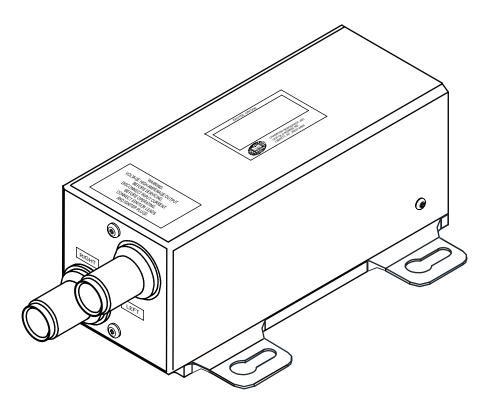


TURBOFAN ENGINE IGNITION EXCITER - REPLACEMENT OF



Issued by Champion Aerospace LLC 1230 Old Norris Road Liberty, SC/USA 29657

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MODEL APPLICATION HTF-7000

TURBOFAN ENGINE IGNITION EXCITER - REPLACEMENT OF

1. PLANNING INFORMATION

- A. <u>Effectivity</u>
 - (1) Units Affected: This service bulletin applies to all Champion ignition exciters CH92074-2 (Honeywell P/N: 3038100-5) using Pulse Power Thyristor (PPT) ignition switches. These exciter units are used on the HTF-7000 turbofan engines.
- B. <u>Concurrent Requirements</u>

None.

- C. <u>Reason</u>
 - (1) <u>Problem/Condition</u>:

The ignition exciter's Pulse Power Thyristor (PPT) yield (life-cycle) is low.

- (2) <u>Evidence</u>:
 - a. The beryllium oxide substrate is no longer used. (Obsolete)
 - b. The current switch technology used (a single deep defused die) is outdated.
- (3) <u>Solution</u>:

Replace the ignition exciter with one that has a Silicon Power Ignition Discharge Exciter (SPIDER) switch that has a thicker base made from aluminum nitride and is produced from multiple dies using planar technology. This requires re-configuration of the pulse-forming network capacitors to accommodate for the higher output voltage from the SPIDER switch.

D. <u>DESCRIPTION</u>

Replace existing ignition exciter with new exciter with additional improvements, as listed in Para. 1.C.(3)., Solution.

E. <u>COMPLIANCE</u>

CATEGORY 7 - You can do this service bulletin when the supply of superseded parts is fully used.

S.B.CH92074-74-001

Page 1 of 3

Registered Office: U.S. Copyright Office 101 Independence Ave, SE Washington, DC 20559-6000

Mar. 02/11



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F. <u>APPROVAL</u>

D.O.T/D.A.A/F.A.A approved.

G. WEIGHT AND BALANCE

Not Affected.

H. ELECTRICAL LOAD DATA

Not Affected.

I. SOFTWARE ACCOMPLISHMENT SUMMARY

Not Affected.

- J. <u>REFERENCES</u>
 - Applicable P&WC Technical Manuals
 - Champion Aerospace Component Maintenance Manual (CMM) 74-11-10
- K. <u>PUBLICATIONS AFFECTED</u>
 - Champion Aerospace CMM 74-11-10
 - Applicable Honeywell Technical Manuals
- L. INTERCHANGEABILITY AND INTERMIXABILITY OF PARTS
 - Interchangeability Refer to Para. 2. (D).
 - Intermixability Not Affected.

2. <u>MATERIAL INFORMATION</u>

A. Industry Support Information

Not Applicable.

S.B.CH92074-74-001

Page 2 of 3

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B. <u>Material - Cost and Availability</u>

As of April 2010, inoperative units should be replaced by new at cost of OH/Repair.

Procurable parts listed in Para. 2. (D) can be obtained from any Champion Aerospace Distributor.

C. <u>Manpower</u>

An estimate of 1.0 man-hours are required to complete this service bulletin.

D. <u>Material Necessary for Each Engine</u>

The quantity of materials listed in this section is on a per engine basis.

| New P/N | Keyword | Old P/N | Qty | Est. Unit List Price (\$US, 2011) | Disposition Instructions |
|--|---|-----------|-----|---|-----------------------------|
| | Exciter, Ignition (0AFL4) Honeywell P/N: 3038100-5 | CH92074-2 | 1 | | (A) |
| CH92074-6 | Exciter, Ignition (0AFL4) Honeywell P/N: 3038100-6 | | 1 | (Quote) | (A) |
| (A) TWO WAY INTERCHANGEABLE - (ATA 200 Explanation Code 02): The old or the new part can replace the old or the new part. | | | | | |

E. <u>Reidentified Parts</u>

None.

F. <u>Tooling - Price and Availability</u>

Not Applicable.

3. ACCOMPLISHMENT INSTRUCTIONS

- A. <u>PROCEDURE</u>
 - (1) Remove ignition exciter listed under Old P/N in Para.2.(D)., in accordance with applicable Honeywell manuals.
 - (2) Install ignition exciter listed under Old P/N in Para.2.(D)., in accordance with applicable Honeywell manuals.

S.B.CH92074-74-001

Page 3 of 3

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Mar. 02/11