



400 MAIN STREET, MAIL STOP 121-10  
EAST HARTFORD, CT 06108, USA.  
TELEPHONE:- 860 565 5515  
FAX:- 860 565 0600

DATE: Nov.23/09

P.O. BOX 31, DERBY  
TELEGRAMS - 'ROYCAR' DERBY  
TELEX - 37645  
TELEPHONE:- 44 (0) 1332 242424  
FAX:- 44 (0) 1332 249936

Printed in Great Britain

## V2500-A5/D5 SERIES PROPULSION SYSTEMS SERVICE BULLETIN

This document transmits the Initial Issue of Service Bulletin V2500-ENG-70-0984 and the Initial Issue of the Supplement.

### Service Bulletin Initial Issue

Remove	Incorporate	Reason for change
	Pages 1 to 5 of the Service Bulletin.	Initial Issue.
	Page 1 of the of the Supplement.	Initial Issue.

**V2500-ENG-70-0984**  
Transmittal - Page 1 of 1

RETAIN THIS LETTER OF TRANSMITTAL - CHECK THAT ALL PREVIOUS TRANSMITTALS HAVE BEEN INCORPORATED  
If any have not been received please advise the Publication Services Department at the following address:  
Rolls-Royce plc, PO Box 31, Derby DE24 8BJ, England or e-mail: [airlines.publication.services@rolls-royce.com](mailto:airlines.publication.services@rolls-royce.com)  
© Rolls-Royce Deutschland Ltd & Co KG (date as above) Printed in Great Britain.



INFORMATION – ENGINE – HIGH PRESSURE (HP) COMPRESSOR VARIABLE STATOR SPLIT CASES –  
VSV BUSHES OF NEW MATERIAL

1. Planning Information

A. Effectivity

(1) Airbus A319

(a) V2522-A5, V2524-A5, V2527M-A5 Engines prior to Serial Number V13165 (A5 Standard and A5 SelectOne™ Retrofit Standard).

(2) Airbus A320

(a) V2524-A5, V2527-A5, V2527E-A5 Engines prior to Serial Number V13165 (A5 Standard and A5 SelectOne™ Retrofit Standard).

(3) Airbus A321

(a) V2530-A5, V2533-A5 Engines prior to Serial Number V13165 (A5 Standard and A5 SelectOne™ Retrofit Standard).

(4) Boeing MD-90

(a) V2525-D5, V2528-D5 Engines prior to Serial Number V20286.

B. Concurrent Requirements

None.

C. Reason

(1) Condition:

Examination of in-service engines has revealed wear of the variable stator vanes (VSV) casing bushes leading to frequent replacement of bushes during overhaul. The bushes on stages 4 and 5 are most affected by this wear. Thermal oxidation has been identified as the root cause.

(2) Objective:

The new casing bushes, of a different material, on the variable inlet guide vanes (VIGV) and on the VSV stages 3 to 5, will be introduced to reduce wear on the VIGV and the VSV casing bushes.

(3) Substantiation:

The changes introduced by this General Information Bulletin were the subject of satisfactory engineering analysis, extensive engine testing and flight test. This Service Bulletin complies with the applicable engine certification basis.

D. Description

This General Information Bulletin replaces the current casing bushes at the VIGV and the VSV stages 3 to 5 of the high pressure (HP) compressor with bushes of a different material. Fits and tolerances have been adjusted to compensate differences in thermal expansion, the key design features of the bushes are unchanged.

E. Compliance

Category Code 7.

Accomplish when supply of superseded parts has been depleted.

F. Approval

The part number changes and/or part modifications described in section 2 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 affected.

H. Weight and Balance

(1) Weight

None.

(2) Moment Arm

Not affected.

(3) Datum

Engine Front Mount Centerline (Power Plant Station (PPS) 100)

**I. General Information**

- (1) This General Information Bulletin introduces new VIGV and VSV casing bushes.
- (2) Publications affected:
  - (a) IAE V2500 Engine Illustrated Parts Catalogues (S-V2500-1IA, S-V2500-2IA, S-V2500-2IB, S-V2500-3IA, S-V2500-3IB, S-V2500-5IA, S-V2500-5IB, S-V2500-6IA, S-V2500-6IB, S-V2500-7IA, S-V2500-7IB), Chapter/Section 72-41-31, will be revised to include the new part. Refer to Section 2. "Material Information".
  - (b) The V2500 Engine Manuals (E-V2500-1IA, E-V2500-3IA), Chapter/Section 72-41-30, will be revised to include the new part.

**J. References**

- (1) Internal Reference No.:  
Engineering Change No. 08VR006.
- (2) ATA Locator - 72-41-31.

## 2. Material Information

### A. Parts affected by this Service Bulletin:

Applicability: For all V2500-A5/D5 Engines

FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	MAT	OLD PART NO.	INSTR DISP
72-41-31						
01-244	6B1333	80	.Bush, casing	-	1035212	(S1)(S2)
01-254	6B1336	228	.Bush, casing	-	1035252	(S1)(S2)
01-264	6B1334	60	.Bush, casing	-	1035272	(S1)(S2)
01-274	6B1335	4	.Bush, casing	-	1035232	(S1)(S2)

### B. Instruction/Disposition Codes:

(S1) Old and new parts are not interchangeable, but the new parts can be fitted in lieu of the old parts, but not vice versa.

(S2) New parts must be fitted as a set per stage. Mixing of old and new parts is not permissible.

Printed in Great Britain

**3. Accomplishment Instructions**

None.

Printed in Great Britain





INFORMATION – ENGINE – HIGH PRESSURE (HP) COMPRESSOR VARIABLE STATOR SPLIT CASES –  
VSV BUSHES OF NEW MATERIAL

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. New Production Parts:

Part No.	Description	Unit Price US Dollars
6B1333	.Bush, casing	44.60
6B1334	.Bush, casing	44.60
6B1335	.Bush, casing	44.60
6B1336	.Bush, casing	44.60

3. Tools

None.