

it is fully charged, even though the insulation is perfect. As a consequence, the indicating pointer of the Megger Insulation Tester will initially fall, subsequently rising to the correct insulation value.

If, moreover, the applied voltage varies, the generator of the insulation tester will alternately charge and discharge the capacitance, with the result that the pointer reading will be unsteady.

The generators in Series 3 Mk. III instruments have special voltage limiting features in their internal circuitry to keep the output voltage relatively steady over a range of handle speeds. This feature is also present in the Major Megger Tester with the addition of an extra stabilizing circuit to give even closer limitation.

Continuity Testing

This may be carried out by using the continuity ranges of our combined insulation and continuity testers or, alternatively, our Megger Circuit Testing Ohmmeters.

Note: These tests must be made with the circuit "dead".

With Megger Insulation and Continuity Testers, set the selector switch to the continuity range and connect up as described on pages 31 and 33. Turn the crank at about 160 r.p.m. and read the scale.

With the Battery Megger Tester set the selector switch to " Ω " (see page 40) and, without connecting the test leads, adjust the pointer to the 'set' position on the centre scale by turning the adjusting screw (figure 27). Then connect up the leads as described on pages 31 and 33 and provided the neon lamp is not alight, take the reading.

Megger Circuit Testing ohmmeters have two ranges per instrument. Set the switch to the appropriate range, applying the leads as before, and the instrument is ready to make the test. Operation is by a push-button situated on the test prod of a type 'S' instrument or on the instrument itself in case of the type 'B'. There is no preliminary adjustment as the circuit testing ohmmeter automatically compensates for changes in battery voltage.

TESTING ELECTRICAL APPLIANCES

Connect the tester as shown in Figure 5 and make the following four tests:

Test 1: This measures the insulation resistance between the electrical element and the frame.

Test 2: This tests the insulation of the flexible only.

Test 3: This shows the continuity of the electrical circuit.

Test 4: This tests the earth continuity conductor.

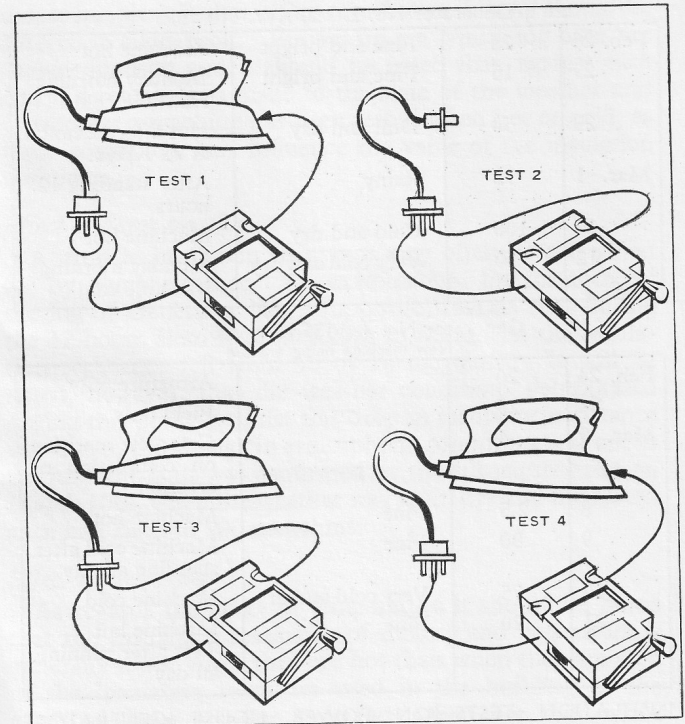


Figure 5. Testing an electrical appliance