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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DATE: May.12/04

V2500-A1/A5 SERIES PROPULSION SYSTEMS SERVICE BULLETIN

This document transmits the Initial Issue of Service Bulletin EV2500-75-0092 and the Initial Issue of the Supplement

Bulletin Initial Issue

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Supplement Initial Issue

Remove	Incorporate	Reason for change
	Page 1	Initial issue

V2500-ENG-75-0092

CHECK THAT ALL PREVIOUS TRANSMITTALS HAVE BEEN INCORPORATED
If any have not been received please advise Publication Services, Rolls-Royce plc, Derby, England

LIST OF EFFECTIVE PAGES

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AIR - HP COMPRESSOR STAGE 7 BLEED VALVE - INTRODUCTION OF A BLEED VALVE SPACER

1. Planning Information

A. Effectivity

(1) Airbus A319

(a) V2522-A5, V2524-A5, V2527M-A5 Engines prior to Serial No. V11700

(2) Airbus A320

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

(b) V2527-A5, V2527E-A5 Engines prior to Serial No. V11700

(3) Airbus A321

(a) V2530-A5, V2533-A5 Engines prior to Serial No. V11700

B. Concurrent Requirements

This Service Bulletin must only be fitted to engines which incorporate V2500 Service Bulletin ENG-75-0071.

C. Reason

(1) Problem

Thrust Reverser Unit (TRU) filler loss and panel disbond around the HP Compressor Stage 7 RH upper (Stage 7A) bleed valve porthole may occur. The damage is caused by air from the bleed valve silencer impinging on the rim of the TRU port coupled with normal vibration.

The problem has been attributed to insufficient height of the bleed valve silencer outlet in relation to the Stage 7A bleed valve port in the TRU.

(2) Evidence

The problem has been observed on engines in service.

(3) Substantiation

The changes introduced by this Service Bulletin (modification) have been the subject of satisfactory engineering analysis and successful flight testing.

(4) Objective

Incorporation of this Service Bulletin is designed to maintain reliability.

(5) Effect of Bulletin on:

(a) Operation

Not affected.

(b) Maintenance

Affected (see 1.O. Other Publications Affected).

(c) Overhaul

Affected (see 1.O. Other Publications Affected).

(d) Repair Schemes

Not affected.

(e) Interchangeability

Not affected.

(f) Fits and Clearances

Not affected.

D. Description

(1) In order to reposition the bleed valve outlet as far into the bypass flow as is feasible the following changes have been introduced:

(a) A new spacer is introduced beneath the HP Compressor Stage 7A bleed valve silencer assembly.

(b) A revised bolt is introduced similar to the existing bolt except for an increase in length to accommodate the spacer.

E. Compliance

Category Code 6

Accomplish when the sub assembly (i.e. modules, accessories, components, build groups) is disassembled sufficiently to afford access to the affected part and to all affected spare parts.

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

In service

Not applicable.

At overhaul

Not affected.

NOTE: The parts affected by this Service Bulletin are accessible at overhaul.

H. Material Price and Availability

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

For prices and availability of future spares see Supplement to this Bulletin.

I. Tooling Price and Availability

Special tools are not required.

J. Industry Support Information

None.

K. Weight and Balance

(1) Weight Change

Plus 0,204 Kg (plus 0.45 lb).

(2) Moment Arm

518,2 mm. (20.4in.) rearwards of the datum.

(3) Datum

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

L. Electrical Load Data

The aircraft electrical load is not affected by this Service Bulletin.

M. Software Accomplishment Summary

Not applicable.

N. References

(1) IAE V2500 Service Bulletin:

ENG-75-0071 - Air - HP Compressor Stage 7 Bleed Valves - Introduction of Revised Bleed Valve Silencer with Integral Seal Land.

(2) Engineering Change No. - 03VR017.

(3) ATA Locator - 75-32-52.

O. Other Publications Affected

(1) Illustrated Parts Catalogue (IPC), Chapter/Section 75-32-52 will be revised.

(2) A1/A5 Engine Manual (EM), Chapter/Section 72-00-40, Removal/Installation.

(3) A319, A320, A321 Aircraft Maintenance Manual (AMM), Chapter/Section 75-32-52.

(4) Component Maintenance Manual (CMM)(THD), Chapter/Section 75-32-52.

P. Interchangeability of Parts

Parts must be fitted as a set.

2. Material Information

A. Parts required to accomplish this Service Bulletin:

All Engines

75-32-52

FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	OLD PART NO.	INSTR DISP
01230	6A8319	1	.Spacer HPC Stg 7 RH Upper Bleed Valve Silencer	-	(A)
01268	AS21013	12	.Bolt, bihex hd - (.250 dia x .812)	AS21010	(B)(S1)(1D)

B. Parts to be reworked:

None.

C. New production parts:

None.

D. Instruction Disposition Codes:

(A) New part will be available from February 2004.

(B) New part is currently available.

(S1) Old and new parts are not interchangeable.

(1D) Old part may be used up on other applications.

3. Accomplishment Instructions

A. Rework Instructions

None.

B. Removal Instructions

For the correct removal instructions refer to A1/A5 Engine Manual (EM), Chapter/Section 72-00-40, Removal/Installation or A319, A320, A321 Aircraft Maintenance Manual (AMM), Chapter/Section 75-32-52, Removal/Installation.

Assembly Instructions - At Overhaul

(1) Put a bleed valve (75-32-52,01-100) in position on the air off-take duct (75-00-49,01-100) at the 2 o'clock position. Make sure that bleed valve actuation connection is at the 4 o'clock position and align the bolt holes.

(2) Install the 12 bolts (75-32-52,01-104) and the nuts (75-32-52,01-102) and torque the nuts to 85 to 105 lbfin (10 to 12 Nm).

(3) Attach the silencer assembly (75-32-52,01-250) to the bleed valve with the 12 bolts AS21013, spacer 6A8319 and the 12 nuts 4W0002. Torque the nuts to 85 to 105 lbfin (10 to 12 Nm). Refer to Fig. 2

(4) Put a bleed valve (75-32-52,01-100) in position on the air off-take duct (75-00-49,01-100) at the 4 o'clock position. Make sure the bleed valve actuation connection is at the 10 o'clock position and align the bolt holes.

Install 12 of the bolts (75-32-52,01-104) the nuts (72-32-52,01-102) to secure the blled valve to the duct. Torque the nuts to 85 to 105 lbfin (10 to 12 Nm).

(5) Attach the seal assembly (75-32-52,01-465) to the bleed valve with the 12 bolts (75-32-52,01-468) and the 12 nuts (75-32-52,01-466). Torque the nuts to 85 to 105 lbfin (10 to 12 Nm).

(6) Put the remaining bleed valve (72-32-52,01-100) through the seal assembly (75-32-52,01-070) on to the air off-take duct (75-00-49,01-250). Make sure the bleed valve actuation connection is at the 6 o'clock position and align the bolt holes.

(7) Install the other 12 bolts (75-32-52,01-104) and torque them to 85 to 105 lbfin (10 to 12 Nm).

(8) Attach the silencer assembly (75-32-52,01-060) to the bleed valve with the 12 bolts (75-32-52,01-062). Torque the bolts to 85 to 105 lbfin (10 to 12 Nm).

C. Assembly Instructions - On Wing

(1) Install the Bleed Valve

(a) Put the valve in Position on the support duct flange.

(b) Align the air operation connector on the valve with the air operation tube.

(c) Install the bolts and the nuts which attach the valve to the support duct flange.

(d) Torque the nuts to between 85 and 105 lbfin (0.96 and 1.18 m.daN).

(e) Connect the air operation tube.

(i) Attach the tube to the bleed valve connector.

(ii) Torque the connector to between 159 and 177 lbfin (1.79 and 2.00 m.daN).

(iii) Safety the connector with the corrosion resistant steel lockwire.

(f) Install the seal carrier and the silencer.

(i) Hold the seal carrier and the silencer in position on the bleed valve.

(ii) Attach the seal carrier and the silencer to the valve with the bolts and the nuts.

(iii) Torque the nuts to between 85 and 105 lbfin (0.96 and 1.18 m.daN).

(g) Install the silencer assembly.

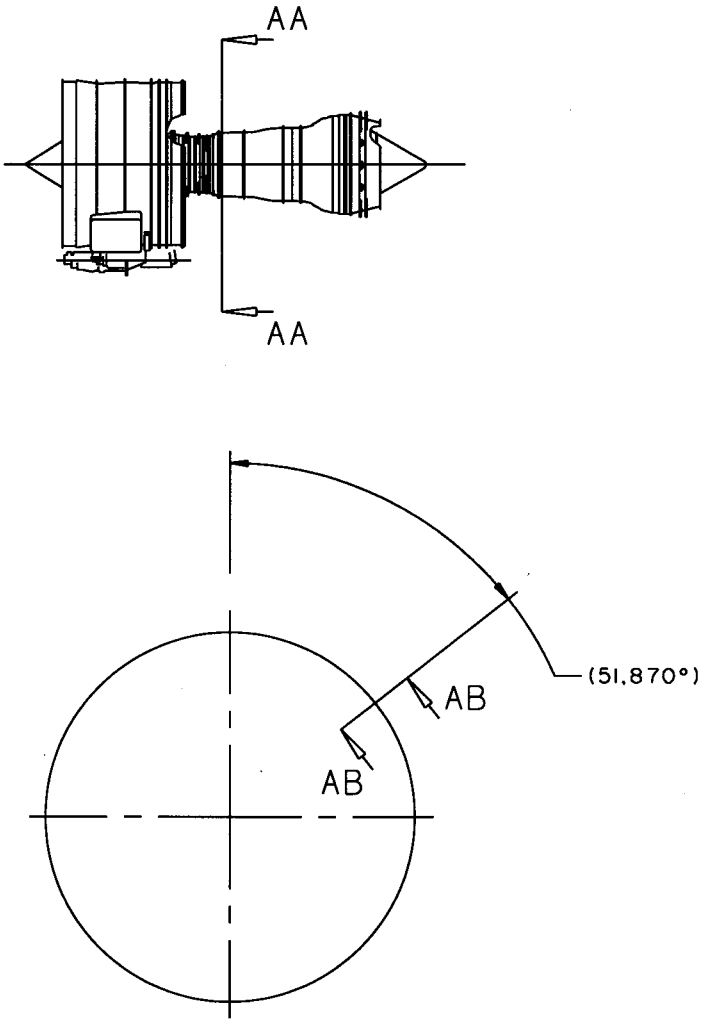
(i) Hold the silencer assembly and spacer 6A8319 in position on the bleed valve. Refer to Fig. 1 and Fig. 2.

(ii) Attach the silencer assembly and spacer to the valve with bolts AS21013 and the nuts 4W0002. Refer to Fig. 1 and Fig. 2.

(iii) Torque the nuts to between 85 and 105 lbfin (0.96 and 1.18 m.daN)

D. Recording Instructions

(1) A record of accomplishment is necessary.



SECTION AA
DIAGRAMMATIC VIEW LOOKING FORWARD
THROUGH STAGE 7 BLEED VALVE SILENCER

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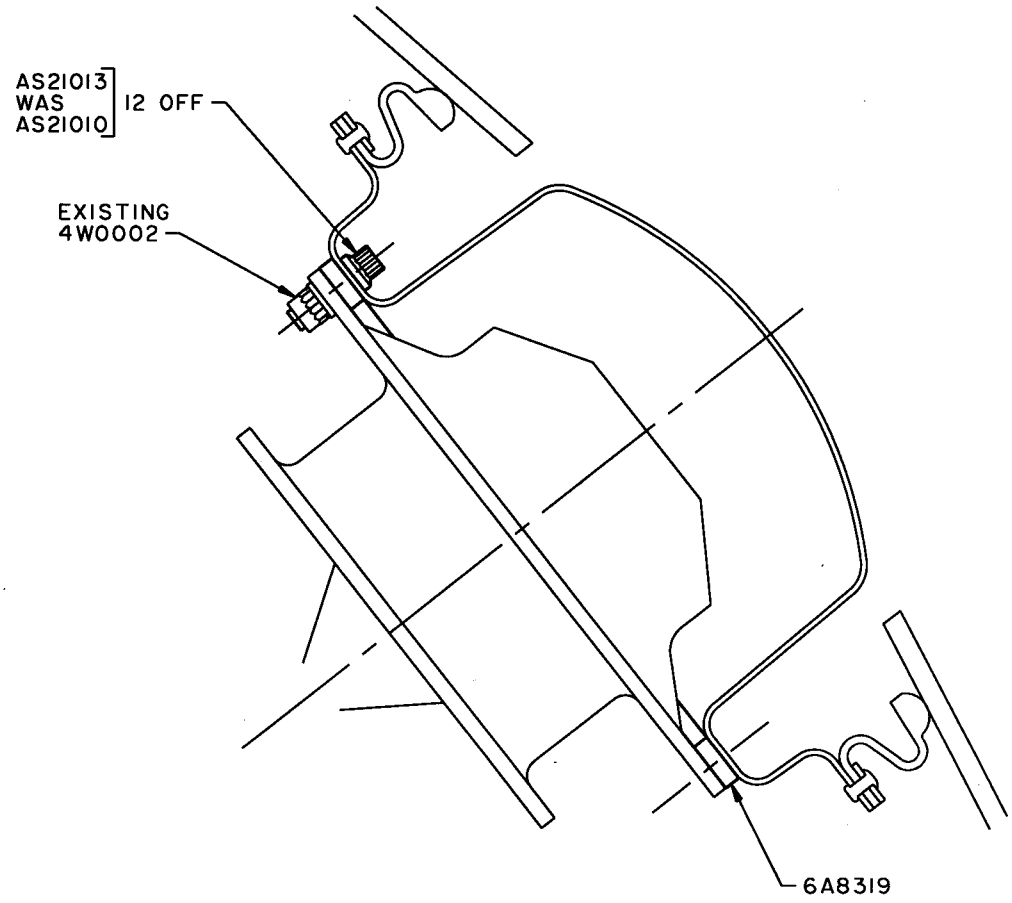
ANGLES ARE IN DEGREES AND DECIMAL PARTS
OF A DEGREE.

Fig. 1



SECTION AB

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Fig. 2

AIR – HP COMPRESSOR STAGE 7 BLEED VALVE – INTRODUCTION OF A BLEED VALVE SPACER

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. Parts required:

Part No.	Description	Unit Price US Dollars
6A8319	Spacer	225.00
AS21013	Bolt	4.80