

## SERVICE BULLETIN

ENGINE — AIR — RING, SEALING — REPLACEMENT OF, FOR PROCUREMENT

#### 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 72-0664

ATA NUMBER

75-00-00

#### IAE PROPRIETARY INFORMATION

This document is the property of International Aero Engines (IAE). You may not possess, use, copy or disclose this document or any information in it, for any purpose, including without limitation to design, manufacture, or repair parts, or obtain FAA or other government approval to do so, without IAE's express written permission. Neither receipt nor possession of this document alone, from any source, constitutes such permission. Possession, use, copying or disclosure by anyone without IAE's express written permission is not authorized and may result in criminal and/or civil liability.

WARNING – This document contains technical data the export of which is or may be restricted by the Export Administration Act and the Export Administration Regulations (EAR), 15 C.F.R. parts 730-774. Diversion contrary to U.S. law is prohibited. The export, re-export, transfer or re-transfer of this technical data to any other company, entity, person, or destination, or for any use or purpose other than that for which the technical data was originally provided by IAE, is prohibited without prior written approval from IAE and authorization under applicable export control laws.

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

**Compliance Category** 

7

P&W Distribution Code

V2500

April 28/16



## Summary

The purpose of this Service Bulletin is to replace the sealing ring. The sealing rings used on the union of the No. 4 bearing scavenge valve and Low Pressure Compressor (LPC) bleed valve actuators can no longer be procured. This change introduces new equivalent sealing rings for replacement.

#### Planning Information

## **Effectivity Data**

**Engine Models Applicable** 

V2500-A1

Engine Serial No. — All engines

V2522-A5, V2524-A5, V2527M-A5, V2527-A5, V2527E-A5, V2530-A5, V2533-A5 that have incorporated Reference 6, Service Bulletin V2500-ENG-72-0565 Engine Serial No. — All engines

V2525-D5, V2528-D5 Engine Serial No. — All engines

#### Concurrent Requirements

There are no concurrent requirements.

#### Reason

- 1. Condition: The sealing rings used on the union of the No. 4 bearing scavenge valve and LPC bleed valve actuators can no longer be procured.
- 2. Background: The sealing rings used on the union of the No. 4 bearing scavenge valve and LPC bleed valve actuators are obsolete.
- 3. Objective: Introduce equivalent part number sealing rings for use on the union of the No. 4 bearing scavenge valve and LPC bleed valve actuators.
- Substantiation: The new and old sealing rings are equivalent.
- 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 sealing ring.

#### Compliance

Category 7

April 28/16



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 75-31-42, 75-31-43 and 79-23-51.
- 2. V2500-A1 Series Illustrated Parts Catalog, P&W Ref. PN 2A4427, Chapter/Section 75-31-42, 75-31-43 and 79-23-51.
- V2500-A5 Series Illustrated Parts Catalog, P&W Ref. PN 2A4428, Chapter/Section 79-23-51.
- 4. V2500-D5, Series Illustrated Parts Catalog, P&W Ref. PN 2A4426, Chapter/Section 79-23-51.
- V2500 Service Bulletin V2500-ENG-70-0099 (Standard Practices Engine Information
   — To Announce The Availability Of Expendable Parts To Permit Accessory Component
   Replacement On An Installed Engine).

April 28/16



6. V2500 Service Bulletin V2500-ENG-72-0565 (Engine — Provide The Requirements For Modification To The V2500 SelectOne™ Retrofit Standard).

## 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.

- V2500-A1 Series Illustrated Parts Catalog, P&W Ref. PN 2A4427, Chapter/Section 75-31-42, 75-31-43 and 79-23-51.
- 2. V2500-A5 Series Illustrated Parts Catalog, P&W Ref. PN 2A4428, Chapter/Section 79-23-51.
- 3. V2500-D5, Series Illustrated Parts Catalog, P&W Ref. PN 2A4426, Chapter/Section 79-23-51.

## Interchangeability of Parts

Old and new parts are directly interchangeable.

## Information in the Appendix

Alternate Accomplishment Instructions (No)

Progression Charts (Yes)

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.
- 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
STD1031-4908	1	54.50	RING — SEALING TOROIDAL	STD831-1 (75-31-42-01-128)	(2)(A)(L)
STD1031-4905	1	45.40	RING — SEALING TOROIDAL	STD831-11 (75-31-42-01-148)	(2)(A)(L)
STD1031-4907	1	53.40	RING — SEALING TOROIDAL	STD831-16 (75-31-42-01-133)	(2)(A)(L)
STD1031-4907	1	53.40	RING — SEALING TOROIDAL	STD831-16 (75-31-42-01-138)	(2)(A)(L)
STD1031-4907	1	53.40	RING — SEALING TOROIDAL	STD831-16 (75-31-42-01-143)	(2)(A)(L)
STD1031-4905	1	45.40	RING — SEALING TOROIDAL	STD831-11 (75-31-43-01-138)	(2)(A)(L)
STD1031-4907	1	53.40	RING — SEALING TOROIDAL	STD831-16 (75-31-43-01-128)	(2)(A)(L)
STD1031-4907	1	53.40	RING — SEALING TOROIDAL	STD831-16 (75-31-43-01-133)	(2)(A)(L)
STD1017-4907	1	40.00	RING — SEALING TOROIDAL	STD831-16 (79-23-51-01-143)	(2)(A)(L)



## 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
STD1017-4907	1	40.00	RING — SEALING TOROIDAL	STD831-16 (79-23-51-01-143)	(2)(A)(L)

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
STD1017-4907	1	40.00	RING — SEALING TOROIDAL	STD831-16 (79-23-51-01-143)	(2)(A)(L)

#### 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.

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

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

#### For V2500-A1 Engines:

- 1. Replace the Sealing Ring, PN STD831-1 with PN STD1031-4908, PN STD831-11 with PN STD1031-4905 and three Sealing Rings, PN STD831-16 with PN STD1031-4907. See Figure 1.
- 2. Replace the Sealing Ring, PN STD831-11 with PN STD1031-4905 and two Sealing Rings, PN STD831-16 with PN STD1031-4907. See Figure 2.
- 3. Replace the Sealing Ring, PN STD831-16 with PN STD1017-4907. See Figure 3.

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

1. Replace the Sealing Ring, PN STD831-16 with PN STD1017-4907. See Figure 3.

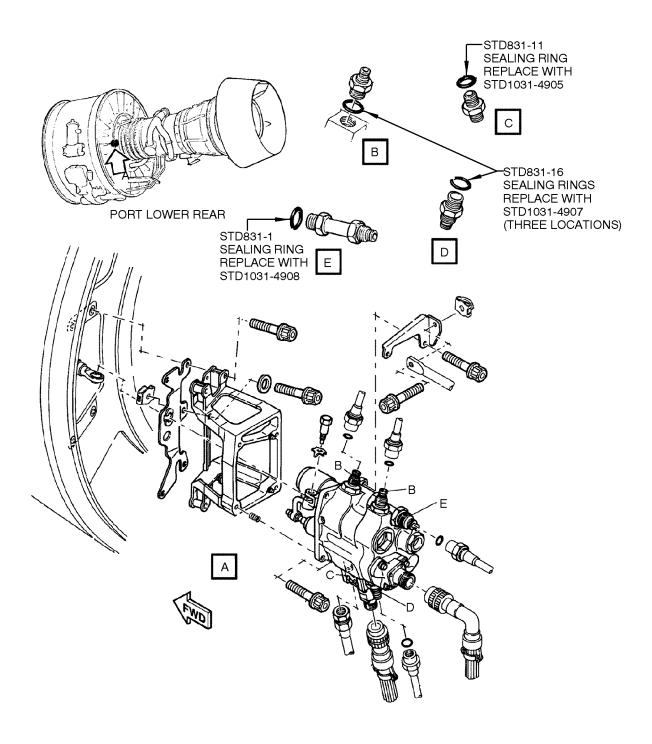
#### For V2525-D5 and V2528-D5 Engines:

1. Replace the Sealing Ring, PN STD831-16 with PN STD1017-4907. See Figure 4.

## For V2500-A5 SelectOne™ Engines:

- 1. Replace the Sealing Ring, PN STD831-16 with PN STD1017-4907.
- 2. Recording Instructions
  - A. A record of accomplishment is required.



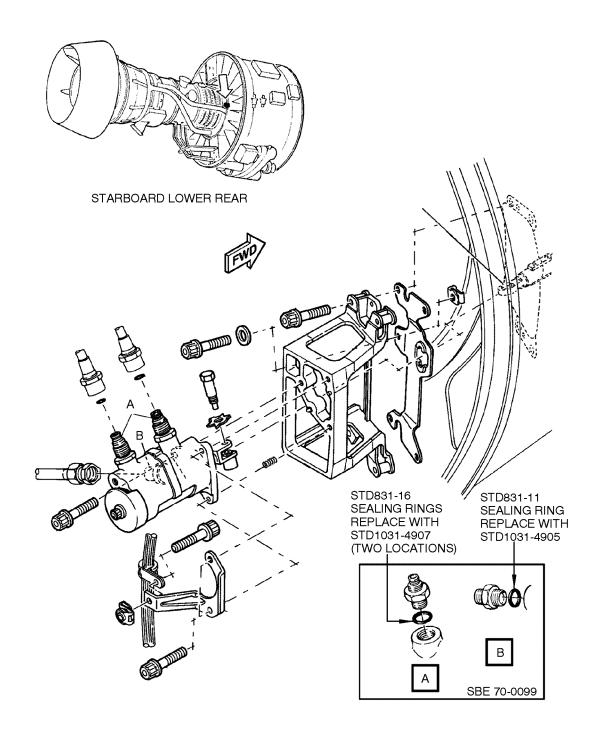


B525837

LOCATION OF THE SEALING RING 75-31-42 FIGURE 1

April 28/16





B525832

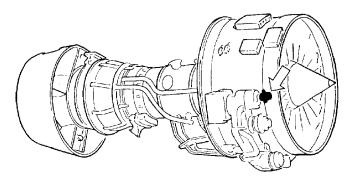
LOCATION OF THE SEALING RING 75-31-43 FIGURE 2

April 28/16

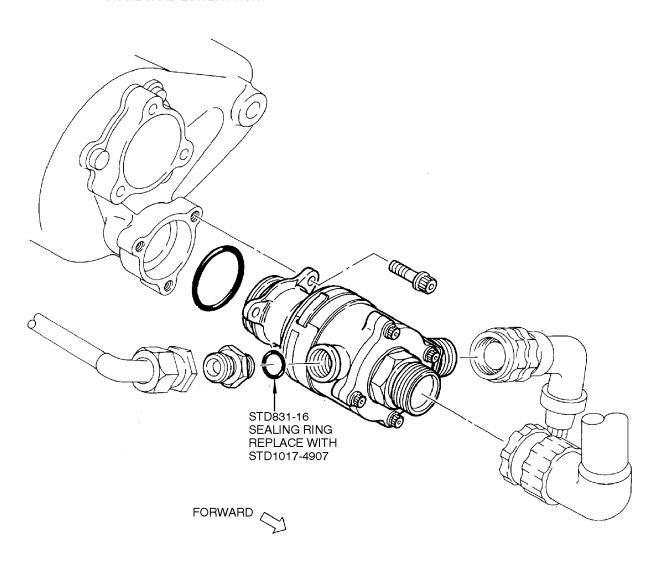
V2500-ENG-72-0664

Page 9





STARBOARD LOWER FRONT



B525833

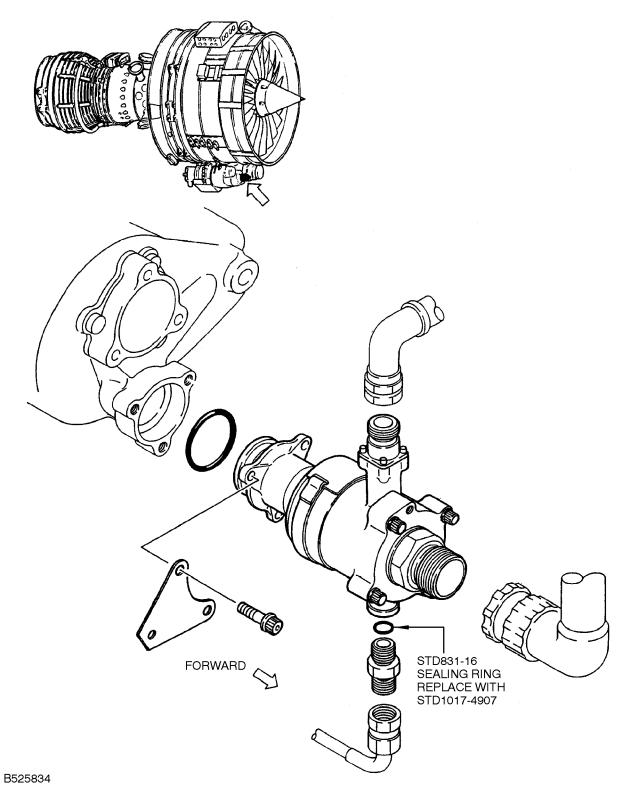
LOCATION OF THE SEALING RING 79-23-51 FIGURE 3

April 28/16

V2500-ENG-72-0664

Page 10





LOCATION OF THE SEALING RING 79-23-51 FIGURE 4

April 28/16

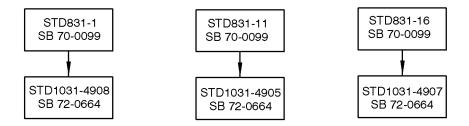
V2500-ENG-72-0664

Page 11



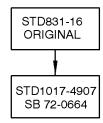
## <u>Appendix</u>

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



B525835

#### SEALING RING FOR V2500-A1 ENGINE MODELS CHART A



B525836

# SEALING RING FOR V2500-A5, D5 AND A5-SELECTONE™ ENGINE MODELS CHART B

#### Added Data

#### Internal Reference Information

Revision No.	Reference Document	Origination
Original	EC15VI004	FC/IEL

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, the following Technical Publications cross reference table is provided.

#### 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

April 28/16



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