

# SERVICE BULLETIN

NON-MODIFICATION SERVICE BULLETIN — REPLACEMENT OF NO. 3 BEARINGS  
FROM SUSPECT POPULATION (LOT A)

## MODEL APPLICATION

V2522-A5, V2524-A5, V2527-A5, V2527E-A5, V2527M-A5, V2530-A5, V2533-A5

## BULLETIN ISSUE SEQUENCE

V2500 Series 72-0673

## ATA NUMBER

72-30-00

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## Compliance Category

4

## P&W Distribution Code

V2500

June 3/16

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## Summary

The purpose of this Service Bulletin is to perform a one-time replacement for the No. 3 Bearings contained in Lot A of the suspect population. This NMSB is the closing action for the reduced 125 hour MMCD inspection interval established in Reference 5, NMSB 72-0671. The replacement of Lot B suspect bearings is documented in Reference 7, NMSB 72-0674.

## Planning Information

### Effectivity Data

#### Engine Models Applicable

V2522-A5, V2524-A5, V2527M-A5, V2527-A5, V2527E-A5, V2530-A5, V2533-A5  
Engine Serial Nos. V10395, V10428, V10473, V10513, V10583, V10840, V11148, V11171, V11460, V11466, V11533, V11732, V11964, V12173, V12248, V12524, V12532, V13056, V17233, V17234, V17235, V17238, V17239, V17240, V17242, V17243, V17244, V17245, V17246, V17247, V17248, V17302, V17308, V17315, V17318, V17319, V17321, V17326, V17329, V17330, V17335, V17343, V17351, V17354, V17356, V17359, V17363, V17394, V17399, V17403, V17404, V17405, V17406, V17410, V17413, V17414, V17415, V17416, V17417, V17418, V17421, V17425, V17426, V17428, V17431, V17433, V17434, V17436, V17438, V17439, V17468, V17469, V17471, V17506, V17729

### Concurrent Requirements

There are no concurrent requirements.

### Reason

1. Condition: IAE has observed characteristic lives for bearings produced from two ball Lots (A and B) that are statistically lower than the general population.
2. Background: Since January 2015, there have been four confirmed low time No. 3 bearing events containing No. 3 bearings produced from ball Lot A and two confirmed low time events from Lot B.

Two Non-modification Service Bulletins (NMSB's) were recently released for suspect ball Lots A & B, which introduced a reduced 125 hour Master Magnetic Chip Detector (MMCD) inspection interval. (Reference 5, NMSB 72-0671 for Lot A and Reference 6, NMSB 72-0672 for Lot B).

3. Objective: This NMSB provides instruction for when the No. 3 bearings from Lot A should be replaced. The bearing replacement procedure is applicable to the suspect bearings and associated engines listed in Table 1 and Table 2 of the Accomplishment Instructions.
4. Substantiation: Actions contained within this Service Bulletin have been substantiated through engineering analysis.

This NMSB is the closing action for the reduced 125 hour MMCD inspection interval established in Reference 5, NMSB 72-0671. The replacement of Lot B suspect bearings is documented in Reference 7, NMSB 72-0674.

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.

6. Supplemental Information

None.

Description

Remove and replace the No. 3 Bearing listed in Table 1 and Table 2 of the Accomplishment Instructions.

Compliance

Category 4

Accomplish at the first visit of an engine or module to a maintenance base capable of compliance with the accomplishment instructions regardless of the planned maintenance action or the reason for engine removal.

NOTE: Service Bulletin incorporation on engines installed on aircraft may be desirable and should be individually evaluated

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 inspection.

Manpower

1. In Service

..... Not Applicable.

2. At Overhaul

Estimated man-hours to embody this SB in full:

A. To remove/replace the No. 3 Bearing — 250 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 — 72-30-00.
2. Internal Reference No. — 16VC153
3. V2500-A5 Series Illustrated Parts Catalog, P&W Ref. PN 2A4428, Chapter/Section 72-32-24.
4. V2500 A1/A5 Series Engine Manual, P&W Ref. PN 2A4407, Chapter/Section 72-00-31, 72-00-50, 72-32-00.
5. V2500 Service Bulletin V2500-ENG-72-0671, Non-Modification Service Bulletin — No. 3 Bearing — Reduced Master Magnetic Chip Detector Inspection Interval For Suspect Population (Lot A)
6. V2500 Service Bulletin V2500-ENG-72-0672, Non-Modification Service Bulletin — No. 3 Bearing — Reduced Master Magnetic Chip Detector Inspection Interval For Suspect Population (Lot B)
7. V2500 Service Bulletin V2500-ENG-72-0674, Non-Modification Service Bulletin — Replacement of No. 3 Bearings From Suspect Population (Lot B)

## Other Publications Affected

**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. None.

## Interchangeability of Parts

Old and new parts are directly interchangeable.

## 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. Part prices were not available at the time of Service Bulletin publication. Contact IAE Spares Management & Logistics for firm quotations.

### Industry Support Program

For V2500-A5 Engines in the effectivity of this Service Bulletin.

Under this program the operator is offered support in the form of a one-time discount of full catalog list price for the No. 3 Bearing Option, PN 2A4235 replaced as a result of the accomplishment of this NMSB.

To be eligible for this discount:

- No. 3 Bearing Option, PN 2A4235 must be replaced with new.
- Determine through your local IAE field representative if the removed No. 3 Bearing should be returned to P&W for investigation.
- If return of the bearing is not required, proof of mutilated No. 3 Bearing Option, PN 2A4235 (countersigned by the local IAE representative) must be provided to IAE.
- All required documentation must be submitted to IAE within 180 days of the applicable Shop Visit completion date. Requests received after the 180 day period, even if they are prior to the expiration date of this Support Program, will be ineligible for the IAE spare parts discount and disqualified.

No duplicate benefits through FHA, Service Policy or other Support Programs will be approved.

Customers are requested to place a purchase order for the parts through their normal PW/IAE spare parts channel.

Upon approval, IAE Materials Management will issue the applicable IAE spare parts discount to the Customer's account with IAE.

This support program is valid through December, 31, 2024.

If you have any questions concerning this offer please 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	51,510.00	Bearing, No. 3	2A4170 (72-32-24-01-100K)	(4)(X)(O1)
	1	51,510.00	Bearing, No. 3	2A3851 (72-32-24-01-100L)	(4)(X)(O1)

### 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 part as specified in the Accomplishment Instructions.

**Spare Parts Availability**

(X) See Reference 2., 3., or 4., Illustrated Parts Catalog for applicable replacement parts.

(O1) Bearing, PN 2A4170 , or PN 2A3851 are details of Bearing Option, PN 2A4235.

**Vendor Services or Special Components/Materials**

Not Applicable.

**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 the No. 3 Bearing:
  - A. Remove the Fan Module. Refer to Reference 4, Engine Manual (EM), TASK 72-00-31.
  - B. Remove the Low Pressure Turbine (LPT)/Turbine Exhaust Case (TEC) Module. Refer to Reference 4, EM, TASK 72-00-50.
  - C. Remove the Low Pressure Compressor(LPC)/Booster Module. Refer to Reference 4, EM, TASK 72-32-00.
  - D. Remove the No. 3 bearing, Internal Gearbox and Support Assembly to gain access to Front Bearing Compartment (FBC) area (pre surgical strike procedure for FBC area). Refer to Reference 4, EM TASK 72-32-00-030-013-C00.
2. Replace suspect No. 3 Bearing with No. 3 Bearing Option, PN 2A4235:
  - A. Install a new No. 3 Bearing. Refer to Reference 4, EM, TASK 72-32-24, 01-100.
  - B. The removed bearing must either be returned to IAE or scrapped locally. If scrapped, a photograph or digital image of the mutilated bearing and a copy of the scrap tag must be provided to IAE Warranty.
3. Assembly Instructions:
  - A. Assemble the No. 3 bearing, Internal Gearbox and Support Assembly. Refer to Reference 4, EM, TASK 72-32-00-030-013-C00.
  - B. Assemble the LPC/Booster Module. Refer to Reference 4, EM, TASK 72-32-00.
  - C. Assemble the LPT/TEC Module. Refer to Reference 4, EM, TASK 72-00-50.
  - D. Assemble the Fan Module. Refer to Reference 4, EM, TASK 72-00-31.

Table 1 — Lot A — Bearing, PN 2A4170

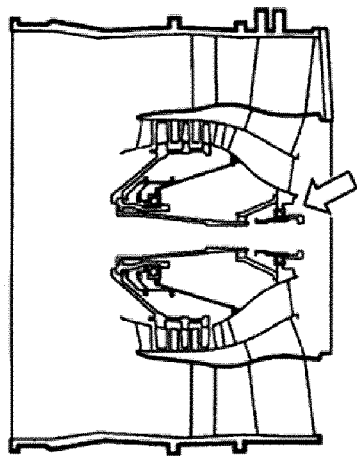
ESN	SERIAL NUMBER	ESN	SERIAL NUMBER	ESN	SERIAL NUMBER
V10395	PCWKAK4548	V17243	PCWKAK4526	V17404	PCWKAK5436
V10428	PCWKAK5434	V17244	PCWKAK3593	V17405	PCWKAK4619
V10473	PCWKAK4545	V17245	PCWKAK3590	V17406	PCWKAK4616
V10513	PCWKAK4549	V17246	PCWKAK3592	V17410	PCWKAK4617
V11533	PCWKAK4547	V17247	PCWKAK3594	V17413	PCWKAK5441
V10583	PCWKAK3597	V17248	PCWKAK3589	V17414	PCWKAK5442
V10840	PCWKAK4546	V17302	PCWKAK4532	V17415	PCWKAK5451
V11148	PCWKAK4543	V17308	PCWKAK4542	V17416	PCWKAK5443
V11171	PCWKAK3599	V17315	PCWKAK4534	V17417	PCWKAK5440
V11460	PCWKAK4550	V17318	PCWKAK4540	V17418	PCWKAK5437
V11466	PCWKAK4552	V17319	PCWKAK4533	V17421	PCWKAK5445
V11732	PCWKAK4551	V17321	PCWKAK4539	V17425	PCWKAK5457

ESN	SERIAL NUMBER	ESN	SERIAL NUMBER	ESN	SERIAL NUMBER
V11964	PCWKAK3598	V17326	PCWKAK4536	V17426	PCWKAK5444
V12173	PCWKAK4525	V17329	PCWKAK4556	V17428	PCWKAK5454
V12248	PCWKAK5433	V17330	PCWKAK4537	V17431	PCWKAK5448
V12524	PCWKAK5435	V17335	PCWKAK4538	V17433	PCWKAK5447
V12532	PCWKAK3595	V17343	PCWKAK4535	V17434	PCWKAK5450
V13056	PCWKAK3596	V17351	PCWKAK4553	V17436	PCWKAK5449
V17233	PCWKAK3591	V17354	PCWKAK4554	V17438	PCWKAK5459
V17234	PCWKAK3586	V17356	PCWKAK4615	V17439	PCWKAK5446
V17235	PCWKAK3585	V17359	PCWKAK4555	V17468	PCWKAK5456
V17238	PCWKAK3587	V17363	PCWKAK4557	V17469	PCWKAK5453
V17239	PCWKAK3588	V17394	PCWKAK4614	V17471	PCWKAK5455
V17240	PCWKAK4527	V17399	PCWKAK5439	V17506	PCWKAK5452
V17242	PCWKAK4528	V17403	PCWKAK5438		

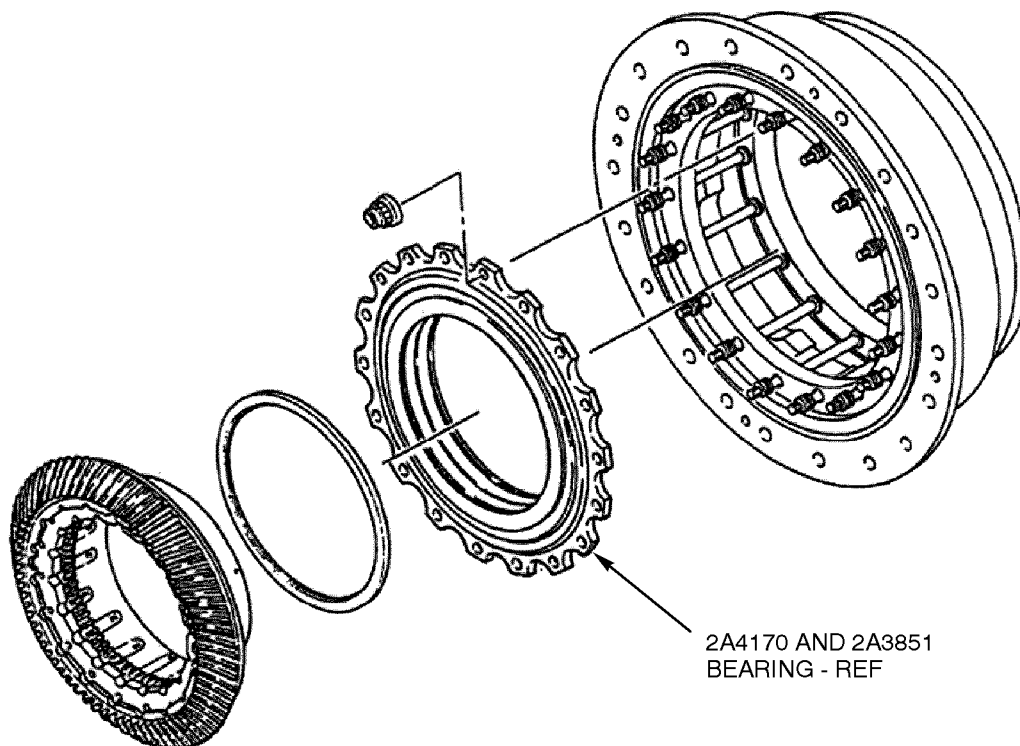
Table 2 — Lot A — Bearing, PN 2A3851

ESN	Serial Number
V17729	PCWKAK5286





MODULE 32



B526343

LOCATION OF THE NO. 3 BEARING  
FIGURE 1

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## Appendix

### Added Data

#### Internal Reference Information

Revision No.	Reference Document	Origination
Original	EA16VC153	DM/RCM

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

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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
SPPM (SPM) — A1, A5, D5	All	SPP-V2500-1IA	2A4414

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	