71-51-44)	1	8.84	.Clamp, loop style, cushion (1,57mm (0.062)) (CP1007)	TA025074-01 (01-193)	(A) (S2) (1D)
- (71-51-44)	1		.Clamp, loop style, cushion (1,58mm (.062)) (CP1007)	AS61931 (01-193)	(1D)
4W0001 (71-51-44)	1	2.80	.Nut, self locking dbl hex (.190 dia) (CP1007)	(01-197)	(A) (C)
6A7432 (71-51-49)	1	39.40	.Bracket - Support	5A0835 (01-370)	(B) (S1)
4W0164 (73-22-49)	2	5.55	.Bolt, machine double hex (.250 dia x .625)	(03-792)	(A) (C)
4W2622 (73-22-49)	2	0.89	.Washer	(03-794)	(A) (C)
4W0002 (73-22-49)	2	9.32	.Nut, self locking db1 hex (.250 dia)	(03-796)	(A) (C)
6A7420 (73-22-49)	1	72.00	.Bracket-assy, support	5A0834 (03-800)	(B) (S1)
- (73 <b>-22-</b> 49)	1		.Bolt, machine double hex (.250 dia x .625)	4W0164 (03-805)	(2D)
4W2622 (73-22-49)	2		.Washer	- (03-806)	(A) (C)



# SERVICE BULLETIN

NEW PART No. (ATA No.)	QTY	EST'D UNIT PRICE	PART TITLE	OLD PART No. (IPC No.)	INSTR DISP
4W0002 (73-22-49)	2		.Nut, self locking db1 hex (.250 dia)	4W0044 (03-808)	(A)(S1)(2D)

<u>NOTE</u>: The unit prices, if shown, are an estimate and they are given for the purposes of planning only. For information about actual prices, refer to the IAE Price Catalogue or contact IAE's spare parts sales department.

#### C. Instruction Disposition Codes:

- (A) New part is available.
- (B) New part will be available from December 1998.
- (C) Additional.
- (S1) Old and new parts are not interchangeable.
- (S2) Old and new parts are freely and fully interchangeable.
- (1D) Old part can be used on other applications.
- (2D) Quantity reduced from three to two.



# **SERVICE BULLETIN**

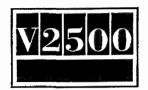
3	. A	cco	mpl	ishn	nent l	[nstri	ictic	ons

A. Rework Instructions

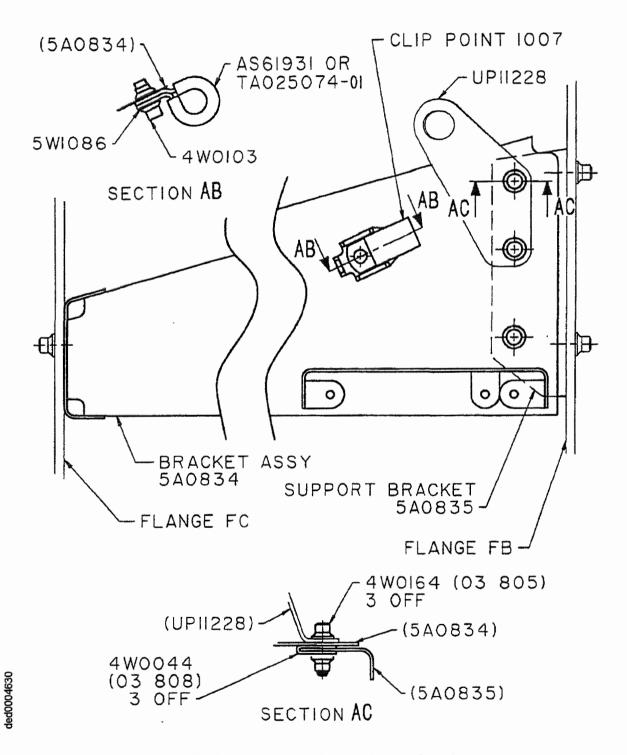
None.

- B. Assembly Instructions
  - (1) For the correct removal/installation procedures refer to the A1/A5 Engine Manual, Chapter/Section 72-00-32 Removal-03 CONFIG 1 and Installation-03 CONFIG 2.
- C. Recording Instructions

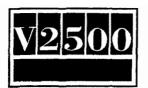
A record of accomplishment is necessary.



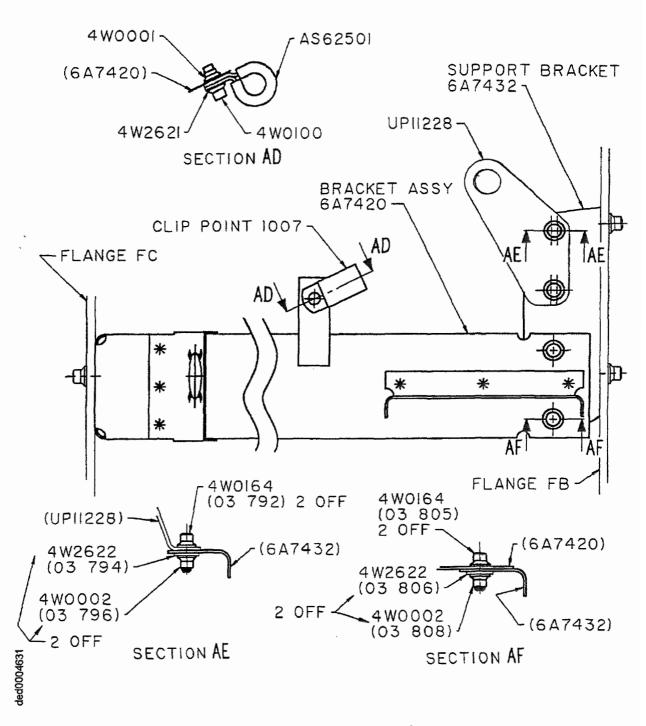
# **SERVICE BULLETIN**



View of Fuel Systems Air-Tubes Bracket - Before alteration Figure 1



# **SERVICE BULLETIN**



View of Fuel Systems Air-Tubes Bracket - After alteration Figure 2

Mar. 5/99