

International Aero Engines

SERVICE BULLETIN

ENGINE - FUEL AND CONTROL - REPLACE THE TUBE CLIP AT CLIPPING POINT 0795 - CATEGORY

CODE 4 - MOD.ENG-73-0060

1. Planning Information

A. Effectivity

(1) Aircraft: (a) Airbus A320

(b) Airbus A321

(2) Engine: (a) V2527-A5 Engines prior to Serial No.V10084

(b) V2530-A5 Engines prior to Serial No.V10084

B. Reason

(1) Condition

Fretting could occur on the fuel cooled oil cooler (F.C.O.C.) to fuel pump fuel tube in the area of clipping point 0795.

(2) Background

An instance of frettage between the 'P' clip at clipping point 0795 and the fuel tube has been reported.

The frettage results from relative movement between the clip and tube, the metal clip eventually wearing through the rubber sleeve to fret directly on the tube. The movement is permitted due to a loose fit of the clip on the tube.

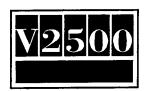
(3) Objective

Incorporation of this Service Bulletin is designed to eliminate frettage.

(4) Substantiation

Vibration testing carried out using the new configuration has shown a marked reduction in movement of the tube at clipping point 0795. The reduction in movement will significantly improve the integrity of the clipping at this position.

(5) Effect of Bulletin on Workshop Procedures:



International Aero Engines

SERVICE BULLETIN

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

C. <u>Description</u>

- (1) The changes introduced by this Service Bulletin are as follows:
 - (a) Tube clamps with a thicker rubber sleeve replace the existing clips at clipping point 0795. The new clamps have a tighter fit with the tube compared to the existing clips.

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 Engine Model listed.

E. Compliance

Category Code 4

Accomplishment at the first visit of an engine or module to a maintenance base of compliance with the accomplishment instructions regardless of the planned maintenance action or the reason for engine removal.

F. Manpower

Estimated manhours to incorporate the full intent of this bulletin.

Venue Estimated Manhours

(1) In Service 30 minutes

(2) At Overhaul 30 minutes

G. Material - Price and Availability

- (1) Modification kit is not required.
- (2) See "Material Information" section for prices and availability of future spares.

V2500-ENG-73-0060



International Aero Engines

SERVICE BULLETIN

H. Tooling - Price and Availability

Special tools are not required.

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.

EC92VR359D

(2) Other References

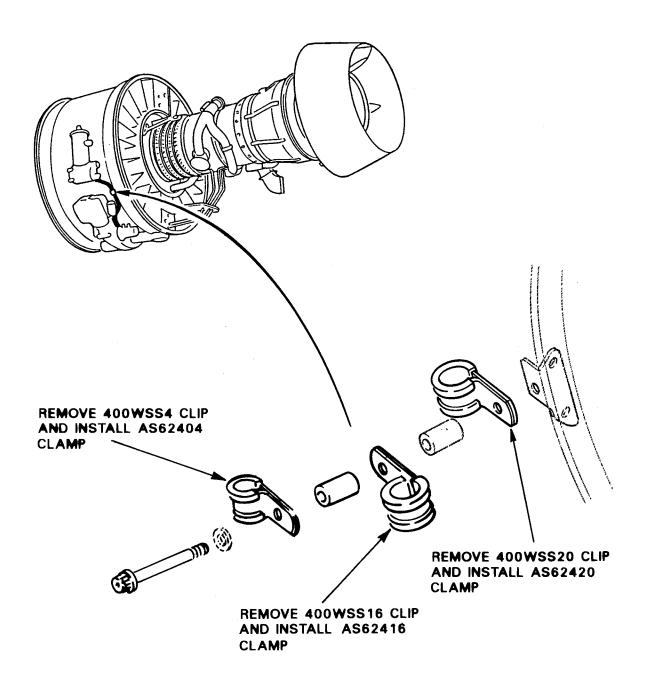
A320 Aircraft Maintenance Manual.

A321 Aircraft Maintenance manual.

L. Other Publications Affected.

- (1) V2500 Illustrated Parts Catalog (S-V2500-2IA), 73-11-49.
- (2) V2500 Engine Manual (E-V2500-1IA), 72-00-60, Removal-02 and 06, Installation-03 and 06.

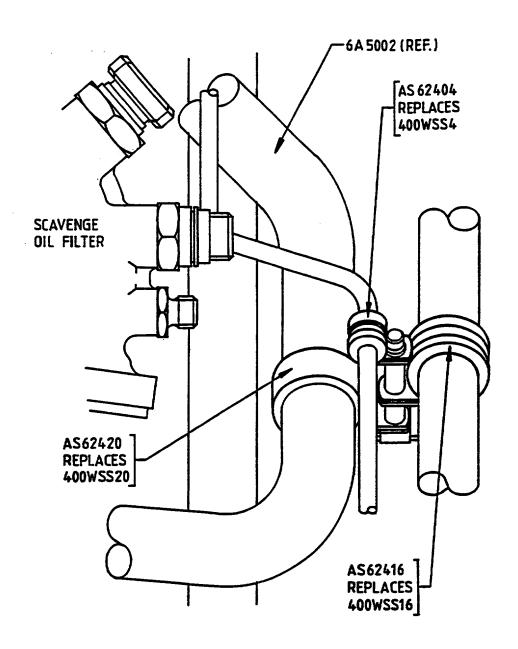




E3495

Location at clipping point 0795 Fig.1

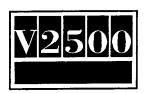
V2500-ENG-73-0060



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View of clipping point 0795 - Before and after alteration Fig.2

V2500-ENG-73-0060

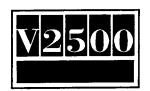


2. Accomplishment Instructions

- A. Prerequisite Instructions
 - (1) Open the left fan cowl door in accordance with the instructions in the A320 Aircraft Maintenance Manual, TASK 71-13-00-010-010 or the A321 Aircraft Maintenance Manual, TASK 71-13-00-010.
- B. Removal Instructions
 - (1) Remove the bolt AS20940, the washer K8831, the two spacers UP10481 and UP10482 from clipping point 0795. Refer to Figure 1.
 - (2) Remove clips 400WSS4, 400WSS16 and 400WSS20.
 - (3) Discard clips.
- C. Rework Instruction

None

- D. Assembly Instructions
 - (1) Secure the F.C.O.C. to fuel pump fuel tube to clipping point 0795 using clamps AS62404, AS62416, bolt AS20940, washer K8831, spacers UP10481 and UP10482. Torque the bolt to 36 to 45 lbfin (4 to 5 Nm). Refer to Figures 1 and 2.
- E. Post Requisite Instructions
 - (1) Close the left fan cowl door in accordance with the instructions in the A320 Aircraft Maintenance Manual, TASK 71-13-00-410-010 or the A321 Aircraft Maintenance Manual, TASK 71-13-00-410-010.
- F. Recording Instructions
 - (1) A record of accomplishment is required.



3. Material Information

Applicability: For each V2500 Engine to incorporate this Bulletin.

A. <u>Kits associated with this Bulletin:</u>

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
AS62420 (73-11-49)	1		Clamp, Loop Style, Cushion	400WSS20 (05-136)	(S1)(A)(B) (S2)
AS62404 (73-11-49)	1		Clamp, Loop Style, Cushion	400WSS4 (25-536)	(\$1)(A)(B) (\$2)
AS62416 (73-11-49)	1		Clamp, Loop Style, Cushion	400WSS16 (26-152)	(S1)(A)(B) (S2)

C. <u>Instructions/Disposition Code Statements:</u>

- (S1) Item coded (S1) must be fitted as a set.
- (S2) New parts may be used in place of old parts, but not vice-versa.
- (A) New parts coded (A) are currently available for sale.
- (B) Old parts coded (B) will no longer be available.

NOTE: The estimated 1994 unit prices shown are provided for planning purposes only and do not constitute a firm quotation. Consult the I.A.E. price catalog or contact I.A.E.'s Spare Parts Sales Department for information concerning firm prices.

