P U B L I C A T I O N T R A N S M I T T A L

RR-DERBY

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V2500-A5/D5 PROPULSION SYSTEMS SERVICE BULLETIN

Printed in Great Britain

This document transmits the Initial Issue of Service Bulletin EV2500-72-0426

Bulletin Initial Issue

Remove	Incorporate	Reason for change
	Pages 1 to 7 of the Service Bulletin	Initial issue

V2500-ENG-72-0426

CHECK THAT ALL PREVIOUS TRANSMITTALS HAVE BEEN INCORPORATED
If any have not been received please advise Publication Services, Rolls-Royce plc, Derby, England

LIST OF EFFECTIVE PAGES

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ENGINE - ACTUATING MECHANISM HP COMPRESSOR VARIABLE VANES - INTRODUCTION OF A REVISED CRANKSHAFT ASSEMBLY WITH REDUCED FRONT BEARING INTERFERENCE

1. Planning Information

A. Effectivity

(1) Airbus A319

V2522-A5, V2524-A5 and V2527M-A5 Engines.

(2) Airbus A320

V2527-A5, V2527E-A5 Engines.

(3) Airbus A321

V2530-A5, V2533-A5 Engines.

(4) Boeing Longbeach Division MD-90

V2525-D5, V2528-D5 Engines.

B. Concurrent Requirements

None.

C. Reason

(1) Problem

During an engine build check it was observed that the interference fit between the inner race of the front bearing and the front crankshaft journal could be optimised.

(2) Evidence

See (1) Problem.

(3) Substantiation

The changes introduced by this modification have been the subject of satisfactory engineering analysis.

(4) Objective

Incorporation of this modification is designed to facilitate engine build requirements.

(5) Effect of 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 modification introduces a revised crankshaft assembly.

The changes introduced are:

(a) The interference between the inner race of the front bearing and the front crankshaft journal has been reduced to between 0,0076 mm. and 0,0356 mm. on diameter by reducing the crankshaft journal diameter from 72,0446 mm. to 72,0306 mm. nominal.

E. Compliance

Category Code 7

Accomplish when the supply of superseded parts has been depleted.

F. Approval

The part number transactions shown in section 2. Material Information 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

Modification kit not required; parts supplied as single line items.

I. Tooling Price and Availability

Special tools are not required.

J. Industry Support Information

None.

K. Weight and Balance

(1) Weight Change

None.

(2) Moment Arm

No effect.

(3) Datum

Engine Front Mount Centrline (Power Plant Station PPS100)

L. Electrical Load Data

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

M. Software Accomplishment Summary

Not applicable.

N. References

(1) IAE Engineering Change Number 02VR003.

(2) ATA Locator - 72-41-34.

O. Other Publications Affected

(1) Illustrated Parts Catalogue (IPC) S-V2500-2IA, 2IB, 3IA, 3IB, 5IA, 5IB, 6IA, 6IB, 7IA and 7IB, Chapter/Section 72-41-34, will be revised.

(2) Engine Manual, 1IA and 3IA, 72-41-34, Cleaning, Inspection, Assembly and Repair.

(3) Engine Manual, 1IA and 3IA, 72-00-40, Testing.

(4) Aircraft Maintenance Manual, 75-32-42 Config-02, Removal/Installation and Inspection/Check (A5).

(5) Aircraft Maintenance Manual, 75-31-02, Removal/Installation and Inspection/Check (D5).

P. Interchangeability of Parts

Not affected.

2. Material Information

A. The kit required consists of the following parts:

All Engines

72-41-34

FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	MAT	OLD PART NO.	INSTR DISP
01600	6A7975	1	.Shaft, Assy	-	6A7804	(A)(B)(S1)
01630	6A7976	1	..Shaft, Crank	-	6A7805	(A)(B)(S1)

B. Parts to be reworked:

None.

C. New production parts:

None.

D. Parts Prices:

PART NO.	QTY	UNIT PRICE US DOLLARS
6A7975	1	20120.00
6A7976	1	12830.00

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.

E. Instruction Disposition Codes:

(A) New part will be made available from December 2002.

(B) Old part becomes redundant upon embodiment of this modification.

(S1) Old and new part are freely and fully interchangeable.

3. Accomplishment Instructions

A. Rework Instructions

None.

B. Assembly Instructions

The revised crankshaft assembly introduced by this Service Bulletin is freely and fully interchangeable with the existing item. Remove and Install in accordance with current overhaul procedures (Engine Manual, 72-41-00 Config-02, Disassembly and Assembly-02 (A5). Engine Manual, 72-41-00, Disassembly and Assembly-02 (D5). Aircraft Maintenance Manual, 75-32-42 Config-02, Removal/Installation (A5). Aircraft Maintenance Manual, 75-31-02, Removal/Installation (D5)).

C. Recording Instructions

(1) A record of accomplishment is necessary

HP Compressor Variable Stator Vane System Crankshaft Assy Family Tree

V2500 A5 and D5 Engines

Baseline

6A4316

V2500-ENG-72-0366
Engine - Actuating Mechanism HP Compressor Variable Vanes - Introduction of a Revised Crankshaft Assembly.

6A7662

V2500-ENG-72-0406
Engine - Actuating Mechanism HP Compressor Variable Vanes - Introduction of a Fully Machined from Bar Crankshaft Assembly.

6A7804

V2500-ENG-72-0426
Engine - Actuating Mechanism HP Compressor Variable Vanes - Introduction of a Revised Crankshaft Assembly with reduced Front Bearing Interference.

6A7975

ded0004431

Family Tree
Fig.1