



DIESEL ENGINE PERFORMANCE PROGRAM

VW TDI 2.0L

Model: MEG320-VW2.0

DESCRIPTION:

The MEG320 diesel engine performance program is a fully operational VW TDI diesel engine on a test stand built to meet all diesel engine performance and repair tasks. Completely operational and safe, the exposed engine makes this trainer easy to work with. All major components, wiring and connectors match OEM configurations for easy diagnosis.

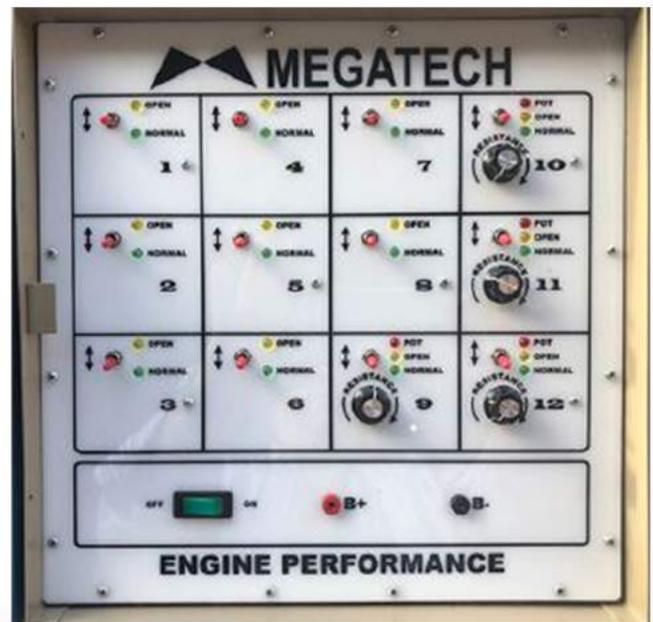


EDUCATIONAL ADVANTAGES:

- Latest vehicle system and diagnostic technologies
- Exposed engine allows easy demonstration of the system
- Real world symptoms can be created via Fault Insertion Box (up to 12 faults)
- Breakout Box allows easy access to electrical circuitry for viewing with test-lights, scantools and oscilloscopes

STANDARD FEATURES:

- 100% Fully Functional Operational Diesel Engine
- Dynamic Faulting System
- Non-invasive Breakout Box
- Instrument Panel w/ Murphy Box
- Charging/Cranking System
- Exhaust system/Latest Emissions
- Custom Engine Stand
- Cooling System
- Radiator and Radiator Bracket
- Fuel Cell w/ Fuel Lines
- Regulated Battery Charger/Battery Tray
- Heavy duty locking casters
- Digital Copy of OEM Maintenance Manuals



Dynamic Fault Box

DIESEL ENGINE:

The Diesel Engine Program introduces the latest in diesel engines available with complete cranking, charging, cooling, exhaust system (with aftertreatment), instrument display, breakout box, and Fault Insertion Module.

ENGINE TEST STAND:

The engine mount is a heavy duty test stand, constructed from 2" x 2" steel mechanical tubing frame, 11 gauge heavy wall type welded at all joints and has a special pair of universal engine mounts pre-drilled to accept several different types of engines. The stand accommodates a heavy-duty radiator mount with varied positioning slots and sliding brackets positioned in the front of the engine test stand.

The entire test stand is positioned on specially designed vibration dampers and is welded to the main frame. A total of four sets of vibration dampers are installed. Each set of dampers has four Toro type pads, held centrally by a 1/2" bolt and steel plates. The engine mount includes four caser wheels for easy mobility.

FULL INSTRUMENT PANEL:

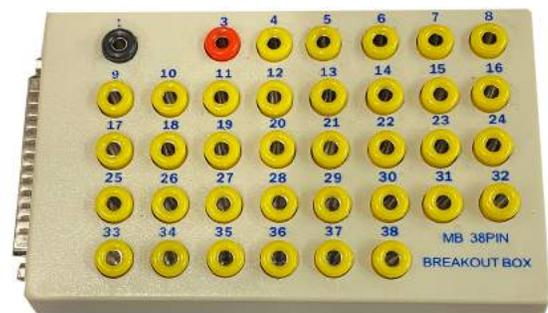
The instrument panel is constructed from 16 gauge steel, 24"W x 28" L and is fully wired to the engine and to the electrical system. The panel is primed and painted blue with silk-screened lettering and includes throttle pedal assembly.

DYNAMIC FAULTING SYSTEM:

The trainer includes a Fault Insertion Module feature that allows the instructor to create faults in the engine control system. This unit allows an instructor to "tap in" to various automotive circuits by wiring it directly to the vehicle's existing wiring harness. Pin-outs are labeled for preset sensors. Each set of pin-outs brings either a signal, power, or ground to the breakout box while also allowing faults to be created in the corresponding circuit. There are two types of faults that can be induced: an open circuit and a potentiometer, which will add a variable amount of resistance to the given circuit based on the instructor's setting. The breakout box, although labeled specifically, can be wired to any circuit, carrying less than four amps.

FEATURES:

- Pin-outs on the face of the break-out-box for easy access to electrical circuitry for viewing with test-lights, DVOMs and oscilloscopes
- Pin-outs for fifteen sensors/ circuits
- Fourteen "preset" sensor pin-outs
- One "custom" sensor pin-out
- Fault induction capability for a total twenty four possible faults, including:
 - "open circuit" fault induction capability
 - "variable resistive" fault induction capability
- Colored LEDs for indication when a fault is inserted
- Comes with easy-to-follow instructions for wiring and use.



Breakout Box

INSTRUCTIONAL REFERENCE MATERIAL:

The manuals provide full information and procedures for troubleshooting diesel engines. Potential problems are listed, diagnostic methods are indicated and repair procedures detailed. Also to be included is the manufacturer's service manual, to contain detailed procedures, descriptions and diagrams of the engine provided. (Owner's Manual, Service Manual, Fault Insertion Manual)

TRAINING AND SERVICE REQUIREMENTS:

If training/service is required, Megatech is an ASE CASE certified training provider. CASE training providers enhance and aid in the continued certification process and have been evaluated through a quality-assurance process called CASE (Continuing Automotive Service Education) and certified by ASE.

SPECIFICATIONS:

Approx. Size: 72" L x 24" W x 36" H

Approx. Weight: 1,800 lbs.