DIESEL ENGINE WITH CR (COMMON RAIL) SYSTEM

A9/L2

Product number
MVTCR03

The Educational Diesel Engine Trainer, featuring the Cummins QSB 6.7 T3 engine, is an advanced training tool designed for a thorough understanding and hands-on practice of modern diesel engine technology. This fully operational system includes a Common Rail (CR) injection system, turbocharger, and a range of diagnostic and measurement tools, offering in-depth insights into diesel engine operation, diagnostics, and fault simulation.

Features

- OEM Cummins QSB 6.7 T3, 6-cylinder inline diesel engine.
- Common Rail fuel injection technology with high-pressure fuel delivery.
- Integrated turbocharger, cooling system, intake and exhaust, fuel injection, wiring and all other necessary components.
- OBD II 16-pin diagnostic socket for real-time monitoring and fault code reading.
- Fault code simulations and pre-configured fault scenarios for practical diagnostic training.
- Accessible system components and circuits for detailed measurement and analysis.
- Fully functional system with all necessary elements for comprehensive learning experience.
- Mobile, durable and space-saving. Removable safety panels for easy elements observation, learning and maintenance.

Values for students

- Experience the fully functional Cummins QSB 6.7 T3 engine, providing realistic exposure to a modern diesel powertrain, including CR system components and turbocharger functionality.
- Utilize the OBD II 16-pin diagnostic connector for detailed fault diagnosis and live data monitoring. Engage in real-world diagnostic procedures including fault code simulations and system status evaluations.
- Access open contacts for precise measurement of system components and circuits, allowing a comprehensive understanding of the diesel engine's operational principles and electronic controls.
- Practice diagnosing and correcting simulated faults, enhancing problem-solving skills and troubleshooting techniques essential for real-world applications.
- Study the turbocharger's operation, including its impact on engine performance and efficiency. Learn about boost pressure dynamics and their effect on engine power and emissions.

Values for teachers

- Provides a robust educational platform for demonstrating and teaching the complexities of diesel engine systems, including CR fuel injection and turbocharging.
- Facilitates effective teaching of fault diagnosis with realistic fault code simulations, allowing students to develop troubleshooting skills in a controlled environment.
- Removable panels protect against hot and rotating parts while allowing easy access to the engine for maintenance and instructional purposes.
- The OBD II 16-pin connector and fault simulation features support extensive diagnostic training. Teachers can guide students through various diagnostic techniques and fault simulations, enhancing their practical skills and understanding of engine diagnostics.
- The mobile frame is designed for easy movement and integration into various classrooms, allowing concurrent use by multiple students and promoting collaborative learning and practical training opportunities.
- The closed steel frame with internal wiring ensures a clean and safe learning environment while maintaining the model's durability.
- Requires minimal adjustments to reset to default parameters, making it easy to prepare and start each lesson.

Specifications

- Dimensions: 47.24 in × 35.43 in × 39.37 in
- Weight: approx. 770 lb
- Power supply: 12V DC battery for engine operation and diagnostics.
- Product Number: MVTCR03