

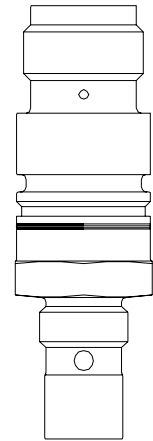
# TECHNICAL BULLETIN

Customer  
Support

**SUBJECT: Champion Igniter CH34690-2 (Cleaning, Inspection and Testing)**

**99-1**

The CH34690-2 igniter is a low voltage series igniter used in Pratt & Whitney Canada's PW100 series engines. A semiconductor material bridges the electrode and is required for proper function of ignition. The CH34690-2 igniter incorporates a button style contact with a deeper terminal well to improve conductivity, prevent flashover and incorporates provisions for venting.

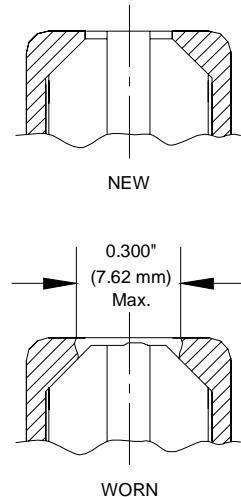


## **CLEANING.**

- (1) Wipe combustion deposit from exterior with a lint-free cloth.
- (2) DO NOT DISTURB THE COMBUSTION DEPOSITS IN THE GAP AREA.
- (3) The terminal well may only be cleaned with a felt swab saturated with isopropyl alcohol, using caution not to damage the terminal button.

## **INSPECTION.**

- (1) Visually check for mechanical damage. Reject igniter for the following conditions: signs of impact damage, connector well insulator or firing end semiconductor is cracked or loose, terminal button exhibits heavy erosion or pitting.
- (2) Check firing end shell for chafing or fretting wear. This wear is not to exceed .015" for wear more than one-half the circumference of the shell.
- (3) Reject if shell body is swollen or distorted.
- (4) Check igniter plug for electrical erosion. Use Champion CT494 gauge to determine if wear exceeds .300" maximum. Reject igniter if measurement is greater than .300".



## **TESTING.**

- (1) Spark Test. Test at normal open air pressure using standard engine ignition unit, including shielded lead and terminal fittings.
- (2) Connect ignition unit to igniter.
- (3) Clamp igniter with firing end in the upward position.
- (4) Turn "ON" ignition unit. Wait 30 seconds. (If misfiring or irregularity in spark occurs, discard igniter).
- (5) Turn "OFF" ignition unit.

**WARNING:** THE OUTPUT OF THIS IGNITION SYSTEM IS SUFFICIENT TO CAUSE A LETHAL ELECTRICAL SHOCK. DO NOT TOUCH ANY EXPOSED OR LIVE PORTION. ALWAYS DISCONNECT LEADS FROM INPUT POWER SOURCE AND WAIT AT LEAST ONE MINUTE TO PERMIT STORED ENERGY TO DISSIPATE BEFORE WORKING WITH IGNITION.

- (6) Wait at least one minute. Disconnect igniter from ignition unit and unclamp igniter.