

SERVICE BULLETIN

NON-MODIFICATION SERVICE BULLETIN - ENGINE - PLATE, RING HPT,
STAGE 2 - CYCLIC LIFE REDUCTION

MODEL APPLICATION

V2522-A5, V2524-A5, V2527-A5, V2527E-A5, V2527M-A5, V2530-A5,
V2533-A5, V2525-D5, V2528-D5

BULLETIN ISSUE SEQUENCE

V2500 Series 72-0682

ATA NUMBER

72-45-33

IAE PROPRIETARY INFORMATION

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Export Classification: Not subject to the EAR per 15 C.F.R. Chapter 1, Part 734.3(b)(3).

Compliance Category

3

P&W Distribution Code

V2500

December 2/16

V2500-ENG-72-0682

Summary

The purpose of this Non-Modification Service Bulletin (NMSB) is to replace five (5) High Pressure Turbine (HPT) Stage 2 Ring Plates, PN 2A3437. Production defects have been reported that may impact the certified life of these five (5) parts.

Planning Information

Effectivity Data

Engine Models Applicable

V2522-A5, V2524-A5, V2527M-A5, V2527-A5, V2527E-A5, V2530-A5, V2533-A5
Engine Serial Nos. V10001 thru V18254

V2525-D5, V2528-D5
Engine Serial Nos. V20001 thru V20285

Concurrent Requirements

There are no concurrent requirements.

Reason

1. Condition: Certain HPT stage 2 ring plates may exhibit manufacturing defects which could impact the part certified life. These parts will require replacement within the time limits of this NMSB.
2. Background: Production defects have been reported by one manufacturer in an area that may impact the certified life of these parts. Five (5) parts are known to be affected. There is no method to inspect for these defects; requiring replacement.
3. Objective: Replace the affected parts within the time limits of this NMSB.
4. Substantiation: Structural analysis based on location of reported manufacturing defect.
5. Effects of Bulletin on:
 - Removal/Installation: Not Affected.
 - Disassembly/Assembly: Not Affected.
 - Cleaning: Not Affected.
 - Inspection/Check: Not Affected.
 - Repair: Not Affected.
 - Testing: Not Affected.

Description

Replace the HPT Stage 2 Ring Plate, PN 2A3437 if it has a serial number listed within the Compliance section.

Compliance

Category 3

Accomplish replacement of the HPT Stage 2 Ring Plate, PN 2A3437 identified by serial number and cycle limit specified in Table 1.

Table 1

Serial Number	Threshold
PKLBJC5331	Replace part prior to accumulating 7081 cycles since new
PKLBJC5369	Replace part prior to accumulating 7479 cycles since new
PKLBML9153	Replace part prior to accumulating 8471 cycles since new
PKLBML9341	Replace part prior to accumulating 7004 cycles since new
PKLBMM8042	Replace part prior to accumulating 6426 cycles since new

Approval Data

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.

The aircraft Type Certificate (TC) holder has been informed of this change.

Manpower

1. In Service

..... Not Applicable.

2. At Overhaul

Estimated man-hours to embody this SB in full:

- A. To remove/replace the HPT stage 2 ring plate 226 hours.

Weight and Balance

1. Weight Change

None.

2. Moment Arm

No Effect.

3. Datum

Engine Front Mount Centerline (Power Plant Station (PPS) 100)

Electrical Load Data

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

Software Accomplishment Summary

Not Applicable.

References

NOTE: In 2014 IAE converted the V2500 Technical Publications to a new system. As a result of the conversion, some manuals were consolidated. All manuals received new P&W part numbers. To facilitate the use of this Service Bulletin, a Technical Publications conversion table is provided in the Appendix.

1. ATA Locator — 72-45-33.

2. Internal Reference No. — 16VC445.
3. V2500-A5 Series Illustrated Parts Catalog, P&W Ref. PN 2A4428, Chapter/Section 72-45-33.
4. V2500-D5, Series Illustrated Parts Catalog, P&W Ref. PN 2A4426, Chapter/Section 72-45-33.
5. V2500 A1/A5 Series Engine Manual, P&W Ref. PN 2A4407, Chapter/Section 72-00-31, 72-00-40, 72-00-45, 72-00-50, 72-45-00 and 72-45-30.
6. V2500-D5 Series Engine Manual, P&W Ref. PN 2A4416, Chapter/Section 72-00-31, 72-00-40, 72-00-45, 72-00-50, 72-45-00 and 72-45-30.

Other Publications Affected

Not Applicable.

Interchangeability of Parts

Not Applicable.

Information in the Appendix

Alternate Accomplishment Instructions (No)

Progression Charts (No)

Added Data (Yes)

Revision to Table of Limits (No)

Inspection Procedures (No)

Material Information

Material — Price and Availability

1. There is no kit provided to do this Service Bulletin.
2. Part availability information is provided in material data Instructions — Disposition.

Industry Support Program

Contact your IAE Customer Field Representative or Customer Fleet Director.

The material data that follows is for each engine.

For V2522-A5, V2524-A5, V2527-A5, V2527E-A5, V2527M-A5, V2530-A5, V2533-A5 Engines:

New PN	Qty	Estimate of Unit Price (\$)	Keyword	Old PN	Instructions — Disposition
	1	88,460.00	PLATE - RING HPT, STAGE 2	2A3437 (72-45-33-01-020)	(4)(X)

The material data that follows is for each engine.

For V2525-D5, V2528-D5 Engines:

New PN	Qty	Estimate of Unit Price (\$)	Keyword	Old PN	Instructions — Disposition
	1	88,460.00	PLATE - RING HPT, STAGE 2	2A3437 (72-45-33-01-020)	(4)(X)

Instructions/Disposition Code Statements:

Parts Modification Conditions

Estimated part prices are provided when they are available at time of publication. The Estimate of Unit Price is only for planning purposes and does not constitute a firm quotation. An asterisk (*) is shown where part pricing information was unavailable. In either case, contact IAE Spares for firm quotations.

(4) Replace parts as specified in the Accomplishment Instructions if applicable.

Spare Parts Availability

(X) See Reference 3 or 4 for applicable part replacement.

Vendor Services or Special Components/Materials

Tooling — Price and Availability

Special tools are not required to accomplish this Service Bulletin.

Reidentified Parts

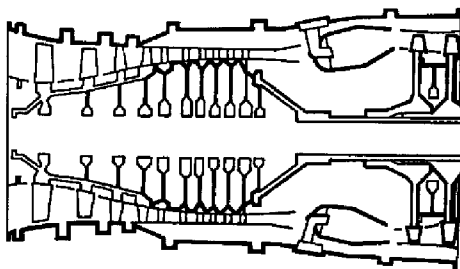
Not Applicable.

Other Material Information Data

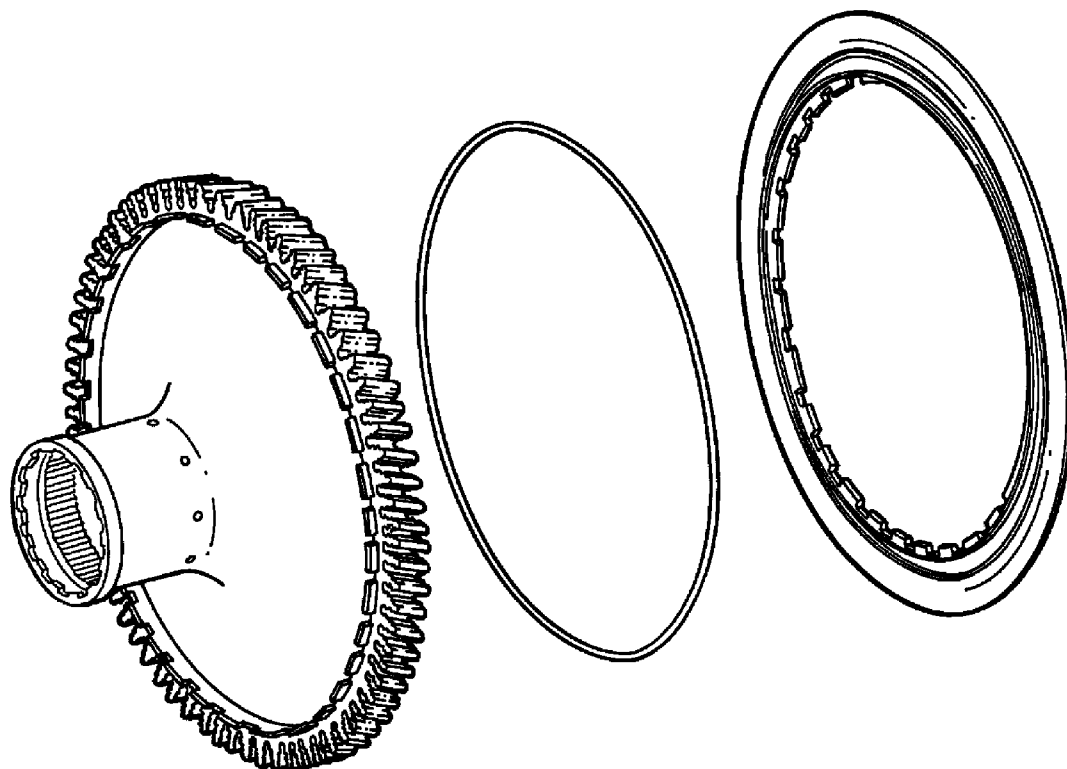
Not Applicable.

Accomplishment Instructions

1. Disassembly instructions for HPT Stage 2 Ring Plate:
 - A. Remove the Fan Module. Reference 5 or 6, Engine Manual, Chapter/Section 72-00-31.
 - B. Remove the Low Pressure Turbine (LPT)/Turbine Exhaust Case (TEC). Reference 5 or 6, Engine Manual, Chapter/Section 72-00-50.
 - C. Remove the HP System Module. Reference 5 or 6, Engine Manual, Chapter/Section 72-00-40.
 - D. Remove the HPT Rotor and Stator Assembly. Reference 5 or 6, Engine Manual, Chapter/Section 72-00-45.
 - E. Remove the HPT Stage 2 Rotor Assembly from the HPT Rotor and Stator Assembly. Reference 5 or 6, Engine Manual, Chapter/Section 72-45-00.
 - F. Remove the HPT Stage 2 Ring Plate, PN 2A3437, identified by serial number and cycle limit specified in Table 1. Reference 5 or 6, Engine Manual, Chapter/Section 72-45-30.
2. Replace suspect HPT Stage 2 Ring Plate:
 - A. Install a new HPT Stage 2 Ring Plate, PN 2A3437.
 - B. The HPT Stage 2 Ring Plate, PN 2A3437, identified by serial number in Table 1 must be either returned to IAE or scrapped locally. If scrapped, a photograph or digital image of the mutilated HPT Stage 2 Ring Plate and a copy of the scrap tag, countersigned by the local IAE representative, must be provided to IAE Warranty.
3. Assembly instructions:
 - A. Assemble the HPT Stage 2 Ring Plate. Reference 5 or 6. Engine Manual, Chapter/Section 72-45-30.
 - B. Assemble the HPT Stage 2 Rotor Assembly. Reference 5 or 6. Engine Manual, Chapter/Section 72-45-00.
 - C. Install the HPT Rotor and Stator Assembly. Reference 5 or 6. Engine Manual, Chapter/Section 72-00-45.
 - D. Install the HP System Module. Reference 5 or 6. Engine Manual, Chapter/Section 72-00-40.
 - E. Install the LPT/TEC module. Reference 5 or 6. Engine Manual, Chapter/Section 72-00-50.
 - F. Install the Fan Module. Reference 5 or 6. Engine Manual, Chapter/Section 72-00-31.
4. Recording Instructions
 - A. A record of accomplishment is required.



2A3437
HPT STAGE 2 RING PLATE
REPLACE AS SPECIFIED IN
TABLE 1



B526465

LOCATION OF THE STAGE 2 HPT RING PLATE
FIGURE 1

Appendix

Added Data

Internal Reference Information

Revision No.	Reference Document	Origination
Original	EA 16VC445	MK/JAC

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

To calculate part life, include the hours and/or cycles since the part was made. Use the total hours or cycles to calculate life limits that are the result of part modification, a part used in an engine with different thrust, or for some other reason.

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Technical Publications Cross Reference Table

Publication	Engine Model(s)	IAE IETM Pub Ref	P&W Part Number
ENGINE MANUAL — A1, A5	All	E-V2500-1IA	2A4407
CMM-EHC — A1, A5	All	EHC-V2500-1IA	2A4409
CMM-FN — A1, A5	All	FN-V2500-1IA	2A4410
CMM-MMC — A1, A5	All	MECH-V2500-1IA	2A4411
CMM-THD — A1, A5	All	THD-V2500-1IA	2A4412
TLM — A1, A5	All	T-V2500-1IA	2A4408
ENGINE MANUAL — D5	All	E-V2500-3IA	2A4416
CMM-EHC — D5	All	EHC-V2500-3IA	2A4418
CMM-FN — D5	All	FN-V2500-3IA	2A4419
CMM-MMC — D5	All	MECH-V2500-3IA	2A4420
CMM-THD — D5	All	THD-V2500-3IA	2A4423
TLM — D5	All	T-V2500-3IA	2A4417
SPPM (SPM) — A1, A5, D5	All	SPP-V2500-1IA	2A4414
EIPC — A1	V2500-A1102Q00	S-V2500-1IA	2A4427

Publication	Engine Model(s)	IAE IETM Pub Ref	P&W Part Number
EIPC — A5	V2522/V2524/V2527M-AQ02	S-V2500-6IA	2A4428
	V2522/V2524/V2527M-AQ03	S-V2500-6IB	
	V2522/V2524/V2527M-SQ02	S-V2500-6SA	
	V2522/V2524/V2527M-SQ03	S-V2500-6SB	
	V2522/V2524/V2527M-SQ04	S-V2500-6NA	
	V2522/V2524/V2527M-SQ05	S-V2500-6NB	
	V2527/V2527E-AQ02	S-V2500-7IA	
	V2527/V2527E-AQ03	S-V2500-7IB	
	V2527/V2527E-SQ02	S-V2500-7SA	
	V2527/V2527E-SQ03	S-V2500-7SB	
	V2527/V2527E-SQ04	S-V2500-7NA	
	V2527/V2527E-SQ05	S-V2500-7NB	
	V2530-AQ02	S-V2500-2IA	
	V2530-AQ03	S-V2500-2IB	
	V2530-SQ02	S-V2500-2SA	
	V2530-SQ03	S-V2500-2SB	
	V2530-SQ04	S-V2500-2NA	
	V2530-SQ05	S-V2500-2NB	
	V2533-AQ02	S-V2500-5IA	
	V2533-AQ03	S-V2500-5IB	
	V2533-SQ02	S-V2500-5SA	
	V2533-SQ03	S-V2500-5SB	
	V2533-SQ04	S-V2500-5NA	
	V2533-SQ05	S-V2500-5NB	
EIPC — D5	V2525/V2528-AQ02	S-V2500-3IA	2A4426
	V2525/V2528-AQ03	S-V2500-3IB	
	V2525/V2528-AQ04	S-V2500-3IC	