



# AVIATION TECHNICAL BULLETIN

Champion Spark Plug Company

P. O. BOX 910, TOLEDO, OHIO 43601

ROUTE TO	
SERVICE MANAGER	
SALES MANAGER	
BULLETIN BOARD	

April 22, 1985

NO. 85-6

## CHAMPION CH31701A IGNITER

The CH31701A igniter is a high voltage igniter which can be serviced in the same manner as an aviation spark plug. This igniter is used in Garrett's TPE331-14 engine.

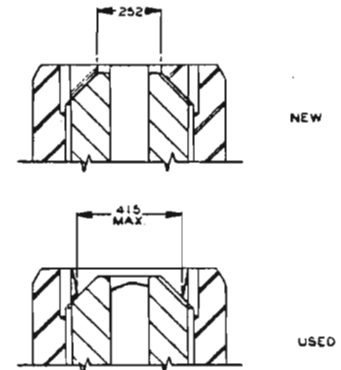
### CLEANING

1. Abrasive-clean the firing end enough to remove deposits.  
NOTE: Be sure cooling-air inlet holes are clear of all deposits after cleaning.
2. Clean terminal well with a felt swab saturated with Stoddard Solvent, wood alcohol or methylethylketone.

### INSPECTION

Reject igniter for the following reasons:

1. Visually check for mechanical damage. Reject if it shows impact damage, or if connector well or firing end insulator is cracked or loose.
2. Reject if firing end shell body is swollen or distorted.
3. Check igniter plug for electrical erosion. If erosion is equal to, or greater than the measurement shown, reject the igniter.



### 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, then test fire. Allow the igniter to fire consistently for 15 seconds. (If misfiring or irregularity in sparking 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 to elapse, disconnect the igniter from the ignition unit, unclamp the igniter.

JTQ/mf

\*\*\*