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

Printed in Great Britain

This document transmits the Initial Issue of Service Bulletin V2500-ENG-72-0579 and the Initial Issue of the Supplement

Service Bulletin Initial Issue

| Remove | Incorporate | Reason for change |
|--------|--------------------------------------|-------------------|
| | Pages 1 to 8 of the Service Bulletin | Initial Issue. |
| | Page 1 of the Supplement | Initial Issue. |

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Transmittal - Page 1 of 1

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

Printed in Great Britain

1. Planning Information**A. Effectivity**

- (1) Airbus A319
 - (a) V2522-A5, V2524-A5, V2527M-A5 Engines.
- (2) Airbus A320
 - (a) V2500-A1 Engines.
 - (b) V2524-A5, V2527-A5, V2527E-A5 Engines.
- (3) Airbus A321
 - (a) V2530-A5, V2533-A5 Engines.
- (4) Boeing MD-90
 - (a) V2525-D5, V2528-D5 Engines.

B. Concurrent Requirements

None.

C. Reason**(1) Condition**

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

(2) Background

The fan case panels are made by bonding together an aluminium honeycomb, glass reinforced composite, aluminium skin and/or titanium skin. Current surface treatment of the aluminium honeycomb is traditional chromic acid anodizing surface treatment. Chrome acid anodize process is difficult to carry out due to environmental issue. Availability of the chrome acid anodized aluminium honeycomb is difficult according to this restriction.



(3) Objective

This Service Bulletin provides a new type of surface treatment for the aluminium honeycomb fan case panels. The PAA aluminium honeycomb does not make any environmental issue. These parts are repair details only and do not effect the engine BOM.

(4) Substantiation

Engineering assessment has concluded that change introduced by this modification 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

See Material Information.

(f) Fits and Clearances

Not affected.

(6) Supplementary Information

None.

D. Description

Replace the fan case panels.

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

Not applicable.

H. Material Price and Availability

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

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), Chapters/Sections 72-32-85 and 72-32-89.
- (2) IAE V2500 Engine Manual (E-V2500-1IA), Chapters/Sections 72-32-85 and 72-32-89.
- (3) IAE V2500 Engine Manual (E-V2500-3IA), Chapter/Section 72-32-85.
- (4) Airbus A319/A320/A321 Aircraft Maintenance Manual, Chapter/Section 72-32-85 Approved Repairs.
- (5) Boeing MD-90 Aircraft Maintenance Manual, Chapter/Section 72-32-85 Approved Repairs.
- (6) Internal Reference No.
Engineering Change No. 06VJ006A.
- (7) ATA Locator - 72-32-85 and 72-32-89.

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), Chapters/Sections 72-32-85 and 72-32-89, to add the new parts.
- (2) IAE V2500 Engine Manuals (E-V2500-1IA, E-V2500-3IA) Chapter/Section 72-32-85, Repair, to add the new parts.
- (3) IAE V2500 Engine Manual (E-V2500-1IA), Chapter/Section 72-32-89, Cleaning, Inspection and Repair, to add the new part.
- (4) Airbus A319/A320/A321 Aircraft Maintenance Manual, Chapter/Section 72-32-85 Approved Repairs, to add the new parts.
- (5) Boeing MD-90 Aircraft Maintenance Manual, Chapter/Section 72-32-85 Approved Repairs, 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 (Pre SB ENG-72-0103)

| FIG ITEM NO. | NEW PART NO. | QTY | PART TITLE | MAT | OLD PART NO. | INSTR DISP |
|--------------------|--------------------|-----|----------------------------------|-----|--------------------|----------------|
| 72-32-85 | | | | | | |
| 01-900 | 5R0300 | 6 | Panel, A/O Front - Repair | - | 5R0083 | (A)(B) (S1) |
| 01-905 | 5R0301 | 6 | Panel, A/O Middle - Repair | - | 5R0084 | (A)(B) (S1) |
| 01-910 | 5R0302 | 1 | Panel, A/O Middle - Repair | - | 5R0085 | (A)(B) (S1) |
| 01-915 | 5R0303 | 6 | Panel, A/O Rear - Repair | - | 5R0086 | (A)(B) (S1) |
| 01-920 | 5R0304 | 1 | Panel, A/O Rear - Repair | - | 5R0087 | (A)(B) (S1) |
| 01-930 | 5R0298 | 6 | Lining, A/O Front - Repair | - | 5R0078 | (A)(B) (S1) |
| 01-940 | 5R0299 | 6 | Lining, A/O Rear - Repair | - | 5R0079 | (A)(B) (S1) |
| 01-950 | 5R0312 | 4 | Lining, A/O Acoustic - Repair | - | 5R0292 | (A)(B) (S1) |
| 01-955 | 5R0312 | 1 | Lining, A/O Acoustic - Repair | - | 5R0292 | (A)(B) (S1) |
| 01-960 | 5R0312 | 1 | Lining, A/O Acoustic - Repair | - | 5R0292 | (A)(B) (S1) |

| FIG ITEM NO. | NEW PART NO. | QTY | PART TITLE | MAT | OLD PART NO. | INSTR DISP |
|--------------------|--------------------|-----|------------|-----|--------------------|---------------|
|--------------------|--------------------|-----|------------|-----|--------------------|---------------|

72-32-89

| | | | | | | |
|--------|--------|---|----------------------|---|--------|-------------------|
| 01-100 | 5R0313 | 5 | Lining, A/O Acoustic | - | 5R0012 | (A)(B) (S1)(I) |
|--------|--------|---|----------------------|---|--------|-------------------|

Applicability: For V2500-A1 engines (Post SB ENG-72-0103)

| FIG ITEM NO. | NEW PART NO. | QTY | PART TITLE | MAT | OLD PART NO. | INSTR DISP |
|--------------------|--------------------|-----|------------|-----|--------------------|---------------|
|--------------------|--------------------|-----|------------|-----|--------------------|---------------|

72-32-85

| | | | | | | |
|--------|--------|---|-----------------------------------|---|--------|----------------|
| 01-905 | 5R0306 | 6 | Panel, A/O Ice Impact - Repair | - | 5R0183 | (A)(B) (S1) |
| 01-910 | 5R0307 | 1 | Panel, A/O Ice Impact - Repair | - | 5R0184 | (A)(B) (S1) |
| 01-930 | 5R0310 | 6 | Lining, A/O Attrition - Repair | - | 5R0274 | (A)(B) (S1) |
| 01-950 | 5R0311 | 8 | Lining, A/O Acoustic - Repair | - | 5R0291 | (A)(B) (S1) |
| 01-955 | 5R0311 | 2 | Lining, A/O Acoustic - Repair | - | 5R0291 | (A)(B) (S1) |
| 01-960 | 5R0311 | 2 | Lining, A/O Acoustic - Repair | - | 5R0291 | (A)(B) (S1) |

Applicability: For V2500-A5/D5 engines

| FIG ITEM NO. | NEW PART NO. | QTY | PART TITLE | MAT | OLD PART NO. | INSTR DISP |
|--------------------|--------------------|-----|------------|-----|--------------------|---------------|
|--------------------|--------------------|-----|------------|-----|--------------------|---------------|

72-32-85

| | | | | | | |
|--------|--------|---|-----------------------------------|---|--------|----------------|
| 01-905 | 5R0308 | 6 | Panel, A/O Ice Impact - Repair | - | 5R0272 | (A)(B) (S1) |
| 01-910 | 5R0309 | 1 | Panel, A/O Ice Impact - Repair | - | 5R0273 | (A)(B) (S1) |

| FIG ITEM NO. | NEW PART NO. | QTY | PART TITLE | MAT | OLD PART NO. | INSTR DISP |
|--------------------|--------------------|-----|-----------------------------------|-----|--------------------|----------------|
| 01-930 | 5R0310 | 6 | Lining, A/O Attrition - Repair | - | 5R0274 | (A)(B) (S1) |
| 01-950 | 5R0311 | 8 | Lining, A/O Acoustic - Repair | - | 5R0291 | (A)(B) (S1) |
| 01-955 | 5R0311 | 2 | Lining, A/O Acoustic - Repair | - | 5R0291 | (A)(B) (S1) |
| 01-960 | 5R0311 | 2 | Lining, A/O Acoustic - Repair | - | 5R0291 | (A)(B) (S1) |

D. Redundant parts:

None.

E. Instruction disposition codes:

Spare Parts Availability

(A) The new part is available.

(B) The old part will be discontinued.

(S1) Old and new parts are fully interchangeable and can be intermixed without restrictions.

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.

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

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 |
|----------|-----------------------------------|--------------------------|
| 5R0298 | Lining, A/O Front – Repair | 1,403.00 |
| 5R0299 | Lining, A/O Rear – Repair | 1,601.00 |
| 5R0300 | Panel, A/O Front – Repair | 1,827.00 |
| 5R0301 | Panel, A/O Middle – Repair | 1,485.00 |
| 5R0302 | Panel, A/O Middle – Repair | 1,042.00 |
| 5R0303 | Panel, A/O Rear – Repair | 1,456.00 |
| 5R0304 | Panel, A/O Rear – Repair | 982.00 |
| 5R0306 | Panel, A/O Ice Impact – Repair | 2,724.00 |
| 5R0307 | Panel, A/O Ice Impact – Repair | 1,532.00 |
| 5R0308 | Panel, A/O Ice Impact – Repair | 2,724.00 |
| 5R0309 | Panel, A/O Ice Impact – Repair | 1,532.00 |
| 5R0310 | Lining, A/O Attrition – Repair | 2,742.00 |
| 5R0311 | Lining, A/O Acoustic – Repair | 2,590.00 |
| 5R0312 | Lining, A/O Acoustic – Repair | 1,463.00 |
| 5R0313 | Lining, A/O Acoustic | 5,570.00 |

3. Tools

None.