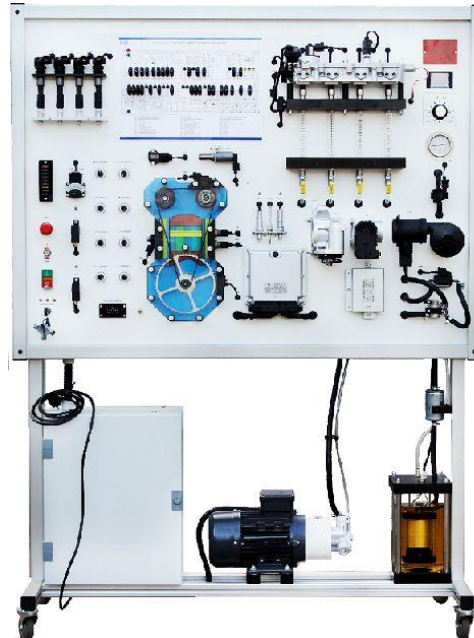




ENGINE CONTROL SYSTEM BOSCH MOTRONIC MED 7.5.10. TRAINER



DL DM36

LEARNING EXPERIENCE

This demonstration panel represents direct petrol injection (FSI) system MOTRONIC MED 7.5.10. Integrated engine control system shows different operation modes of the fuel injection/ignition system and the trainer is based on OEM components of Audi/VW.

GENERAL CHARACTERISTICS

Dim. mm approx (HxLxW) : 1800x1000x510
Weight approx. kg 150
Power supply: AC 220V $\pm$ 10% 50/60 Hz

ACCESSORIES

- Oscilloscope (Not included)
- Multimeter (Not included)
- OBD (Not included)

MAIN CHARACTERISTICS

The main characteristics and functions of the trainer are:

- Integrated engine control system with direct petrol
- injection (FSI).
- Visible work process of spark plugs.
- Easy access for high voltage measurements.
- Manual adjustment of the engine crankshaft speed.
- Monitoring operation of fuel supply system, injected fuel quantity, spray pattern quality, fuel pressure of the fuel pump.
- Low pressure fuel pump in a transparent tank which allows to see its operation.
- Complete electric wiring diagram of direct petrol injection system (FSI)
- Electric wiring diagram with built-in banana plug jumpers for measurements and simulation of system fault codes.
- Possibility to simulate more than 20 faults by disconnecting banana plug jumpers.
- Integrated simulators allow to change parameters of each system component:



- Lambda probe signal simulation
- Engine operation temperature simulation
- NOx sensor parameter simulation
- Exhaust gas temperature sensor simulation
- Intake manifold pressure sensor simulation
- Intake manifold flap regulation (vacuum pump is required; optional).
- Training board has an integrated TFT voltmeter.
- It displays voltage of different electronic system components:
- Exhaust gas recirculation potentiometer;
- Air-mass flow meter;
- Accelerator pedal position sender I;
- Accelerator pedal position sender II;
- Intake manifold flap potentiometer;
- Fuel pressure sensor;
- Throttle valve potentiometer I;
- Throttle valve potentiometer II;
- Intake manifold pressure sensor;
- Engine operation temperature sensor;
- Coolant temperature sensor;
- Exhaust gas temperature sensor;

The trainer has the following diagnostic and measurement features:

- Control unit diagnosis
- Control unit encoding/configuration
- Reading/erasing fault codes
- Diagnosis through OBD 16 – pin diagnostic connector
- Electronic control unit (ECU) identification
- Displaying the operating system parameters (live data)
- Activating the actuators (depending on the control unit)
- Throttle valve adaptation
- Possibility to measure the parameters of the system connecting to the banana connector (Oscilloscope and multimeter are required)
- Possibility to measure electrical signal parameters of each system component (such as sensor or actuator) (Oscilloscope and multimeter are required)
- Possibility to measure high voltage circuit of the ignition system (Oscilloscope and multimeter are required)