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DATE: Sep. 22/08

V2500-A5 SERIES PROPULSION SYSTEM SERVICE BULLETIN

This document transmits the Initial Issue of Service Bulletin V2500-ENG-72-0573 Service Bulletin Initial Issue

Remove Incorporate Reason for change

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V2500-ENG-72-0573

Printed in Great Britain



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

### 1. Planning Information

### A. Effectivity

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

## B. Concurrent Requirements

None.

### C. Reason

(1) Condition

None.

(2) Background

Variable Stator Vane Actuator (VSVA) track check errors have been seen on V2500 engines in service. To reduce the actuation force of the whole V2500 SelectOne VSV system the centraliser pad clearances between the High Pressure (HP) compressor casing and the pads have been optimized.

(3) Objective

Incorporation of this Service Bulletin is designed to reduce the actuation force of the whole VSV system and to improve the reliability.

(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.

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- (5) Effect of Bulletin on:
  - (a) Operation

Not affected.

(b) Maintenance

Not affected.

(c) Overhaul

Affected (Refer to paragraph 1.0. Other Publications Affected).

(d) Repair Schemes

Not affected.

(e) Interchangeability

Not affected.

(f) Fits and Clearances

Affected.

### D. <u>Description</u>

The changes introduced by this Service Bulletin are as follows:

To achieve the force reduction on VSV system the centralizer pad clearance adjustment value between pad and HP compressor casing has been increased as follows:

STAGE	FROM	ТО
VIGV	0,15 mm	0,20 mm
VSV stage 3	0,20 mm	0,30 mm
VSV stage 4	0,15 mm	0,30 mm

# E. <u>Compliance</u>

(1) For Serial No. V15002 only:

Category Code 4

Accomplish at the first visit of an engine or module to a maintenance base capable of compliance with the accomplishment instructions regardless of the planned maintenance action or the reason for the engine removal.

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(2) For Serial No. V15003 onwards:

Category Code 8

For Information only.

## F. Approval

The modifications described in this Service Bulletin have been shown to comply with the applicable Federal Aviation Regulations and are FAA-APPROVED for the engine models listed.

The authorizing IAE document is EC 08VR002.

#### G. Manpower

(1) In Service

Not applicable.

(2) At Overhaul

Not applicable.

H. Material Price and Availability

Not applicable.

I. Tooling Price and Availability

Not applicable.

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).

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## L. Electrical Load Data

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

## M. <u>Software Accomplishment Summary</u>

Not applicable.

# N. References

(1) Internal Reference No.

Engineering Change No. 08VR002.

- (2) ATA Locator -72-41-30.
- O. Other Publications Affected
  - (1) IAE V2500 Engine Manual (E-V2500-1IA), Chapter 72-41-30.

## P. Interchangeability of Parts

Not affected.



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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.

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## 3. Accomplishment Instructions

- A. Rework Instructions
  - (1) None.
- B. Assembly Instructions
  - (1) For Serial No. V15002 only:

For the accomplishment instructions to incorporate the content of this Service Bulletin, contact IAE Technical Services.

For the difference between the old and the new values of the pad clearance refer to the table that follows:

STAGE	FROM	ТО
VIGV	0,15 mm	0,20 mm
VSV stage 3	0,20 mm	0,30 mm
VSV stage 4	0,15 mm	0,30 mm

(2) For Serial No. V15003 onwards:

This Service Bulletin is for information only.

All engines from Serial No. 15003 onwards have this Service Bulletin SB-V2500-72-0573 standard already incorporated at new production. Therefore no Operator action is required.

- C. Recording Instructions
  - (1) For Serial No. V15002 only:

A record of accomplishment is required.