

glow brightly. To verify this, insert test probes into "Test Light" jacks and touch the tips together. Test light will glow full brilliance then.

2. TESTING FOR GROUNDS, CONTINUITY AND OPENS:--

Remove appliance plug from tester. With the 3-way switch in "Test Light" position, use your test leads for continuity checking. Touch one probe to either terminal of line cord of appliance and other probe to frame of appliance. If test light lights you have a ground indicated. The test lamp should not light on this test if appliance is well insulated and has no ground.

When the test light lights, this indicates there is a complete electrical circuit. Use a $7\frac{1}{2}$ volt or 25 volt bulb in this test.

CAUTION:--

Your test leads should be treated as "live" or "hot". They are not in direct connection to the 110 volt line, but in series with the test lamp. If a 25 watt lamp or less is used as test light, there won't be enough current passing thru the test leads to severely shock you, or run a motor. But should you have a heater cone or a 200 watt bulb in test light socket, a sufficient amount of current will pass thru the test leads to run a small motor and could cause you a severe shock. So be careful in handling them.

3. TESTING LIGHT BULBS, FUSES, ETC.:--

Use your test leads for this. If the test light lights up, the circuit is good. Radio tube filaments, flashlight bulbs, mogul base light bulbs, etc., can be tested also.

4. ACTUAL OPERATING TEST:--

Set 3-way switch to test light position. Plug appliance into tester. Turn appliance switch "on" if equipped with switch.

Test light on instrument would light if appliance circuit is complete. Be sure meter switch is in "off" position.

Now set 3-way switch to 110 volt position. Appliance should run if O.K. On appliances of larger wattage the 2.5 volt indicating bulb will light, indicating current is passing thru appliance. Shunt will also get warm or hot.

Should appliance be equipped with automatic thermostat switch, such as an electric iron, toaster, etc., the indicating 2.5 V. bulb will go out when iron switch turns off. Will light up when switch turns on. This will indicate that automatic switch is operating.

Now by turning meter switch to "on" position the meter will show the actual current consumption of the appliance. This current consumption can be used to show the appliance owner what it actually costs to operate the appliance, by comparing it against the electric bill.

5. TESTING TWO OR THREE HEAT APPLIANCES.--

Most electric stoves, hot plates, etc., provide 3 or more degrees of heat.

Turn 3-way switch to "test light" position. Plug appliance into receptacle on tester. Now by inserting the proper wattage bulb into test light socket you can test the different heat positions of the appliance.

Use a 25 or 50 watt bulb. By turning the appliance switch to its different settings, such as "high", "Medium", "Low". The brilliancy of the test lamp will decrease. If no variation in the test lamp brilliance occurs, then there is