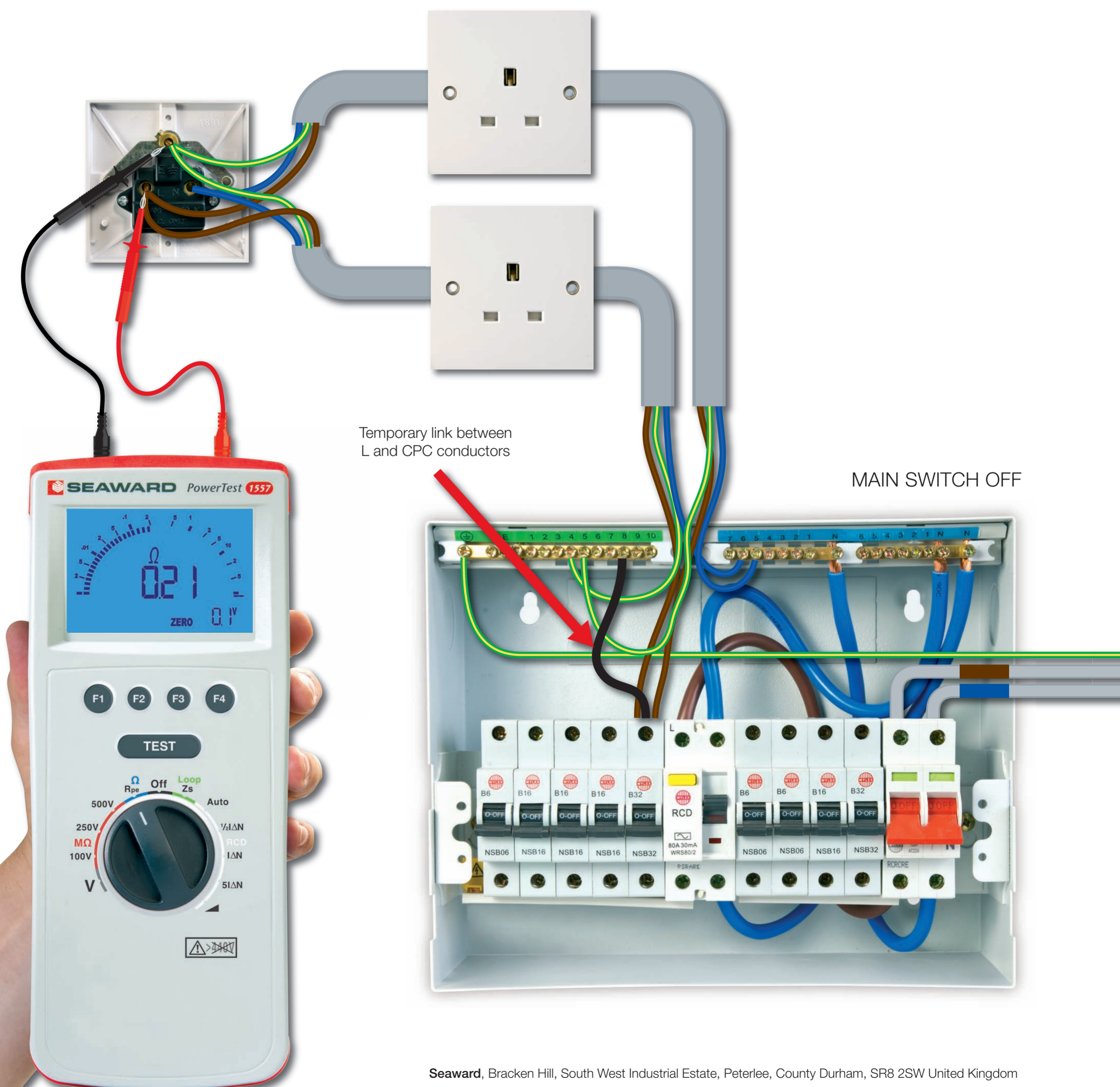


Measuring R1 + R2 for compliance with Regulation 612.2.1

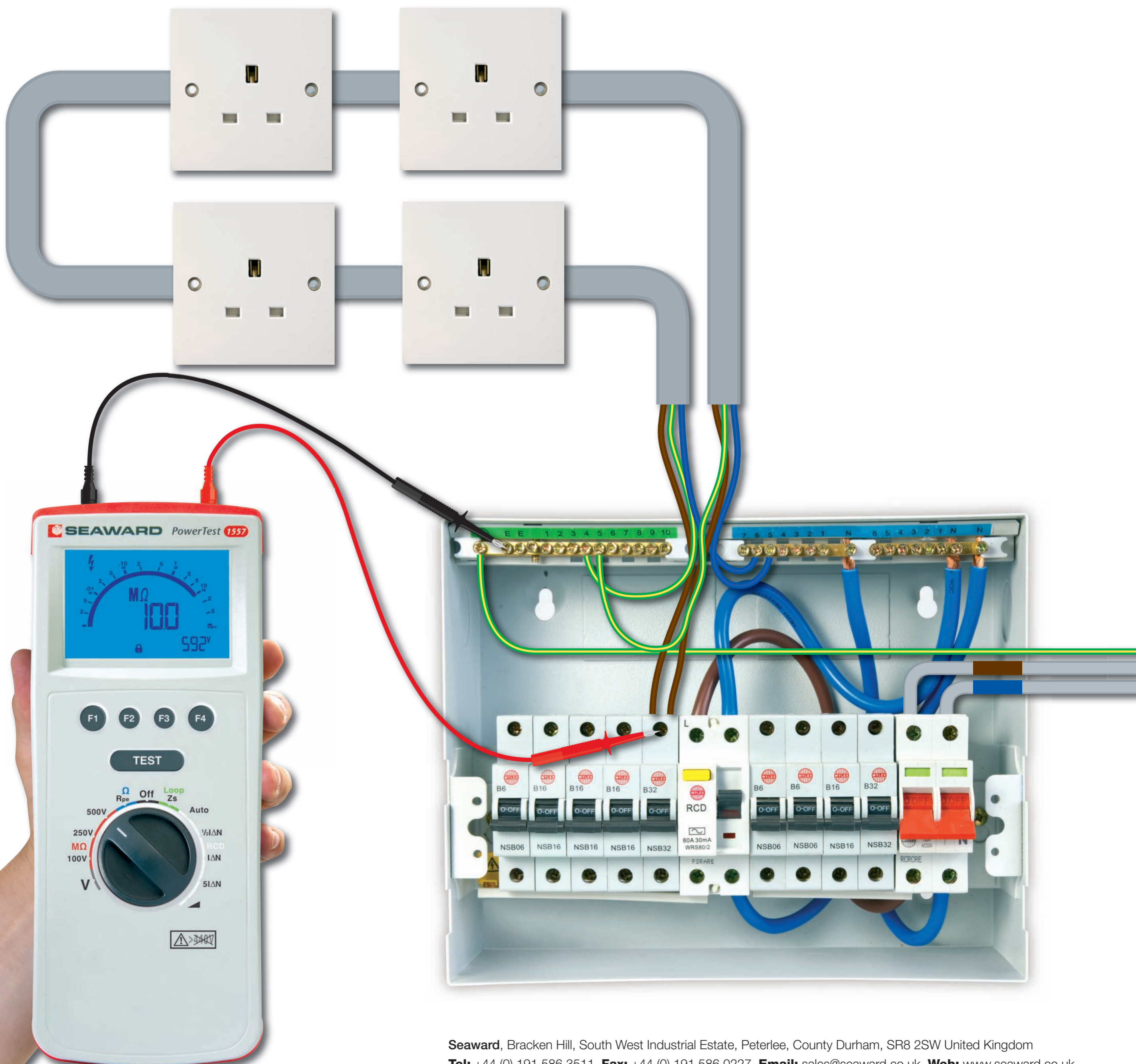
A temporary link is made between the line and CPC conductors at the consumer unit.
The resistance measured between line and CPC at the further point on the ring is R1 + R2

NOTE: The link must be removed before re-energising



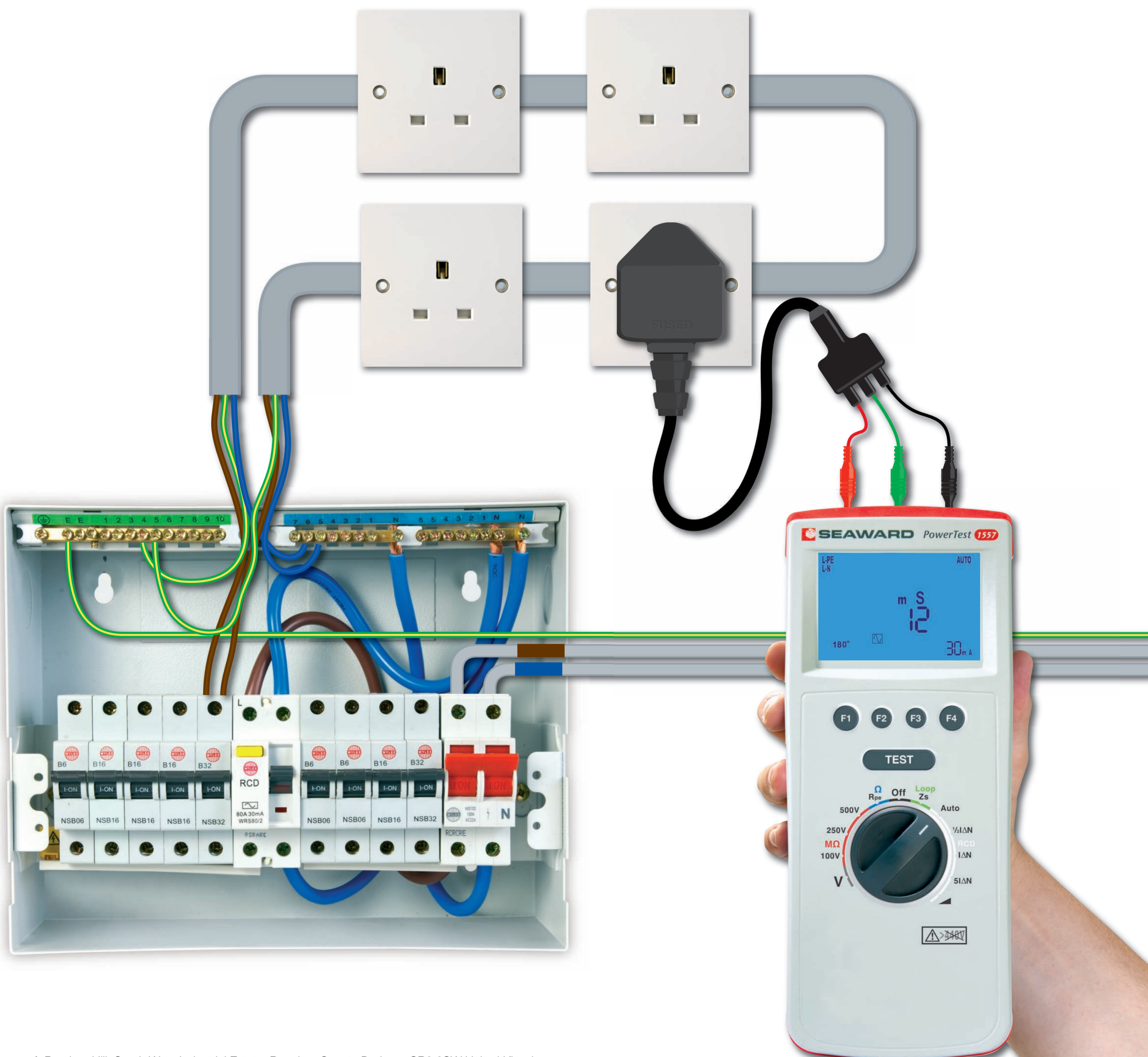
Measuring insulation for compliance with Regulation 612.3

- Measurements are made between: Line and earth, neutral and earth and line and neutral.
- All lamps are removed and equipment or appliances disconnected.
- All switches in circuit are in the ON position.
- For circuits up to and including 500V the test voltage is 500V and the measured insulation resistance should be at least 1Mohm



RCD testing for compliance with Regulation 612.13.1

- Measurement of RCD trip is made at a mains outlet on the RCD protected ring circuit.
- The PowerPlus 1557 allows automatic measurement of trip time at $\frac{1}{2} I_{\Delta n}$, $I_{\Delta n}$ and $5 I_{\Delta n}$ at 0 and 180 degree phase whilst the operator resets the RCD at the consumer unit.



Measuring of the external earth fault loop impedance Z_E at the origin of the supply for compliance with Regulation 612.9

- The consumer unit must be proved to be isolated before disconnecting the earth conductor.
- Z_E is measured between the incoming line and protective earth.
- The protective earth conductor is not connected to the main earthing terminal (MET) to avoid the possible influence of parallel earth paths.

