



AIR CONDITIONING AND CLIMATE CONTROL EDUCATIONAL TRAINER

A7

Product number

MSC02

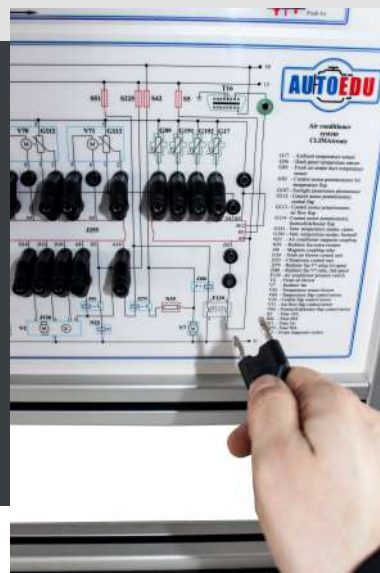


The air conditioning and climate control educational trainer features an integrated CLIMATRONIC system with an expansion valve, R134a refrigerant, and visible HVAC components, including the compressor, electromagnetic clutch, and airflow flaps. This fully functional trainer is designed for in-depth technical education, providing hands-on experience with real-time diagnostic capabilities and component analysis.



Features

- Integrated CLIMATRONIC air conditioning system includes an expansion valve and R134a refrigerant, monitor and control different operation modes.
- Visible HVAC compressor, electromagnetic compressor clutch, airflow flaps, and HVAC mixing unit.
- Equipped with OBD 16-pin diagnostic connector, integrated voltmeter, and the ability to simulate system faults.
- The trainer features a diagram with LEDs showing the operation modes of outlets and flaps, enhancing visual learning.
- Enclosed wiring and robust aluminum frame ensure safety and longevity in educational settings.





Values for students

- Hands-on experience with a fully operational electronic air conditioning system, study components like the HVAC compressor, electromagnetic compressor clutch, and refrigerant pressure distribution.
- Perform diagnostic procedures using tools like an oscilloscope, multimeter, and OBD diagnostic scan tool, monitor and control system parameters, simulate faults, and interpret diagnostic data.
- Exposes key components, such as airflow flaps and control motors, analyze and adjust the system's performance. The visible operation of airflow flaps and HVAC mixing unit provides real-time feedback on various operational modes.
- The trainer allows for precise measurements of electrical signals from system components, such as temperature sensors and control motor potentiometers, enhancing students' ability to troubleshoot and maintain complex HVAC systems.
- Simulate over 15 system faults by disconnecting banana plug jumpers enables students to understand fault diagnosis and resolution in a controlled environment.



Values for teachers

- The MSC02 provides a reliable platform for demonstrating the intricacies of air conditioning and climate control systems, including the operation of the CLIMATRONIC electronic system.
- OEM automotive parts to provide students with realistic training scenarios, ensuring that the learning experience closely mirrors real-world automotive diagnostics.
- Board on castors version, which is mobile and space saving in the classroom, allows concurrent use by multiple students, promoting collaborative learning and practical training opportunities.
- The training stand is designed for simplicity, requiring only small adjustments to reset to default parameters, making it easy to prepare and start each lesson quickly and efficiently.
- Educators can guide students through manual and automated diagnostic procedures, enhancing their understanding of electronic control unit (ECU) identification, fault code management, and live data interpretation.



Specifications

- Dimensions: 1680 x 800 x 500 mm (66.14 in x 31.50 in x 19.69 in)
- Weight: approx. 100 kg (220 lb)
- Power supply: 220V (US 110V)
- Made in EU
- Product number: MSC02