SERVICE BULLETIN REVISION NOTICE

NON-MODIFICATION SERVICE BULLETIN – ENGINE – HIGH PRESSURE (HP) COMPRESSOR – ENHANCED FLUORESCENT PENETRANT INSPECTION (FPI)

Turbojet Engine Service Bulletin No. V2500-ENG-72-0637 Revision No. 3, dated March 1, 2017.

Revision History

Original Issue May 2, 2013

Revision 1 dated June 30, 2015

Revision 2 dated May 11, 2016

Revision 3 dated March 1, 2017

Reason for the Revision

Editorial Changes.

To update email from gpiaesprtlg@iaev2500.com to pwtools@pw.utc.com for price and availability information.

To add complete task number for Engine Manual task.

Effect of Revision on Prior Compliance

None.

This is a Complete Revision (Not Applicable to the SGML version)

The contents are in accordance with the list of effective pages. All pages have the current revision number. Technical changes are marked with black bars.

MODEL APPLICATION

V2500-A1, V2522-A5, V2524-A5, V2527-A5, V2527E-A5, V2527M-A5, V2530-A5, V2533-A5, V2525-D5, V2528-D5

BULLETIN ISSUE SEQUENCE

V2500 Series 72-0637

Page	Revision No.	Date
1 thru 8	3	March 1/17

A copy of this Revision Notice and any future revision notices must be filed as a permanent record with your copy of the subject bulletin.

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MODEL APPLICATION

V2500-A1, V2522-A5, V2524-A5, V2527-A5, V2527E-A5, V2527M-A5, V2530-A5, V2533-A5, V2525-D5, V2528-D5

BULLETIN ISSUE SEQUENCE

V2500 Series 72-0637

ATA NUMBER

72-41-11

Compliance Category

8

P&W Distribution Code

V2500

Summary

The purpose of this Service Bulletin is to provide an improved method to detect cracks in the Stage 7-8 disk cavity and provide a means to accurately track the inspection accomplishment. Accomplishment of this inspection provides extended grace periods before required Ultrasonic Inspection in accordance with Reference 5, NMSB 72-A0615 Revision 6, or later.

Planning Information

Effectivity Data

Engine Models Applicable

V2500-A1
Engine Serial Nos. V0001 thru V0361

V2522-A5, V2524-A5, V2527M-A5, V2527-A5, V2527E-A5, V2530-A5, V2533-A5
Engine Serial Nos. V10001 thru V13190
Engine Serial Nos. V15001 thru V16706
Engine Serial Nos. V16708 thru V16728
Engine Serial No. V16869

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

Concurrent Requirements

There are no concurrent requirements.

Reason

1. Condition: Cracks have been found on the High Pressure (HP) Compressor inside the stage 8 cavity.
2. Background: Cracks were highlighted during an Engine Manual crack inspection of the Stage 7-8 disk internal cavity.
3. Objective: To define an improved method to detect cracks in the Stage 7-8 disk internal cavity during overhaul.
4. Substantiation: An improved method to detect cracks in the Stage 7-8 disk cavity is necessary to provide extended grace periods before Ultrasonic Inspection in accordance with Reference 5, NMSB 72-A0615 Revision 6, or later.
5. Effects of Bulletin on:

   Removal/Installation: N/A

   Disassembly/Assembly: N/A.

   Cleaning: N/A.

   Inspection/Check: Yes.

   Repair: N/A.

   Testing: N/A.
6. Supplemental Information

   None.

Description

This Non-Modification Service Bulletin introduces an improved internal inspection method for the stage 8 cavity of the HP compressor stage 3 to 8 drum to detect smaller crack indications.

Compliance

Category 8

Accomplish based upon experience with the prior configuration.

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

   ..... Not Applicable.

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.

See Vendor Supplier Service Bulletin.

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 — 72-41-11
2. V2500 Standard Practices and Processes, P&W Ref. PN 2A4414, Chapter/Section 72-41-11.

3. V2500 A1/A5 Series Engine Manual, P&W Ref. PN 2A4407, Chapter/Section 72-41-11.
4. V2500-D5 Series Engine Manual, P&W Ref. PN 2A4416, Chapter/Section 72-41-11.
5. V2500 Service Bulletin No. V2500-ENG-72-A0615 Rev 6.

Other Publications Affected

1. None

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

Tooling — Price and Availability

Support Equipment Necessary

TOOL NUMBER	DESCRIPTION
IAE2R19883	Rotary Table Inspection Device
IAE2R19884	Adapter
OR	
Not Applicable	IAE Approved Alternative Inspection Device
For price and availability of the tools listed above, submit an email to: pwtools@pw.utc.com. Return details will be provided by email.	

The material data that follows is for each engine.

None

Accomplishment Instructions

1. Perform focused fluorescent penetrant inspection in accordance with Reference 3 or 4 Engine Manual task 72-41-11-230-001. Use only IAE 2R19883 and IAE2R19884 or IAE approved alternative inspection device.

2. Recording Instructions

   A. A record of accomplishment is required. Service bulletin accomplishment should be recorded in the appropriate engine records and reported to your local IAE field representative. Any cracks found must be reported to IAE Customer Technical Services.

Appendix

Added Data

Internal Reference Information

Revision No.	Reference Document	Origination
Original	EC12VR784	RR
1	EA15VC308	RR
2	EA15VC308A	MM/RCM
3	EA15VC308B	MM/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-V2500-31A	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

Publication	Engine Model(s)	IAE IETM Pub Ref	P&W Part Number
EIPC — A1	V2500-A1102Q00	S-V2500-1IA	2A4427
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	