

International Aero Engines SERVICE BULLETIN

AIR - HP COMPRESSOR STAGE 10 BLEED VALVE - INTRODUCTION OF A REVISED PARKER
HANNIFIN BLEED VALVE WITH INCREASED LENGTH RELIEF IN THE PISTON BORE

MODEL APPLICATION

V2525-D5
V2528-D5

BULLETIN INDEX LOCATOR

75-32-54

Compliance Category Code
No.

6

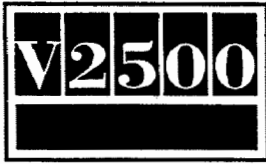
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Internal Reference

EC98VI007

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1. Planning Information

A. Effectivity

- (1) Aircraft
 - (a) Boeing-Douglas Product Division MD-90
- (2) Engines
 - (a) V2525-D5 Engines prior to Serial No.V20275
 - (b) V2528-D5 Engines prior to Serial No. V20275

B. Reason

(1) Condition

Sticking of the Parker Hannifin supplied Stage 10 HP. Compressor Bleed Valve may occur and in extreme circumstances can result in an engine failing to start.

The problem is attributed to slight misalignment of the guide stem, resulting in the stem contacting the inner bore of the piston. This leads to gouging, raised material and debris inside the piston, which over time increases until the valve becomes stuck.

(2) Background

The problem has been experienced on in service V2500-D5 engines and during engine Pass-Off testing using a slave valve.

(3) Objective

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

(4) Substantiation

The changes introduced by this Bulletin have been the subject of satisfactory IAE engineering assessment and vendor analysis.

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(5) Effect of Service Bulletin on:

(a) Operation

Not affected.

(b) Maintenance

Not affected.

(c) Overhaul

Not affected.

(d) Repair Schemes

Not affected

(e) Interchangeability

Not affected

(f) Fits and Clearances

Not affected

D. Description

- (1) This Service Bulletin introduces a revised Parker Hannifin supplied Stage 10 HP Compressor Bleed Valve similar to the existing unit. The changes are as follows:-

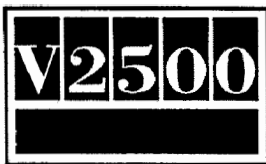
- (a) The existing relief in the piston bore has been extended to avoid contact between the end of the guide stem and the inner bore of the piston. This will prevent the corner of the guide stem producing debris and raised material, therefore reducing the potential for valve sticking.

- (2) Units incorporating this Service Bulletin will be identified by a new type number (see 3.B).

E. Approval

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The part number changes and/or modification described in Section 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.

F. Compliance

Category 6

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

G. Manpower

Estimate of man-hours necessary to embody this Service Bulletin in full:

- | | |
|-----------------|--|
| (1) In Service | Not applicable. |
| (2) At Overhaul | No additional time is necessary to embody this Service Bulletin. |

NOTE: It is possible to get access to the parts affected by this Service Bulletin at overhaul.

H. Material Price and Availability

Not affected.

I. Tooling Price and Availability

Not affected.

J. Weight and Balance

(1) Weight Change

None.

(2) Moment Arm

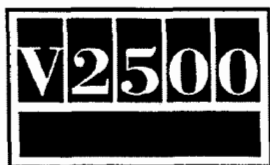
No effect.

(3) Datum

Engine front mount centreline (Power Plant Station (PPS) 100).

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K. Electrical Load Data

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

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L. References

- (1) D5 Engine Manual (EM), Chapter/Section 72-00-40, Removal-04 and Installation-04.
- (2) MD90 Aircraft Maintenance Manual (AMM), Chapter/Section 75-33-54, Removal/Installation
- (3) Parker Hannifin Vendor Service Bulletin 5950041-75-106

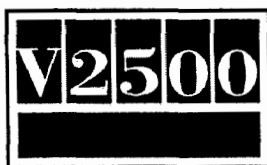
M. Publications Other Affected

- (1) Illustrated parts catalogue (IPC), Chapter/Section 75-32-54.

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2. Accomplish Instructions

A. Rework Instructions

None

B. Assembly Instructions

(1) For the correct removal/installation procedures, refer to the:

(a) D5 Engine Manual (EM), Chapter/Section 72-00-40, Removal-04 and Installation-04.

or

(b) MD90 Aircraft Maintenance Manual (AMM), Chapter/Section 75-33-54.

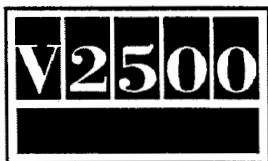
C. Recording Instructions

(1) A record of accomplishment is necessary.

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3. Material Information

NEW PART No. (ATA No.)	QTY	EST'D UNIT PRICE (\$)	PART TITLE	OLD PART No. (IPC No.)	INSTR DISP
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Applicability : For each V2500 engine to incorporate this Bulletin.

A. Kits associated with this Bulletin:-

None.

B. Units affected by this Bulletin:-

5950041-107 (75-32-54)	1	Valve, Bleed, Stage 10 HP Comp (V92003)	5950041-105 (01-400)	(A)(B)(S1)
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NOTE: The unit prices, if shown, are an estimate and they are given for the purpose of planning only.
For information about actual prices, refer to IAE Price Catalog or contact IAE's spare parts sales department.

C. Instruction/Disposition Codes:

- (A) New part will be available from December 1998.
- (B) Old part will be discontinued.
- (S1) Old and new parts are freely and fully interchangeable

