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 SYSTEM SERVICE BULLETIN

This document transmits the Revision 1 of IAE Service Bulletin V2500-ENG-75-0105 and the Initial Issue of Meggitt Service Bulletin 75-43.

Document History

Service Bulletin Revision Status

Initial Issue	Sep.30/08

Service Bulletin Revision 1

Remove	Incorporate	Reason for change
All pages of the IAE Service Bulletin V2500-ENG-75-0105.	Pages 1 to 7 of the IAE Service Bulletin V2500-ENG-75-0105.	To change the Effectivity. Minor editorial changes.
All pages of the Supplement.	Page 1 of the Supplement.	No change.
All pages of the Meggitt Service Bulletin 75-43.	Pages 1 to 8 of the Meggitt Service Bulletin 75-43.	No change.

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

International Aero Engines

SERVICE BULLETIN

AIR - HP COMPRESSOR STAGE 7 BLEED VALVES - INTRODUCTION OF AN ALTERNATIVE BLEED VALVE WITH NEW DESIGN

1. Planning Information

A. Effectivity

(1) Airbus A319

R (a) V2522-A5, V2524-A5, V2527M-A5 Engines prior to Serial No. V13157 (A5
R Standard and A5 SelectOne™ Retrofit Standard).

R V2522-A5, V2524-A5, V2527M-A5 Engines prior to Serial No. V15100 (A5
R SelectOne™ Production Standard).

(2) Airbus A320

R (a) All V2500-A1 Engines.

R (b) V2527-A5, V2527E-A5 Engines prior to Serial No. V13157 (A5 Standard
R and A5 SelectOne™ Retrofit Standard).

R V2527-A5, V2527E-A5 Engines prior to Serial No. V15100 (A5 SelectOne™
R Production Standard).

(3) Airbus A321

R (a) V2530-A5, V2533-A5 Engines prior to Serial No. V13157 (A5 Standard and
R A5 SelectOne™ Retrofit Standard).

R V2530-A5, V2533-A5 Engines prior to Serial No. V15100 (A5 SelectOne™
Production Standard).

B. Concurrent Requirements

The Service Bulletin that follows must be done before or at the same time as
R this one, to install the new HP compressor stage 7 bleed valve at the HP compressor stage 7C position (LH lower):

V2500-ENG-75-0071 AIR - HP COMPRESSOR STAGE 7 BLEED VALVE - INTRODUCTION OF REVISED BLEED-VALVE SILENCER WITH INTEGRAL SEAL LAND

For V2500-A5 engines only:

The EEC software SCN19 introduced by the Service Bulletin that follows, or later EEC software versions, must be incorporated before or at the same time as this one:

V2500-ENG-73-0197 ENGINE - FUEL AND CONTROL - TO PROVIDE A NEW ELECTRONIC ENGINE CONTROL (EEC) WITH A5 SCN19/X SOFTWARE

C. Reason

(1) Condition

To introduce a new Dunlop HP compressor stage 7 bullet style bleed valve.

R (2) Background

The current production standard of the HP compressor stage 7 bleed valve can be affected by contamination which results in reduced reliability. This is caused by the triple carbon seals being directly exposed to the compressor bleed air flow. The resulting ingress of contamination into the bleed valve leads to accelerated piston seal wear which in turn can cause the valves to stick.

(3) Objective

Introduction of this Service Bulletin is designed to improve the reliability.

(4) Substantiation

The changes introduced by this Service Bulletin were the subject of satisfactory engineering analysis and testing. 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

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

(d) Repair Schemes

Not affected.

(e) Interchangeability

R Affected (Refer to paragraph 1.B. Concurrent Requirements).

(f) Fits and Clearances

Not affected.

D. Description

(1) The new design of the HP compressor stage 7 bleed valves introduced by this Service Bulletin consists a cylindrical body containing a triple seal housing, a spring and a piston attached to a support bolt. The inside of the piston forms the servo chamber. The piston and piston support move up and down a carbon bush pressed into the seal housing. Operation of the new unit is identical to the existing bleed valve and when in position of either open, closed or in a transient position the triple carbon seal assembly will be protected from compressor air flow and possible contamination.

E. Compliance

Category Code 7

Accomplish when supply of superseded parts has been depleted.

F. Approval

The technical content of this Service Bulletin has been approved under the authority of the EASA Design Organization Approval No. EASA.21J.031.

The authorizing IAE document is EC 04VI001.

The part number changes and/or part modification described in Section 2 and 3
R 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

Not applicable.

H. Material Price and Availability

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

For prices and availability of future spares see section 2. "Material Information".

I. Tooling - Price and Availability

Special tooling is not necessary.

J. Industry Support Information

Not applicable.

K. Weight and Balance

(1) Weight Change

NOTE: The weight change stated in this Service Bulletin is the change in nominal weight. The weight change identified in the attached Meggitt Service Bulletin 75-43 is the change in guaranteed maximum weight.

(a) per single valve:

Plus 0.69 lb (0,31 kg)

(b) per engine set:

Plus 2,07 lb (0,94 kg)

(2) Moment Arm

No effect.

(3) Datum

R 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) Airbus A319/A320/A321 Aircraft Maintenance Manual, Chapter 75-32-52 Removal/Installation of bleed valve.

(2) IAE V2500-A1/A5 Engine Manual (E-V2500-1IA), Chapter/Section 72-00-40, Removal/Installation of bleed valve.

(3) V2500 Service Bulletins:

V2500-ENG-75-0071 - AIR - HP COMPRESSOR STAGE 7 BLEED VALVE - INTRODUCTION OF REVISED BLEED-VALVE SILENCER WITH INTEGRAL SEAL LAND

V2500-ENG-73-0197 - ENGINE - FUEL AND CONTROL - TO PROVIDE A NEW ELECTRONIC ENGINE CONTROL (EEC) WITH A5 SCN19/X SOFTWARE

(4) Meggitt Service Bulletin 75-43 dated 16th September 2008.

R (5) This Service Bulletin is subject to Aircraft Modification No. 38434.

R Under no circumstances shall the modified equipment, resulting from the
R application of this SB, be installed on the aircraft type unless the
R corresponding modification, and if applicable, its aircraft SB are
R approved.

(6) Internal Reference No.:

R Engineering Change No. 04VI001 and 04VI001-01.

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

O. Other Publications Affected

(1) Airbus A319/A320/A321 Aircraft Illustrated Parts Catalogue (AIPC) will be revised, to add the new part number.

(2) IAE V2500 Engine Illustrated Parts Catalogues (EIPC) will be revised, to add the new part number.

P. Interchangeability of Parts

R Not affected.

2. Material Information

A. The kit required consists of the following parts:

None.

B. Parts to be reworked

Not applicable.

C. New production parts:

FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	MAT	OLD PART NO.	INSTR DISP
75-32-52						
01-100	EB101729B	3	.Valve, Bleed stg. 7, HP Compressor	-	AC69924	(A)(B) (S1)

D. Instructions disposition codes:

(A) New part is available for sale.

(B) Old part will continue to be supplied available until supply is depleted.

(S1) New and old parts are freely and fully interchangeable and intermixable.

3. Accomplishment Instructions

A. Rework Instructions

Refer to the attached Meggitt Service Bulletin 75-43.

B. Assembly Instructions

(1) For the correct Removal/Installation procedures of the HP compressor stage 7 bleed valve, refer to one of the manuals that follow:

(a) A319/320/321 Aircraft Maintenance Manual, Chapter/Section 75-32-52, Removal/Installation.

(b) IAE V2500-A1/A5 Engine Manual, Chapter/Section 72-00-40, Removal/Installation.

(2) For the further information, refer to the attached Meggitt Service Bulletin 75-43.

C. Recording Instructions

R (1) A record of accomplishment is required.

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AIR – HP COMPRESSOR STAGE 7 BLEED VALVES – INTRODUCTION OF AN ALTERNATIVE BLEED VALVE WITH NEW DESIGN

SUPPLEMENT – PRICE AND AVAILABILITY

The prices shown are for estimating purposes only and 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.

Part No	Description	Unit Price (US Dollars)
EB101729B	.Valve, Bleed stg. 7, HP Compressor	order before 12/31/2009: 7,830.00 (set of three units) order from 01/01/2010 to 12/31/2011: 9,993.00 (set of three units) order after 12/31/2011: 6,891.00 (per unit)

R Parts are currently available for sale.

MEGGITT

SERVICE BULLETIN

SB Number 75-43
POWER PLANT - AIR – BLEED VALVE
Introduction of Bleed Valve EB101729B
as an Alternative to Bleed Valve AC69924

1. Planning Information

A. Effectivity

(1) Aircraft affected — Airbus A319, A320 and A321

(2) Engines affected — IAE V2500 (A1 and A5 Engine Variants)

(3) Units affected — Dunlop Bleed Valve AC69924

B. Concurrent Requirements

N/A

C. Reason

(1) Condition (Problem)

Operators in the field have reported contamination of the triple seal assembly in the Dunlop Stage 7 Bleed Valve p/n AC69924. Contamination of this triple seal assembly reduces the reliability of the Bleed Valve.

(2) Background (Evidence)

Operator feedback on overhauls has formed the background for the introduction of the new Bleed Valve p/n EB101729B.

(3) Objective

In response to operator feedback, IAE approached Dunlop Equipment to re-design a new improved Bleed Valve which resolves the contamination and reliabilty issues reported by operators.

(4) Substantiation

Not Applicable

(5) Effect of Bulletin on:

(a) Operation

N/A

(b) Maintenance

N/A

(c) Overhaul

N/A

(d) Repair Schemes

N/A

(e) Interchangeability

N/A

(f) Fits and Clearances

N/A

D. Description

(1) There are no rework procedures introduced by this Service Bulletin. This Service Bulletin introduces the Dunlop HP 7 Bleed Valve p/n EB101729B (Figure 3) as an alternative to the Dunlop Stage 7 Bleed Valve p/n AC69924 (Figure 1).

(2) The primary differences between the old and new Bleed Valves are as follows:

(a) The new Bleed Valve p/n EB101729B is of the 'Bullet Type' design (Figure 4). It is designed to flow bleed air around the piston and not, in the case of Bleed Valve p/n AC69924 (Figure 2), through the piston. This change in design reduces the entry of bleed air contamination into the Bleed Valve.

(b) The new Bleed Valve p/n EB101729B has an attached perforated dome plate. The perforated dome plate keeps noise levels within permitted levels.

(c) The new Bleed Valve p/n EB101729B is fully interchangeable with the old Bleed Valve p/n AC69924. No additional work is required on the engine mounting flanges.

E. Compliance

Recommended

F. Approval

(1) This Service Bulletin was technically approved by IAE on 16th September 2008. The procedures described in this Service Bulletin have been shown to comply with the appropriate Federal Aviation Regulations and are FAA approved for those unit types listed in this Service Bulletin.

G. Manpower

(1) In Service

N/A

(2) At Overhaul

N/A

H. Material Price and Availability

(1) N/A

I. Tooling Price and Availability

(1) N/A

J. Industry Support Information

N/A

K. Weight

(1) Bleed Valve p/n AC69224 weighs 1.82Kg (4.02lbs)
Bleed Valve p/n EB101729B weighs 2.02Kg (4.45lbs)

Weight increase is 0.20Kg (0.43lbs)

(2) Moment Arm

N/A

(3) Datum

N/A

L. Electrical Load Data

N/A

M. Software Accomplishment Summary

N/A

N. References

N/A

O. Other Publication Affected

N/A

P. Interchangeability of Parts

N/A

2. Material Information

A. Price and Availability
For further information please contact:

Contact	Contact Details
Lee Bull Customer Services Manager	MFC - Dunlop Equipment Holbrook Lane Coventry CV6 4QY West Midlands England Tel: +44 (0) 24 76294270 Fax: +44 (0) 24 76294236 Email: lee.bull@meggitt.com
Val Yeomans Customer Service Administrator	MFC - Dunlop Equipment Holbrook Lane Coventry CV6 4QY West Midlands England Tel: +44 (0) 24 76294201 Fax: +44 (0) 24 76294236 Email: valerie.yeomans@meggitt.com

B. Parts to be reworked

N/A

C. New production parts

N/A

D. Redundant parts

N/A

E. Instruction disposition codes

N/A

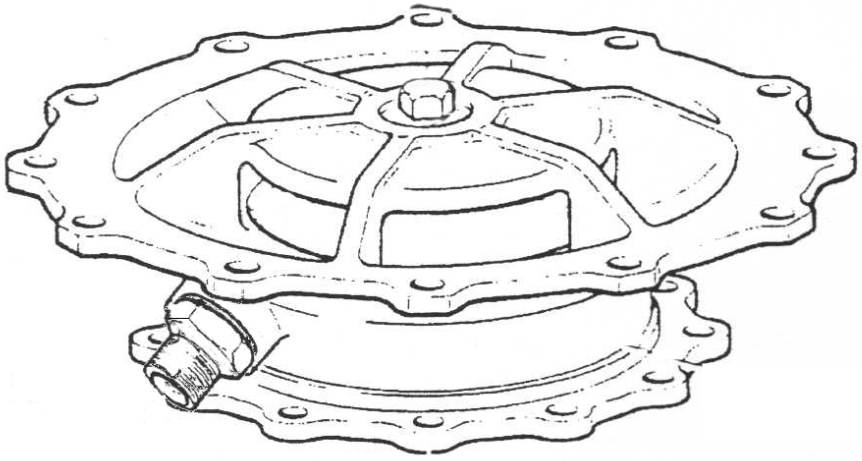
3. Accomplishment Instructions

A. Rework Instructions

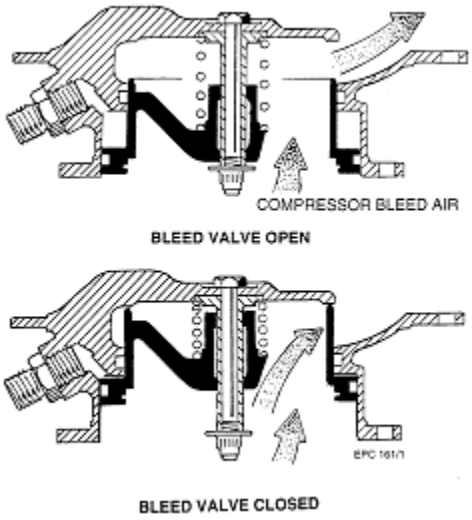
(1) General

This Service Bulletin informs operators of the introduction of the new improved Dunlop Bleed Valve p/n EB101729B as an alternative to the Dunlop Bleed Valve p/n AC69924.

(2) Illustrations



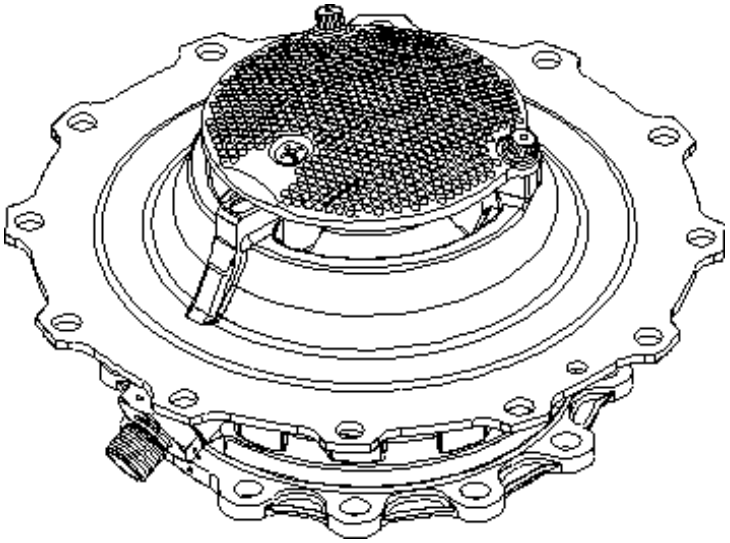
Old Type Bleed Valve p/n AC69924
Figure 1



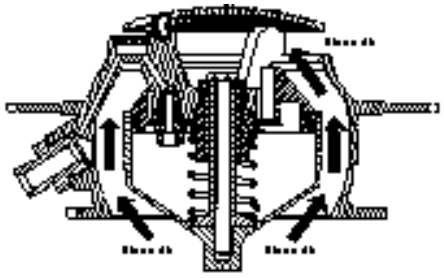
Bleed Air Flow Through Old Type Bleed Valve p/n AC69924
Figure 2

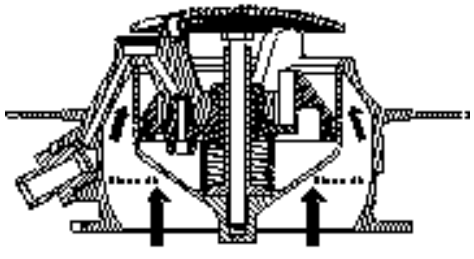
SERVICE BULLETIN

SB Number 75-43
POWER PLANT - AIR – BLEED VALVE
Introduction of Bleed Valve EB101729B
as an Alternative to Bleed Valve AC69924



New Type Bleed Valve p/n EB101729B
Figure 3





Bleed Air Flow Through New Type Bleed Valve p/n EB101729B
Figure 4

SERVICE BULLETIN FEEDBACK FORM

Please use this form to give feedback on the quality of this Service Bulletin. The input you provide will be used to analyse areas of improvement and to take action to further improve on the quality of our Service Bulletins.

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

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

- General quality rating of this Service Bulletin	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
- Quality rating of the Accomplishment Instructions	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
- Quality rating of the Illustration	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
- Is this Service Bulletin easy 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.H	☐ 1.P.		

Explanatory notes:

Operator:	Overhaul Site:
Name/Title:	Date:

Please send the completed Service Bulletin Feedback Form to IAE, Customer Support.
Email: GPIAECUSTCOM@IAEV2500.COM