


International Aero Engines
RR-DERBY

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

P.O. BOX 31, DERBY
TELEGRAMS - 'ROYCAR' DERBY
TELEX - 37645
TELEPHONE - DERBY 242424

DATE ~~R~~ Jan.31/02

V2500-A1/A5/D5 PROPULSION SYSTEMS SERVICE BULLETIN

Printed in Great Britain

This document transmits Revision 1 to Service Bulletin EV2500-72-0263

Document History

Service Bulletin Revision Status
Initial Issue Mar.28/97

Supplement Revision Status

Bulletin Revision 1

Remove
All pages of the
Service Bulletin

Incorporate
Pages 1 to 7 of the
Service Bulletin

Reason for change
To correct the Weight and
Balance statement and
remove an instructions
disposition code

V2500-ENG-72-0263

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

© Rolls-Royce plc (date as above) Printed in Great Britain

LIST OF EFFECTIVE PAGES

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

<u>Page</u>	<u>Revision Number</u>	<u>Revision Date</u>
-------------	------------------------	----------------------

	Bulletin		
R	1	1	Jan.31/02
R	2	1	Jan.31/02
R	3	1	Jan.31/02
R	4	1	Jan.31/02
R	5	1	Jan.31/02
R	6	1	Jan.31/02
R	7	1	Jan.31/02

Printed in Great Britain



ENGINE - HP COMPRESSOR REAR OUTER CASE - INTRODUCTION OF REVISED CASE WITH INTEGRAL REAR SEAL LAND

1. Planning Information

A. Effectivity

(1) Airbus A319

V2522-A5, V2524-A5 Engines prior to Serial No. V10250

(2) Airbus A320

(a) V2500-A1 Engines prior to Serial No. V0362

(b) V2527-A5 Engines prior to Serial No. V10250

(3) Airbus A321

V2530-A5, V2533-A5 Engines prior to Serial No. V10250

(4) Boeing - Longbeach Division MD-90

V2525-D5, V2528-D5 Engines prior to Serial No. V20145

(5) ATA Locator 72-00-00

B. Concurrent Requirements

None.

C. Reason

(1) Condition

A design review has indicated that manufacture of the HP compressor rear case assembly can be optimised.

(2) Background

See Condition

(3) Objective

Incorporation of this Service Bulletin is designed to facilitate manufacture.

Mar 28/97

R Jan.31/02

V2500-ENG-72-0263

Page 1 of 7



(4) Substantiation

The changes introduced by this Service Bulletin have been the subject of satisfactory engineering analysis and a 1500 cycle endurance test.

(5) Effect of Bulletin on Workshop Procedures:

(a) Removal/Installation

Affected

(b) Disassembly/Assembly

Affected

(c) Cleaning

Affected

(d) Inspection/Check

Affected

(e) Repair

Not affected

(f) Testing

Not affected

(6) Supplemental Information

None

D. Description

The changes introduced by this Service Bulletin are as follows:

(1) A revised HP compressor rear case assembly is introduced similar to the existing item except for:

(a) The wall thickness is revised from 1,50 - 3,50mm (0.059 - 0.138in.) to 1,50 - 2,50mm (0.059 - 0.098in.).

(b) The inner profile of the casing is fully machined and the requirements for chemi-etching is deleted.

(c) The compressor rear seal housing is incorporated into the casing.



- (d) An internal chamfer has been added to the Stage 10 handling bleed and the cabin air offtake.
- (2) The number of bolts and washers attaching the rear seal housing is reduced from 72 to 30.
- (3) A revised cross key segment is introduced similar to the existing item except for a change in material from Titanium to C263 Nickel alloy and a reduction in quantity to 6.
- (4) A revised cross key location ring is introduced similar to the existing except for a reduction in the number of 'dog' features to suit the reduced number of cross key segments.
- (5) The rear seal housing is deleted, now an integral part within the HP compressor rear case assembly (see D.(1) (c)).

E. Compliance

Category code 7

Accomplish when the supply of superseded parts have been depleted

F. Approval

The part number changes and/or part modifications 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.

G. Manpower

- (1) In service

Not applicable

- (2) At overhaul

Not affected

NOTE: The parts affected by this Service Bulletin are accessible at overhaul.

H. Material – Price and Availability

- (1) Modification kit is not required.

See Material Information section for prices and availability of future spares.



I. Tooling – Price and Availability

Special tools are not required.

J. Weight and Balance

(1) A1 and A5 models

(a) Weight Change

R Minus 2,40kg (5.3lb).

(b) Moment Arm

R 584mm (23.0in.) rearwards.

(c) Datum

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

(2) D5 model

(a) Weight Change

R Minus 1.70kg (3.7lb).

(b) Moment Arm

R 584mm (23.0in.) rearwards.

(c) Datum

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

K. Electrical Load Data

The aircraft electrical load is not affected by this Service Bulletin

L. References

(1) Internal reference 93VR051

(2) Engine Manual, 72-41-00, 72-41-20, Disassembly and Assembly

M. Other Publications Affected

(1) illustrated Parts Catalogue will be revised

**2. Material Information****A. Kits associated with this Bulletin:**

None.

B. New production parts:

PART NO.	QTY	UNIT PRICE
6A5685	6	234.00
6A6513	1	NOTE
6A5682	1	NOTE
6A5737	1	NOTE
6A5738	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:

A1, A5 and D5 models

72-41-00

FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	OLD PART NO.	INSTR DISP
01-364	-	42	Bolt (0.250in. dia x 0.898in.)	BLT5292	(1D)
01-366	-	42	Washer	LK35703	(1D)
01-367	-	12	Spacer	EU55204	(A)

72-41-23

FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	OLD PART NO.	INSTR DISP
R 02-220	6A5685	6	Segment-cross key location	6A2251	(B)(S1)(2D)
02-250	-	1	Housing-rear seal, compressor	6A1861	(A)

D5 model only

72-41-23



	FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	OLD PART NO.	INSTR DISP
R	02-400	6A6513	1	Case assy-HP comp, rear outer	6A5497	(B)(S1)
	A1 and A5 models only					
	72-41-23					

	FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	OLD PART NO.	INSTR DISP
R	02-400	6A5682	1	Case assy-HP comp, rear outer	6A5495	(B)(S1)
	A1 model only					
	72-41-21					

	FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	OLD PART NO.	INSTR DISP
R	04-750	6A5737	1	Ring-cross key location	6A2856	(B)(S1)
	A5 and D5 models only					
	72-41-21					

	FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	OLD PART NO.	INSTR DISP
R	04-750	6A5738	1	Ring-cross key location	6A4179	(B)(S1)

NOTE: For price and availability of future spares, refer to the IAE Price Catalogue or contact the IAE Spare Parts Sales Department.

R D. Instructions disposition codes

(A) Redundant part

(B) New part currently available

(S1) Old and new parts are not interchangeable.

R (1D) Quantity reduced from 72 to 30

R (2D) Quantity reduced 12 to 6



3. Accomplishment Instructions

A. Rework Instructions

None

B. Assembly Instructions

Install the revised HP compressor rear case assembly in accordance with the approved procedures, Ref. V2500 Engine Manual 72-41-20.

C. Recording Instructions

A record of accomplishment is required.

Printed in Great Britain

