

Figure 25. The Battery Megger Tester arranged for insulation tests

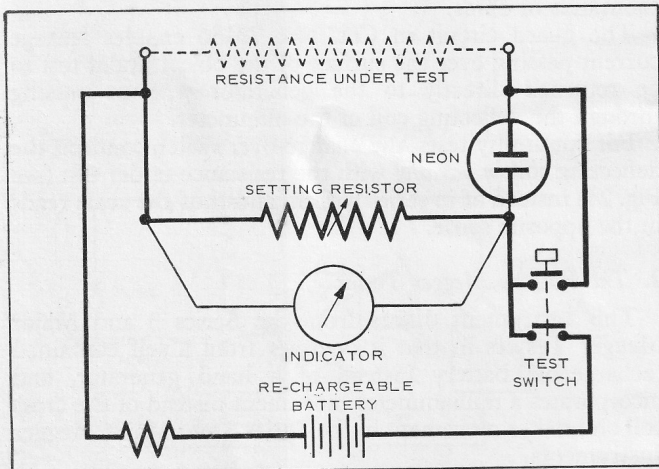


Figure 26. The Battery Megger Tester arranged for continuity tests

For insulation tests (Figure 25) the current from the 9 volt battery passes through the setting resistor to a transistor-converter comprising two transistors which modulate the current, a step-up transformer and a voltage doubler rectifier to produce the 500 V d.c. test voltage. The adjustable setting resistor is to compensate for changes in battery voltage. The milliammeter indicator is in series with the resistance under test.

For continuity tests (Figure 26), the converter is not used, and the operating voltage is that of the 9 volt battery. In this case the resistance under test is shunted by the setting resistor, and the milliammeter indicator is connected across these two parallel circuits.

The neon live line detector gives warning of inadvertent connection to a live circuit. It is short-circuited by the test switch which should therefore not be pressed if the neon lamp is alight.

For voltage tests the movement is connected across the supply and is in series with a resistor and a bridge rectifier for a.c. voltages.