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## V2500-A1/A5 SERIES PROPULSION SYSTEMS SERVICE BULLETIN

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This document transmits Revision 1 to Service Bulletin EV2500-75-0093 and Revision 1 to the Supplement

### Document History

Service Bulletin Revision Status  
Initial Issue May 5/04

Supplement Revision Status  
Initial Issue May 5/04

### Bulletin Revision 1

Remove  
Pages 1 to 8 of the  
Service Bulletin

Incorporate  
Pages 1 to 9 of the  
Service Bulletin

Reason for change  
To split the Service  
Bulletin into 3 parts

### Supplement Revision 1

Remove  
All pages

Incorporate  
Page 1

Reason for change  
To split the Service  
Bulletin into 3 parts

# V2500-ENG-75-0093

Transmittal - Page 1 of 2

CHECK THAT ALL PREVIOUS TRANSMITTALS HAVE BEEN INCORPORATED

If any have not been received please advise Publication Services, Rolls-Royce plc, Derby, England

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# LIST OF EFFECTIVE PAGES

The effective pages to this Service Bulletin following incorporation of Revision 1 to the Bulletin and Revision 1 to the Supplement are as follows:

<u>Page</u>		<u>Revision Number</u>	<u>Revision Date</u>
Bulletin			
R	1	1	Nov.18/04
R	2	1	Nov.18/04
R	3	1	Nov.18/04
R	4	1	Nov.18/04
R	5	1	Nov.18/04
R	6	1	Nov.18/04
R	7	1	Nov.18/04
R	8	1	Nov.18/04
R	9	1	Nov.18/04
Supplement			
R	1	1	Nov.18/04

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ENGINE – HP COMPRESSOR – INTRODUCTION OF A REVISED HPC STAGE 7A AND 10 BLEED VALVE  
SILENCER WITH INCREASED HEIGHT

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

R None

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 ports in the TRU.

In addition damage to the TRU C-duct opposite the Stage 10 Silencer can occur when the bleed valve fails in the open position. The problem is attributed to the coarse hole pattern in the Silencer not diffusing the airflow sufficiently.

(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.

(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 1.0. Other Publications Affected).

(c) Overhaul

Affected (see 1.0. Other Publications Affected).

(d) Repair Schemes

Not affected.

(e) Interchangeability

Not affected.

(f) Fits and Clearances

Not affected.

**D. Description**

- (1) This Service Bulletin introduces a generic HP Compressor Bleed Valve Silencer at the Stage 7A and Stage 10 positions in order to project the bleed valve outlet further into the bypass flow.

The changes introduced are:

- (a) A revised Stage 7A Bleed Valve Silencer is introduced similar to the existing item except for an increase in height.
- (b) A revised Stage 10 Bleed Valve Silencer is introduced similar to the existing item except for:
- (i) An increase in height.
  - (ii) The existing hole pattern has been changed to facilitate diffusion of the valve efflux.

- R (2) This modification is in parts as follows :
- R Part 1 – Covers the full embodiment of Stage 7 RH Upper Silencer and Stage  
R 10 Silencer.
- R Part 2 – Covers the embodiment of Stage 7 RH Upper Silencer.
- R Part 3 – Covers the embodiment of the Stage 10 Silencer.
- R NOTE: New production engines that fully embody this modification will not  
R be annotated with a mod part and can be considered equivalent to  
R part 1.

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 0,15 Kg (plus 0.31 lb).

**(2) Moment Arm**

616 mm. (24.25 in) 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-75-0092:- Air – HP Compressor Stage 7 Bleed Valve – Introduction Of A Bleed Valve Spacer.

**(2) Airbus aircraft modification No.34075.****(3) Engineering Change No. – 03VR018.****(4) 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

For Engines Incorporating SB ENG-75-0092, Stage 7 Silencer and bolts (Spacer deletion) must be fitted as a set.

- R SB ENG-75-0092 and SB ENG-75-0093 are NOT to be incorporated simultaneously at  
R the stage 7A position. If SB ENG-75-0092 has been previously incorporated, the  
spacer will require removal and the new silencer installed.

## 2. Material Information

### A. The kit required consists of the following parts:

None.

### B. Parts to be reworked:

None.

### C. New production parts:

All Engines

R Part 1 and Part 2

75-32-52

FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	OLD PART NO.	INSTR DISP
01250	6A8338	1	.Silencer, assy HPC 7 RH Upper	Stage6A6535	(A)(B)(S1)

75-32-54

R Part 1 and Part 3

FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	OLD PART NO.	INSTR DISP
01350	6A8338	1	.Silencer, assy - HPC Stage 10	6A6536	(A)(B)(S1)

For Engines Incorporating ENG-75-0092

75-32-52

R Part 1 and Part 2

FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	OLD PART NO.	INSTR DISP
01268	AS21010	12	.Bolt, bihex hd	AS21013	(C)(S2)(1D)



D. Redundant Parts:

For Engines Incorporating ENG-75-0092

Part 1 and Part 2

75-32-52

FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	OLD PART NO.	INSTR DISP
01230	-	1	.Spacer HPC Stg 7 RH Upper Bleed Valve Silencer	6A8319	(B)

E. Instruction Disposition Codes:

(A) New part will be made available from March 2004.

(B) Old part becomes redundant upon embodiment of this modification.

(C) New part is currently available.

(S1) Old and new parts are freely and fully interchangeable.

(S2) New and old parts are not interchangeable.

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

### 3. Accomplishment Instructions

#### A. Rework Instructions

None.

#### B. Assembly Instructions

For the correct assembly 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.

#### C. Recording Instructions

A record of accomplishment is necessary.

**HP Compressor Stage 7A & 10 Bleed Valve Silencer**

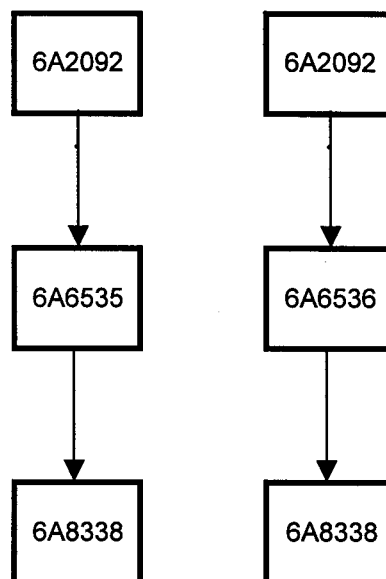
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**V2500 A1/A5 Engines**
**Baseline**
**V2500-ENG-75-0071**

Air - HPC Stage 7 Bleed Valves  
Introduction of Revised Bleed Valve  
Silencers with Integral Seal Land

**V2500-ENG-75-0093**

Engine - HP Compressor - Introduction Of A  
Revised HPC Stage 7A & 10 Bleed Valve  
Silencer with Increased Height.

**Stage 7A**
**Stage 10**


Family Tree  
Figure 1



ENGINE – HP COMPRESSOR – INTRODUCTION OF A REVISED HPC STAGE 7A AND 10 BLEED VALVE  
SILENCER WITH INCREASED HEIGHT

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
6A8338	Silencer	7,285.00
AS21010	Bolt	4.80

