

## **SERVICE BULLETIN**

# POWER PLANT — SOCKET CONTACT — INTRODUCTION OF TWO ALTERNATIVE SOCKET CONTACTS

#### MODEL APPLICATION

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

## **BULLETIN ISSUE SEQUENCE**

V2500 Series 71-0290

ATA NUMBER

71-52-43

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**Compliance Category** 

6

P&W Distribution Code

V2500

May 9/17



## Summary

The purpose of this Service Bulletin is to replace the current 2-tine socket contact with a 4-tine socket contact.

## Planning Information

#### Effectivity Data

## Engine Models Applicable

V2522-A5, V2524-A5, V2527M-A5, V2527-A5, V2527E-A5, V2530-A5, V2533-A5 Engine Serial Nos. All engines

#### Concurrent Requirements

There are no concurrent requirements.

#### Reason

- 1. Condition: The 2-tine socket contact is currently the only type used.
- 2. Background: 4-tine socket contact is considered to provide improved electrical contact between pin and socket.
- 3. Objective: A new 4-tine socket contact is being introduced as it is considered to provide improved electrical contact between pin and socket.
- 4. Substantiation: Both types are used to create a K-type thermocouple. The 2-tine and 4-tine socket contact are designed from Alumel and Chromel. Both types are created as socket contacts per ESC30S16NC/EN3155 for Chromel and ESC30S16NA/EN3155 for Alumel with exception of higher retention forces to meet Rolls-Royce drawing requirements of drawing AT581185. The 4-tine socket contact is currently being used in connectors by P&W as latest best practice.
- 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.

Supplemental Information

None.

#### Description

Replace the socket contact.

#### Compliance

Category 6

Accomplish when the subassembly (i.e. modules, accessories, components, build groups) is disassembled sufficiently to afford access to the affected part and to all affected spare parts.

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## 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.

2.

In Service	
	Not Applicable
At Overhaul	
	Not Applicable

#### Weight and Balance

1. Weight Change

None.

Moment Arm

No Effect.

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 71-52-43.
- 2. Internal Reference No. 16VU008A.
- 3. V2500 Standard Practices and Processes, P&W Ref. PN 2A4414, Chapter/Section 71-52-43.
- 4. V2500-A5 Series Illustrated Parts Catalog, P&W Ref. PN 2A4428, Chapter/Section 71-52-43.

#### Other Publications Affected

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 V2500-A5 Series Illustrated Parts Catalog, P&W Ref. PN 2A4428, Chapter/Section 71-52-43.

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

New PN	Qty	Estimate of Unit Price (\$)	Keyword	Old PN	Instructions — Disposition
097-0266-16	2	*	CONTACT - SOCKET	ESC30S16NC (71-52-43-04-227)	(2)(A)(C)
097-0267-16	2	*	CONTACT - SOCKET	ESC30S16NA (71-52-43-04-228)	(2)(A)(C)

## 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.
- (C) The old part will continue to be supplied.

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.

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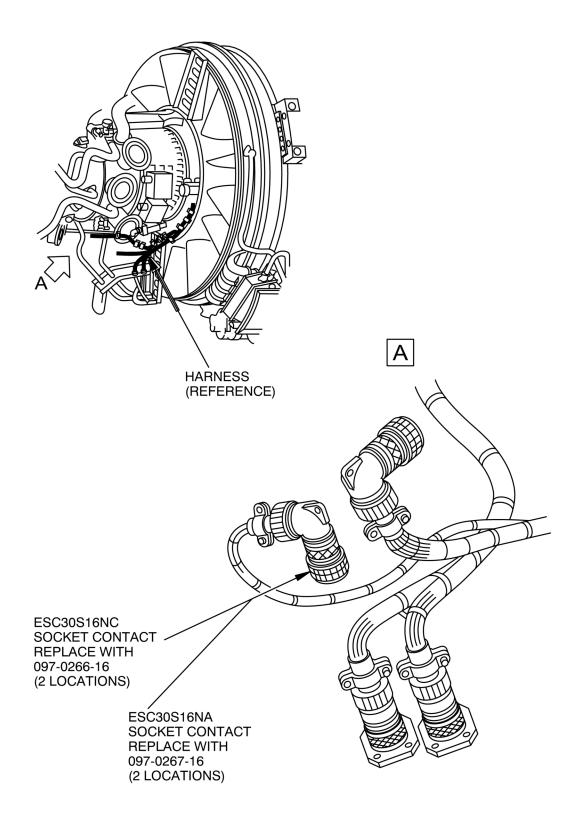


## Accomplishment Instructions

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

- 1. Replace 2 Socket Contacts, PN ESC30S16NC with PN 097-0266-16. See Figure 1.
- 2. Replace 2 Socket Contacts, PN ESC30S16NA with PN 097-0267-16. See Figure 1.
- 3. Recording Instructions
  - A. A record of accomplishment is required.





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LOCATION OF THE SOCKET CONTACT FIGURE 1

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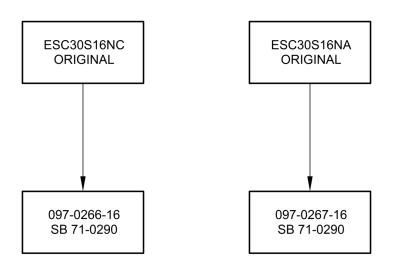


## **Appendix**

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

See Figure 2.





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SOCKET CONTACT ALUMEL AND CHROMEL FIGURE 2

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#### Added Data

#### Internal Reference Information

Revision No.	Reference Document	Origination	
Original	EC16VU008A	DJ, MTU	

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
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
EIPC — A1	V2500-A1102Q00	S-V2500-1IA	2A4427



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	
	V2527/V2527E-SQ04	S-V2500-7NA	
EIDC AF	V2527/V2527E-SQ05	S-V2500-7NB	24420
EIPC — A5	V2530-AQ02	S-V2500-2IA	2A4428
	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-	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	