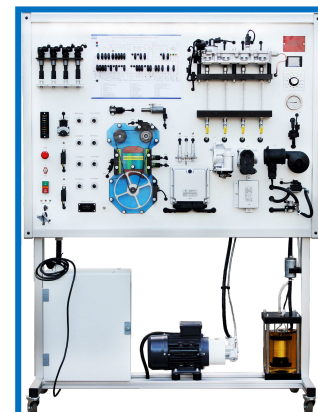


## Direct petrol injection training board – simulator

### Specifications

- Fully functional engine control system is installed in a mobile aluminum frame. This training board – simulator is specially designed to help technical students understand better direct petrol injection system.
- Educational training board is based on OEM components.
- Integrated engine control system shows different operation modes of the direct fuel injection/ignition system.
- Integrated engine control system with direct petrol injection.
- Monitoring operation of fuel supply system, injected fuel quantity, spray pattern quality, low fuel pressure of the fuel pump.
- Low pressure fuel pump is built – in a transparent tank which allows to see its operation.
- Adjustable air flowrate simulator allows to demonstrate a work of mass – air flow meter and air temperature sensor.
- Visible work process of spark plugs.
- Easy access for high voltage measurements.
- Manual adjustment of the engine crankshaft speed.
- 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
- Training board has a complete electric wiring diagram of direct petrol injection system.
- Electric wiring diagram with built – in banana plug jumpers for measurements and simulation of system fault codes. Possibility to monitor the changing operation mode of each system component.
- Possibility to simulate more than 20 system faults by disconnecting banana plug jumpers.
- Training board – simulator has an integrated voltmeter. It displays voltage of different electronic system components.
- Intake manifold flap regulation (vacuum pump is required).
- The stand has a closed structure – internal wiring is not visible.
- Power supply: 220V
- Dimensions (HxLxW) not bigger than: 1850x1380x600 mm
- Weight (netto) approx.: 105 kg
- CE certificate



### Diagnostic and measurements

- System's parameters are measured by connecting to the banana connector.
- Possibility to measure electrical signal parameters of each system component (such as sensor or actuator).
- Possibility to measure high voltage circuit of the ignition system.
- Diagnosis through OBD 16 – pin diagnostic connector
- Electronic control unit identification
- Reading/erasing fault codes
- Displaying the operating system parameters (live data)
- Activating the actuators (Depends on the control unit)
- Throttle valve adaptation function