

take *half* the value so obtained. The switch controlling the particular outlet must be in the "closed" or "on" position.

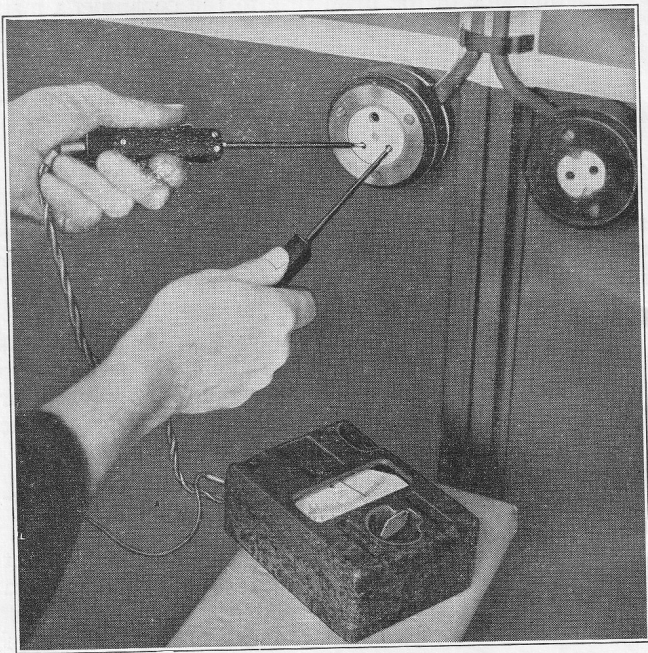


Figure 20. Measuring resistance of conductors, lead and return, with a Megger Circuit Testing Ohmmeter (main switch off)

Further investigation if high readings are obtained

In order to ascertain whether the high readings are due to bad earth-continuity, wrong polarity or to both causes, proceed as follows:—

Connect one lead of the testing instrument to the conduit at some other point where good earth-continuity has been proved (see Figure 10).

Connect the other lead in turn:

- (a) to the switch box or to the earth socket of the outlet under test, to check the earth-continuity.
- (b) to the bridge piece of the "closed" switch or to the "L" socket of the 3-pin socket-outlet, to check the polarity.

—In each case a reading of $\frac{1}{2}$ ohm or less should be obtained if the earth-continuity and polarity are correct.

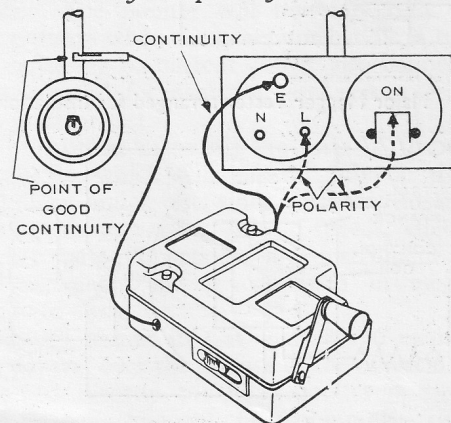


Figure 21. Tests to ascertain if a high reading is due to bad earth-continuity or wrong polarity. Resistance should not exceed half an ohm

MEGGER TESTERS. Principles of operation

1. *Major Megger Testers and Megger Insulation and Continuity Testers, Series 3, Mk. III.*

Both these testers contain A.C. generators with static tectifiers, the Major Megger has, in addition, an extra stabilizing circuit to minimise the effect of changes in handle speed which are already small in the Series 3, Mk. III. All Major Megger Testers except the high range type 70156 have continuity ranges in addition to the four insulation ranges. The high range type 70156 has