Printed in Great Britain

## **International Aero Engines**

### **RR-DERBY**

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DATE: Jul. 25/00

V2500-A5 SERIES PROPULSION SYSTEMS SERVICE BULLETIN

This document transmits the Initial Issue of Service Bulletin EV2500-75-0074

**Bulletin Initial Issue** 

Remove

Incorporate
Pages 1 to 6 of the
Service Bulletin

Reason for change Initial Issue

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CHECK THAT ALL PREVIOUS TRANSMITTALS HAVE BEEN INCORPORATED If any have not been received please advise Publication Services, Rolls-Royce plc, Derby, England © Rolls-Royce plc (date as above) Printed in Great Britain

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#### LIST OF EFFECTIVE PAGES

The effective pages to this Service Bulletin are as follows:

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# <u>AIR - HPC STAGE 10 BLEED VALVE - INTRODUCTION OF A BLEED VALVE SUPPLIED BY PARKER HANNIFIN CORPORATION</u>

#### 1. Planning Information

#### A. Effectivity

(1) Airbus A319

V2522-A5, V2524-A5 Engines prior to Serial No.V10450

(2) Airbus A320

V2527-A5, V2527E Engines Serial Nos.V10450, V10329, V10330, V10340, V10362, V10360, V10361, V10400, V10432, V10476, V10477, V10500, V10502, V10512, V10506, V10550, V10551, V10577, V10568, V10385 and V10391

- (3) Airbus A321
  - (a) V2530-A5 Engines prior to Serial No.V10450
  - (b) V2533-A5 Engines Serial Nos.V10450, V10329, V10330, V10340, V10362, V10360, V10361, V10400, V10432, V10476, V10477, V10500, V10502, V10512, V10506, V10550, V10551, V10577, V10568, V10385 and V10391
- (4) ATA Location

75-32-00

#### B. Concurrent Requirements

- (1) The Service Bulletin that follows must be installed before or at the same time as Service Bulletin V2500-ENG-75-0074:
  - (a) V2500-ENG-75-0072

Air - HP Compressor Stage 10 bleed valves - Introduction of revised bleed valve silencer with integral seal land

#### C. Reason

(1) Condition

The bleed valve for the Stage 10 HP Compressor supplied by Dunlop, can lock in the closed position.

The problem is caused by contaminated air-flows and occurs more often during compressor rub-in on new engines.

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(2) Background

The problem has been found on in-service engines.

(3) Substantiation

A satisfactory engineering analysis, engine tests and vendor rig tests have been done on the changes introduced by this Service Bulletin.

(4) Objective

The purpose of this Service Bulletin is to maintain unit reliability.

- (5) Effect of Bulletin on:
  - (a) Operation

Not affected

(b) Maintenance

Not affected

(c) Overhaul

Not affected

(d) Repair Schemes

Not affected

(e) Interchangeability

Affected (Refer to 2.B.)

(f) Fits and Clearances

Not affected

#### D. <u>Description</u>

(1) The Parker Hannifin bleed valve shields the piston sealing rings and piston guide stem, from direct exposure to valve inlet air-flow air. This gives protection against contamination.

The changes introduced are:

(a) The Stage 10 bleed valve installed to the HP Compressor is supplied by Dunlop Limited. This Service Bulletin replaces it with a unit supplied by the Parker Hannifin Corporation.

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#### E. Compliance

This Service Bulletin is released for purposes of Controlled Service Introduction within United Airlines (UAL) and British Midland Airlines (BMA) only. The Controlled Service Introduction ends on December 31st 2000.

#### F. Approval

The part number changes and/or part modification are given in Section 2 and 3 of this Service Bulletin. They obey applicable Federal Aviation Regulations and are FAA-APPROVED for the Engine Models listed.

#### G. Manpower

Estimated manhours to incorporate the full intent of this bulletin:

(1) In Service

Not applicable

(2) At Overhaul

No more time is necessary to do this Service Bulletin

<u>NOTE</u>: It is possible to get access to parts affected by this Service Bulletin at overhaul.

#### H. Material - Price and Availability

- (1) A modification kit is not necessary.
- (2) See 2. Material Information for prices and availability of future spares.

#### I. Tooling - Price and Availability

Special tools are not necessary.

#### J. Weight and Balance

(1) Weight change

Plus 0,18 kg (0.4 lb)

(2) Moment arm

673 mm (26.5in.) rearwards

(3) Datum

Engine Front Mount Centreline Power Plant Station (PPS 100)

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#### K. Electrical Load Data

This Service Bulletin has no effect on aircraft electrical load.

#### L. References

(1) V2500-ENG-75-0072

Air - HP Compressor Stage 10 bleed valves - Introduction of revised bleed valve silencer with integral seal land

(2) Internal Reference No.

IAE Engineering Change Number 97V1004A and 97V1004A-01

#### M. Other Publications Affected

(1) Illustrated Parts Catalogue (IPC), Chapter/Section 75-32-54



#### 2. Material Information

#### A. Kits associated with this Bulletin:

None.

#### B. New production parts:

PART NO. QTY UNIT PRICE

5950041-105 1 Note

NOTE: The unit prices, if shown, are an estimate and they are given for the purpose of planning only. For actual prices, refer to the IAE Price Catalogue or contact IAE's spare parts sales department.

#### C. Parts affected by this Bulletin:

Applicability: For each V2500 engine to incorporate this Bulletin:

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FIG	NEW			OLD	
ITEM	PART			PART	INSTR
NO.	NO.	QTY	PART TITLE	NO.	DISP
01-400	5950041- 105	1	Valve, bleed, stage 10 HPC (V92003)	AC69922	(S1)

#### D. Instruction Disposition Codes

(S1) Old and new parts are freely and fully interchangeable after embodiment of IAE V2500 Service Bulletin V2500-ENG-75-0072 (Refer to 1.L.).

Mixing of new parts with Pre-Service Bulletin V2500-ENG-75-0072 components is not possible.

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#### 3. Accomplishment Instructions

A. Rework Instructions

None

- B. Assembly Instructions
  - (1) For correct Removal/Installation procedures, refer to the Manuals that follow:
    - (a) A319/A320/A321 Aircraft Maintenance Manual (AMM), Chapter/Section 75-32-54, Removal/Installation.

or

- (b) A1/A5 Engine Manual (EM), Chapter/Section 72-00-40, Removal-04 and Installation-07.
- C. Recording Instructions

A record of accomplishment is necessary.