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

Printed in Great Britain

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

DATE: Sep.22/08

V2500-A5 SERIES PROPULSION SYSTEMS SERVICE BULLETIN

This document transmits the Initial Issue of Service Bulletin V2500-ENG-72-0572.

Service Bulletin Initial Issue

Remove Incorporate Reason for change

Pages 1 to 7 of the Service Bulletin

Initial Issue.

V2500-ENG-72-0572
Transmittal - Page 1 of 1

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

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



# <u>ENGINE - PROVIDE THE REQUIREMENTS FOR MODIFICATION TO THE V2500 SELECTONE PRODUCTION STANDARD</u>

## 1. Planning Information

## A. <u>Effectivity</u>

- (1) Airbus A319
  - (a) V2522-A5, V2524-A5, V2527M-A5 Engines from Serial No. V15002 onwards.
- (2) Airbus A320
  - (a) V2524-A5, V2527-A5, V2527E-A5 Engines from Serial No. V15002 onwards.
- (3) Airbus A321
  - (a) V2530-A5, V2533-A5 Engines from Serial No. V15002 onwards.

## B. Concurrent Requirements

None.

## C. Reason

(1) Condition

None.

## (2) Background

The V2500 SelectOne is a committed programme to enhance the V2500 engine for improved time on wing, efficiency and durability. The package for V2500 SelectOne Production standard features an optimised aerodynamic and mechanical design of the HP compressor and turbine and an improved EEC software.

## (3) Objective

The purpose of this Service Bulletin is to inform the operator about the incorporated modification of a V2500-A5 SelectOne Production standard engine during new production.

### (4) Substantiation

The changes introduced by this Service Bulletin were the subject of satisfactory engineering analysis. This Service Bulletin complies with the applicable engine certification basis.

Sep.22/08 Sep.22/08 Initial Issue



- (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. <u>Description</u>

This SelectOne Retrofit Service Bulletin refers to the necessary Service Bulletins for the modification to a V2500-A5 SelectOne Production standard engine.

## E. Compliance

Category Code TD (Technical Data)

For Information only.

## F. Approval

The technical content of this Service Bulletin comply with the Federal Aviation Regulations and is FAA approved for the engine models listed.

The authorising IAE document is EC 08SEL02I.

# G. Manpower

(1) In Service

Not applicable.

Sep.22/08 Sep.22/08 Initial Issue



(2) At Overhaul

Not applicable.

H. Material Price and Availability

Not applicable.

I. Tooling Price and Availability

Special tools are not required.

J. <u>Industry Support Information</u>

Not applicable.

## K. Weight and Balance

(1) Weight Change

None.

(2) Moment Arm

No effect.

(3) Datum

Engine Front Mount Centreline (Power Plant Station (PPS) 100).

L. Electrical Load Data

This Service Bulletin has no effect on the aircraft electrical load.

M. Software Accomplishment Summary

Not applicable.

## N. <u>References</u>

(1) V2500 Service Bulletins:

V2500-ENG-72-0560 ENGINE - HIGH PRESSURE (HP) COMPRESSOR - V2500 SELECTONE

RETROFIT AND PRODUCTION - HP COMPRESSOR UPGRADE

V2500-ENG-72-0561 ENGINE - HIGH PRESSURE (HP) COMPRESSOR - V2500 SELECTONE

PRODUCTION - HP COMPRESSOR UPGRADE

V2500-ENG-72-0562 ENGINE - HIGH PRESSURE TURBINE (HPT) - V2500 SELECTONE

PRODUCTION AND RETROFIT - HPT UPGRADE

Sep.22/08 Sep.22/08 Initial Issue



V2500-ENG-72-0563 ENGINE - LOW PRESSURE (LP) TURBINE - INTRODUCTION OF

TURBINE VANES STAGE 3

V2500-ENG-72-0564 ENGINE - HIGH PRESSURE (HP) COMPRESSOR - V2500 SELECTONE

- INTRODUCTION OF REDESIGNED VARIABLE STATOR VANE (VSV)

SYSTEM

V2500-ENG-73-0203 ENGINE - FUEL AND CONTROL - PROVIDE A NEW ELECTRONIC

ENGINE CONTROL (EEC) WITH A5 SCN20/Y SOFTWARE

(2) Internal Reference No.:

Engineering Change No. 08SEL02I.

(3) ATA Locator -72-00-00.

O. Other Publications Affected

None.

P. <u>Interchangeability of Parts</u>

Not affected.



# 2. <u>Material Information</u>

A. The kit required consists of the following parts:

None.

B. <u>Parts to be reworked:</u>

None.

C. New production parts:

None.

D. <u>Redundant parts:</u>

None.

E. <u>Instruction disposition codes:</u>

None.

Sep.22/08 Sep.22/08 Initial Issue



## 3. Accomplishment Instructions

- A. Rework Instructions
  - (1) None.
- B. Assembly Instructions
  - (1) The Service Bulletins that follow are parts of the SelectOne Production package:

V2500-ENG-72-0560	ENGINE - HIGH PRESSURE (HP) COMPRESSOR - V2500 SELECTONE RETROFIT AND PRODUCTION - HP COMPRESSOR UPGRADE
V2500-ENG-72-0561	ENGINE - HIGH PRESSURE (HP) COMPRESSOR - V2500 SELECTONE PRODUCTION - HP COMPRESSOR UPGRADE
V2500-ENG-72-0562	ENGINE - HIGH PRESSURE TURBINE (HPT) - V2500 SELECTONE PRODUCTION AND RETROFIT - HPT UPGRADE
V2500-ENG-72-0563	ENGINE - LOW PRESSURE (LP) TURBINE - INTRODUCTION OF TURBINE VANES STAGE 3
V2500-ENG-72-0564	ENGINE - HIGH PRESSURE (HP) COMPRESSOR - V2500 SELECTONE - INTRODUCTION OF REDESIGNED VARIABLE STATOR VANE (VSV) SYSTEM
V2500-ENG-73-0203	ENGINE - FUEL AND CONTROL - PROVIDE A NEW ELECTRONIC ENGINE CONTROL (EEC) WITH A5 SCN2O/Y SOFTWARE

NOTE: All engines have the referred Service Bulletin standards already incorporated at new production. The engraved Installation Arrangement Number (IAN) on the engine identification plate (72-32-85, 03-120) is SQ02 or SQ03.

Therefore no Operator action is required.

(2) The Service Bulletins that follow are additionally to the SelectOne Production package and already incorporated in Engine Serial No. V15003 and onwards:

V2500-ENG-72-0571	ENGINE - HIGH PRESSURE (HP) COMPRESSOR - V2500 SELECTONE
	PRODUCTION - INTRODUCTION OF A BAULKING FEATURE IN THE
	VARIABLE STATOR VANE (VSV) SYSTEM TO PREVENT MISASSEMBLY
	OF LEVER ARMS

V2500-ENG-72-0573 ENGINE - HIGH PRESSURE (HP) COMPRESSOR - V2500 SELECTONE PRODUCTION - INCREASE OF CENTRALIZER PAD CLEARANCE TO REDUCE THE FORCE TO MOVE THE VARIABLE STATOR VANE (VSV) SYSTEM

Sep.22/08 Sep.22/08 Initial Issue



V2500-ENG-72-0575 ENGINE - ROTOR AND STATOR ASSEMBLY - PROVIDE NEW

SELECTONE 2ND STAGE HIGH PRESSURE TURBINE (HPT)

RESTAGGERED BLADES

V2500-ENG-72-0576 ENGINE - TURBINE NOZZLE - PROVIDE A SELECTONE NEW HIGH

PRESSURE TURBINE (HPT) 1ST STAGE VANE ASSEMBLY

NOTE: The Engine Serial No. V15002 has a different design standard of HP

compressor VSV spindles, VSV lever arms, stage 1 HP turbine vanes

and stage 2 HP turbine blades.

C. Recording Instructions

(1) None.

Sep.22/08 Sep.22/08 Initial Issue