

# TECHNICAL BULLETIN



Customer  
Support

**SUBJECT: Ignition - Distribution - Inspection/Check Instructions for Champion Igniter CH34682**

ATA SYSTEM: 74-20

T.B. NUMBER: T.B.CH34682-74-20-02-003

## DESCRIPTION

Champion Aerospace is providing this technical bulletin to assist in the servicing of igniter CH34682 (Figure 1). This information is specific to igniter CH34682 and includes detailed inspection and checks instructions to determine the operational condition of the igniter.

## INSPECTION/CHECK INSTRUCTIONS

A. Examine shell body for visible damage

- (1) Small nicks 0.020 in. (0.51 mm) (Max. depth) or burrs (sharp material fragments) that cause assembly interference can be removed with a fine file (AMS Swiss No. 2 or equivalent).
  - (2) If insulator is broken, cracked, chipped or loose, reject igniter.
- NOTE:** Small chips at the spark gap are normal and will not affect operation of the igniter.
- (3) If input contact is damaged, reject igniter.
  - (4) Contact pitting is permitted if contact surfaces are smooth with pits no greater than 0.010 in. (0.25 mm) in length and no greater than 0.005 in. (0.13 mm) in depth.

**NOTE:** If excessive contact pitting is present due to arcing impingement, replace with new igniter and observe for similar pitting on ignition lead contact. If present, replace with new ignition lead.

- (5) Visually inspect silver plating on threads at both ends of igniter. Discard igniter if silver plating is missing.

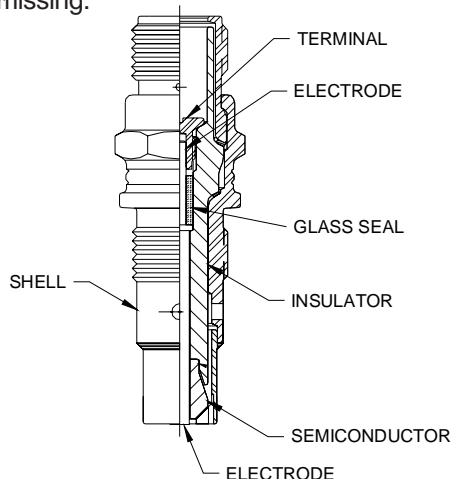


Figure 1. Igniter CH34682 construction  
October 10, 2002

B. Visually examine firing end of igniter for wear and/or damage

**NOTE:** Discoloration of center electrode at firing end is normal and does not affect operation. See Figure 2 for example of acceptable discoloration.

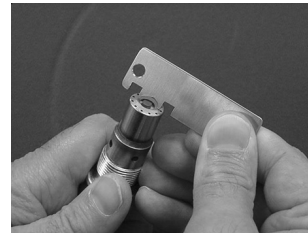


Figure 2. Acceptable center electrode discoloration

- (1) Examine semiconductor (between center and ground outer electrode) to make sure it is intact and secure. Reject igniter if semiconductor is missing or loose within igniter. Shaking igniter may reveal a loose semiconductor.

**NOTE:** Channeling of semiconductor is normal and does not affect operation of igniter.

- (2) Inspect firing tip for erosion to determine if gap is within serviceable limits (See Figure 3). Use calipers or gap gage to measure ground shell ID. If limits are exceeded, discard igniter. Limits are:

Ground Shell ID - .400 in. (10.16 mm)

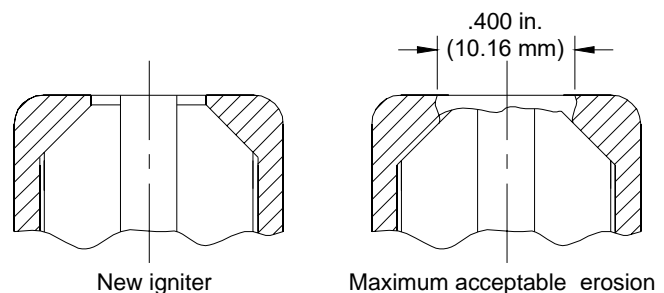


Figure 3. Igniter wear limits  
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A handwritten signature in black ink that reads "Eric Wolff".

Eric Wolff, Product Manager

9/26/02

Date

A handwritten signature in black ink that reads "Mike Runge".

Mike Runge, Engineering Manager

9/26/02

Date