

## **SERVICE BULLETIN**

IGNITION — PLUG, IGNITER — INTRODUCE A NEW IGNITER PLUG TO INCREASE DURABILITY

MODEL APPLICATION V2525-D5, V2528-D5

BULLETIN ISSUE SEQUENCE

V2500 Series 74-0010

ATA NUMBER 74-21-41

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Supplier Service Bulletin

Champion Aerospace LLC Service Bulletin CH31991-74-001

Compliance Category

7

IAE Distribution Code

V2500

May 15/20



#### Summary

The purpose of this Service Bulletin is to introduce a new igniter plug that increases igniter plug durability.

## Planning Information

#### **Effectivity Data**

Engine Models Applicable

V2525-D5, V2528-D5

Engine Serial Nos. V20001 thru V20285

#### Concurrent Requirements

There are no concurrent requirements.

#### Reason

- Condition: Igniter Plug, PN CH31964-1 could fail to light because of ceramic insulator cracks.
- 2. Background: Igniter plug ground electrode with spark erosion damage could let the spring loaded ceramic insulator push into the eroded area when the engine is hot. After the engine is shut down and the engine is cool, the ceramic insulator could apply bends in load/tensile stress that could crack the ceramic insulator.
- 3. Objective: To introduce a new igniter plug that features a nickel plated center electrode, an increased ceramic insulator shelf, and an increased ceramic insulator outer diameter to minimize the potential of ceramic insulator cracks.
- 4. Substantiation: The means of compliance for the new igniter plug is by similarity and analysis.
- 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 igniter plug.

#### Compliance

Category 7

Accomplish when supply of superseded parts has been depleted.

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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.

- V2500 Standard Practices and Processes, P&W Ref. PN 2A4414, Chapter/Section 70-01-00.
- 2. V2500-D5 Series Illustrated Parts Catalog, P&W Ref. PN 2A4426, Chapter/Section 74-21-41.
- 3. Champion Aerospace LLC Service Bulletin CH31991-74-001.
- IAE Service Bulletin V2500-ENG-74-0007.

#### Other Publications Affected

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1. 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. 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 V2525-D5, V2528-D5 Engines:

New PN	Qty	Estimate of Unit Price (\$)	Keyword	Old PN	Instructions — Disposition
CH31991	2	*	PLUG, IGNITER	CH31964-1 (74-21-41-01-100B)	(2)(L)(V)

#### Modification and Spares Information

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

- (L) The old part will be supplied until the supply is fully used.
- (V) Igniter Plug, PN CH31964-1 and PN CH31991 are Champion Aerospace LLC part numbers.

#### Vendor Services or Special Components/Materials

P&W Designation	Vendor Designation	Name	Vendor Name & Address
CH31991	CH31991	Igniter Plug	Champion Aerospace LLC
	CH31991- 74-001	Service Bulletin	1230 Old Norris Rd Liberty, SC 29657 USA

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

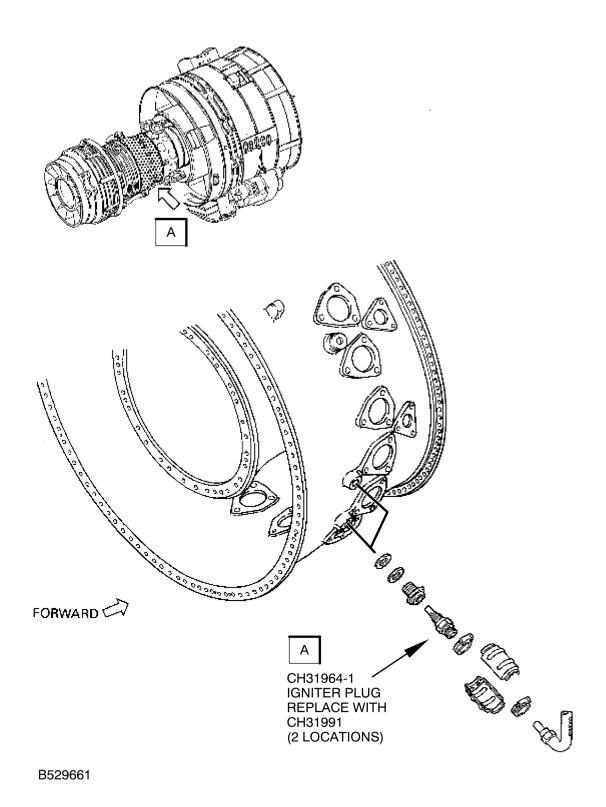
Not Applicable.



## **Accomplishment Instructions**

- 1. Replace the two Igniter Plugs, PN CH31964-1 with PN CH31991. See Figure 1.
  - Recording Instructions.
    - (1) A record of accomplishment is necessary.





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

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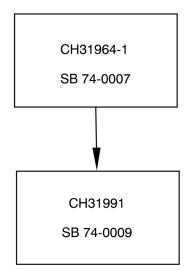
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## **Appendix**

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



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IGNITER PLUG FIGURE 2



#### Added Data

#### Internal Reference Information

Revision No.	Reference Document	Origination
Original	EC19VI008A	HB/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 — 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
	V2525/V2528-AQ02	S-V2500-3IA	
EIPC — D5	V2525/V2528-AQ03	S-V2500-3IB	2A4426
	V2525/V2528-AQ04	S-V2500-3IC	