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## V2500-A1/A5/D5 SERIES PROPULSION SYSTEMS SERVICE BULLETIN

This document transmits the Revision 1 of Service Bulletin V2500-ENG-72-0578 and the Revision 1 of the Supplement.

### Document History

#### Service Bulletin Revision Status

Initial Issue Mar.12/09

### Service Bulletin Revision 1

Remove	Incorporate	Reason for change
All pages of the Service Bulletin.	Pages 1 to 7 of the Service Bulletin.	To revise the effectivity and internal reference number.
None.	Page 1 of the Supplement.	To add the Supplement.

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ENGINE – LP COMPRESSOR – INTRODUCTION OF NEW FAN CASE ASSEMBLY WITH PAA ALUMINIUM  
HONEYCOMB PANELS

1. Planning Information

A. Effectivity

(1) Airbus A319

R (a) V2522-A5, V2524-A5, V2527M-A5 Engines prior to Serial No.V13125 and  
R for Engine Serial No.V13175 (A5 Standard and SelectOne™ Retrofit  
R Standard).

R V2522-A5, V2524-A5, V2527M-A5 Engines prior to Serial No.V15031 and  
R for Engine Serial No.V15041 (A5 SelectOne™ Production Standard).

(2) Airbus A320

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

R (b) V2524-A5, V2527-A5, V2527E-A5 Engines prior to Serial No.V13125 and  
R for Engine Serial No.V13175 (A5 Standard and SelectOne™ Retrofit  
R Standard).

R V2524-A5, V2527-A5, V2527E-A5 Engines prior to Serial No.V15031 and  
R for Engine Serial No.V15041 (A5 SelectOne™ Production Standard).

(3) Airbus A321

R (a) V2530-A5, V2533-A5 Engines prior to Serial No.V13125 and for Engine  
R Serial No.V13175 (A5 Standard and SelectOne™ Retrofit Standard).

R V2530-A5, V2533-A5 Engines prior to Serial No.V15031 and for Engine  
R Serial No.V15041 (A5 SelectOne™ Production Standard).

(4) Boeing MD-90

R (a) V2525-D5, V2528-D5 Engines prior to Serial No.V20286.

B. Concurrent Requirements

None.

C. Reason

(1) Condition

To introduce a new type of the fan case assembly with PAA (Phosphoric Acid Anodizing) aluminium honeycomb panels.

(2) Background

Fan case manufacturing includes assembly by bonding together aluminium honeycomb, glass reinforced composite, aluminium skin and/or titanium skin. The current surface treatment of the aluminium honeycomb is a traditional chromic acid anodizing surface treatment. The chrome acid anodize process is difficult to carry out due to environmental restrictions. The availability of the chrome acid anodized aluminium honeycomb is limited due to these restrictions.

(3) Objective

This Service Bulletin provides a new type of surface treatment for the aluminium honeycomb panels of the fan case assembly. The use of PAA aluminium honeycomb addresses the environmental issues associated with the prior configuration.

(4) Substantiation

Engineering assessment has concluded that the change introduced by this Service Bulletin will be beneficial.

(5) Effect of Bulletin on:

(a) Operation

Not affected.

(b) Maintenance

Not affected.

(c) Overhaul

Not affected.

(d) Repair Schemes

Affected.

(e) Interchangeability

Not affected.

(f) Fits and Clearances

Not affected.

(6) Supplementary Information

None.

R

**D. Description**

(1) The changes introduced are:

- (a) The replacement of chromic acid anodizing surface treatment with PAA treatment on the aluminium honeycomb panels of the fan case assembly.

**E. Compliance**

Category Code 7

Accomplish when supply of superseded parts has been depleted.

**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

Not applicable.

**H. Material Price and Availability**

Modification kit is not required.

For prices and availability of spares, refer to the 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

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. References

(1) IAE V2500 Engine Illustrated Parts Catalogs (S-V2500-1IA, S-V2500-2IA, S-V2500-2IB, S-V2500-3IA, S-V2500-3IB, S-V2500-5IA, S-V2500-5IB, S-V2500-6IA, S-V2500-6IB, S-V2500-7IA, and S-V2500-7IB), Chapter/Section 72-32-85.

(2) IAE V2500 Engine Manual (E-V2500-1IA), Chapter/Section 72-32-85.

(3) IAE V2500 Engine Manual (E-V2500-3IA), Chapter/Section 72-32-85.

(4) Internal Reference No.

R        Engineering Change No. 06VJ006 and 06VJ006-03.

(5) ATA Locator - 72-32-85.

O. Other Publications Affected

(1) IAE V2500 Engine Illustrated Parts Catalogs (S-V2500-1IA, S-V2500-2IA, S-V2500-2IB, S-V2500-3IA, S-V2500-3IB, S-V2500-5IA, S-V2500-5IB, S-V2500-6IA, S-V2500-6IB, S-V2500-7IA, and S-V2500-7IB), Chapter/Section 72-32-85, to add the new parts.

R        (2) IAE V2500 Engine Manuals (E-V2500-1IA, E-V2500-3IA) Chapter/Section 72-32-85 Cleaning, Inspection and Repair to add the new parts.

P. Interchangeability of Parts

Not affected.

## 2. Material Information

### A. The kit required consists of the following parts:

None.

### B. Parts to be reworked:

Not applicable.

### C. New production parts:

Applicability: For V2500-A1 Engines

FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	MAT	OLD PART NO.	INSTR DISP
72-32-85						
01-100	5W0306	1	Case, A/O Fan	-	5W0193	(A)(B) (S1)(I)

Applicability: For V2500-A5 Engines

FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	MAT	OLD PART NO.	INSTR DISP
72-32-85						
01-100	5W0307	1	Case, A/O Fan	-	5W0198	(A)(B) (S1)(I)

Applicability: For V2500-D5 Engines

FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	MAT	OLD PART NO.	INSTR DISP
72-32-85						
01-100	5W0308	1	Case, A/O Fan	-	5W0173	(A)(B) (S1)(I)

### D. Redundant parts:

None.

**E. Instruction disposition codes:****Spare Parts Availability**

- (A) The new part is currently available.
- (B) The old part will be discontinued.
- (S1) Old and new parts are fully interchangeable.

**Cleaning, Inspection and Repair Information**

- (I) The cleaning, inspection and repair requirements are the same for old and new part. The applicable engine manuals will be revised.



**3. Accomplishment Instructions**

None.

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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:

	Part No.	Description	Unit Price US Dollars
R	5W0306	Case, A/O Fan	P.O.A.
R	5W0307	Case, A/O Fan	P.O.A.
R	5W0308	Case, A/O Fan	P.O.A.
R	P.O.A. - Price On Application		

3. Tools

None.