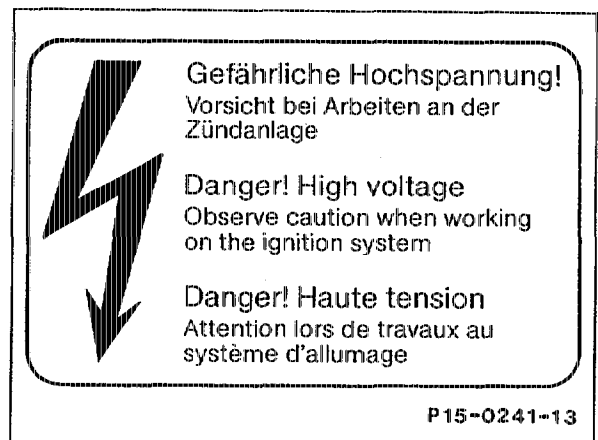


A. Safety precautions

Increased demands of modern engines in respect of the ignition systems and the desire for freedom of maintenance have led to standard introduction of electronic ignition systems.

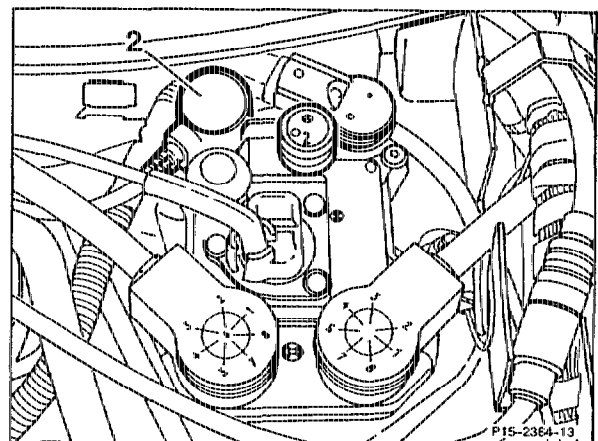
As a rule, the ignition capacities of electronic systems are higher than those of conventional systems. Further increases in capacity are likely. Consequently, electronic ignition systems operate in a power range which may be hazardous if contact is made with live parts or terminals (see warning sign).

Warning sign in engine compartment



For this reason, when working on electronic ignition systems (EZL), pay attention to the following safety precautions:

- When performing work at starting speed, e. g. testing compression pressure, switch off ignition and unplug control cable (2) at the EZL ignition control unit or plug protective connector 102 589 02 21 00 into the diagnostic socket.
- Persons with a heart pacemaker should not operate on this type of ignition system.
- Do not grasp and/or unplug any component of the ignition system at starting speed or when the engine is running.
- Do not perform removal and installation work at the ignition system or disconnect and connect sensors at ignition cables unless the engine is not running and the ignition is switched off.



Shown on engine 119

B. Notes regarding avoiding damage to the ignition system

- The connectors of ignition control units must not be unplugged or plugged in unless the ignition is switched off to avoid damaging the EZL ignition control unit.
- Do not connect a test lamp to terminal 1 of the ignition coil.
- Terminals 1 and 15 of the ignition coil must not be short-circuited to ground, e. g. as an anti-theft protection.
- The threaded pins of the ignition coil have different diameters (M5 and M6) to eliminate the risk of incorrect polarity.
- Install only genuine components of the ignition system.
- Do not operate the ignition system at starting speed unless all the ignition cables are completely connected.
- To avoid damage to the EZL ignition control unit, the load applied to the high voltage side of the ignition system must be at least 2 k Ω (distributor rotor arm 1 k Ω , distributor cap per terminal 1 k Ω). Do not install 5 k Ω distributor rotor arms for interference suppression.
- The following operations must not be performed at starting speed or when the engine is running:
 - Holding ignition cable (terminal 4) close to ground,
 - unplugging spark plug connectors,
 - unplugging ignition cable (terminal 4) at the ignition coil.
- To improve heat dissipation, the EZL ignition control unit is provided with heat conducting paste on the rear side and covered with a heat-conducting protective film. This protective film must not be removed.
- 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 providing breakdown assistance, this must only be performed with a spark plug at a cylinder ignition cable.
Ensure good ground contact of the spark plug.
Pay attention to risk of electrification!

C. Notes regarding use of engine testers

- Do not connect and disconnect voltage clamp to ignition cable (terminal 4) and trigger clamp to ignition cable of cylinder 1 unless the engine is not running and the ignition is switched off.
- If the short-circuit protection (cylinder comparison) is operated and the engine stops, the test cannot be performed with this tester.