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DATE: Dec. 2/09

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V2500-A5/D5 SERIES PROPULSION SYSTEM SERVICE BULLETIN

This document transmits Revision 2 to Service Bulletin V2500-ENG-72-0447. Document History

Service Bulletin Revision Status

Initial Issue. Jan.31/03.

Revision 1. Sep. 1/03. Service Bulletin Revision 2

Remove Incorporate
All pages of the Pages 1 to 16 of the Service Bulletin. Service Bulletin.

Reason for change To discontinue the Controlled Service Use (CSU) plan and allow unrestricted incorporation of this Service Bulletin on D5 engines.

To make all D5 engines eligible for incorporation of this Service Bulletin.

To make A5 and A5 SelectOne $^{\text{\tiny TM}}$ engines eligible for incorporation of this Service Bulletin.

V2500-ENG-72-0447

CHECK THAT ALL PREVIOUS TRANSMITTALS HAVE BEEN INCORPORATED
If any have not been received please advise Customer Data Services, Rolls-Royce plc, Derby, England
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<u>ENGINE - INNER AND OUTER COMBUSTION CHAMBER LINERS WITH ADDITION OF SINGLE CRYSTAL</u> <u>MATERIAL ON ROWS 3 AND 4</u>

1. Planning Information

Printed in Great Britain

Tillted III Great Dillalli	R	A. <u>Effe</u>	ectivity					
	R	(1)	Air	bus A31	9			
	R R R			NOTE:	A5 Engines with Outer Combustion Chamber Assembly, PN 2A3442-01 installed must incorporate Reference 4, Non-Modification Service Bulletin No. V2500-ENG-72-0604 in order to be eligible for incorporation of this Service Bulletin.			
	R R R			NOTE:	A5 Engines with Inner Combustion Chamber Assembly, PN 2A3344-01 installed must incorporate Reference 4, Non-Modification Service Bulletin No. V2500-ENG-72-0604 in order to be eligible for incorporation of this Service Bulletin.			
	R R		(a)	V2522- Standa	A5, V2524-A5, V2527M-A5 (A5 Standard and A5 SelectOne™ Retrofitrd)			
	R			All En	gines.			
	R		(b)) V2522-A5, V2524-A5, V2527M-A5 (A5 SelectOne™ Production Sta				
	R			Engine	Serial Nos Any engine as applicable			
	R	(2)	Air	bus A32	0			
	R R R			NOTE:	A5 Engines with Outer Combustion Chamber Assembly, PN 2A3442-01 installed must incorporate Reference 4, Non-Modification Service Bulletin No. V2500-ENG-72-0604 in order to be eligible for incorporation of this Service Bulletin.			
R R R R		NOTE:	A5 Engines with Inner Combustion Chamber Assembly, PN 2A3344-01 installed must incorporate Reference 4, Non-Modification Service Bulletin No. V2500-ENG-72-0604 in order to be eligible for incorporation of this Service Bulletin.					
	R		(a)) V2527-A5, V2527E-A5 (A5 Standard and A5 SelectOne™ Retrofit St				
	R			All Engines.				
	R		(b)	(b) V2527-A5, V2527E-A5 (A5 SelectOne™ Production Standard)				
	R			All Engines.				

Jan 31/03 Dec. 2/09 Revision 2



R		(3)	Airbus A321
R R R			NOTE: A5 Engines with Outer Combustion Chamber Assembly, PN 2A3442-0 installed must incorporate Reference 4, Non-Modification Service Bulletin No. V2500-ENG-72-0604 in order to be eligible for incorporation of this Service Bulletin.
R R R			NOTE: A5 Engines with Inner Combustion Chamber Assembly, PN 2A3344-0 installed must incorporate Reference 4, Non-Modification Service Bulletin No. V2500-ENG-72-0604 in order to be eligible for incorporation of this Service Bulletin.
R			(a) V2530-A5, V2533-A5 (A5 Standard and A5 SelectOne™ Retrofit Standard)
R			All Engines.
R			(b) V2530-A5, V2533-A5 (A5 SelectOne™ Production Standard)
R			All Engines.
R		(4)	Boeing MD-90
R			(a) V2525-D5, V2528-D5
R			All Engines.
	В.	Conc	urrent Requirements
		Ther	e are no concurrent requirements.
	С.	Reas	<u>on</u>
R		(1)	Condition
R R R R			A Thermal Mechanical Fatigue Distress mode has been identified on Row 3 and 4 Combustor segments (referred to as 3ID, 4ID, 30D and 40D combustion chamber liner segments throughout this Service Bulletin). The distress habeen limited to severe environment operators and has caused engine removals in this environment.

(2) Background

Severe environment operators have requested combustor segment durability enhancement for operation with combined severe temperatures and severe environmental contamination.

Jan 31/03 Dec. 2/09 Revision 2



R (3) Objective

Incorporate single crystal material on rows 3 and 4 inner and outer combustor segments for a limited number of severe environment operators based on field experience. The revised material will provide improved Thermal Mechanical Fatigue properties and oxidation resistance.

- (4) Effect of Bulletin on:
 - (a) Removal/Installation

Not affected.

(b) Disassembly/Assembly

Not affected.

(c) Cleaning

Not affected.

(d) Inspection/Check

Not affected.

(e) Repair

Not affected.

(f) Testing

Not affected.

(5) Supplemental Information

None.

D. <u>Description</u>

Replace the combustion chamber liner segments on rows 3 and 4 of the inner and outer combustion chamber assemblies.

E. Compliance

R

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Category 8

Accomplish based upon experience with the prior configuration.

Jan 31/03 Dec. 2/09 Revision 2



F. Approval Data

The part number changes and/or part modifications specified in the Accomplishment Instructions and Material Information sections of this Service Bulletin have been shown to comply with the applicable Federal Aviation Regulations and are FAA-APPROVED for the engine model(s) given.

The compliance statement and the procedures described in this Service Bulletin have been shown to comply with the applicable Federal Aviation Regulations and are FAA-APPROVED for the Engine Model listed.

G. Manpower

(1) In Service

Not Applicable.

- R (2) At Overhaul
- R <u>NOTE</u>: The parts affected by this Service Bulletin are accessible at overhaul.
- (a) Necessary to Re-identify the Inner Combustion Chamber Assembly: 5 minutes
 - (b) Necessary to Re-identify the Outer Combustion Chamber Assembly: 5 minutes
 - (c) Total necessary Man-hours: 10 minutes

H. Weight and Balance

- R (1) Weight Change
- R None.
- R (2) Moment Arm
- R None.
- R (3) Datum
- R Engine Front Mount Centreline (Power Plant Station (PPS) 100).

I. <u>Electrical Load Data</u>

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

J. Software Accomplishment Summary

Not Applicable.

Jan 31/03 Dec. 2/09 Revision 2



K. References

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- R 1. IAE V2500 Service Bulletin V2500-ENG-72-0315 (Engine Diffuser and Combustion Group and Stage 1 Turbine Nozzle Assembly Provide New Inner and Outer Combustion Chamber Liners with Addition of PWA 281 Coating).
- R 2. IAE V2500 Service Bulletin V2500-ENG-72-0330 (Engine Diffuser and Combustion R Group Provide New Bulkhead Liner Segment).
- R 3. IAE V2500 Service Bulletin V2500-ENG-72-0331 (Engine Diffuser and Combustion R Group Provide New Fuel Nozzle Guides).
- R 4. IAE V2500 Service Bulletin V2500-ENG-72-0604 (Non-Modification Service Bulletin Inspection of Outer and Inner Combustion Chamber Liner Shell).
- R 5. V2500 Engine Illustrated Parts Catalogs (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 72-42-61, Figure 01 and 72-44-30, Figure 01.
- R 6. V2500 Engine Illustrated Parts Catalogs (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/Section 72-42-61, Figure 01 and 72-44-30, Figure 01.
- R 7. V2500 Engine Manual (E-V2500-1IA), Chapter/Section 72-42-61 and 72-44-30.
 - 8. V2500 Engine Manual (E-V2500-3IA), Chapter/Section 72-42-61 and 72-44-30.
 - 9. V2500 Standard Practices/Processes Manual, Chapter/Section 70-09-00.
- R 10. Internal Reference No. EC 00VA027A and 00VA027S.
 - 11. ATA Locator 72-40-00.
 - L. Other Publications Affected
- R 1. 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 72-42-61, Figure 01 and 72-44-30, Figure 01.
- R 2. V2500 Engine Manual (E-V2500-1IA), Chapter/Section 72-42-61 and 72-44-30, Cleaning, Inspection and Repair, to add the new part.
- R 3. V2500 Engine Manual (E-V2500-3IA), Chapter/Section 72-42-61 and 72-44-30, Cleaning, Inspection and Repair, to add the new part.

Jan 31/03 Dec. 2/09 Revision 2



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

Old and new parts are directly interchangeable; however, to achieve the full benefit of this Service Bulletin it is recommended that new parts be incorporated in full sets.

N. <u>Information in the Appendix</u>

Alternate Accomplishment Instructions (No)

- R Progression Charts (Yes)
- R Added Data (Yes)

R R

Revision to Table of Limits (No)

Inspection Procedures (No)



2. Material Information

A. <u>Material - Price and Availability</u>

R 1. Modification kit is not required.

R For Price and availability of spares refer to the supplement of this Service R Bulletin.

B. <u>Industry Support Program</u>

Not Applicable.

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FIG

C. The material data that follows is for each engine.

QTY

R For V2522-A5, V2524-A5, V2527-A5, V2527E-A5, V2527M-A5, V2530-A5, V2533-A5, R V2525D, V2528-D5, V2522-A5 (SelectOne™), V2524-A5 (SelectOne™), V2527-A5 (SelectOne™), V2527E-A5 (SelectOne™), V2527M-A5 (SelectOne™), V2530-A5 (SelectOne™), V2533-A5 (SelectOne™) Engines:

PART TITLE

R R R	ITEM NO.	PART NO.	WIT	PART TITLE	MAI	PART NO.	DISP
R R	01-501	2A3442-003	1	Assembly, Combustion Chamber, Outer	-	2A3345-01	(1)(M) (R)
R R	01-620	2A3804	10	.Liner Segment, Combustion Chamber, 30D	-	2A3316	(2)(A) (C)(I)
R R R	01-610	2A3805	10	.Liner Segment, Combustion Chamber, 40D or	-	2A3317	(2)(A) (C)(I)
R R	01-501	2A3442-003	1	Assembly, Combustion Chamber, Outer	-	2A3345-001	(1)(M) (R)
R R	01-620	2A3804	10	.Liner Segment, Combustion Chamber, 30D	-	2A3316	(2)(A) (C)(I)
R R R	01-610	2A3805	10	.Liner Segment, Combustion Chamber, 40D or	-	2A3317	(2)(A) (C)(I)
R R	01-501	2A3442-003	1	Assembly, Combustion Chamber, Outer	-	2A3440-01	(1)(M) (R)
R R	01-620	2A3804	10	.Liner Segment, Combustion Chamber, 30D	-	2A3316	(2)(A) (C)(I)

Jan 31/03 Dec. 2/09 Revision 2 V2500-ENG-72-0447

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R R R	FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	MAT	OLD PART NO.	INSTR DISP
R R R	01-610	2A3805	10	.Liner Segment, Combustion Chamber, 40D or	-	2A3317	(2)(A) (C)(I)
R R	01-501	2A3442-003	1	Assembly, Combustion Chamber, Outer	-	2A3440-001	(1)(M) (R)
R R	01-620	2A3804	10	.Liner Segment, Combustion Chamber, 30D	-	2A3316	(2)(A) (C)(I)
R R R	01-610	2A3805	10	.Liner Segment, Combustion Chamber, 40D or	-	2A3317	(2)(A) (C)(I)
R R	01-501	2A3442-003	1	Assembly, Combustion Chamber, Outer	-	2A3440-002	(1)(M) (R)
R R	01-620	2A3804	10	.Liner Segment, Combustion Chamber, 30D	-	2A3316	(2)(A) (C)(I)
R R R	01-610	2A3805	10	.Liner Segment, Combustion Chamber, 40D or	-	2A3317	(2)(A) (C)(I)
R R	01-501	2A3442-003	1	Assembly, Combustion Chamber, Outer	-	2A3442-01	(1)(M) (R)
R R	01-620	2A3804	10	.Liner Segment, Combustion Chamber, 30D	-	2A3316	(2)(A) (C)(I)
R R	01-610	2A3805	10	.Liner Segment, Combustion Chamber, 40D	-	2A3317	(2)(A) (C)(I)
R R	01-501	2A3442-003	1	Assembly, Combustion Chamber, Outer	-	2A3442-001	(1)(M) (R)
R R	01-620	2A3804	10	.Liner Segment, Combustion Chamber, 3 OD	-	2A3316	(2)(A) (C)(I)
R R R	01-610	2A3805	10	.Liner Segment, Combustion Chamber, 4 OD or	-	2A3317	(2)(A) (C)(I)
R R	01-501	2A3442-003	1	Assembly, Combustion Chamber, Outer	-	2A3442-001	(1)(M) (R)

Jan 31/03 Dec. 2/09 Revision 2



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SERVICE BULLETIN

R R R	FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	MAT	OLD PART NO.	INSTR DISP
R R	01-620	2A3804	10	.Liner Segment, Combustion Chamber, 30D	-	2A3316	(2)(A) (C)(I)
R R R	01-610 72-44-3	2A3805	10	.Liner Segment, Combustion Chamber, 40D	-	2A3317	(2)(A) (C)(I)
R R	01-401	2A3344-002	1	Assembly, Combustion Chamber, Inner	-	2A3344-01	(1)(M) (R)
R R	01-600	2A3806	10	.Liner Segment Combustion Chamber, 3ID	-	2A3326	(2)(A) (C)(I)
R R R	01-580	2A3807	10	.Liner Segment, Combustion Chamber, 4 ID or	-	2A3322	(2)(A) (C)(I)
R R	01-401	2A3344-002	1	Assembly, Combustion Chamber, Inner	-	2A3344-001	(1)(M) (R)
R R	01-600	2A3806	10	.Liner Segment, Combustion Chamber, 3ID	-	2A3326	(2)(A) (C)(I)
R R	01-580	2A3807	10	.Liner Segment, Combustion Chamber, 4ID	-	2A3322	(2)(A) (C)(I)

D. <u>Instructions/Disposition Code Statements:</u>

Parts Modification Conditions

- (1) The new part can be obtained by modification of the old part as specified in the Accomplishment Instructions.
- (2) The new part is a replacement part only, and cannot be obtained by modification of the old part.

Spare Parts Availability

- (A) The new part is available.
 - (C) The old part will continue to be supplied.
 - (M) It is possible to get the new part only by modification.

Cleaning, Inspection and Repair Information

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

Jan 31/03 Dec. 2/09 Revision 2



E. Tooling - Price and Availability

Special tools are not required to accomplish this Service Bulletin.

F. Reidentified Parts

Not Applicable.

	Reidentified Parts	Data	
R	New PN	Keyword	Old PN
R		Outer Combustion	
R	2A3442-003	Chamber Assembly	2A3345-01
R		Outer Combustion	
R	2A3442-003	Chamber Assembly	2A3445-001
R		Outer Combustion	
R	2A3442-003	Chamber Assembly	2A3440-01
R		Outer Combustion	
R	2A3442-003	Chamber Assembly	2A3440-001
R		Outer Combustion	
R	2A3442-003	Chamber Assembly	2A3440-002
		1	In
R	2A3442-003	Outer Combustion	2A3442-01
R		Chamber Assembly	
R	2A3442-003	Outer Combustion	2A3442-001
R		Chamber Assembly	
R	2A3442-003	Outer Combustion	2A3442-002
R		Chamber Assembly	
R	2A3344-002	Inner Combustion	2A3344-01
R	0.77// 000	Chamber Assembly	0.77// 004
R	2A3344-002	Inner Combustion	2A3344-001
R		Chamber Assembly	

G. Other Material Information Data

Not Applicable.

Jan 31/03 Dec. 2/09 Revision 2



3. Accomplishment Instructions

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DO NOT TIGHTEN THE COMBUSTION CHAMBER LINER SEGMENTS TO A TORQUE VALUE OF R CAUTION: R

MORE THAN 50.0 LBF-IN (5,649 NM). OVERTIGHTENING CAN CAUSE THE STUD BASE

AND THREADS TO CRACK.

R CAUTION: IF YOU TIGHTEN THE SEGMENTS TO MORE THAN 50.0 LBF-IN (5,649 NM) THEN YOU MUST VISUALLY EXAMINE THE STUD BASE AND THREADS FOR CRACKS UNDER WHITE

LIGHT AND 20X MAGNIFICATION, AND REPLACE SEGMENTS THAT HAVE CRACKED STUDS.

(1) Replace 10 30D Combustion Chamber Liner Segments, PN 2A3316 with PN 2A3804 by the procedure in Reference 7 or 8, Engine Manual, Chapter/Section 72-42-61, Repair 015 (VRS 3540). See Figure 1, Sheet 1 for the location of the parts.

CAUTION: DO NOT TIGHTEN THE COMBUSTION CHAMBER LINER SEGMENTS TO A TORQUE

VALUE OF MORE THAN 50.0 LBF-IN (5,649 NM). OVERTIGHTENING CAN CAUSE

THE STUD BASE AND THREADS TO CRACK.

IF YOU TIGHTEN THE SEGMENTS TO MORE THAN 50.0 LBF-IN (5,649 NM) THEN R **CAUTION:** YOU MUST VISUALLY EXAMINE THE STUD BASE AND THREADS FOR CRACKS UNDER R

WHITE LIGHT AND 20X MAGNIFICATION, AND REPLACE SEGMENTS THAT HAVE

CRACKED STUDS.

R Replace 10 40D Combustion Chamber Liner Segments, PN 2A3317 with PN 2A3805 by the procedure in Reference 7 or 8, Engine Manual, Chapter/Section R 72-42-61, Repair 015 (VRS3540). See Figure 1, Sheet 1 for the location of R R the parts.

(3) Identify the modified outer combustion chamber assembly by the vibration peen method specified in Reference 9, Standard Practices Manual, Chapter/Section 70-09-00, Marking of Parts. See Figure 1, Sheet 2 for the part marking location. Part number identification is provided in the list that follows:

Identification of the Inner Combustion Chamber Assembly

R	New PN	Old PN	
R	2A3442-003	2A3345-01	
R	2A3442-003	2A3345-001	
R	2A3442-003	2A3440-01	
R	2A3442-003	2A3440-001	
R	2A3443-003	2A3440-002	
R	2A3443-003	2A3442-01	
R	2A3442-003	2A3442-001	
R	2A3442-003	2A3442-002	

Jan 31/03 Dec. 2/09 Revision 2



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SERVICE BULLETIN

R CAUTION: DO NOT TIGHTEN THE COMBUSTION CHAMBER LINER SEGMENTS TO A TORQUE VALUE OF MORE THAN 50.0 LBF-IN (5,649 NM). OVERTIGHTENING CAN CAUSE THE STUD BASE AND THREADS TO CRACK.

R CAUTION: IF YOU TIGHTEN THE SEGMENTS TO MORE THAN 50.0 LBF-IN (5,649 NM) THEN YOU MUST VISUALLY EXAMINE THE STUD BASE AND THREADS FOR CRACKS UNDER WHITE LIGHT AND 20X MAGNIFICATION, AND REPLACE SEGMENTS THAT HAVE CRACKED STUDS.

(4) Replace 10 3ID Combustion Chamber Liner Segments, PN 2A3326 with PN 2A3806 by the procedure in Reference 7 or 8, Engine Manual, Chapter/Section 72-44-30, Repair 001 (VRS3173). See Figure 2, Sheet 1 for the location of the parts.

CAUTION: DO NOT TIGHTEN THE COMBUSTION CHAMBER LINER SEGMENTS TO A TORQUE VALUE OF MORE THAN 50.0 LBF-IN (5,649 NM). OVERTIGHTENING CAN CAUSE THE STUD BASE AND THREADS TO CRACK.

CAUTION: IF YOU TIGHTEN THE SEGMENTS TO MORE THAN 50.0 LBF-IN (5,649 NM) THEN YOU MUST VISUALLY EXAMINE THE STUD BASE AND THREADS FOR CRACKS UNDER WHITE LIGHT AND 20X MAGNIFICATION, AND REPLACE SEGMENTS THAT HAVE CRACKED STUDS.

- (5) Replace 10 4ID Combustion Chamber Liner Segments, PN 2A3322 with PN 2A3807 by the procedure in Reference 7 or 8, Engine Manual, Chapter/Section 72-44-30, Repair 001 (VRS3173). See Figure 2, Sheet 1 for the location of the parts.
- (6) Identify the modified outer combustion chamber assembly by the vibration peen method specified in Reference 9, Standard Practices Manual, Chapter/Section 70-09-00, Marking of Parts. See Figure 2, Sheet 2 for the part marking location. Part number identification is provided in the list that follows:

Identification of the Inner Combustion Chamber Assembly
New PN Old PN

2A3344-002 2A3344-001

2A3344-001

(7) Recording Instructions

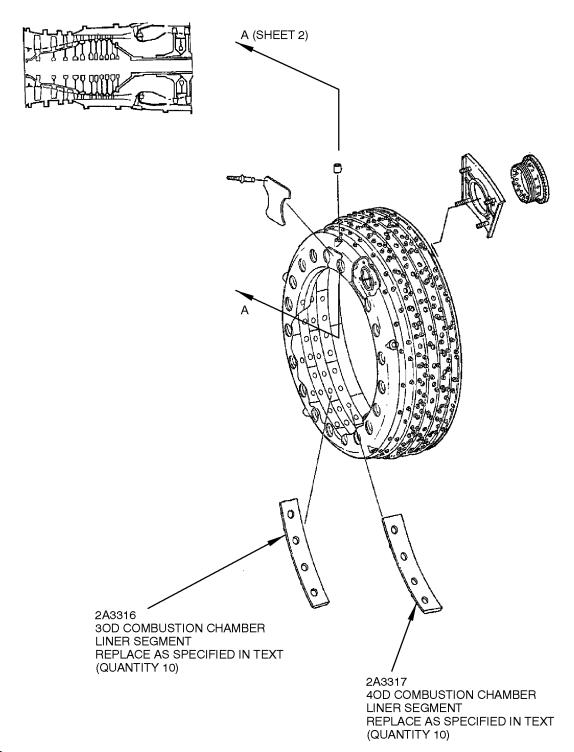
(a) A record of accomplishment is required.

Jan 31/03 Dec. 2/09 Revision 2

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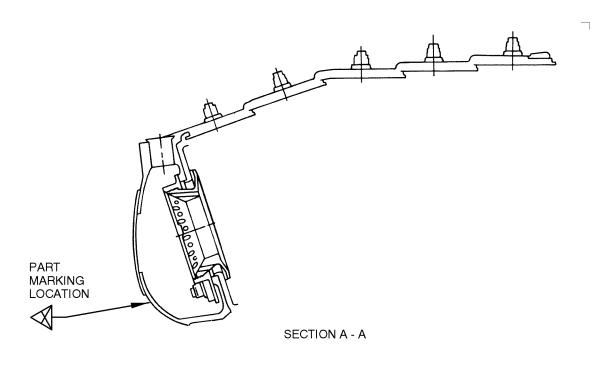
SERVICE BULLETIN



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R R Location and Identification of the 30D and 40D Combustion Chamber Liner Segments Figure 1, Sheet 1

Jan 31/03 Dec. 2/09 Revision 2



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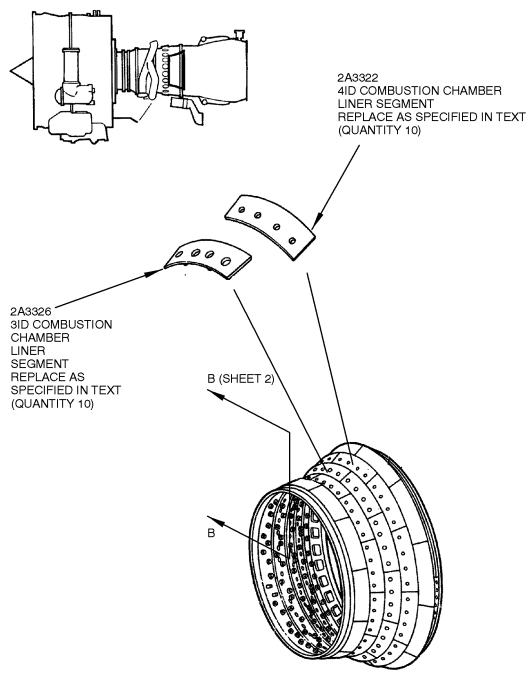
Location and Identification of the 30D and 40D Combustion Chamber Liner Segments Figure 1, Sheet 2

Jan 31/03 Dec. 2/09 Revision 2

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SERVICE BULLETIN



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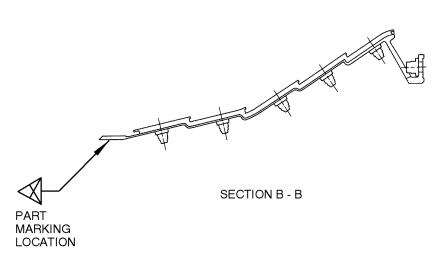
R

Location and Identification of the 3ID and 4ID Combustion Chamber Liner Segments 72-44-30

Figure 2, Sheet 1

Jan 31/03 Dec. 2/09 Revision 2 V2500-ENG-72-0447

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Location and Identification of the 3ID and 4ID Combustion Chamber Liner Segments Figure 2, Sheet 2

Jan 31/03 Dec. 2/09 Revision 2



APPENDIX

Parts Progression To Show the Changed Part in Relation to Other Parts

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MODIFICATIONS

V2500-ENG-72-0315
ENGINE - DIFFUSER
AND COMBUSTION
GROUP AND
STAGE 1 TURBINE
NOZZLE ASSEMBLY PROVIDE NEW
INNER AND OUTER
COMBUSTION
CHAMBER LINERS
WITH ADDITION OF
PWA 281 COATING

V2500-ENG-72-0330 ENGINE - DIFFUSER AND COMBUSTION GROUP - PROVIDE NEW BULKHEAD LINER SEGMENT

V2500-ENG-72-0331 ENGINE - DIFFUSER AND COMBUSTION GROUP - PROVIDE NEW FUEL NOZZLE GUIDES

V2500-ENG-72-0447 ENGINE - INNER AND OUTER COMBUSTION CHAMBER LINERS WITH ADDITION OF SINGLE CRYSTAL MATERIAL ON ROWS 3 AND 4 2A3345-01 2A3345-001 2A3440-01 2A3440-001 2A3440-002 2A3442-01 2A3442-001 2A3442-002 2A3442-003

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Family Tree - Outer Combustion Chamber Assembly Ref. Catalog Sequence No. 72-42-61, Fig.1 Item 501
Chart A

Jan 31/03 Dec. 2/09 Revision 2



MODIFICATIONS

V2500-ENG-72-0315
ENGINE - DIFFUSER AND
COMBUSTION GROUP AND
STAGE 1 TURBINE NOZZLE ASSEMBLY PROVIDE NEW INNER AND OUTER
COMBUSTION CHAMBER LINERS
WITH ADDITION OF
PWA 281 COATING

2A3344-001 2A3344-001

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V2500-ENG-72-0447
ENGINE - INNER AND OUTER
COMBUSTION CHAMBER LINERS
WITH ADDITION OF
SINGLE CRYSTAL MATERIAL
ON ROWS 3 AND 4

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Family Tree - Inner Combustion Chamber Assembly Ref. Catalog Sequence No. 72-44-30, Fig.1 Item 401

Chart B

Jan 31/03 Dec. 2/09 Revision 2 V2500-ENG-72-0447
Appendix - Page 3

MODIFICATIONS

V2500-ENG-72-0315
ENGINE - DIFFUSER AND
COMBUSTION GROUP AND
STAGE 1 TURBINE NOZZLE ASSEMBLY PROVIDE NEW INNER AND OUTER
COMBUSTION CHAMBER LINERS
WITH ADDITION OF
PWA 281 COATING

30D 40D
COMBUSTION COMBUSTION
CHAMBER CHAMBER
LINER SEGMENT LINER SEGMENT
PROGRESSION PROGRESSION

2A3316 2A3317 2A3804 2A3805

V2500-ENG-72-0447
ENGINE - INNER AND OUTER
COMBUSTION CHAMBER LINERS
WITH ADDITION OF
SINGLE CRYSTAL MATERIAL
ON ROWS 3 AND 4

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Family Tree - 30D and 40D Combustion Chamber Liner Segments Ref. Catalog Sequence
No. 72-42-61, Fig. 1 Items 620 and 610
Chart C

Jan 31/03 Dec. 2/09 Revision 2



MODIFICATIONS

V2500-ENG-72-0315
ENGINE - DIFFUSER AND
COMBUSTION GROUP AND
STAGE 1 TURBINE NOZZLE ASSEMBLY PROVIDE NEW INNER AND OUTER
COMBUSTION CHAMBER LINERS
WITH ADDITION OF
PWA 281 COATING

3ID 4ID
COMBUSTION COMBUSTION
CHAMBER CHAMBER
LINER SEGMENT LINER SEGMENT
PROGRESSION PROGRESSION

2A3326 2A3322 2A3806 2A3807

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V2500-ENG-72-0447
ENGINE - INNER AND OUTER
COMBUSTION CHAMBER LINERS
WITH ADDITION OF
SINGLE CRYSTAL MATERIAL
ON ROWS 3 AND 4

pw0b52167

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Family Tree - 3ID and 4ID Combustion Chamber Liner Segments Ref. Catalog Sequence No. 72-44-30, Fig. 1 Items 600 and 580 Chart D

Jan 31/03 Dec. 2/09 Revision 2



R Added Data

R	Internal Reference Information					
R	Revision No.	Reference Document	Origination			
R	Original	EC OOVAO27A	RG/MN			
R	1	EC OOVAO27A	RG/MN			
R	2	EC OOVAO27S	RG/JDH			

R Number values shown in parentheses adjacent to U.S. values are International System R of units (SI) equivalents.

Jan 31/03 Dec. 2/09 Revision 2



ENGINE - INNER AND OUTER COMBUSTION CHAMBER LINERS WITH ADDITION OF SINGLE CRYSTAL MATERIAL ON ROWS 3 AND 4

R <u>Supplement</u>

R V2522-A5, V2524-A5, V2527-A5, V2527E-A5, V2527M-A5, V2530-A5, V2533-A5, V2525-D5, R V2528-D5, V2522-A5 (SelectOne™), V2524-A5 (SelectOne™), V2527-A5 (SelectOne™), R V2527E-A5 (SelectOne™), V2527M-A5 (SelectOne™), V2530-A5 (SelectOne™), V2533-A5 R (SelectOne™)

R 1. Modification Kit:

R A. There is no kit provided to do this Service Bulletin.

R 2. Material Cost

R NOTE: The prices 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.

- R A. The estimated price of new material is \$137,200.00 to do this Service Bulletin when the part modification procedure is used.
- R B. There is no kit provided to do this Service Bulletin.

R 3. New Production Parts

R R R	New Production Part Number	Description	Unit Price US Dollars
R R R	2A3804	30D Combustion Chamber Liner Segment	3,430.00
R R R	2A3805	40D Combustion Chamber Liner Segment	3,430.99
R R R	2A3806	3ID Combustion Chamber Liner Segment	3,430.00
R R R	2A3807	4ID Combustion Chamber Liner Segment	3,430.00

Jan 31/03 Dec. 2/09 Revision 2