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DATE: **Apr. 2/12**

V2500-A5 SERIES PROPULSION SYSTEMS SERVICE BULLETIN

This document transmits the Initial Issue of Service Bulletin V2500-ENG-75-0120.

Service Bulletin Initial Issue

Remove Incorporate Reason for change

Pages 1 to 10 of the Service Bulletin.

Initial Issue.

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Page 1 of the Supplement.

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



<u>AIR - TURBINE COOLING CONTROLLED AIR TUBES - STAGE 10 MAKE UP AIR ADAPTOR WITH</u> <u>REVISED MACHINING PROFILE</u>

1. Planning Information

A. Effectivity

- (1) Airbus A319
 - (a) V2522-A5, V2524-A5, V2527M-A5 Engines from Serial No. V10001 to Serial No. V13190.
 - (b) V2522-A5, V2524-A5, V2527M-A5 Engines from Serial No. V15001 to Serial No. V16299.
- (2) Airbus A320
 - (a) V2527-A5, V2527E-A5 Engines from Serial No. V10001 to Serial No. V13190.
 - (b) V2527-A5, V2527E-A5 Engines from Serial No. V15001 to Serial No. V16299
- (3) Airbus A321
 - (a) V2530-A5, V2533-A5 Engines from Serial No. V10001 to Serial No. V13190.
 - (b) V2530-A5, V2533-A5 Engines from Serial No. V15001 to Serial No. V16299.

B. Concurrent Requirements

None.

C. Reason

(1) Condition

The current clearance between the High Pressure (HP) compressor stage 10 make up air valve adaptor and the clip bracket which is mounted on top of the adaptor flange hinders the build process.

(2) Background

Clearance issues have been reported at engine build, between the flange on the HP compressor stage 10 make up air valve adaptor and the clip bracket.

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(3) Objective

Incorporation of this Service Bulletin introduces a redesigned adaptor with an increased machined recess on the flange which connects the adaptor to the HP compressor case. The increased recess provides additional clearance for the clip bracket mounted on top of the adaptor flange.

The material of the adaptor and the minimum wall thickness remain unchanged.

(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

Affected (Refer to paragraph 1.0. Other Publications Affected).

(d) Repair Schemes

Not affected.

(e) Interchangeability

Not affected.

(f) Fits and Clearances

Not affected.

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D. <u>Description</u>

This Service Bulletin introduces a redesigned HP compressor stage 10 make up air valve adaptor:

The change is as follows:

An increased machined recess on the flange which connects the adaptor to the HP compressor case. The increased recess provides additional clearance for the clip bracket which is mounted on top of the adaptor flange.

NOTE: The Accomplishment Instruction for this Service Bulletin is divided into two INSTRUCTIONs as follows:

INSTRUCTION I - Applicable for engines "In Service".

INSTRUCTION II - Applicable for engines "At Overhaul/Shop visit

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

Estimated Man-hours:

(1) In Service

2 hours.

(2) At Overhaul/Shop Visit

Applicable (Hours not affected).

H. Material Price and Availability

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

I. Tooling Price and Availability

Special tools are not required.

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J. <u>Industry Support Information</u>

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 72-00-40.
- (2) Aircraft Maintenance Manual, Chapter 75-23-51
- (3) Internal Reference No.

Engineering Change No. 11VRO02 and 11VRO02-01.

(4) ATA Locator - 75-23-48.

O. Other Publications Affected

- (1) IAE V2500 Engine Illustrated Parts Catalogues (S-V2500-2IA, S-V2500-2IB, S-V2500-2SA, S-V2500-2SB, S-V2500-2NA, S-V2500-2NB, S-V2500-5IA, S-V2500-5IB, S-V2500-5SA, S-V2500-5SB, S-V2500-5NA, S-V2500-5NB, S-V2500-6IA, S-V2500-6IB, S-V2500-6SA, S-V2500-6SB, S-V2500-6NA, S-V2500-6NB, S-V2500-7IA, S-V2500-7IB, S-V2500-7SA, S-V2500-7SB, S-V2500-7NA and S-V2500-7NB), Chapter 75-23-48 will be amended to incorporate the new part number (Refer to section 2. Material Information).
- (2) Component Maintenance Manual Miscellaneous Mechanical MECH-V2500-1IA, Chapter 75-23-48.

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P. <u>Interchangeability of Parts</u>

Not affected.

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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
75-23-48	3					
04-400	6B1429	1	.High Pressure (HP) compressor stage 10 make up air adaptor	-	6A7555	(S1)(A)

D. <u>Redundant parts:</u>

None.

E. <u>Instruction disposition codes:</u>

(S1) Old and new parts are fully interchangeable.

(A) Part is available for sale.

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3. Accomplishment Instructions

- A. Rework Instructions
 - (1) None.
- **B.** Assembly Instructions

INSTRUCTION I - APPLICABLE FOR ENGINES "IN SERVICE"

(1) General

CAUTION: IN ORDER TO REDUCE THE POTENTIAL FOR MULTIPLE ENGINE IN-FLIGHT SHUT DOWN, POWER LOSS, OR OTHER ANOMALIES DUE TO MAINTENANCE ERROR, IAE RECOMMENDS THAT OPERATORS AVOID PERFORMING MAINTENANCE ON MULTIPLE ENGINES INSTALLED ON THE SAME AIRCRAFT AT THE SAME TIME. IF IT IS NOT POSSIBLE TO AVOID MAINTENANCE ON MORE THAN ONE ENGINE AT THE SAME

TIME, IAE RECOMMENDS THAT ADDITIONAL CONTROLS BE APPLIED IN ORDER TO ENSURE THAT MAINTENANCE TASKS HAVE BEEN COMPLETED AS DEFINED.

MAINTENANCE GUIDELINES SHOULD BE REVISED WHERE POSSIBLE TO PROMOTE

THIS RECOMMENDATION.

WARNING: DO NOT TOUCH THE ENGINE COMPONENTS FOR A SHORT TIME AFTER THE ENGINE IS SHUT DOWN. THE COMPONENTS STAY HOT AND CAN CAUSE INJURY.

- (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 High Pressure (HP) compressor stage 10 make up air adaptor that is installed in the top central area of the engine
 - (a) Open the fan cowl doors (Refer to the Aircraft Maintenance Manual, TASK 71-13-00-010-010).
 - (b) Deactivate the Thrust Reverser Hydraulic Control Unit (HCU) (Refer to the Aircraft Maintenance Manual, TASK 78-30-00-040-012).
 - (c) Open the left thrust reverser door (Refer to the Aircraft Maintenance Manual, TASK 78-32-00-010-010).
- (3) Remove the old HP compressor stage 10 make up air adaptor (75-23-48, 04-400), P/N 6A7555 (Refer to the Aircraft Maintenance Manual, Chapter 75-23-51).

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- (4) Install the new HP compressor stage 10 make up air adaptor (75-23-48, 04-400), P/N 6B1429 (Refer to the Aircraft Maintenance Manual, Chapter 75-23-51).
- (5) Make sure that the work area is clean and clear of tools, equipment and other unwanted materials.
- (6) Close the access to the High Pressure (HP) compressor stage 10 make up air adaptor
 - (a) Close the left thrust reverser door (Refer to the Aircraft Maintenance Manual, TASK 78-32-00-010-010).
 - (b) Activate the Thrust Reverser Hydraulic Control Unit (HCU) (Refer to the Aircraft Maintenance Manual, TASK 78-30-00-440-012).
 - (c) Close the fan cowl doors (Refer to the Aircraft Maintenance Manual, TASK 71-13-00-410-010).



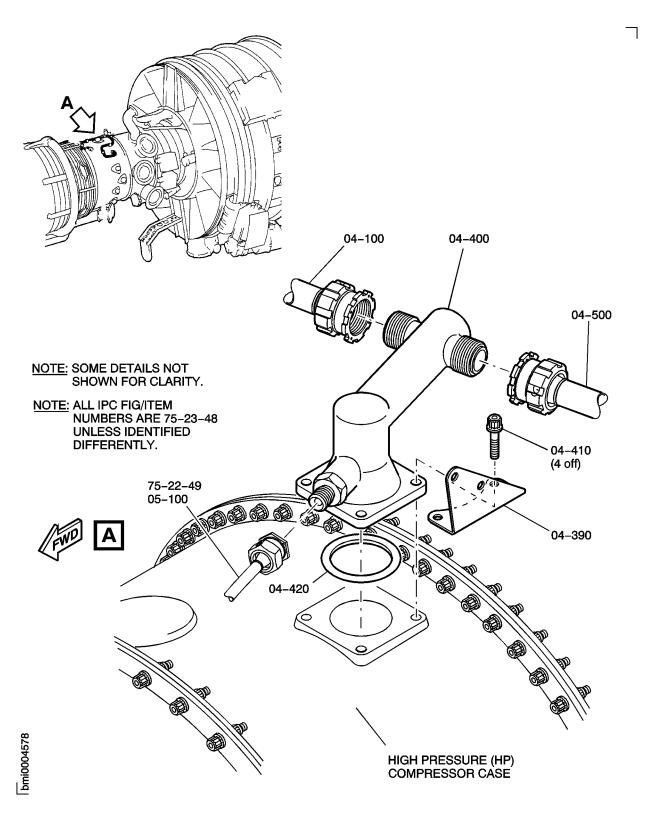
INSTRUCTION II - APPLICABLE FOR ENGINES "AT OVERHAUL/SHOP VISIT"

- (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) For the correct Removal/Installation procedure of the old HP compressor stage 10 make up air adaptor refer to the Engine Manual, Chapter 72-00-40, Removal/Installation.
- (3) Remove the old HP compressor stage 10 make up air adaptor (75-23-48, 04-400), P/N 6A7555 from the engine.
- (4) Install the new HP compressor stage 10 make up air adaptor (75-23-48, 04-400), P/N 6B1429 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 required.

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Remove and Install the High Pressure (HP) Compressor Stage 10 Air Make Up Adaptor Figure 1

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<u>AIR - TURBINE COOLING CONTROLLED AIR TUBES - STAGE 10 MAKE UP AIR ADAPTOR WITH</u> REVISED MACHINING PROFILE

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.

Part No.

2. New Production Parts:

Unit Price
Description US Dollars

6B1429 .High Pressure (HP) 6,383.00

compressor

stage 10 make-up

air adaptor

Part is currently available for sale.

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We thank you for the time you spent in completing this form.

<u>Please rate on a scale of 1 to 5, with 5 being the highest score:</u>

General quality rating of this Service BulletinQuality rating of the Accomplishment Instructions

- Quality rating of the Illustration

- Is this Service Bulletin eas	y to understand?	☐ Yes	□ No								
If you have had difficulties to perform this Service Bulletin please quote below the area(s) and give a short description of the issue:											
Planning Information Section:			Material Information Section:		Accomplishment Instruction Section:						
☐ 1.A.	☐ 1.I.		2.A.		General						
☐ 1.B.	☐ 1.J.		2.B.		Get Access						
☐ 1.C.	□ 1.K.		2.C.		Removal/Installation						
☐ 1.D.	□ 1.L.		2.D.		Inspection						
□ 1.E.	□ 1.M.		2.E.		Test						
☐ 1.F.	☐ 1.N.		2.F.		Close the Access						
☐ 1.G.	☐ 1.O.				Log Book Entry						
	□ 1.P.				Ţ.						
Explanatory notes:											
Operator:			Overhaul Site:								
Name/Title:			Date:								

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