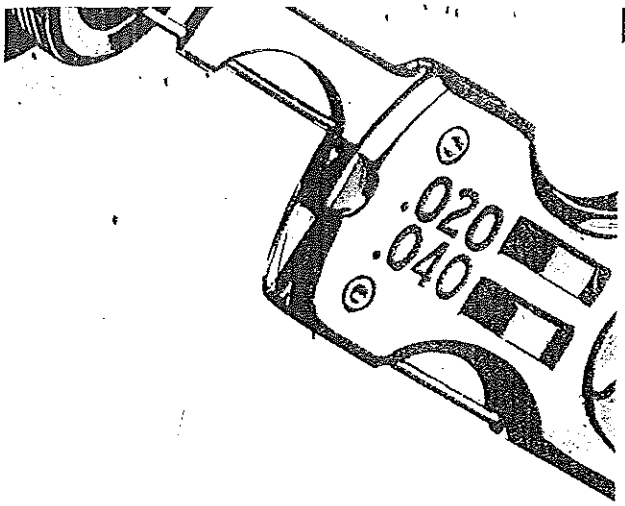


Measuring and correcting the spark plug gap. Never bend the center electrode or you will crack the porcelain. Courtesy AC Spark Plug Division, General Motors Corporation.

TESTING AN IGNITION COIL

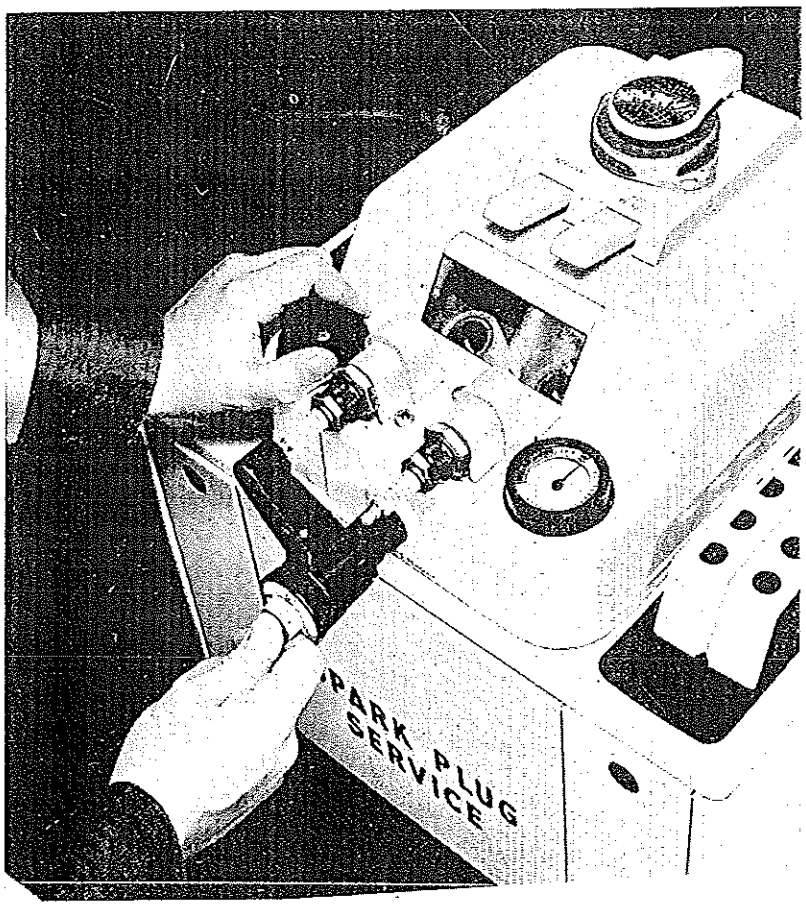
There are three ways to test the output of a coil, two of which are quick but not accurate. A third method employs accurate testing equipment. The first two methods are generally used to locate the trouble, the third to verify it.

Tools and Equipment

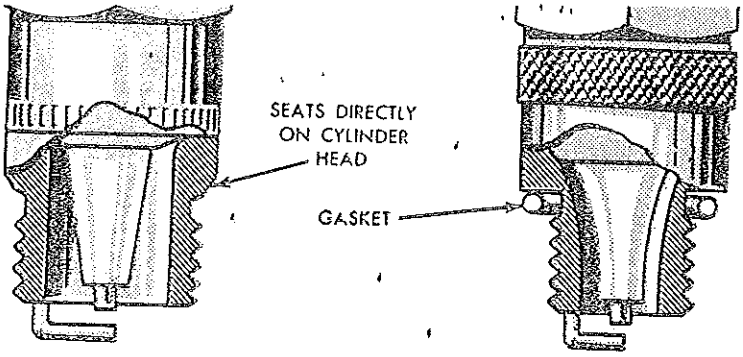
Insulated screwdriver; Allen E-1403 Coil-Condenser Tester; assorted coils.

Procedure

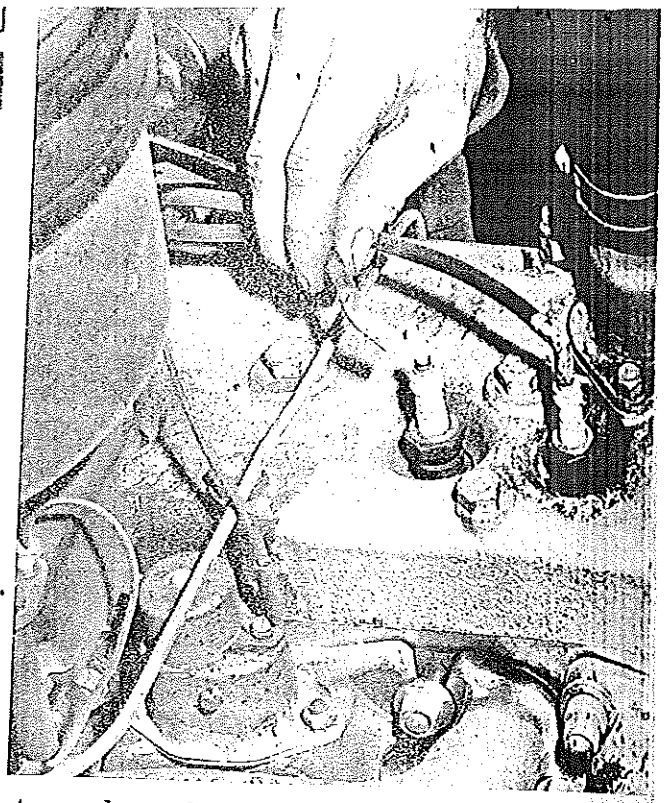
1. For the initial test, remove a spark plug wire and hold it ½ inch from the base of the plug. Start the engine.



The insulated handle resting on top of the left hand spark plug contains a high voltage contact. Courtesy Champion Spark Plug Company.



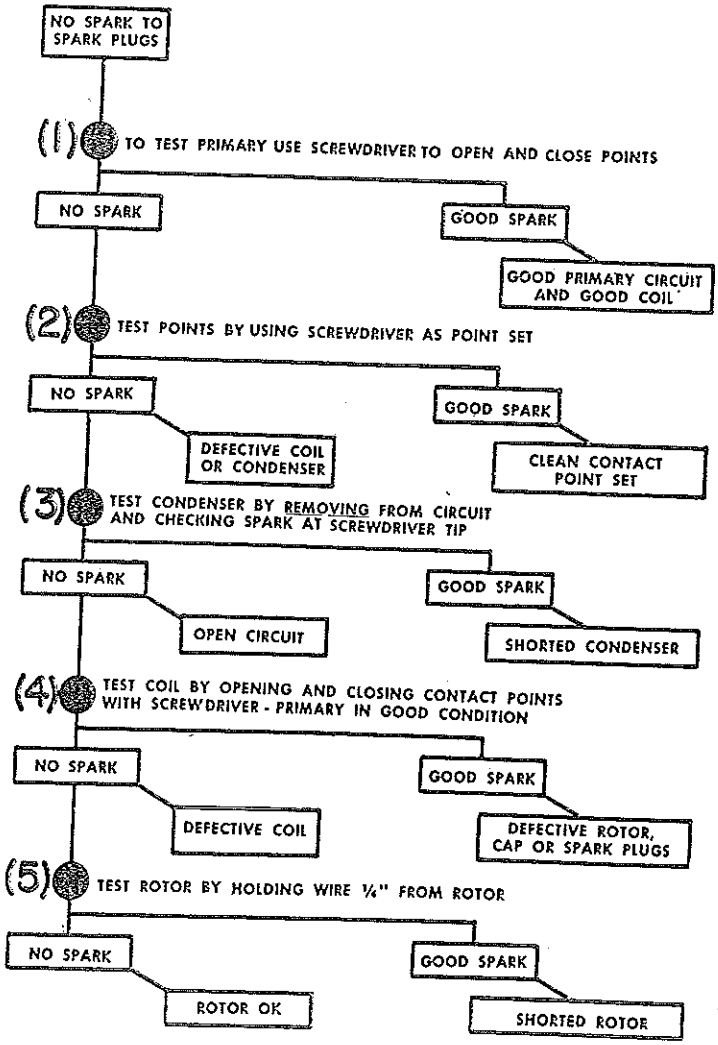
Square shoulder spark plugs require a gasket; the taper-seated types do not. Courtesy Lincoln Division, Ford Motor Company.



A good spark should jump with the engine idling.

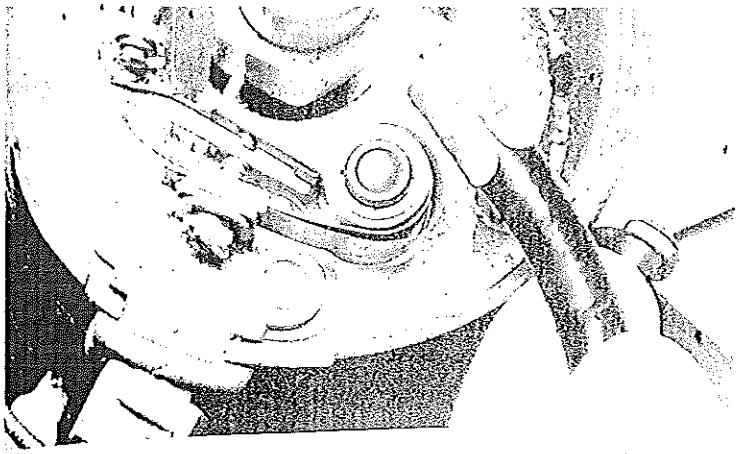
If the spark jumps this gap with the engine idling, the coil is good. However, because this is a check on the entire ignition system, a weak spark here means ignition trouble but not necessarily coil trouble.

Troubleshooting the ignition system.

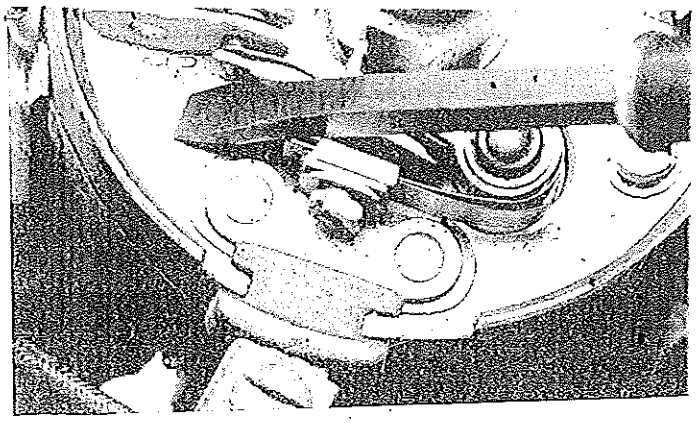


2. The second test is to remove the center wire from the distributor cap. Turn on the ignition switch. Remove the cap and rotor. Place a piece of insulation between the points. Hold the center coil wire ½ inch from any ground. Slide a screwdriver up and down while making contact with the insulated point. The tip of your screwdriver is touching the base plate and you are using it as a set of points. A long high-tension spark means a good coil. A weak spark means ignition trouble but not necessarily coil trouble. This second test is valuable because it eliminates one of the most common possibilities—burned ignition points.

3. To test the coil, remove it from



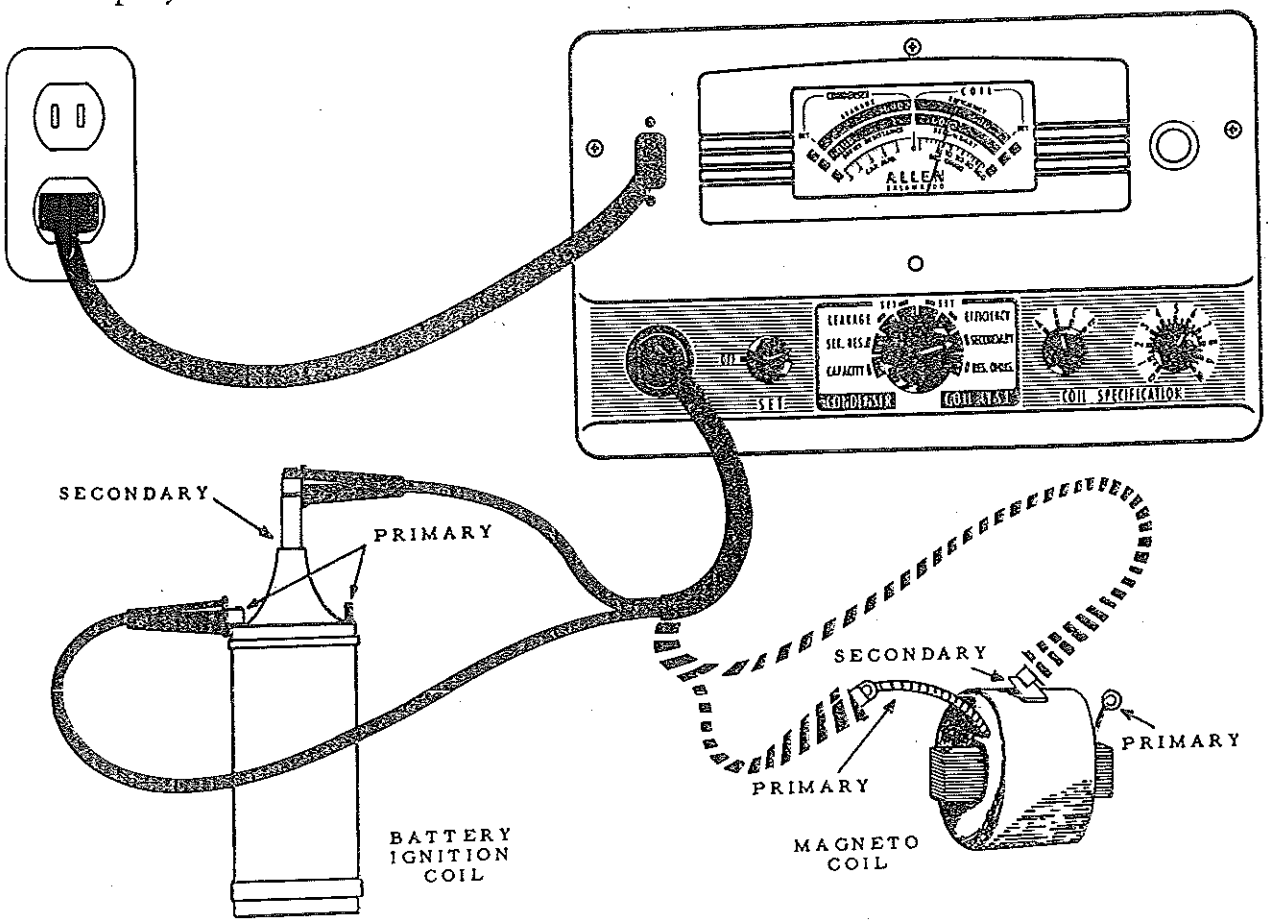
Operating the points with a screwdriver.



By insulating the points, a screwdriver can be used to take the place of a defective point set.

the car and attach the test lead clips to both primary terminals.

4. Adjust the meter needle to *zero* with the *set control* turned to the *off* position.

5. Turn the *selector switch* to the *coil set* position and adjust the *set control* so that the meter needle rests on the *set* mark.

Connecting an ignition coil to a tester. Courtesy Allen Electric & Equipment Company.