

ENGINE CONTROL SYSTEM BOSCH MOTRONIC MED 7.5.10 EDUCATIONAL TRAINER





Product number MSFSI01

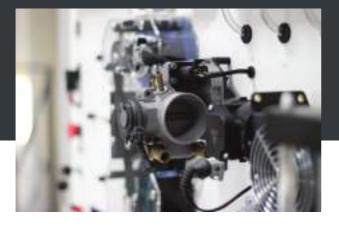


The Engine Control System BOSCH MOTRONIC MED 7.5.10 (FSI) Educational Trainer is a fully functional training tool designed for in-depth technical education. It features an integrated direct gasoline injection system, visible fuel pump operation, adjustable air flow simulation, and over 20 fault code simulations. Mounted on an aluminum frame with OEM components, this trainer enables precise monitoring, diagnostics, and measurements of various engine control parameters, making it ideal for advanced automotive training programs.



Features

- Integrated engine control system BOSCH MOTRONIC MED 7.5.10 with direct gasoline injection (FSI), based on Audi/VW OEM components.
- Fault code simulation allows simulation of more than 20 system faults, enabling detailed study of fault codes and their impact on engine performance.
- TFT Voltmeter integrated display for monitoring voltage signals from key sensors and actuators, with a rotary switch for easy selection of components.
- OBD diagnostic connector allows ECU identification, fault code management, live data display, and actuator testing through a 16-pin diagnostic connector.
- Transparent fuel system: Low-pressure fuel pump integrated into a transparent tank, allowing visible study of fuel supply and pressure regulation.
- · Adjustable air flow rate simulator and engine crankshaft speed control for studying the impact of various parameters on engine operation.







Value for instructors

- Provide students with a realistic and practical understanding of modern engine control systems using a fully functional BOSCH MOTRONIC MED 7.5.10 system.
- The trainer's robust construction and mobility ensure easy integration into any classroom setting, allowing for simultaneous use by multiple students and promoting collaborative learning.
- Utilize the detailed wiring diagrams, integrated fault simulation, and real-time diagnostic capabilities to effectively teach complex automotive concepts and enhance students' diagnostic skills.
- Simplify lesson planning with a trainer that requires minimal setup, allowing for quick and efficient lesson preparation and execution.



Value for students

- Engage with a fully operational engine control system that mirrors real-world scenarios, providing a realistic training experience with OEM Audi/VW parts.
- Explore the structure and functionality of the BOSCH MOTRONIC MED 7.5.10 system, including the operation of injectors, fuel pressure sensors, and ignition coils.
- Perform real-time diagnostics using an OBD 16-pin diagnostic connector, enabling the identification and clearing of fault codes, ECU configuration, and live data monitoring.
- Utilize the training board's integrated TFT voltmeter to measure and monitor electrical signals from key components, such as the G70 Air-mass flow meter, G235 Exhaust gas temperature sensor, and G212 Exhaust gas recirculation potentiometer.
- Gain expertise in troubleshooting by simulating over 20 system faults through removable banana plug jumpers, providing insights into engine behavior and fault code generation.
- Study the impact of variables such as air pressure, coolant temperature, and crankshaft speed on engine performance, allowing for a thorough understanding of the engine's operational parameters.

Specifications

- Dimensions: 1820 x 1360 x 500 mm (71.65in×53.54in×19.69in)
- · Weight: approx. 105 kg (231 lb)
- Power supply: 220V (US 110 V)
- Optional Accessories: Examination console for 10 hidden fault simulations, vacuum/pressure pump, automotive oscilloscope, OBD diagnostic scan tool
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