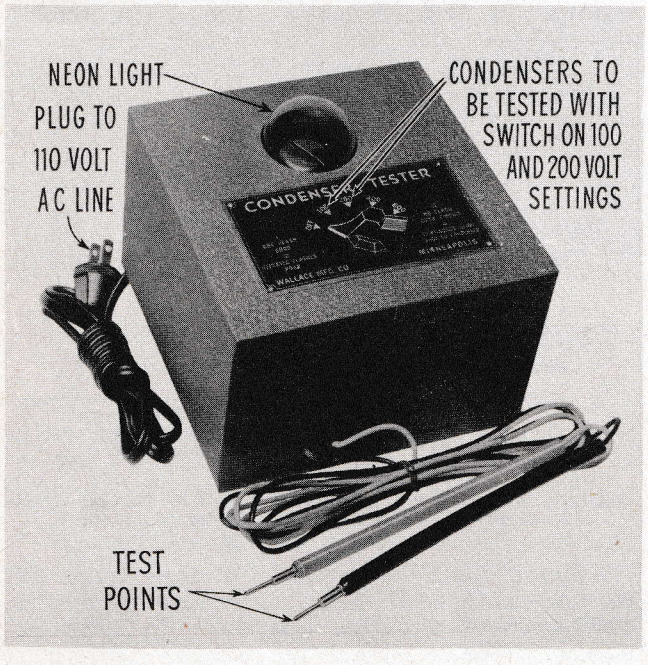
The Condenser

All metal surfaces contacting the condenser should be thoroughly cleaned to insure a good ground. See that condenser is pushed down as far as it will go before tightening the clamp. Refer to Page 11, Illust. 15, Items "E" and "D" for instructions on the proper positioning of the lead wires to condenser terminal screw. It is very important that these wires be positioned as shown in the illustration to prevent "shorting" or "grounding." Condenser as furnished for replacement does not include condenser nut (10-32) which must be obtained separately.

Testing Condenser



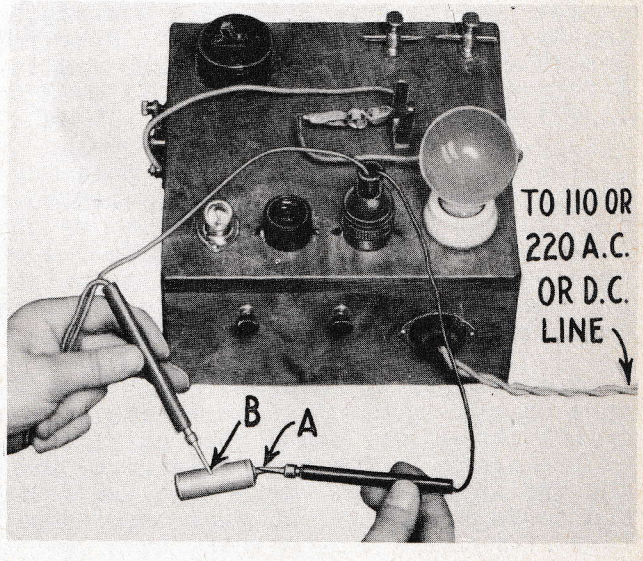
ILLUST. 23--NEON CONDENSER TESTER S.E.-1064.

A sensitive Neon tube type condenser tester is available, which will conclusively show up defects in condenser that cannot be indicated with ordinary test equipment. This Neon condenser tester operates on a 110-volt A.C. current. A special switch on the box allows for testing at four different voltages, ranging from 100 to 600 volts. To determine the exact condition of any condenser, use only the 100 and 200-volt test settings. The use of the 400 and 600-volt test settings will in no way injure the condenser being tested, neither will the readings of the test be as accurate as when using the two lower voltage settings.

Hold one test point on the condenser terminal, the other on the outer metal housing of the condenser. If infrequent flashes occur in the Neon tube with the switch set on the 200-volt position and the tube flashes only for initial charge with the switch set on the 100-volt position, the condenser will pass satisfactorily. If the condenser gives continuous flashes at 200 volts, it should be discarded even though it tests satisfactorily at 100 volts.

This does not apply to the condensers used in the E-4A magnetos. For an E-4A condenser use only the 100 volt test. If satisfactory at this voltage, condenser may be used in the magneto, even though it may flash continuously at the 200 volt test. Good performance is assured when using an E-4A condenser meeting the 100 volt specification.

The Neon condenser tester can be secured by ordering under SE-1064 from any IHC Branch House.



ILLUST. 24--TESTING CONDENSER WITH ELECTRIC TEST SET.

Have a 60-watt, 110-220-volt bulb screwed into the socket inside the test set, and a 15-watt, 110-220-volt bulb screwed into the socket on top of the test set.

Remove the condenser from the magneto and test for short circuit by placing one test point on the terminal screw "A" and the other on the outer metal housing of condenser "B," as shown in illustration. If the condenser is not short circuited, the test lamp will not light.

The test for capacity consists of charging the condenser by holding test points on condenser as shown in illustration and then immediately discharging it by removing test points and placing the side of one of the test points in