

SERVICE BULLETIN

IGNITION — PLUG, IGNITER — REPLACE WITH A MORE DURABLE IGNITER PLUG

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 74-0007

ATA NUMBER

74-21-41

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Supplier Service Bulletin

Champion Aerospace LLC Service Bulletin CH31964-1-7411001

Compliance Category

6

P&W Distribution Code

V2500

July 3/17

V2500-ENG-74-0007

Page 1 of 13

Summary

The purpose of this Service Bulletin is to replace the igniter plug with a new igniter plug that has higher temperature capable materials to improve durability.

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 V18616

V2525-D5, V2528-D5

Engine Serial Nos. V20001 thru V20285

Concurrent Requirements

There are no concurrent requirements.

Reason

1. Condition: At higher engine thrust, the igniter plug is exposed to temperatures that are within the igniter plug tip oxidation temperature range.
2. Background: Igniter plugs removed from service have shown that the igniter plug tip oxidizes in service at high operating temperature.
3. Objective: Supply a new igniter plug that is more durable at higher operating temperatures.
4. Substantiation: The means of compliance are by similarity and analysis.
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 igniter plug.

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.

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 — 74-21-41.
2. Internal Reference No. — 16VI002.
3. V2500 Standard Practices and Processes, P&W Ref. PN 2A4414, Chapter/Section 70-00-00.
4. V2500-A1 Series Illustrated Parts Catalog, P&W Ref. PN 2A4427, Chapter/Section 74-21-41.
5. V2500-A5 Series Illustrated Parts Catalog, P&W Ref. PN 2A4428, Chapter/Section 74-21-41.

July 3/17

V2500-ENG-74-0007

Page 3

6. V2500-D5, Series Illustrated Parts Catalog, P&W Ref. PN 2A4426, Chapter/Section 74-21-41.
7. V2500 Service Bulletin V2500-ENG-70-0276, Information — Engine — To Announce The Availability Of A New Ignitor Plug Featuring Revised Glass Seal Material.
8. V2500 Service Bulletin V2500-ENG-70-1003, Information — Ignition — Introduction Of A New Igniter Plug.
9. Champion Aerospace LLC Service Bulletin CH31964-1-7411001.

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. V2500-A1 Series Illustrated Parts Catalog, P&W Ref. PN 2A4427, Chapter/Section 74-21-41.
2. V2500-A5 Series Illustrated Parts Catalog, P&W Ref. PN 2A4428, Chapter/Section 74-21-41.
3. V2500-D5, Series Illustrated Parts Catalog, P&W Ref. PN 2A4426, Chapter/Section 74-21-41.

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. Contact PW 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
CH31964-1	2	*	PLUG — IGNITER	5U0007 (JS-100A) (74-21-41-01-100)	(2)(A)(N)(V) (V1)
OR					
CH31964-1	2	*	PLUG — IGNITER	5U0056 (JS-100A-1) (74-21-41-01-100 A)	(2)(A)(N)(V) (V1)
OR					
CH31964-1	2	*	PLUG — IGNITER	CH31964 (74-21-41-01-100 B)	(2)(A)(N)(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
CH31964-1	2	*	PLUG — IGNITER	5U0007 (JS-100A) (74-21-41-01-100)	(2)(A)(N)(V) (V1)
OR					
CH31964-1	2	*	PLUG — IGNITER	5U0056 (JS-100A-1) (74-21-41-01-100 A)	(2)(A)(N)(V) (V1)
OR					
CH31964-1	2	*	PLUG — IGNITER	CH31964 (74-21-41-01-100 B)	(2)(A)(N)(V)

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
CH31964-1	2	*	PLUG — IGNITER	5U0007 (JS-100A) (74-21-41-01-100)	(2)(A)(N)(V) (V1)
OR					
CH31964-1	2	*	PLUG — IGNITER	5U0056 (JS-100A-1) (74-21-41-01-100 A)	(2)(A)(N)(V) (V1)
OR					
CH31964-1	2	*	PLUG — IGNITER	CH31964 (74-21-41-01-100 B)	(2)(A)(N)(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 PW Spares Management & Logistics 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.

(N) The old part is not available.

(V) PN CH31964 and PN CH31964-1 are Champion Aerospace LLC part numbers.

(V1) JS-100A and JS-100A-1 are NGK Spark Plug Co LTD part numbers.

Vendor Services or Special Components/Materials

Vendor Services or Special Components/Materials

P&W Designation	Vendor Designation	Name	Vendor Name & Address
CH31964-1	CH31964-1	PLUG — IGNITER	Champion Aerospace LLC 1230 Old Norris Road Liberty, SC 29657 USA www.championaerospace.com
	CH31964-1-7411001	Service Bulletin	
Vendor Manufacturer's Code: 0AFL4 See Illustrated Parts Catalog Vendor Manufacturer's Code List			

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Tooling — Price and Availability

Special tools are not required to accomplish this Service Bulletin.

Reidentified Parts

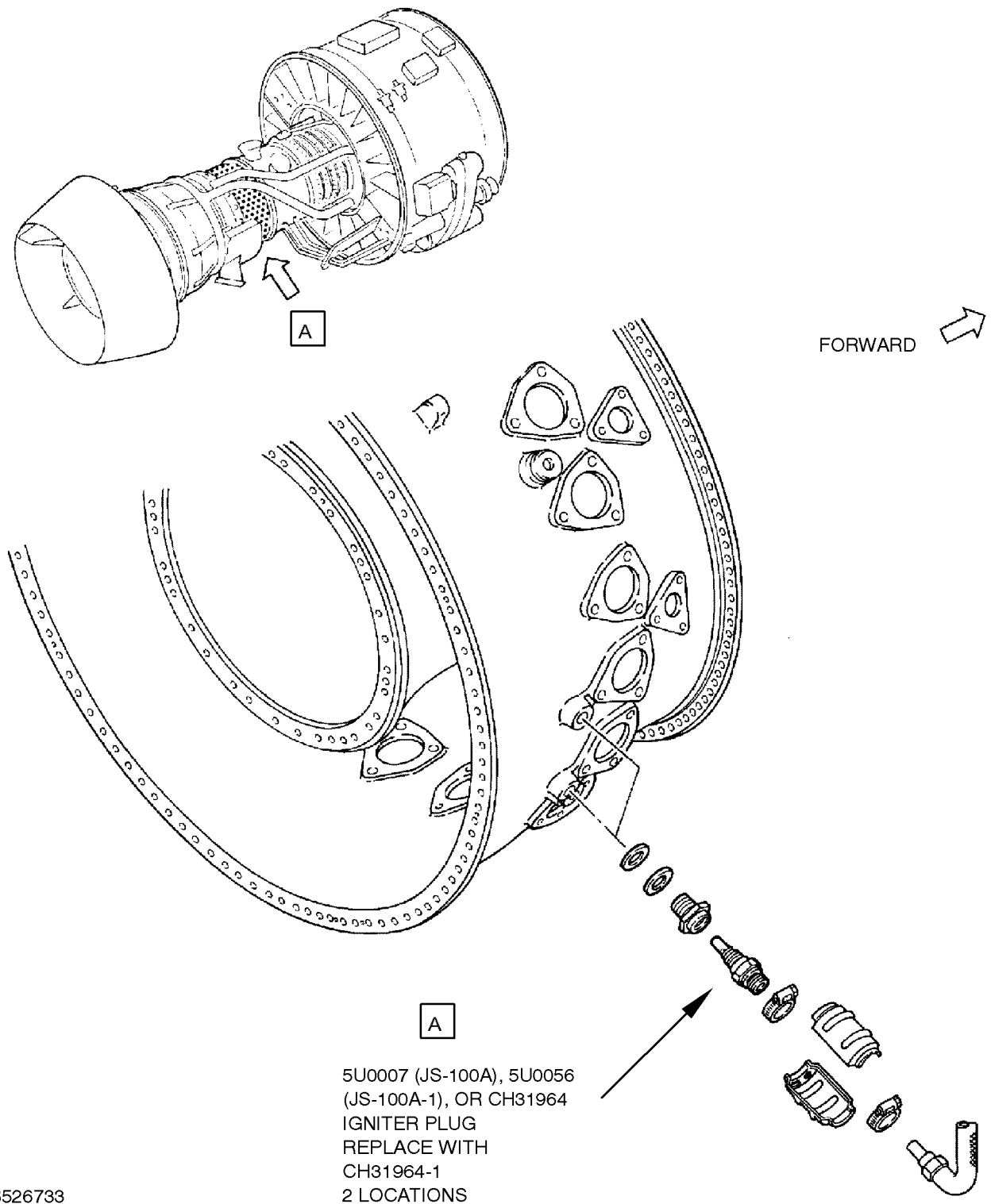
Not Applicable.

Other Material Information Data

Not Applicable.

Accomplishment Instructions

1. Replace the Igniter Plug PN 5U0007 (JS-100A), PN 5U0056 (JS-100A-1), or PN CH31964 with PN CH31964-1. See Figure 1.
2. Recording Instructions
 - A. A record of accomplishment is required.



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LOCATION OF THE IGNITER PLUG
74-21-41
FIGURE 1

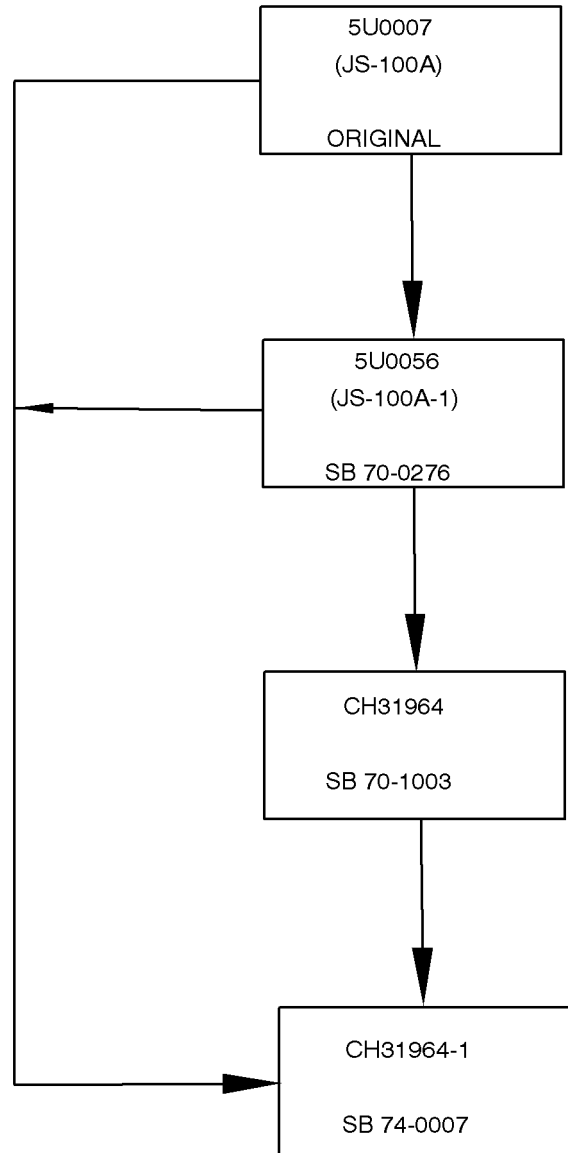
July 3/17

V2500-ENG-74-0007

Page 9

Appendix

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



B526734

IGNITER PLUG CHART A

July 3/17

V2500-ENG-74-0007

Page 11

Added Data

Internal Reference Information

Revision No.	Reference Document	Origination
Original	EC16VI002	FEM/JAC

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-V2500-3IA	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
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	