International Aero Engines

SERVICE BULLETIN

ENGINE – FUEL AND CONTROL – ENGINE – FUEL SYSTEM TUBES – RESET FUEL RETURN TUBE – DISCONNECT TO FUEL METERING UNIT – CATEGORY CODE 7 – MOD.ENG-73-0049

1. Planning Information

A. Effectivity

(1) Aircraft: (a) Airbus A320
(b) Airbus A321

(2) Engine: V2500-A5 Engines prior to Serial No.V10020

B. Concurrent Requirements

None

C. Reason

(1) Condition

Limited clearance between two fuel tubes has been reported on engine build of V2500-A5.

(2) Background

During build of the V2500-A5 first production engine a possible interface condition was highlighted between the fuel return tube – disconnect to F.M.U. and the fuel servo tube from the F.M.U. to the L.P. fuel pump.

(3) Objective

Incorporation of this Service Bulletin is designed to provide adequate clearance between the two tubes.

(4) Substantiation

An assembly check of a modified tube undertaken on a mock-up engine proved to be satisfactory.

(5) Effect of Bulletin on Workshop Procedures:

Removal/Installation	Affected (see Supplemental Information)
Disassembly/Assembly	Not affected
Cleaning	Not affected
Inspection/Check	Not affected
Repair	Not affected
Testing	Not affected

(6) Supplemental Information

(a) The Removal/Installation will be revised to add new configuration of this Service Bulletin.

C. The changes introduced by this Bulletin are:

(1) A new fuel return tube assembly having a revised run local to the L.P. fuel pump and F.M.U. is introduced.

(2) Existing clipping points (CP1131 and CP1134 are modified by the addition of a spacer to accommodate the new tube run.

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.

E. Compliance

Category Code 7

Accomplish when supply of superseded parts has been depleted.

F. Manpower

Estimated manhours to incorporate the full intent of this Bulletin:

	Venue	Estimated Manhours
(1)	In Service	Not applicable
(2)	At Overhaul	Not affected

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

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

Special tools are not required.

I. Weight and Balance

(1)	Weight change	Minus 0.1 lb (0,05 kg)
(2)	Moment arm	1.000 in (25,400 mm) rearward of datum
(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.

EC93VR038

L. Other Publications Affected

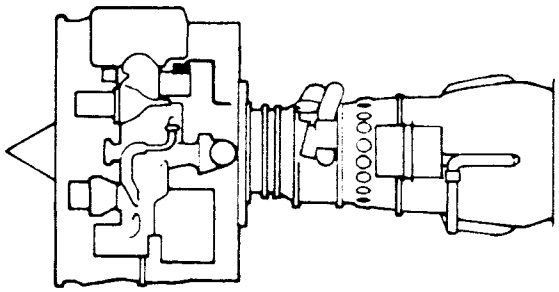
(1) Illustrated Parts Catalogue, 73-11-49 will be revised to add the new part numbers.

(2) V2500 Engine Manual, 72-00-60, Removal-02, Config 2 and Installation-03, Config 2 will be revised.

(3) V2500 Engine Component Maintenance Manual - Tubes, Hoses and Ducts, 73-11-49, Cleaning-00, Cleaning-04, Inspection-00 and Inspection-05 will be revised.

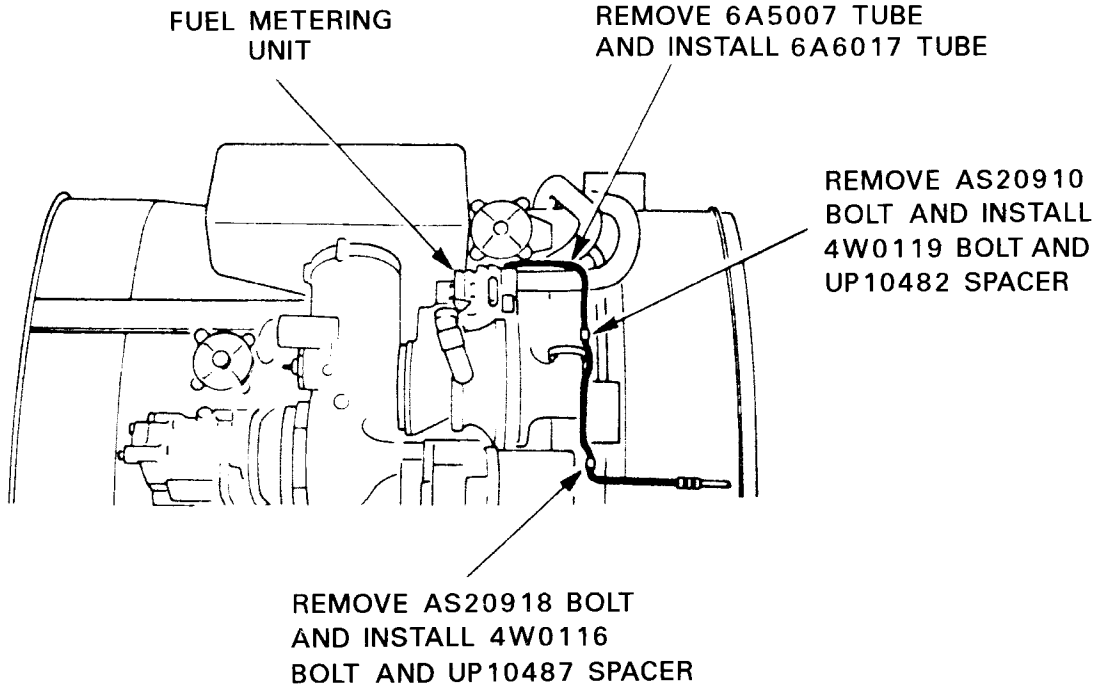
(4) Airbus A320 and A321 Aircraft Maintenance Manuals, 73-12-41, Removal/Installation will be revised.

(5) Airbus A320 and A321 Aircraft Maintenance Manuals, 73-22-52, Removal/Installation will be revised.



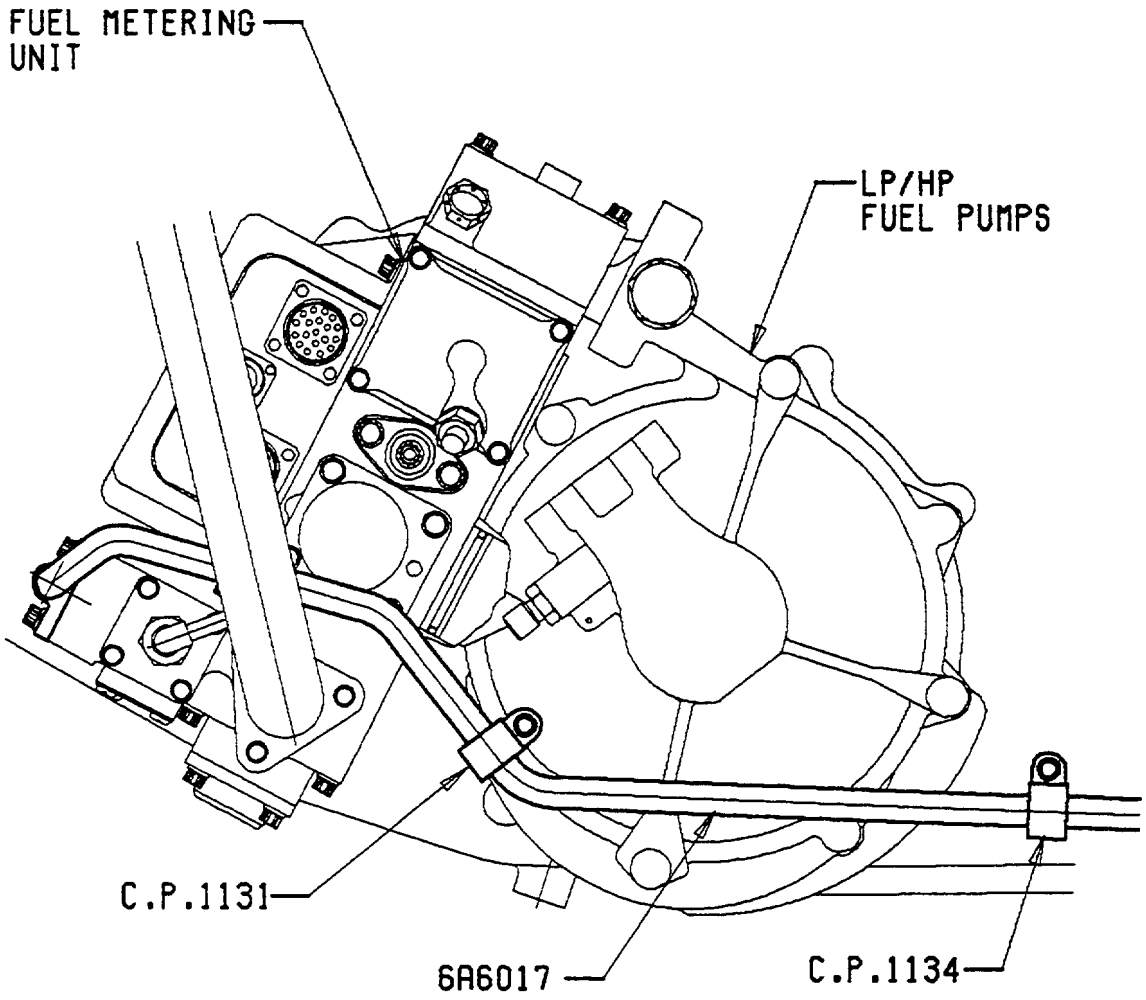
UNDERSIDE VIEW

⇦ FORWARD



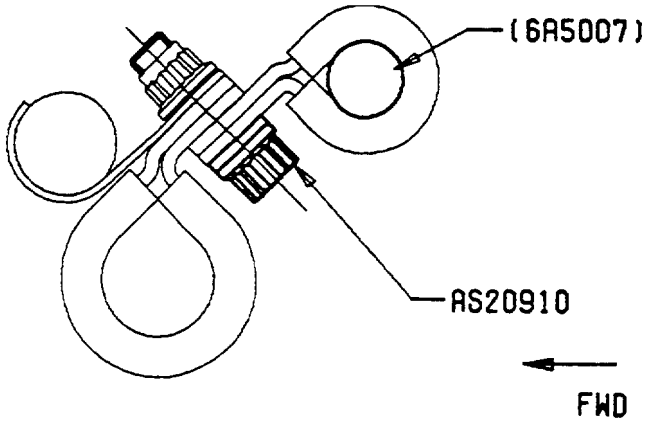
E1033

Location of fuel return tube - Disconnect to F.M.U.
Fig.1

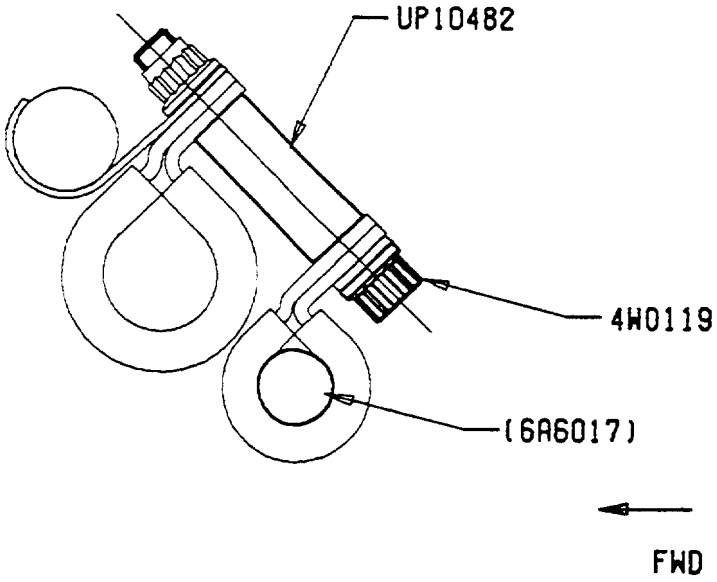


ded0000969

View looking forward on H.S. gearbox - After alteration
Fig.2

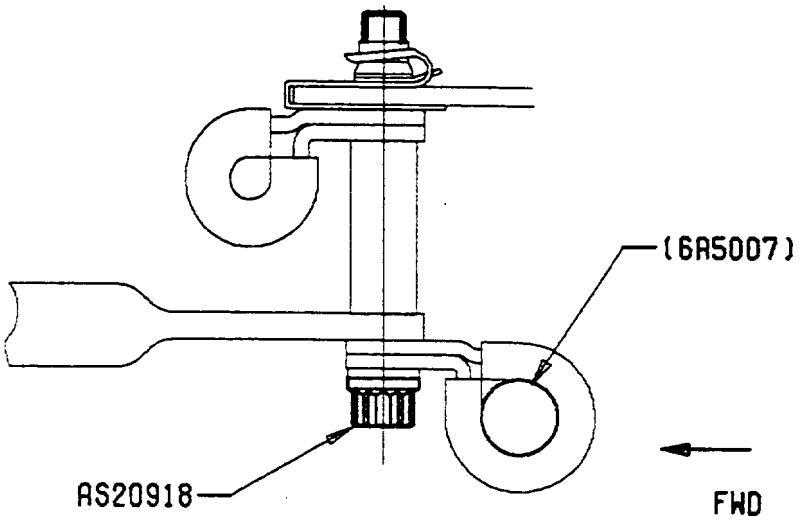


CLIPPING POINT 1131
BEFORE ALTERATION

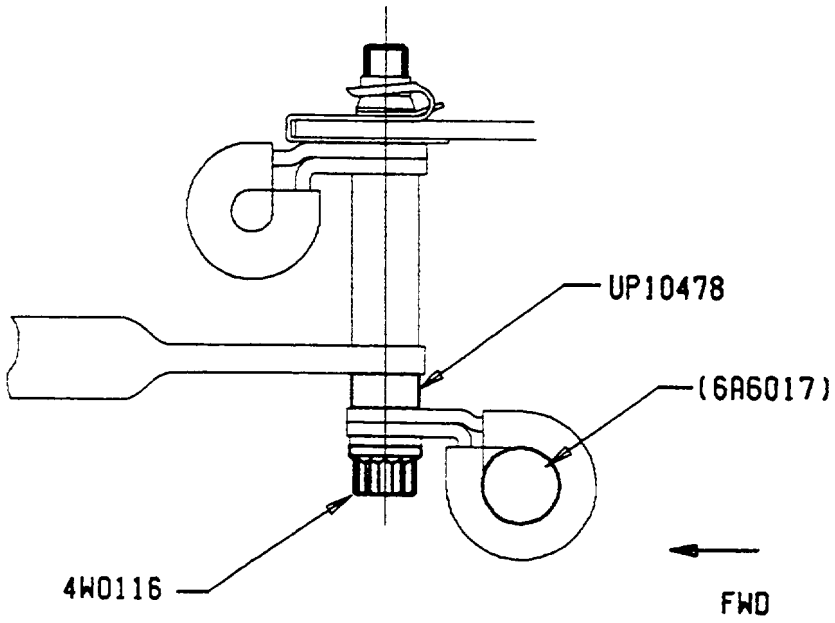


CLIPPING POINT 1131
AFTER ALTERATION

Clipping point CP 1131
Fig.3



CLIPPING POINT 1134
BEFORE ALTERATION



CLIPPING POINT 1134
AFTER ALTERATION

ded0000971

Clipping point CP 1134
Fig.4

2. Accomplishment Instructions

A. Rework Instructions

There are no rework instructions necessary to accomplish this Service Bulletin.

B. Assembly Instructions

(1) Find the 6A5007 fuel tube. Refer to Figure 1.

WARNING: DO NOT LET ENGINE FUEL STAY ON YOUR SKIN FOR A LONG TIME. FLUSH THE FUEL FROM YOUR SKIN WITH WATER. THE FUEL IS POISONOUS AND CAN GO THROUGH YOUR SKIN AND INTO YOUR BODY.

(2) Put the container in position under the 6A5007 fuel tube.

(3) Remove the three bolts that attach the 6A5007 tube to the FMU, cut the lockwire and disconnect the fuel tube connector.

(4) Find clipping points CP 1131 and CP1134. Refer to Figures 3 and 4.

(5) Remove the bolt, washer, clips and nut at clipping point CP 1131 sufficiently to allow removal of the 6A5007 fuel tube.

(6) Remove the bolt, washer, clips and spacer at clipping point CP 1134 sufficiently to allow removal of the 6A5007 fuel tube.

(7) Remove the 6A5007 fuel tube.

(8) Install caps to all openings.

(9) Install 6A6017 fuel tube. Refer to Figures 2, 3 and 4.

(10) Lightly lubricate a new AS43013-112 packing with CoMat 10-038 petroleum jelly or CoMat 10-060 liquid paraffin. Install the packing on the 6A6017 fuel tube at the flange face location.

(11) Attach the 6A6017 fuel tube to the FMU with the 4W0169 bolts (3 off).

(12) Connect the 6A6017 tube connection.

(13) Torque the three attaching bolts to 85 to 105 lbfin (10 to 12 Nm). Torque the tube connection to 283 to 310 lbfin (32 to 35 Nm). Safety connection with CoMat 02-126 lockwire.

(14) Install the 4W0119 bolt, washer, UP10482 spacer, clips and nut at clipping point CP1131.

(15) Install the 4W0116 bolt, washer, clip, UP10478 spacer, spacer and clip at clipping point CP 1134.

(16) Torque the nut and bolt at clipping points CP 1131 and CP 1134 to 36 to 45 lbfin (4 to 5 Nm).

Recording Instructions

(1) A record of accomplishment is necessary.

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
6A6017 (73-11-49)	1		Tube assy, fuel return - Disconnect to F.M.U.	6A5007 (20-500)	(A)(B)(S1)
4W0119 (73-11-49)	1		Bolt, bi-hex hd	AS20910 (20-582)	(A)(E)(S1)
UP10482 (73-11-49)	1		Spacer	- (20-586)	(A)(C)(S1)
4W0116 (73-11-49)	1		Bolt, bi-hex hd	AS20918 (20-592)	(A)(E)(S1)
UP10478 (73-11-49)	1		Spacer	- (20-595)	(A)(C)(S1)

C. Instructions/Disposition Code Statements:

(A) New part currently available.

(B) Old part is no longer available.

(C) Additional part.

(E) Old parts can be used for other applications.

(S1) Old and new parts are interchangeable in complete sets only.

NOTE: The estimated 1994 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.