



ENGINE CONTROL SYSTEM M 3.8.X MOTRONIC TRAINER



DL DM35

LEARNING EXPERIENCE

This demonstration panel represents the multipoint petrol injection (MPI) system MOTRONIC M 3.8.X. 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±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 multipoint petrol injection system (MPI).
- 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.
- Built-in fuel pump in a transparent tank which allows to see its operation;
- Possibility to change the air/fuel mixture by the oxygen sensor signal simulator.
- Adjustable airflow rate simulator allows to demonstrate a work of mass-air flow meter and air temperature sensor.
- Complete electric wiring diagram of multipoint petrol injection system (MPI).





- 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.
- 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 by 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)