



Aviation Technical Bulletin

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CHAMPION CH34687A

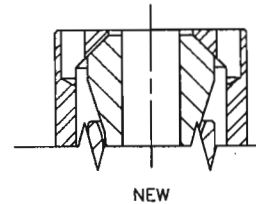
The CH34687A is a low voltage series igniter used in Pratt & Whitney-Canada PW 100 series engines. A semiconductor material bridges the electrodes and is required for proper function of ignition. This igniter incorporates a button-style contact and deeper terminal well to improve conductivity and prevent flashover. It also incorporates provisions for venting.

CLEANING

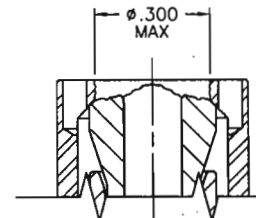
1. Wipe combustion deposits from exterior with a lint-free cloth.
2. DO NOT DISTURB THE COMBUSTION DEPOSITS IN THE GAP AREA.
NOTE: If gap area deposits must be removed for a closer inspection, they may be removed by a wood scraper and light pressure. DO NOT TOUCH SEMICONDUCTOR SURFACE DEPOSITS IN THE GAP AREA. They aid proper igniter operations.
3. The terminal well only, may be cleaned with a felt swab saturated in methylethylketone (MEK) No. 383, or isopropyl alcohol, using caution not to damage the terminal button.

INSPECTION

1. Visually check for mechanical damage. Reject if it shows impact damage, if connector well insulator or firing end semiconductor is cracked or loose, or if terminal button exhibits heavy electrical erosion or pitting.
2. Check firing end shell for chafing or fretting wear. This wear is not to exceed .015 inches 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. Using Champion CT494 gauge to determine if wear exceeds this measurement, reject if wear is greater than .300 inches MAXIMUM. SEE ILLUSTRATIONS.



NEW



USED

DWG ID: J0104-1.DWG

TESTING

1. Spark test. Test at normal open air pressure using the standard engine ignition unit, including the shielded lead and terminal fittings.
2. Connect the ignition unit to the igniter.
3. Clamp the igniter with the firing end up.
4. Switch on the ignition unit. Wait 30 seconds. (If misfiring or irregularity in spark occurs, discard the igniter.)
5. Turn off the 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 UNIT.
6. Wait at least one minute. Disconnect the igniter from the ignition unit; unclamp the igniter.

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