P U B L I C A T I O N T R A N S M I T T A L

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V2500-A1/A5 SERIES PROPULSION SYSTEMS SERVICE BULLETIN

This document transmits the Initial Issue of Service Bulletin V2500-ENG-75-0117.

Service Bulletin Initial Issue

Remove	Incorporate	Reason for change
	Pages 1 to 8 of the Service Bulletin.	Initial Issue.
	Page 1 of the Supplement.	Initial Issue.

V2500-ENG-75-0117

CHECK THAT ALL PREVIOUS TRANSMITTALS HAVE BEEN INCORPORATED
If any have not been received please advise IAE International Aero Engines AG

SERVICE BULLETIN

ENGINE – AIR – TURBINE COOLING AIR TUBES – INTRODUCTION OF NEW COOLING AIR TUBES WITH REVISED ELBOW FITTING CONNECTIONS

1. Planning Information

A. Effectivity

(1) Airbus A319

(a) V2522-A5, V2524-A5, V2527M-A5 Engines prior to Serial No. V13191 (A5 Standard and A5 SelectOne™ Retrofit Standard).

V2522-A5, V2524-A5, V2527M-A5 Engines prior to Serial No. V15596 (A5 SelectOne™ Production Standard).

(2) Airbus A320

(a) V2500-A1 Engines prior to Serial No. V0362.

(b) V2527-A5, V2527E-A5 Engines prior to Serial No. V13191 (A5 Standard and A5 SelectOne™ Retrofit Standard).

V2527-A5, V2527E-A5 Engines prior to Serial No. V15596 (A5 SelectOne™ Production Standard).

(3) Airbus A321

(a) V2530-A5, V2533-A5 Engines prior to Serial No. V13191 (A5 Standard and A5 SelectOne™ Retrofit Standard)

V2530-A5, V2533-A5 Engines prior to Serial No. V15596 (A5 SelectOne™ Production Standard).

B. Concurrent Requirements

None.

C. Reason

(1) Condition

In 2002 a drawing alteration of elbow P/N 2A0783 was approved to allow machining from bar as an alternative for casting. The elbow is part of three Turbine Cooling Air (TCA) tubes. The alteration simplified the drawing but inadvertently reduced accessibility for fitting of the part. Spanner access to the attachment bolts is not possible when the part is manufactured to the drawing. A new part number is required for the elbow and the tube assemblies to avoid further use of production permits and to re-establish compliance of the manufactured part with the drawing.

(2) Evidence

The new tubes are identical to the current standard but for the revised elbow and fitting. The outer geometry of the elbow has been changed to facilitate bolt and tooling access.

(3) Objective

Incorporation of this Service Bulletin is designed to allow the installation of the TCA supply tubes with elbows that have the required geometry.

(4) Substantiation

The changes introduced by this Service Bulletin were the subject of satisfactory engineering analysis. This Service Bulletin complies with the applicable engine certification basis.

(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.

D. Description

This Service Bulletin introduces three new TCA supply tube assemblies.

The changes are as follows:

(1) The new TCA supply tube assemblies are identical to the current standard except for the revised elbow.

(2) The elbows on the new TCA supply tubes assemblies are machined from bar.

(3) The flange on the elbow has a decreased thickness compared to the old design.

E. Compliance

Category Code 7

Accomplish when the supply of superseded parts has been depleted.

F. Approval

The part number changes and/or part modifications 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 models listed.

G. Manpower

(1) In Service

Not applicable.

(2) At Overhaul

Applicable (hours not affected).

H. Material Price and Availability

Modification kit is not required; parts supplied as single line items.

For prices and availability of spares, refer to the supplement of this Service Bulletin.

I. Tooling Price and Availability

Special tools are not required.

J. Industry Support Information

Not applicable.

K. Weight and Balance

(1) Weight Change

None.

(2) Moment Arm

No effect.

(3) Datum

Engine Front Mount Centerline (Power Plant Station (PPS) 100).

L. Electrical Load Data

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

M. Software Accomplishment Summary

Not applicable.

N. References

(1) IAE V2500 Engine Manual (E-V2500-1IA), Chapter 72-00-50.

(2) Airbus A319/A320/A321 Aircraft Maintenance Manual, Chapter/Section 75-23-49.

(3) Internal Reference No.

Engineering Change No. 05VR001, 05VR001-01, 05VR001-02 and 05VR001-03.

(4) ATA Locator - 75-23-49.

O. Other Publications Affected

(1) IAE V2500 Engine Illustrated Parts Catalogues (S-V2500-1IA, S-V2500-2IA, S-V2500-2IB, S-V2500-2SA, S-V2500-2SB, S-V2500-5IA, S-V2500-5IB, S-V2500-5SA, S-V2500-5SB, S-V2500-6IA, S-V2500-6IB, S-V2500-6SA, S-V2500-6SB, S-V2500-7IA, S-V2500-7IB, S-V2500-7SA and S-V2500-7SB), Chapter 75-23-49 will be amended to incorporate the new part numbers (Refer to paragraph 2. Material Information).

(2) IAE V2500 Engine Manual (E-V2500-1IA), Chapter 72-00-50.

(3) Airbus A319/A320/A321 Aircraft Maintenance Manual, Chapter 75-23-49.

P. Interchangeability of Parts

Not affected.

2. Material Information

A. The kit required consists of the following parts:

None.

B. Parts to be reworked:

None.

C. New production parts:

FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	MAT	OLD PART NO.	INSTR DISP
75-23-49						
01-100	6A8597	1	.Turbine cooling air supply-tube assembly		2A1492	(S1)(A)
02-100	6A8596	1	.Turbine cooling air supply-tube assembly		2A0749	(S1)(A)
02-500	6A8598	1	.Turbine cooling air supply-tube assembly		2A1493	(S1)(A)

D. Redundant parts:

None.

E. Instruction disposition codes:

(S1) Old and new parts are fully interchangeable.

(A) New part will be available approximately September 2010.

3. Accomplishment Instructions

A. Rework Instructions

(1) None.

B. Assembly Instructions

INSTRUCTION I - APPLICABLE FOR ENGINES "IN SERVICE"

(1) General

(a) Obey all the WARNINGS and CAUTIONS in the procedures that are referred to.

(b) Consumable Materials

(i) Refer to the related Manual tasks given in this instruction.

(c) Tools and Equipment

(i) Refer to the related Manual tasks given in this instruction.

(2) Get access to the Turbine Cooling Air (TCA) supply tube assemblies that are installed in the upper and lower rear area of the core engine.

(3) Remove the applicable TCA supply tube (Refer to the Aircraft Maintenance Manual, Chapter 75-23-49).

For V2500-A1 Engines and V2500-A5 Engines:

(a) If scheduled, remove the old TCA supply tube (75-23-49, 01-100), P/N 2A1492 from the engine.

(b) If scheduled, remove the old TCA supply tube (75-23-49, 02-100), P/N 2A0749 from the engine.

(c) If scheduled, remove the old TCA supply tube (75-23-49, 02-500), P/N 2A1493 from the engine.

(4) Install the applicable TCA supply tube (Refer to the Aircraft Maintenance Manual, Chapter 75-23-49).

For V2500-A1 Engines and V2500-A5 Engines:

(a) If scheduled, install the new TCA supply tube (75-23-49, 01-100), P/N 6A8597 on the engine.

(b) If scheduled, install the new TCA supply tube (75-23-49, 02-100), P/N 6A8596 on the engine.

(c) If scheduled, install the new TCA supply tube (75-23-49, 02-500), P/N 6A8598 on the engine.

(5) Make sure that the work area is clean and clear of tools, equipment and other unwanted materials.

INSTRUCTION II - APPLICABLE FOR ENGINES "AT OVERHAUL/SHOP VISIT"

(1) General

(a) Obey all the WARNINGS and CAUTIONS in the procedures that are referred to.

(b) Consumable Materials

(i) Refer to the related Manual tasks given in this instruction.

(c) Tools and Equipment

(i) Refer to the related Manual tasks given in this instruction.

(2) Get access to the Turbine Cooling Air (TCA) supply tube assemblies that are installed in the upper and lower rear area of the core engine.

(3) Remove the applicable TCA supply tube (Refer to the Engine Manual, Chapter 72-00-50).

For V2500-A1 Engines and V2500-A5 Engines:

(a) If scheduled, remove the old TCA supply tube (75-23-49, 01-100), P/N 2A1492 from the engine.

(b) If scheduled, remove the old TCA supply tube (75-23-49, 02-100), P/N 2A0749 from the engine.

(c) If scheduled, remove the old TCA air supply tube (75-23-49, 02-500), P/N 2A1493 from the engine.

(4) Install the applicable TCA supply tube (Refer to the Engine Manual, Chapter 72-00-50).

For V2500-A1 Engines and V2500-A5 Engines:

(a) If scheduled, install the new TCA supply tube (75-23-49, 01-100), P/N 6A8597 on the engine.

(b) If scheduled, install the new TCA supply tube (75-23-49, 02-100), P/N 6A8596 on the engine.

(c) If scheduled, install the new TCA supply tube (75-23-49, 02-500), P/N 6A8598 on the engine.

(5) Make sure that the work area is clean and clear of tools, equipment and other unwanted materials.

C. Recording Instructions

(1) A record of accomplishment is necessary.

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SUPPLEMENT – PRICES AND AVAILABILITY

The prices (if shown) are for estimating purposes only and as such are given in good faith, without commercial liability for advanced planning purposes only. Refer to IAE Spares and/or current price catalogue for current prices.

1. Modification Kit:

Not applicable.

2. New Production Parts:

Part No.	Description	Unit Price US Dollars
6A8596	.Turbine cooling air supply tube	$ 4.537.00
6A8597	.Turbine cooling air supply tube	$ 4.453.00
6A8598	.Turbine cooling air supply tube	$ 4.453.00

Parts will be available approximately September 2010.

3. Tools

None.