

International Aero Engines

SERVICE BULLETIN

ENGINE - DIFFUSER AND COMBUSTION GROUP - REPLACE A NO.4 BEARING COMPARTMENT TUBE BRACKET (CP 5756) - CATEGORY CODE 4 - MOD.ENG-72-0072

1. Planning Information

A. Effectivity

(1) Aircraft: Airbus A320

(2) Engine: V2500-A1 Engines, Serial No.s V0014 through V0121

B. Reason

(1) Condition

Insufficient clearance may exist between the bolt at the clipping point 5756 and PS3 cooling air tube.

(2) Background

The above condition has been observed during the manufacturing process.

(3) Objective

To obtain the sufficient clearance between the bolt-end and the tube to prevent possible interference.

(4) Substantiation

Substantiation has been completed by analysis.

(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

C. <u>Description</u>

- (1) The changes introduced by this Bulletin are as follows:
 - (a) The bending angle of the bracket is slightly changed.
 - (b) The thickness of the new bracket is increased from 0.047in. (1,2 mm.) to 0.063in. (1,6 mm.)



D. Approval

The part number change and/or part modification described in Sections 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 4

Accomplish at the first visit of an engine or a module to a maintenance base capable 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:

Estimated Manhours Venue

(1) In service TOTAL 49 minutes

- (a) To gain access
 - (i) Open the thrust

reverser halves 18 minutes

(ii) Remove the bracket 4 minutes

> TOTAL 22 minutes

- (b) To embody
 - (i) Install the new

bracket 6 minutes

> TOTAL 6 minutes

(c) To return to service condition

(i) Close the thrust

reverser halves 21 minutes

> TOTAL 21 minutes

(2) At overhaul

Remarks: No additional time will be required to maintain the new configuration.



International Aero Engines

SERVICE BULLETIN

G. Material Price and Availability

- (1) Modification Kit not required.
- (2) See Material Information section for price and availability of future spares.

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 centreline (Powerplant Station P.P.S.100)

J. Electrical Load Data

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

K. Reference

(1) Internal Reference No.

EC89VJ044

(2) Other References

A320 Aircraft Maintenance Manual

V2500 Engine Manual, 72-00-40, Removal/Installation and 72-42-00, Disassembly/Assembly

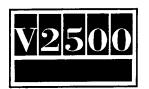
V2500 Engine Illustrated Parts Catalog, 72-42-20 and 74-21-43

V2500 Standard Practices/Processes Manual 70-41-00, Torque Tightening Techniques and 70-42-00, Locking Devices

V2500 Overhaul Processes and Consumables Index

L. Other Publications Affected

(1) V2500 Power Plant Illustrated Parts Catalog, 72-42-20 Figure 06, will be revised to incorporate the new part.



(2) V2500 Engine Illustrated Parts Catalog, 72-42-20 Figure 06, will be revised to incorporate the new part.



2. Accomplishment Instructions

A. Prerequisite Instructions

NOTE: For uninstalled engines (without the Thrust Reverser Half), this step is not applicable.

- (1) Open the Right Thrust Reverser Half, refer to Aircraft Maintenance Manual TASK 78-32-00-010-010.
- B. Removal Instructions

CAUTION: DO NOT BEND THE HIGH ENERGY IGNITION LEAD MORE THAN IS NECESSARY. THE CONDUIT CAN BE DAMAGED AND CAN CAUSE ELECTRICAL CIRCUIT DEFECTS.

- (1) Remove 5W8368, Bracket (72-42-20, 06-255), refer to Figures 1 and 2.
 - (a) Find the clipping point 5756.
 - (b) Remove the bolt (74-21-43, 01-141) and the washer (01-142) at the clipping point 5756.

NOTE: The clip (01-144) stay with the ignition lead.

- (c) Remove the lockwire from the bolts (72-42-20, 06-250) which attach the bracket (06-255) and the adapter (06-240) to the diffuser case. Discard lockwire.
- (d) Remove the two bolts (72-42-20, 06-250) which attach the bracket to the adapter.
- (e) Remove the bracket from the engine.
- (f) Disassemble the nut (74-21-43, 01-148) from the removed bracket.

NOTE: Do not discard the nut.

C. Installation Instructions

CAUTION: DO NOT BEND THE HIGH ENERGY IGNITION LEAD MORE THAN IS NECESSARY.

THE CONDUIT CAN BE DAMAGED AND CAN CAUSE ELECTRICAL CIRCUIT DEFECTS.

NOTE: Lubricate all threads and abutment faces of the bolts with CoMat 10-039 lubricant (engine oil).

- (1) Install 5W0103 Bracket (72-42-20, 06-255), refer to Figures 1 and 2.
 - (a) Assemble the nut (74-21-43, 01-148), which removed from the bracket in step B., to the new bracket.



International Aero Engines

SERVICE BULLETIN

- (b) Install the new bracket to the adapter on the diffuser case with two bolts (72-42-20, 06-250).
- (c) Torque the bolts to 65 to 85 lbfin (7,3 to 9,6 Nm).
- (d) Safety the three bolts with CoMat 02-141 lockwire.
- (2) Install the clip (74-21-43, 01-144) to the bracket.
 - (a) Install the clip, on the ignition lead at the clipping point 5756, to the bracket with the bolt (74-21-43, 01-141) and the washer (01-142).
 - (b) Torque the bolt to 36 to 45 lbfin (4 to 5 Nm).

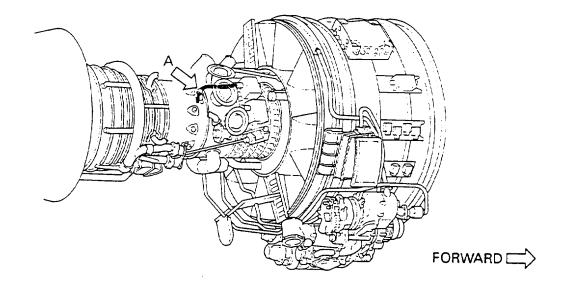
NOTE: If locking torque of the nut and bolt is less than 2 lbfin (0,226 Nm), the attached nut should be discarded and replaced with new one.

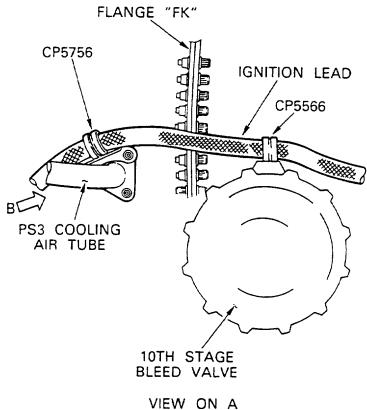
D. Postrequisite Instructions

NOTE: For uninstalled engines (without the Thrust Reverser Half), this step is not applicable.

- (1) Close the Right Thrust Reverser Half, refer to Aircraft Maintenance Manual TASK 78-32-00-410-010.
- E. Recording Instructions
 - (1) A record of accomplishment is necessary.





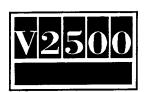


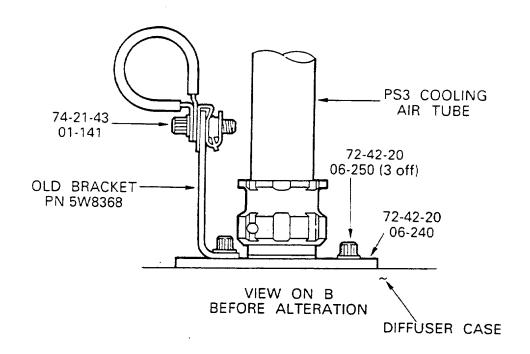
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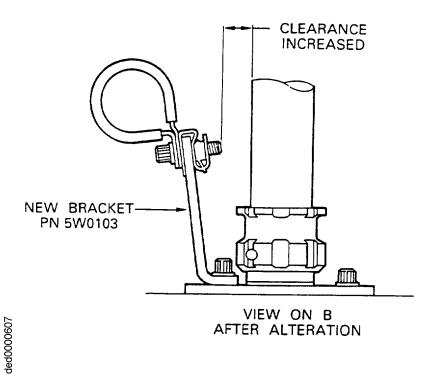
CLIPPING POINT 5756 Fig.1 Sheet 1 of 2

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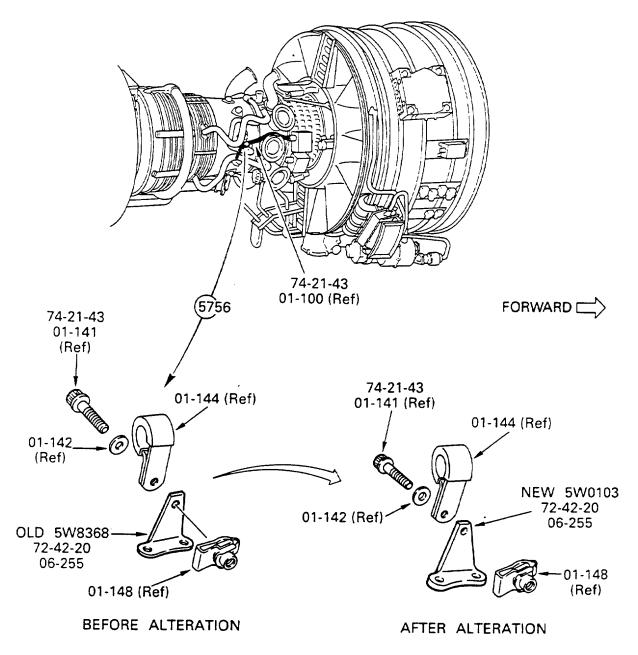






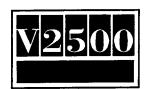
CLIPPING POINT 5756 Fig.1 Sheet 2 of 2





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Change of the Bracket Fig.2



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
5W0103 (72-42-20)	1	33.80	Bracket	5W8368 (06-255)	(A)(B)(S1)

NOTE: The Estimated 1990 Unit Price shown is provided for planning purposes only and does not constitute a firm quotation. Consult the IAE Price Catalog or contact IAE's Spare Parts Sales Department for information concerning firm prices.

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

- (A) The new part is currently available.
- (B) The old part is no longer available.
- (S1) The new part and the old part are interchangeable mechanically.