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V2500-A5 SERIES PROPULSION SYSTEMS SERVICE BULLETIN

This document transmits the Initial Issue of Service Bulletin V2500-ENG-72-0605.

Service Bulletin Initial Issue

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

Supplement Initial Issue

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CHECK THAT ALL PREVIOUS TRANSMITTALS HAVE BEEN INCORPORATED
If any have not been received please advise IAE International Aero Engines AG

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ENGINE – HIGH PRESSURE (HP) COMPRESSOR DISCS (STAGES 3–8) – RE-NUMBERED FRONT DRUMS
WITH INCREASED REPAIR LIMITS

1. Planning Information

A. Effectivity

(1) Airbus A319

(a) V2522-A5, V2524-A5, V2527M-A5 Engines (A5 SelectOne™ Retrofit Standard and A5 SelectOne™ Production Standard).

(i) High Pressure (HP) compressor stage 3–8 drum assembly P/N 6B1384, P/N 6B1385, P/N 6B1386 and P/N 6B1404.

(2) Airbus A320

(a) V2524-A5, V2527-A5, V2527E-A5 Engines (A5 SelectOne™ Retrofit Standard and A5 SelectOne™ Production Standard).

(i) HP compressor stage 3–8 drum assembly P/N 6B1384, P/N 6B1385, P/N 6B1386 and P/N 6B1404.

(3) Airbus A321

(a) V2530-A5, V2533-A5 Engines (A5 SelectOne™ Retrofit Standard and A5 SelectOne™ Production Standard).

(i) HP compressor stage 3–8 drum assembly P/N 6B1384, P/N 6B1385, P/N 6B1386 and P/N 6B1404.

B. Concurrent Requirements

The Service Bulletin that follows must be done at the same time as this one:

V2500-ENG-72-0606 – ENGINE – HIGH PRESSURE (HP) COMPRESSOR DISCS (STAGES 3–8)
– REPLACEMENT OF SILVER PLATED NUTS

C. Reason

(1) Problem

The V2500-A5 SelectOne™ Engine Model uses a High Pressure Compressor (HPC) blade standard at stages 6 to 8 which requires no damping wires, whereas the A5 and D5 models are using a blade standard with damping wires. Currently the three engine models use the same stage 3–8 HPC front drum standard. The drums have a restriction for the damper wire groove wear to avoid damper wires protruding into the gas path.

(2) Evidence

The V2500-A5 SelectOne™ engine uses HP compressor stages 6 to 8 blades without damping wires. The V2500-A5, V2500-D5 and V2500-A5 SelectOne™ engines all use the same HP compressor stages 3-8 drum. Drums which are outside the current damping wire groove repair limits can be used on the V2500-A5 SelectOne™ engine.

(3) Objective

Incorporation of this Service Bulletin authorizes the installation of HP compressor stage 3 to 8 drums which are outside the current damping wire groove repair limits to V2500-A5 SelectOne™ engines.

(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.

(5) Effect of Bulletin on:

(a) Operation

Not affected.

(b) Maintenance

Not affected.

(c) Overhaul

Not affected.

(d) Repair Schemes

Affected (Repair Scheme VRS6527 will be created).

(e) Interchangeability

Affected (Refer to paragraph 1.B.Concurrent Requirements).

(f) Fits and Clearances

Not affected.

D. Description

This Service Bulletin authorizes the use of HP compressor stage 3-8 drums, which are outside the current damping wire groove repair limits, to be used on V2500-A5 SelectOne™ engines.

The HP compressor stage 3-8 drums will receive new part numbers which are only applicable to the V2500-A5 SelectOne™ engine. They will have increased repair limits for removal of material from the damping wire grooves by hand or machine.

E. Compliance

Category Code 8

Accomplish based upon experience with the prior configuration.

F. Approval

The part number changes and/or part modifications described in sections 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

Applicable (hours not affected).

H. Material Price and Availability

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

For prices and availability of spares, refer to supplement to this Service Bulletin.

I. Tooling Price and Availability

Special tools are not required.

J. Industry Support Information

Not applicable.

K. Weight and Balance

(1) Weight Change

No effect.

(2) Moment Arm

None.

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(3) Datum

Engine Front Mount Centerline (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. References

(1) IAE V2500 Engine Manual (E-V2500-3IA), Chapters 72-00-40, 72-41-00 and 72-41-10.

(2) Internal Reference No.

Engineering Change No. 09VR009.

(3) ATA Locator - 72-41-11.

O. Other Publications Affected

(1) IAE V2500 Engine Illustrated Parts Catalogues (S-V2500-2SA, S-V2500-2SB, S-V2500-5SA, S-V2500-5SB, S-V2500-6SA, S-V2500-6SB, S-V2500-7SA and S-V2500-7SB), Chapter 72-41-11 will be amended to incorporate the new part numbers (Refer to paragraph 2. Material Information).

P. Interchangeability of Parts

Affected (Refer to paragraph 2.E. Instruction disposition codes).

2. Material Information

A. The kit required consists of the following parts:

None.

B. Parts to be reworked:

FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	MAT	OLD PART NO.	INSTR DISP
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72-41-11

For A5 SelectOne™ engines:

01-200	6B1391	1	High Pressure (HP) compressor stage 3-8 drum assembly	-	6B1384	(S1)
01-200	6B1392	1	High Pressure (HP) compressor stage 3-8 drum assembly	-	6B1385	(S1)
01-200	6B1393	1	High Pressure (HP) compressor stage 3-8 drum assembly	-	6B1386	(S1)
01-200	6B1405	1	High Pressure (HP) compressor stage 3-8 drum assembly	-	6B1404	(S1)

C. New production parts:

None.

D. Redundant parts:

None.

E. Instruction disposition codes:

(S1) The new part number has restricted installation into V2500-A5 SelectOne™ engines only.

3. Accomplishment Instructions

A. Rework Instructions

- (1) Vibro-peen the new part number on the applicable High Pressure (HP) compressor stage 3-8 drum assembly.
 - (a) Cancel the existing part number and re-identify the High Pressure (HP) compressor stage 3-8 drum assembly (Refer to SPM TASK 70-09-00-400-001).

Re-numbering of the High Pressure (HP) compressor stage 3-8 drum assembly

Existing	Re-number
6B1384	6B1391
6B1385	6B1392
6B1386	6B1393
6B1404	6B1405

B. Assembly Instructions

- (1) General
 - (a) Obey all the WARNINGS and CAUTIONS in the procedures that are referred to.
 - (b) Consumable Materials
 - (i) Refer to the related Manual tasks given in this instruction.
 - (c) Tools and Equipment
 - (i) Refer to the related Manual tasks given in this instruction.
- (2) Remove the HP system module from the engine (Refer to the Engine Manual, Chapter 72-00-40).
- (3) Disassemble the HP compressor assembly (Refer to the Engine Manual, Chapter 72-41-00).
- (4) Disassemble the HP compressor rotor assembly (Refer to the Engine Manual, Chapter 72-41-19)
 - (a) If scheduled, remove the old HP compressor stage 3-8 drum assembly (72-41-11, 01-200), P/N 6B1384, P/N 6B1385, P/N 6B1386 or P/N 6B1404.

- (5) Vibro-peen a new part number on the applicable HP compressor stage 3-8 drum in accordance with 3.A.(1) Rework Instructions.
- (6) Repair the HP compressor stage 3-8 drum (72-41-11, 01-200), P/N 6B1391, P/N 6B1392, P/N 6B1393 or P/N 6B1405 in accordance with Repair Scheme VRS6527.
- (7) Assemble the HP compressor rotor assembly (Refer to the Engine Manual, Chapter 72-41-10).
- (8) Assemble the HP compressor assembly (Refer to the Engine Manual, Chapter 72-41-00).
- (9) Install the HP system module on the engine (Refer to the Engine Manual, Chapter 72-00-40).
- (10) Make sure that the work area is clean and clear of tools, equipment and other unwanted materials.

C. Recording Instructions

- (1) A record of accomplishment is necessary.

ENGINE – HIGH PRESSURE (HP) COMPRESSOR DISCS (STAGES 3–8) – RE-NUMBERED FRONT DRUMS
WITH INCREASED REPAIR LIMITS

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:

None.

3. Tools

None.