

T12117

## INSTRUCTIONS

### "C" SPARK - Test of Voltage & Ignition System Condition

Ignition spark is a major key to a smooth, powerful, reliable running engine. Prime requirements are adequate voltage under load and proper polarity.

The air gap the spark can jump is a simple test of the voltage and condition of the coil, points, condenser, and total ignition system. Proper polarity can be determined by a "SPARKLITE", described in a MODEL A TRADER article<sup>1</sup>.

The ignition system normally fires the spark plugs at about 10,000 volts. A good system should develop an excess, so there is a reserve of approximately 10,000 volts for worst ignition requirements. A wrong spark polarity requires approximately 5000 more volts at the spark plug for plug firing than does the correct polarity and thus decreases the voltage reserve.

### To use the SPARK TESTER

1. With the ignition switch OFF, install the TESTER projecting ferrule into the distributor center cavity.
2. Insert the coil wire into the TESTER brass cup. The "C" SPARK can also be installed between the distributor and a plug, or a plug wire and ground, if desired.
3. With the insulating wooden probe, adjust the TESTER for no gap.
4. Start the engine and let it idle. Slowly open the air gap while observing the sparks. The engine should run with NO MISSES at an opening of at least 10,000 volts. Missed sparks indicates problems in the ignition system; low battery, defective coil, bad condenser, resistive points, wiring, etc.
5. Remove the "C" SPARK and return the ignition system to its normal connections.

An additional use of the "C" SPARK is to clear and start engines that are "flooded" with gasoline. The "C" SPARK is opened to approximately the 10,000 volt setting and the plugs usually clear and run the engine when normally cranked.

<sup>1</sup>B.W. Abrams, "So It Won't Start", *MODEL A TRADER*, Vol.1, No.8, 1991, pg. 2. Copies of the referenced article may be ordered from MODEL A TRADER, 1247 Argonne Road, South Euclid, OH 44121. Include \$1.00 postage and handling for each article requested.