



ENGINE - FUEL AND CONTROL - FUEL AND CONTROL - INCORPORATE A RECONTOURED P2/T2 AIR TUBE
ASSEMBLY - CATEGORY CODE 6 - MOD.ENG-73-0010

1. Planning Information

A. Effectivity

- (1) Aircraft: Airbus A320
- (2) Engine: V2500-A1 Engines, prior to Serial Number V0122

B. Reason

(1) Condition

Insufficient clearance may exist between the Nose Cowl rear flange (Flange FA) and the P2/T2 Air Tube.

(2) Background

This condition was seen on some development engines. A review for the routing of P2/T2 Air Tube has shown that the re-routing is necessary to get sufficient clearance between the Tube and the Flange FA in the area of clipping positions CP0794, CP1053 and CP1054.

(3) Objective

The changes in configuration recommended in this Service Bulletin are intended to re-route the P2/T2 Air Tube to maintain the engine reliability.

(4) Substantiation

Substantiation test is not required.

(5) Effect of Bulletin on workshop procedure:

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

The Removal/Installation of the Post-Service Bulletin configuration requires instructions for removed spacers and revised clipping configurations at CP0794 and CP1054.

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C. Description

- (1) The changes introduced by this Service Bulletin are as follows: (See Figures 1 and 2).
- (a) The P2/T2 Air Tube is re-routed to get sufficient clearance between the Tube and the Flange FA.
 - (b) The Bracket which supports the P2/T2 Air Tube at CP1053 is changed in its shape and also the stock thickness is increased from 0.047 in (1,20 mm) to 0.063 in. (1,60 mm) to clear the resonance with new P2/T2 Air Tube.
 - (c) At CP0794 and CP1054, each of 5W1029, Spacers has been deleted and the clip locations are tuned rearwards.
 - (d) At CP0794, the Bolt is changed to shorter bolt from the existing 4W0108 to the new 4W0104.
 - (e) At CP1054, the Bolt is changed to shorter bolt form the existing 4W0106 to the new 4W0103.
 - (f) At CP1053, the Bolt is changed to longer bolt from the existing 4W0102 to the new 4W0103 in line with an installation of the new thickened bracket.
- (2) A new P2/T2 Air Tube, a new Bracket and new Bolts at CP0794, CP1053 and CP1054 will be available for future replacement purposes.

D. Approval

The Part Number changes 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

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Accomplish when the subassembly (i.e. Modules, Accessories, Components Build Groups) is disassembled sufficiently to afford access to the affected part and to all affected spare parts.

F. Manpower

Estimated Man-hours to incorporate the full intent of this Bulletin:

Venue

Estimated Man-hours

(1) In service

Not applicable

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- (2) At overhaul Not applicable

G. Material - Price and Availability

- (1) Modification Kit is not required. Parts supplied as single line items.
- (2) See "Material Information" section for prices and availability of future spares.

H. Tooling - Price and Availability

Special tools are not required to accomplish this Service Bulletin.

I. Weight and Balance

- (1) Weight change None
- (2) Moment arm No effect
- (3) Datum Engine front mount centerline (Powerplant Station (P.P.S.) 100)

J. Electrical Load Data

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

K. References

- (1) Internal Reference No.

EC88VJ358

EC88VJ358A

- (2) Other References

V2500 Illustrated Parts Catalog, Chapter/Section 73-22-49.

V2500 Engine Manual, 72-00-32, Installation, TASK 72-00-32-420-001, TASK 72-00-32-420-003 and TASK 72-00-32-420-005.

V2500 Standard Practices/Processes Manual, 70-41-00, Torque Tightening Technique.

L. Other Publications Affected

- (1) V2500 Illustrated Parts Catalog, Chapter/Section 73-22-49.

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- (2) V2500 Engine Manual, 72-00-32, LP Compressor/Intermediate Case Module - Removal, TASK 72-00-32-020-003, and Installation, TASK 72-00-32-420-001, and TASK 72-00-32-420-003.

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2. Accomplishment Instructions

A. Rework Instructions

- (1) There are no rework instructions necessary to accomplish this Service Bulletin.

B. Assembly Instructions

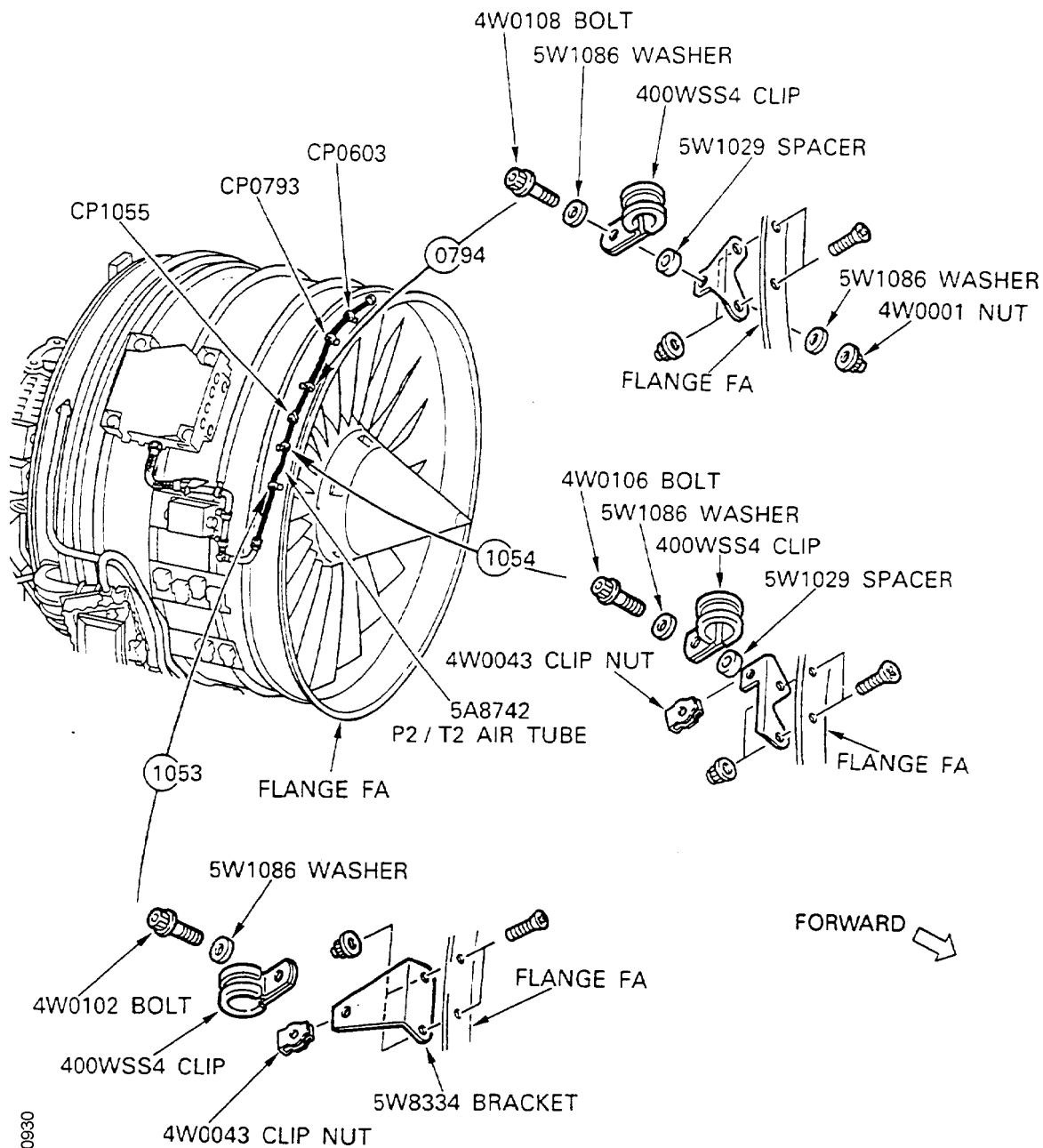
- (1) Install the new 5W8385, Bracket, to the Flange FA by the approved procedures in the Engine Manual, 72-00-32, Installation, TASK 72-00-32-420-001. (Refer to Figure 2, and 1.K.(2)).
- (2) Install the new 5A8782, P2/T2 Air Tube to the Module by the approved procedures in the Engine Manual, 72-00-32, Installation, TASK 72-00-32-420-003. (Refer to Figure 2, and 1.K.(2)).
- (3) At CP0794, install the new 4W0104, Bolt, the two 5W1086, Washers, 400WSS4, Clip, and 4W0001, Nut, to the new Tube and the Bracket with a new clipping configuration. Torque the Nut to 36 - 45 lbin. (4,00 - 5,00 Nm). (Refer to Figure 2, and 1.K.(3)).
- (4) At CP1054, install the new 4W0103, Bolt, 5W1086, Washer, 400WSS4, Clip, and 4W0043, Clip Nut, to the new Tube and the Bracket. Torque the Bolt to 36 - 45 lbfin. (4,00 - 5,00 Nm). (Refer to Figure 2, and 1.K.(3)).
- (5) At CP1053, install the new 4W0103, Bolt, 5W1086, Washer, 400WSS4, Clip, and 4W0043, Clip Nut to the new Tube and the new Bracket. Torque the Bolt to 36 - 45 lbfin (4,00 - 5,00 Nm). (Refer to Figure 2, and 1.K.(3)).
- (6) At CP0603, CP0793 and CP1055, install the Bolts, the Washers, the Clips, and the Nuts in position by the approved procedures in the Engine Manual, 72-00-32, Installation, TASK 72-00-32-420-003, and TASK 72-00-32-420-005. (Refer to 1.K.(2)).

C. Recording Instructions

- (1) A record of accomplishment is necessary.

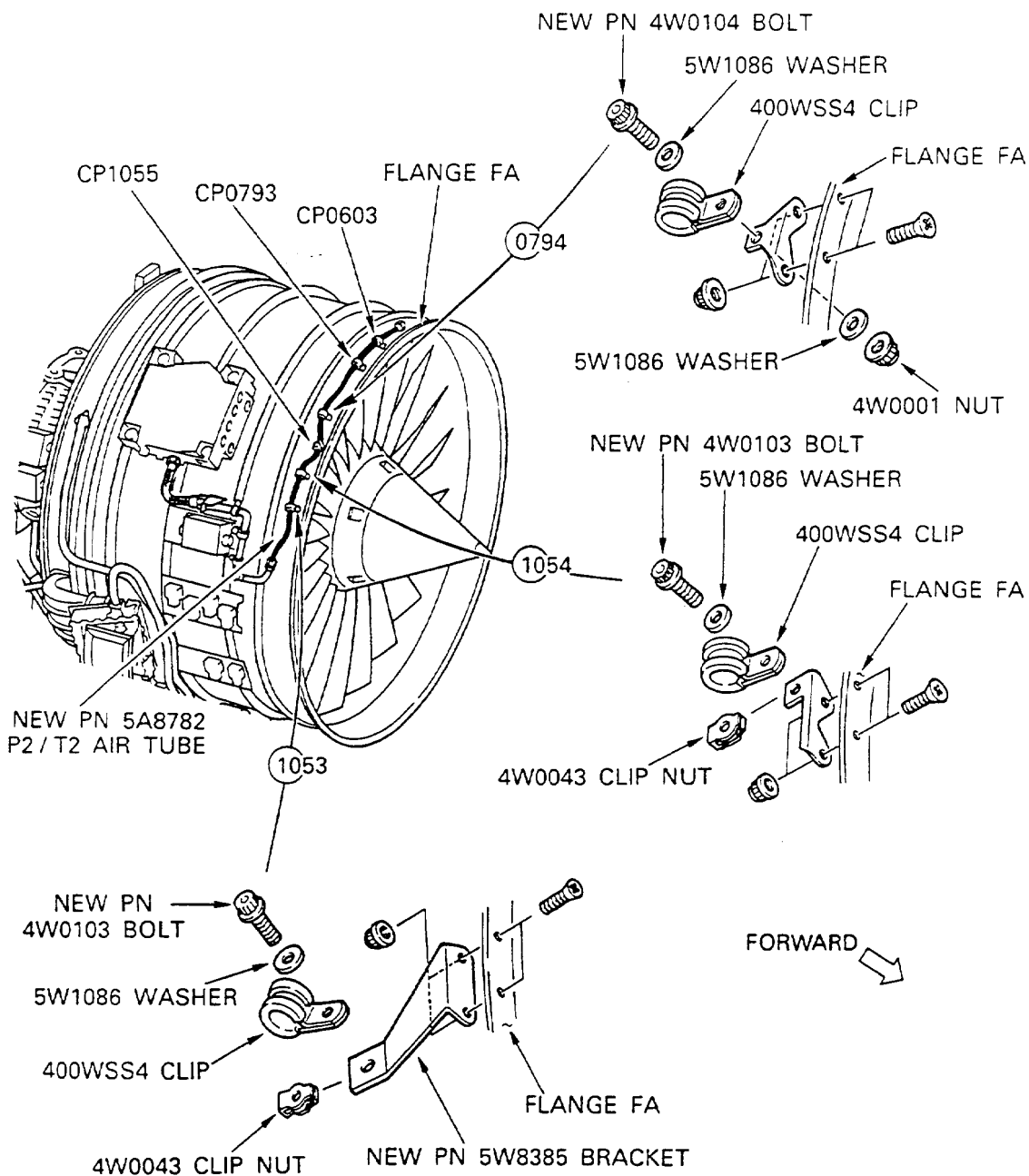


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The P2/T2 air tube and the clipping details - Before alteration
Fig.1

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The P2/T2 air tube and the clipping details - After details Fig.2



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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
5W8385 (73-22-49)	1	-	.Bracket, CP1053	5W8334 (08-030)	(B)(C)(S1) (S3)
5A8782 (73-22-49)	1	-	.Tube, A/O Air P2/T2	5A8742 (08-100)	(B)(C)(S1) (S3)
4W0104 (73-22-49)	1	3.10	.Bolt, CP0794	4W0108 (08-141)	(A)(D)(S1) (S2)(S3)
- (73-22-49)	1		.Spacer, CP0794	5W1029 (08-146)	(D)(S2)(S3)
4W0103 (73-22-49)	1	9.47	.Bolt, CP1054	4W0106 (08-157)	(A)(D)(S1) (S2)(S3)
- (73-22-49)	1	-	.Spacer, CP1054	5W1029 (08-162)	(D)(S2)(S3)
4W0103 (73-22-49)	1	9.47	.Bolt, CP1053	4W0102 (08-189)	(A)(D)(S1) (S2)(S3)

C. Instruction/Disposition Code Statements:

- (A) New part is currently available for sale.
- (B) New part will be available approximately May, 1990.
- (C) Old part will no longer be available for sale.
- (D) Old part will continue to be available for sale on the other applications.
- (S1) Old and new part is not interchangeable, either physically or functionally.
- (S2) Old part can be used up on other applications.
- (S3) New parts coded (S3) must replace old parts coded (S3) as a COMPLETE SET per engine.

NOTE: The estimated 1990 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.

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