

Test Instruments

Voltmeter measuring range 0–15 V DC

Resistance measuring bridge

Testing the Control Unit

The voltage on the primary winding of the ignition coil is measured with a voltmeter.

Stop engine and switchoff ignition. Check whether contact breaker is closed. If not, rotate engine until contact is closed.

Connect black cable of voltmeter to ground connection, red cable to terminal 15 of ignition coil (Fig. 1).

Switch on ignition and read voltage on voltmeter.

Rated value: **2.6–3.5 Volt**.

Open contact breaker. The voltage should return to zero.

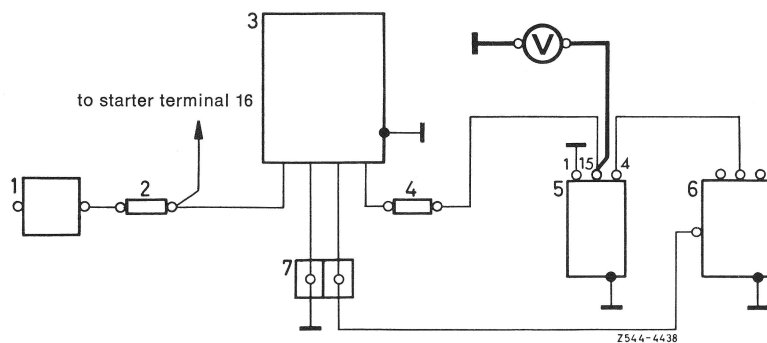


Fig. 1

- 1 Ignition starting switch
- 2 Pre-resistance 0.4 Ω
- 3 Control unit
- 4 Pre-resistance 0.6 Ω
- 5 Ignition coil
- 6 Ignition distributor
- 7 Cable connector

Testing the Ignition Coil

Disconnect all connections on ignition coil. The primary resistance between terminal 1 and 15 is

0.38–0.43 Ω at 20° C.

Connections 1 and 15 should have no ground connection.

Measure with conventional resistance measuring bridge. The Ohm ranges in a standard multiple measuring instrument are generally too inaccurate for such measurements.

At an ignition coil temperature of approx. 80° C the resistance value measured will be approx. 25 % higher.

Testing of Pre-Resistance

Disconnect connecting lines.

Check terminals for body contact. Measure resistance with a measuring bridge.

1. Rated value **0.4 \pm 0.05 Ω** at 20° C.
Resistance (2) between ignition switch and control unit.
2. Rated value **0.6 \pm 0.05 Ω** at 20° C.
Resistance (4) between control unit and ignition coil.