

SERVICE BULLETIN REVISION NOTICE

INFORMATION – ENGINE – VIBRATION TRANSDUCER – INTRODUCTION OF A NEW
VIBRATION TRANSDUCER THAT PROVIDES MORE ACCURATE READINGS

Turbojet Engine Service Bulletin No. 70-1020 Revision No. 1 dated August 12, 2016.

Revision History

Original Issue April 10, 2015

Revision 1 dated August 12, 2016

Reason for the Revision

To change the Engine Effectivity

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

BULLETIN ISSUE SEQUENCE

V2500 Series 70-1020

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Revision No.

1

Date

August 12/16

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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SERVICE BULLETIN

INFORMATION – ENGINE – VIBRATION TRANSDUCER – INTRODUCTION OF A NEW
VIBRATION TRANSDUCER THAT PROVIDES MORE ACCURATE READINGS

MODEL APPLICATION

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

BULLETIN ISSUE SEQUENCE

V2500 Series 70-1020

ATA NUMBER

77-32-15

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Compliance Category

7

P&W Distribution Code

V2500

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Summary

The purpose of this Service Bulletin is to introduce a new engine vibration transducer with a stainless steel membrane welded into the sensor housing. The stainless steel membrane will prevent unwanted movement of the sensor element and provide more accurate indications of engine vibration.

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 No. V15001

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

Engine Serial Nos. V15002 thru V17676

Concurrent Requirements

There are no concurrent requirements.

Reason

1. Condition: In service reports have shown unwanted vibration indications on some V2500 engines.
2. Background: Testing of returned units has shown that too much movement of the sensor inside the vibration transducer housing can decrease the precision of the vibration measurements.
3. Objective: A re-design of the vibration transducer was performed to add a stainless steel membrane inside the sensor housing to prevent unwanted vibrations.
4. Substantiation: A trial installation has been carried out on customer engines and better vibration measurements shown.
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

Replace the Vibration Transducer.

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Compliance

Category 7

Accomplish when supply of superseded parts has been depleted.

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 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.

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 — 77-32-15
2. V2500-A1 Series Illustrated Parts Catalog, P&W Ref. PN 2A4427, Chapter/Section 77-32-15.
3. V2500-A5 Series Illustrated Parts Catalog, P&W Ref. PN 2A4428, Chapter/Section 77-32-15.
4. Meggitt Service Bulletin 171-77-001, Engine Vibration Accelerometer (Twin Cable Accelerometer Kit).

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5. Meggitt Component Maintenance Manual, 144-171-000-031, Engine Vibration Accelerometer (Twin Cable Accelerometer Kit), Chapter/Section 77-32-15.

Publications Affected

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1. V2500-A1 Series Illustrated Parts Catalog, P&W Ref. PN 2A4427, Chapter/Section 77-32-15.
2. V2500-A5 Series Illustrated Parts Catalog, P&W Ref. PN 2A4428, Chapter/Section 77-32-15.

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 Meggitt Sensing Systems for spares pricing.
2. There is no kit provided to do this Service Bulletin.
3. Part availability information is provided in material data Instructions — Disposition.

Industry Support Program

Not Applicable.

The material data that follows is for each engine.

For V2500-A1 Engines:

New PN	Qty	Estimate of Unit Price (\$)	Keyword	Old PN	Instructions — Disposition
144-171-000-032	1	*	TRANSDUCER, VIBRATION	144-171-000-031 (77-32-15-01-100)	(2)(L)(P)(V)

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
144-171-000-032	1	*	TRANSDUCER, VIBRATION	144-171-000-031 (77-32-15-01-100)	(2)(L)(P)(V)

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 Meggitt for firm quotations.

(2) The new part is a replacement part only, and cannot be obtained by modification of the old part.

Spare Parts Availability

(L) The old part will be supplied until the supply is fully used.

(P) Procure the part directly from the Supplier referenced in Vendor Services or Special Components.

(V) This is the Meggitt part number.

Vendor Services or Special Components/Materials

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For more information about the Vibration Transducer, refer to Reference 4, Meggitt Service Bulletin 171-77-001 Engine Vibration Accelerometer (Twin Cable Accelerometer Kit). and Reference 5, Meggitt Component Maintenance Manual, 144-171-000-031, Engine Vibration Accelerometer (Twin Cable Accelerometer Kit), Chapter/Section 77-32-15. Contact Meggitt to obtain Service Bulletin 171-77-001.

Vendor Services or Special Components/Materials

Vendor Designation	Name	Vendor Name & Address
177-77-001	Service Bulletin	<p>MEGGITT SA Route de Moncor, 4 CH-1701 Fribourg, Switzerland Tel: + 41 (0) 26 407 11 11 Fax: + 41 (0) 26 407 15 55 Vendor Manufacturer's Code: S3960 OR MEGGITT (Orange County) Inc. 14600 Myford Rd. Irvine, CA 92606 USA Tel: + 1 (514) 402 2611 Fax: + 1 (949) 661 7231 Vendor Manufacturer's Code: 95411 OR Meggitt Aerospace Asia Pacific Pte Ltd. 1A Seletar Aerospace Link Singapore 797552 Tel: + 65 6511 7200 Fax: + 65 6542 7069</p>

Tooling — Price and Availability

Special tools are not required to accomplish this Service Bulletin.

Reidentified Parts

Not Applicable.

Other Material Information Data

Not Applicable.

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Accomplishment Instructions

1. Replace the Vibration Transducer, PN 144-171-000-031, with Vibration Transducer, PN 144-171-000-032.

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Appendix

Added Data

Internal Reference Information

Revision No.	Reference Document	Origination
Original	EC13VN303	UTAS
1	EC13VN303-02	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
EIPC — A1	V2500-A1102Q00	S-V2500-1IA	2A4427

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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	

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