

BATTERY
“MEGGER”
TESTER

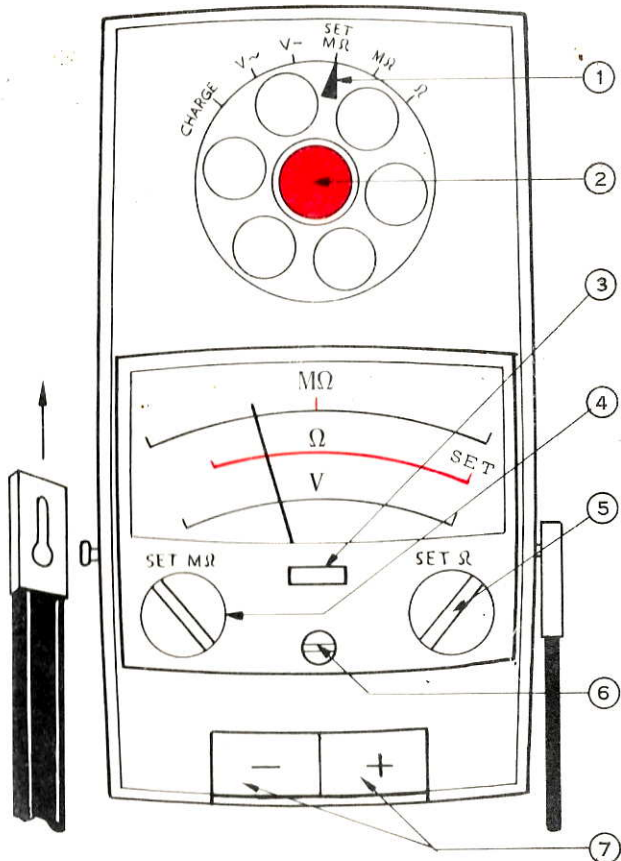
Instructions
for use

Trade **“MEGGER”** Mark

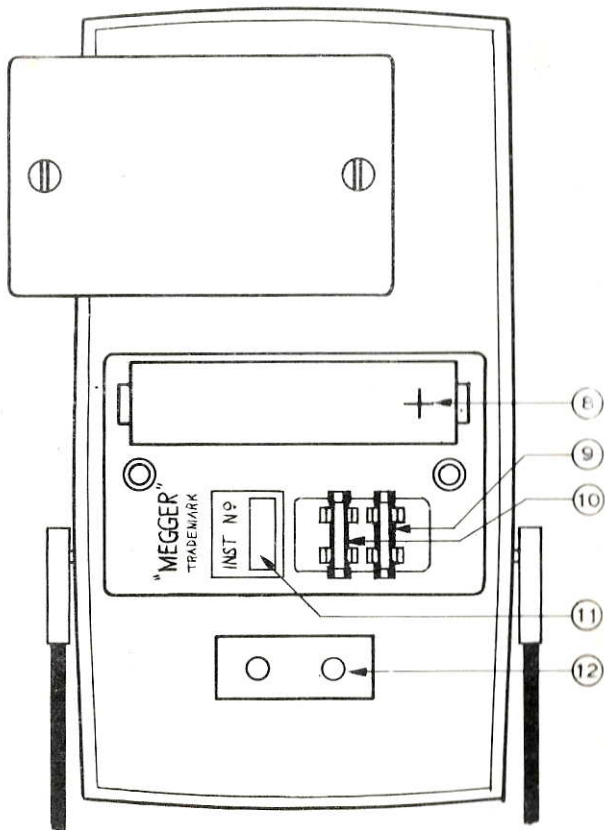
EVERSHED & VIGNOLES LIMITED
ACTON LANE WORKS, CHISWICK, LONDON, W.4

Telegrams: Megger, London Telex.

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1. SELECTOR SWITCH
2. TEST BUTTON
3. NEON LAMP
4. MEGOHM RANGE ADJUSTER
5. OHM RANGE ADJUSTER
6. ZERO ADJUSTER



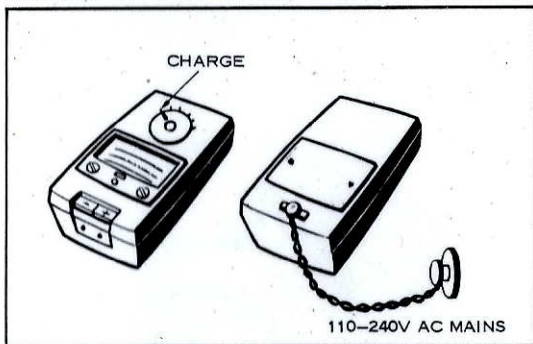
7. TERMINALS
8. RE-CHARGEABLE BATTERY
9. FUSE IN CHARGING CIRCUIT
10. SPARE FUSE
11. INSTRUMENT SERIAL NUMBER
12. BATTERY CHARGING CONNECTION

To remove the instrument from the case, detach the carrying strap by sliding the brass buckles in the direction of the arrow (see Figure 1).

2. THE BATTERY

The tester operates from a 9 volt rechargeable battery which is held by spring clips in a special compartment. It may be inspected by removing the plate on the underside of the instrument (see Figure 2).

The battery is sent out in a fully charged condition and, if not used, it will still retain 60% of its charge at the end of 6 months. If the adjustments 4(i) and 5(i) cannot be made, this indicates that the battery requires recharging.



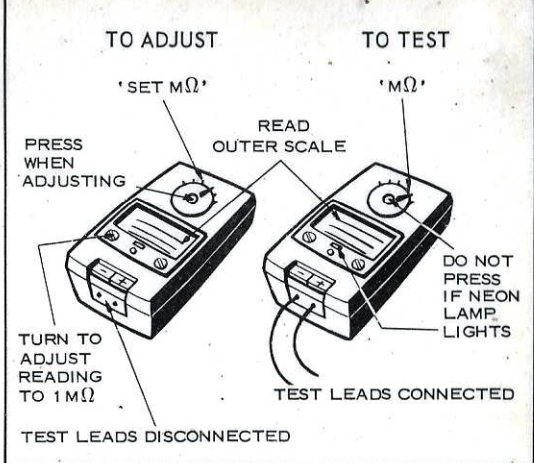
To charge the battery.

Set the selector switch (1) to "CHARGE" and plug into a.c. mains (any voltage between 110 and 240 volts) using the socket provided. On 230 volts the time taken for a full charge is about 12 hours and proportionately longer for lower voltages.

The charging circuit includes a 100 mA fuse which (together with a spare) is located in the battery compartment (see Figure 2).

3. ADJUSTING THE MOVEMENT ZERO

Before making any test, check that the movement pointer rests on the zero of the voltmeter scale (inner scale). If not, bring it on to zero by turning the adjuster (6). The movement has a sensitivity of 1 mA for full scale deflection.



4. INSULATION TESTS

(i) *To adjust.*

Before connecting the test leads, set the selector switch (1) to "SET $M\Omega$ ". Press the red test button (2), and the pointer should indicate " $1M\Omega$ " on the outer scale. If not, turn the adjuster (4). If an adjustment cannot be made, the battery requires charging.

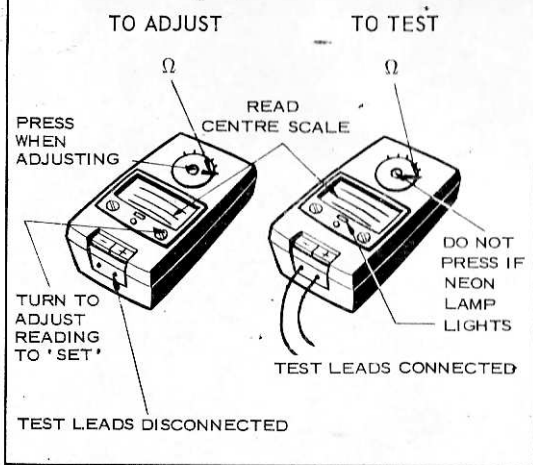
(ii) *To test.*

Set the selector switch (1) to " $M\Omega$ ". With the circuit to be tested "dead", connect the testing leads as follows:-

- (a) For an insulation test to earth, connect the - terminal to the circuit and the + terminal to a good earth.
- (b) For a test between conductors, connect a test lead to each conductor.

WARNING: If the neon indicator lights up the circuit is still "live". Do not press the button (2).

If the neon indicator does *not* light, press the button and take a reading on the outer scale.



5. CONTINUITY TESTS

(i) To adjust.

Before connecting the test leads set the selector switch (1) to " Ω ".

Press the red button (2) and set the pointer to "SET" on the red, centre, scale by turning the adjuster (5). If this cannot be done the battery requires charging.

(ii) To test.

Connect the test leads to each end of the resistance under test.

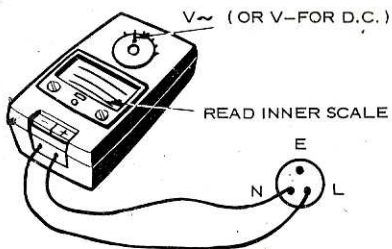
WARNING: If the neon indicator lights up the circuit is "live". Do not press the button (2).

If the neon indicator does *not* light, press the button and take a reading on the red, centre, scale.

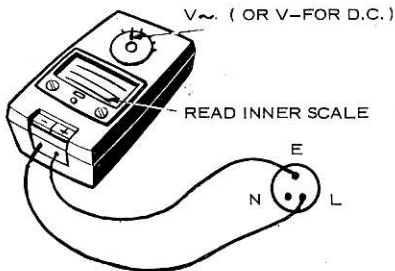
6. VOLTAGE TESTS

Set the selector switch (1) to " $V\sim$ " for a.c. and to " $V-$ " for d.c. tests. The neon indicator will not light provided the selector switch (1) has been correctly set to " $V\sim$ " or " $V-$ ". Read the inner scale. It is unnecessary to press the test button.

VOLTAGE TEST



POLARITY TEST



7. POLARITY TESTS

To check polarity on a "live" circuit, set the selector switch as for a voltage test.

SAFETY NOTE: The test button (2) can be locked in the "ON" position by pressing and turning it clockwise. This arrangement may be convenient for certain tests as it leaves both hands free, but the instrument should not be left with the button locked down because in this position the neon safety indicator is short circuited and will not give warning of "live" circuits, and the battery may discharge.

Instruction books for tracing insulation, continuity and polarity faults are available on request.

9. SPARES

In all correspondence concerning this tester please quote the instrument serial number which will be found in the battery compartment (see Figure 2).

Please also quote the following part numbers when ordering spares:-

| | | |
|--|----------|---------------------------------|
| Battery | RZ.34855 | |
| Testing leads | RY.11986 |] Complete set. RY.12154. |
| Probes | RZ.34815 | |
| Crocodile clips | RZ.34896 | |
| Charging lead and plug | RY.12024 | |
| Fuse (100mA miniature HRC ceramic fuse, Belling-Lee Type L.754, to RCS.261 and BS.88) | | |
| | RV.93949 | |
| Leather case | RX. 9248 | |
| Carrying strap | RY.11944 | |

In using this instrument you enjoy the benefits of over half a century's experience and continuous research into the manufacture and use of electrical testing instruments.

The Battery "MEGGER" Tester is the most advanced instrument of its type available and will fulfil all the general needs of the electrical installation or maintenance engineer. If you require any advice on its use you are invited to contact our free Advisory Service at Chiswick.