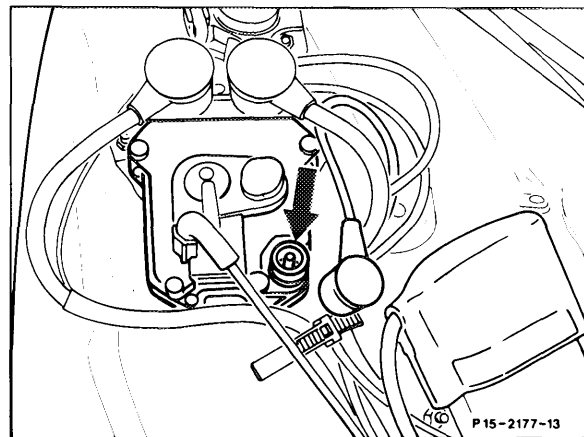


A. Safety Instructions

The increased demands of modern engines in respect of the ignition systems and the desire for zero maintenance have led to the standard implementation of electronic ignition systems.

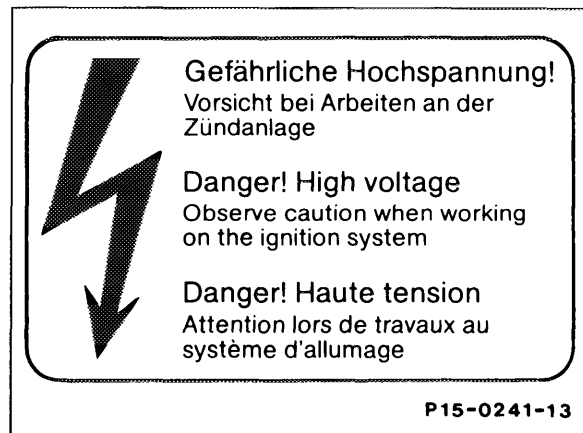
As a rule, the ignition capacities of electronic systems are higher than those of conventional systems with further boosts in capacity likely in future. Consequently, electronic ignition systems operate in a power range which may represent a hazard if contact is made with live parts or terminals (refer to warning plate).

Warning plate in engine compartment



For this reason, it is essential to strictly observe the safety instructions stated below when performing any work on electronic ignition systems (EZL):

- Before performing any work at starting speed, e.g. testing compression pressure or adjusting valve clearance, switch off ignition and detach control line (arrow) at control unit or plug protective connector, Part No. 102 589 02 21 00, onto the diagnostic socket.
- Persons with heart pacemakers should not perform any work on such ignition systems.
- Do not touch or disconnect any parts of the ignition system at starting speed or when engine running.



- Perform installation work on the ignition system or connection and disconnection of sensors at ignition cables only when engine not running and ignition switched off.
- Do not insert any intermediate pieces of built in sensors with bright metallic outer surfaces into the ignition cables, e.g. on cylinder No. 1.

B. Instructions for avoiding damage to ignition system

- **The control unit connectors must only be disconnected and plugged in when the ignition is switched off to avoid any damage to the electronic ignition control unit.**
- Do not connect a test lamp to terminal 1 of the ignition coil.
- Do not short terminals 1 and 15 of the ignition coil to ground, e.g. as an anti-theft protection.
- The threaded pins of the ignition coil have different diameters (M5 and M6) to ensure that the poles are not incorrectly connected.
- Install only genuine ignition system parts.
- Do not operate ignition system at starting speed unless the ignition components are completely connected.
- The load at the high-voltage end of the ignition system must be at least 2 k Ω (distributor rotor 1 k Ω , distributor cap per terminal 1 k Ω) to avoid any damage to the electronic ignition control unit. Do not install a 5 k Ω distributor rotor for interference suppression.

- The work listed below must not be performed at starting speed or when the engine is running:
 - Holding ignition cable 4 away from ground
 - Disconnecting spark plug connector
 - Disconnecting ignition cable 4 at ignition coil.
- The electronic ignition control unit is coated with heat-conducting paste on the back to improve heat dissipation and covered over with a heat-conducting protective foil. The protective foil must not be removed.
- If the short-circuit switch (cylinder comparison) is operated and the engine stops, the test cannot be conducted with this tester.
- When performing the separate ignition coil test, the load applied to the ignition coil must not exceed 28 kV to avoid damaging the ignition coil.
- If it is necessary to test the ignition spark when rendering breakdown assistance, this must only be performed with one spark plug at one cylinder ignition cable. Ensure good contact to ground of the spark plug. Pay attention to risk of electrocution!

C. Instructions for use of engine testers and test equipment

- Connect and disconnect voltage sensor clamps to ignition cable 4 and trigger clamps to ignition cable of cylinder No. 1 only when engine not running and ignition switched off.