



The ConsuLab EM-140 engine performance trainer is a fully operational engine mounted on a mobile stand. Trainer is based on 2008-2010 GM ECOTEC 2.2L global engine platform. The trainer is easy to work on and all major components, wiring and connectors match OEM configuration. Trainer is mounted on a mobile stand constructed of 2" (5cm²) tubular steel equipped with four 5" phenol casters (2-fixed and 2-swivel w/ locks). Students can perform many NATEF related Engine Performance and Electrical/Electronic tasks using this trainer. Trainer is equipped with safety guards covering all rotating components.

EDUCATIONAL ADVANTAGES

- Demonstration of systems to groups of students without the access limitations of a complete vehicle
- Engine systems respond to inserted faults with real world symptoms, OEM DTC's and check engine light operation
- Visually demonstrates refrigerant change of state
- Hands on demonstration of electric assist power steering

SPECIFICATIONS

APPLICATION

- 2008-2010 Chevrolet Cobalt or Pontiac G5 with vehicle identification number (VIN) provided
- 2.2L ECOTEC global engine platform

FEATURES

- Sequential fuel injection w/ electronic ignition
- Adaptive charging system
- CAN (controller area network) system
- ETC (electronic throttle control)
- OEM EVAP system w/ test port
- Optional electric assist power steering

STANDARD EQUIPMENT

- 2.2L GM ECOTEC 4-cylinder engine
- Automatic transaxle (4T45E)
- OEM EVAP system w/test port
- OBDII data link connector
- Integrated ECM breakout box w/ test points and ECM terminals identified with OEM terminology
- Manual fault boxes for engine performance (12 faults)
- Automatic regulated battery charger
- 12 V Battery
- Fuel tank
- Exhaust system w/ catalytic converter
- Safety covers for all rotating components
- HD 2" square tubing mobile stand with 5" phenol casters (2-fixed and 2- swivel w/locks)
- Comes with only one OEM key
- Emergency stop button

OPTIONAL EQUIPMENT

- Electronic programmable fault box (52931) with 16 faults capable of programming intermittent fault insertion
- Electric assist power steering system w/hand grips to demonstrate system function
- Coolant flow sight glass (52910)
- OEM HVAC system with air duct assembly
- A/C system sight glasses with TXV H-block
- Refrigerant high and low-side pressure gauges
- Manual fault boxes for A/C (6 faults)
- Protective instrument panel cover (52905-2)
- Vinyl dust cover (24499)
- Fork lift bars (52827-2)
- Instrumentation display (53144)
- Transport handle (53092)

TECHNICAL INFORMATION

Dimensions: 45" W x 60" L x 51" H w/o pallet / 48" W x 66" L x 54" H w/pallet

Weight: 915 lbs w/o pallet / 1025 lbs w/pallet

Refrigerant: R134a (0.54 kg / 1.2 lb)

Fuel requirements: 87octane gasoline