

Fig. 53. Connections for checking voltage drop—starter solenoid to starter

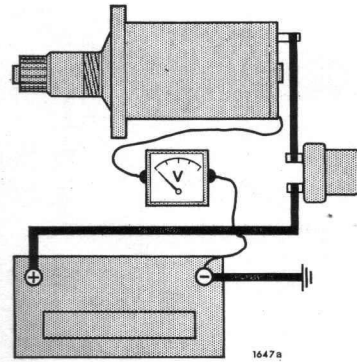


Fig. 54. Voltage drop on earth line

**3C. Voltage drop on cable and terminals—starter solenoid to starter**

Connect the voltmeter to the terminal on the starter motor and the terminal on the starter solenoid to which the starter motor cable is connected. Fig. 53. Operate the starter control. The reading should not be more than 0.25 volt.

If the reading is much above 0.25 volt the cable and/or terminals between the starter motor and starter solenoid are faulty.

If the reading is 0.25 volt or below carry out test 3 again, as an error has been made in the readings.

Note that the total voltage drop on the starter circuit must not exceed 0.5 volt for efficient operation.

Re connect the wire to the ignition coil when the tests are completed.

**4. Voltage drop on earth line**

Connect the voltmeter to the battery earthed terminal and the starter motor commutator end bracket. Fig. 54. Operate the starter control. The reading should not be more than 0.25 volt.

If the reading is much more than 0.25 volt check the earth cable terminal and the bolts securing the cable to the body and engine for cleanliness and tightness. If these are in order, check that there is clean connection between the starter motor flange, engine and starter fixing bolts.

**STARTER MOTOR**

**To remove and refit**

Disconnect the battery.

Disconnect the cable from the starter terminal.

Remove the mounting bolts and withdraw the starter motor.

Refitting is a reversal of the above operations.

Ensure that the spigot of the starter motor flange is correctly entered into the aperture of the bellhousing before tightening the securing bolts.