

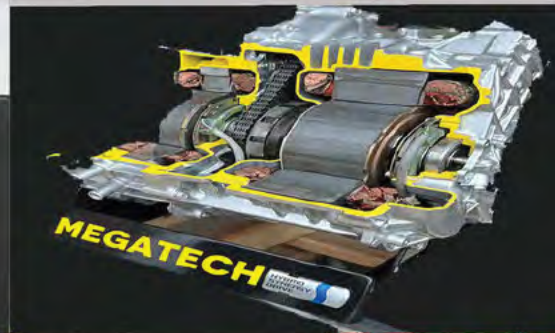


MEGATECH

A World Leader in Transportation



2025-26 Automotive, Hybrid / EV, & Diesel Training Catalog



Accredited
Training
Provider

525 Woburn St. Suite 3, Tewksbury, MA 01876
978-937-9600 • www.megatechcorp.com

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Automotive CANbus Trainer (p. 3)



MEG007-HYB (p. 17)



**MEG-SMR
Hybrid/Electric Vehicle
System Main Relay
Demonstrator
(p. 18)**



Accredited
Training
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MEGATECH



NEW CUSTOMER 2025 :

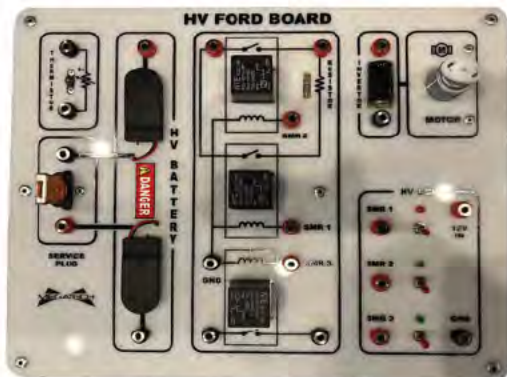
LUCID

Megatech's EV/Hybrid Trainers



MEGLOC-5281

Electric Vehicle/Hybrid High Voltage



MEGFORD-HV



MEG007-HYB

Hybrid Engine Performance Trainer



MEG-HV

OEM

Engine Performance Trainer

Model: MEG007

- Late model domestic or foreign vehicle
- Converted to trainer with built-in fault insertion
- Hybrid and Diesel options available



Gas Engine Performance Program

Model: MEG520



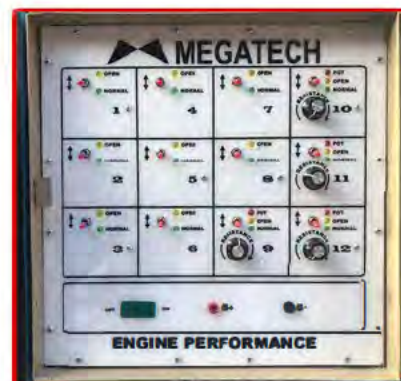
GM 2.2



Ford GDI



Optional HVAC Phase Change



Fault Box

Engine Performance



Oil-less 4 Cycle Multi-Fuel Engine

Model: MEG150

The MEG150 Engine Performance program has made the study of 4-cycle engines a simple task and has opened the door for students to conduct multiple experiments in alternative fuels. This patented, unique engine features all moving parts of a 4-cycle engine.

Available with:

- Cylinder PV Mapping
- Data Acquisition

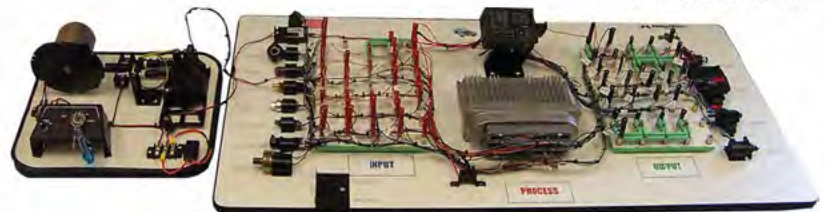
Starting/Charging Trainer

Model: MEG690BT



Engine Management System

Model: MEG570



EVAP Trainer Model: MEG-EVAP



OBDII Fuel Injection Trainer

Model: MEG550



Toyota Fuel Injection Trainer

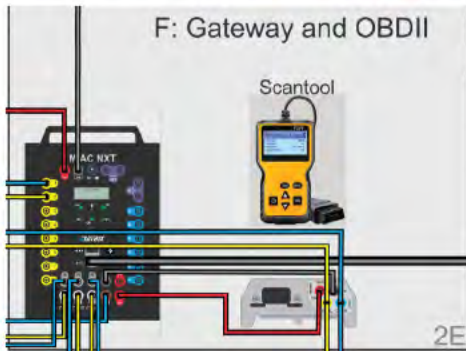
Model: MEG550T



MEG-CANbus



MEGLOC-CANbus Operation



This kit is a fully functioning CANbus system, mimicking vehicle operation by using four MIAC ECUs. A fifth ECU is used for system diagnosis, releasing faults and viewing CANbus messages.

Additional kits available:

Motors, Generators & Charging Systems

MEGLOC-2410A

Automotive High Voltage Battery Circuits

MEGLOC-5281A

ECU architecture and logic

MEGLOC-1800A

Automotive Wave Form Generator

MEGLOC-9155



Sensors and Controls in Automotive Solutions

MEGLOC-9834



Automotive Fault Finding

MEGLOC-8170

As Used In



SUBARU



HYUNDAI



Training Centers



Electricity / Electronics for Automotive

MEGLOC-9562



Classic Series Electrical Trainers



MEG80101
Instrument Panel



MEG80102
Distributorless Ignition



MEG80103
Electronic Ignition



MEG80104
Alternator System



MEG80105
Starter System



MEG80106
Directional/Hazard



MEG80107
Lighting System



MEG80108
Horn/Alarm



MEG80109
Power Door Lock



MEG80110
Power Window



MEG80111
Radio System



MEG80112
Wiper/Washer



MEG80-COLL
Collision Avoidance



MEG80113
Blower Motor



MEG80114
Cooling System



MEG80115
Power Seat



Electrical/Electronic Systems

Series 2000 Electrical Trainers



MEG801012M
Instrument Panel



MEG801022M
Distributorless Ignition



MEG801032M
Electronic Ignition



MEG801042M
Alternator System



MEG801052M
Starter System



MEG801132M
Blower Motor



MEG801062M
Directional/Hazard



MEG801072M
Lighting System



MEG801082M
Horn/Alarm



MEG801092M
Power Door Lock



MEG801102M
Power Window



MEG801142M
Cooling Fan



MEG801112M
Radio System



MEG801122M
Wiper/Washer



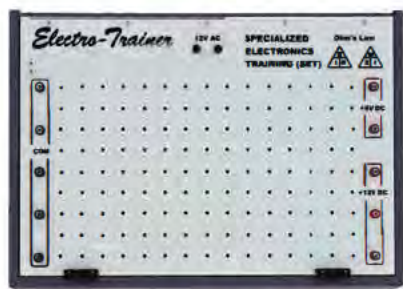
MEG801152M
Power Seat

Improved Chassis Design



**Trainers require Fault Network Device MEG701514
or manual switches**

Industry Trainers



GM SET
Model: MEG-GMSET

- GM Specialized Electronics training course
- Actual GM components
- Stage 1, 2, and 3 GM curriculum
- Separate tip jacks for DC, AC, and fixed 5 and 12 VDC power



SUBARU



Automotive Electro Trainer
Model: MEGELECTRO-S

- Designed for Subaru of America training centers
- Provides "hands on" working knowledge of voltage, current and resistance w/ series & parallel circuits
- (10) Modules w/ Baseboard
- Curriculum Included



Toyota Electrical Program
Model: MEG-623T

- Basic electricity trainer used in Toyota T-10 training programs
- Follows 622 & 623 courses
- Actual Toyota Parts
- Foundation in the basic principles of electricity and electronics
- OEM curriculum



Automotive Electro Trainer
Model: MEGELECTRO/MEGELECTRO-2

- Students gain a foundation in the principles of electricity & electronics
- Provides "hands on" working knowledge of voltage, current and resistance w/ series & parallel circuits
- MEGELECTRO-2 includes faults delivered via toggle switch
- Built in switchable power supply



Automotive Electro Trainer w/ STEM Concepts

STEM CONCEPTS APPLIED!!

- Discovering Hybrid Modes of Operation
- Thermistors
- Cadmium Sulfide LDRs
- PN Junction/LED
- Series Connected LEDs
- Pulse Width Modulation
- Zener Diodes & MOSFET



- Ignition System
- Headlight & Flasher
- Power Distribution
- Engine Electric Fan
- Fuel Pump



Basic Electrical Modules / Advanced Electronic Systems

This specialized program is divided into two categories: The Basic Electricity Program allows the student to transfer fundamental theory lessons into real work skills while The Basic Electronic Program includes solid state components that generate different signals for a comprehensive course. Collectively, these two programs provide a solid foundation from which anyone can build marketable skills in a constantly changing automotive world.



MEGFORD-EE: Basic Electrical Modules (Includes 20+ modules, call for a complete list)



MEGFORD-ET: Basic Electronic Modules (Includes 15 modules, call for a complete list)



Air Bag Trainer, Redeployable (S.R.S) Model: MEG80116

With the Megatech (S.R.S.) Air Bag Trainer, the student can learn the operation, testing and troubleshooting of an actual operating deployable air bag. Because of the dangers involved with automotive live air bags, it is important that the student have the necessary knowledge and skills to practice with the Megatech trainer. A bank of switches can provide fault insertions and have the student do the diagnostics. The impact sensors, the wiring diagram and other components are based on Toyota parts.

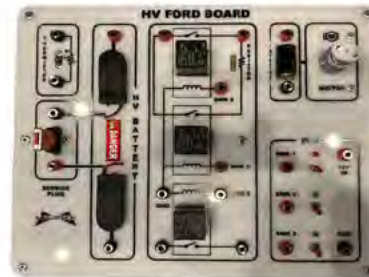


New for 2025....again



MEGFORD EE1A

- Part of Ford's new globalization
- Basic electrical
- Lead into EV and HV
- Integrated fault circuit
- Expanded pegboard



MEGFORD-HV

- Mustang Mach-E Configuration
- BCCM control
- 3 contactors
- Service disconnect
- Other features



CAI Autotronics Trainer

Model: MEGTRON

Traditional subjects such as Ohm's Law are presented using examples from real automotive systems. Calculations are based on real values that exist in automotive electrical systems. Components such as inductors, capacitors, transistors, diodes and logic gates are introduced in context with a specific automotive circuit. The intent of this program is to produce good automotive technicians that are capable of repairing the cars today! The course includes, Introduction to automobiles, Test equipment, Basic Electrical, Basic Electronics, Vehicle Technology, and Automotive Systems. It is fully delivered via the internet (HTML).



4 Wheel Brake System Trainer

Model: MEG-680PB4W

- 4 different Disc brake systems
- Complete with parking brake light, pressure warning light, and standard brake light
- 2 ABS Sensors harnessed out to terminal strips



4 Wheel Brake System Trainer

Model: MEG-680PB2W2W

- 2 Disc in Front + 2 Drum in Rear
- Adjusting brakes, flushing hydraulic fluids, reconditioning of brakes



Drum/Disc Brake Trainer with Adjustable Strut

Model: MEG-680PB-ADJ

- Both drum and disc brakes w/ adjustable strut
- Covers adjusting brakes, replacing hoses and tubes, servicing master cylinder, caster and camber



Power Boost Drum/Disc Brake Trainer

Model: MEG-680PB

Custom Cutaways Available



MEGART1039
Disc Brake



MEGART1333
Parking Brake



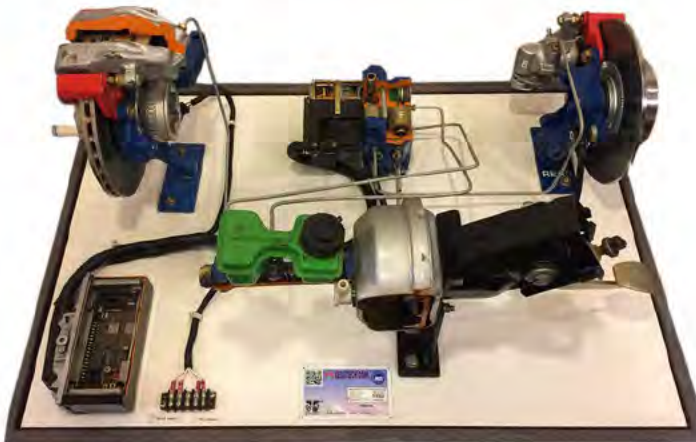
MEGART1203
Drum Brake



MEGART1096
Brake Booster



Model: MEG680PB-ABS SkillsUSA



Double Circuit Brake Trainer

Model: MEGART-DCB



Electromechanical Parking Brake

Model: MEGART-MSEPS1

Four Wheel ABS Trainer

Model: MEGABS4

Megatech's ABS4 training system incorporates live components and hydraulic lines. It is a self-contained, fully functional braking system manufactured with authentic automotive components. The Bosch 5.3 provides a full array of pressure gauges that show front and rear line pressure and the individual pressure at each wheel.

Front Suspension, Power Steering, Brake & Tire Program

Model: MEG-670GPS

- Complete McPherson Strut Assembly
- Heavy Steel Frame with Absorption Pads
- Pneumatic Lifts to Simulate Road Conditions
- Easy Accessibility and "Bench Level" Work Height
- Over 30 Competency Based Modules
- Tires Included for Additional Training



Suspension, Steering & Brake Program

Model: MEG009



Wheel Alignment Training Stand

Model: MEG-MSVAZ1



4 Wheel Suspension, Steering & Brake Trainer

Model: MEG008



Suspension and Steering



MEGART1224
Multi-Link Suspension Cutaway



MEGART1306
Axle Geometry Model



MEGART1305
Spreading Function Model



MEGART1202
Suspension Strut
w/ Wishbone



MEGART1325
Suspension Strut



MEGART1142
Variable Rack & Pinion Steering



MEGART1301
Electrical Rack & Pinion Steering



MEGART1312
Universal Joints Model

Custom Cutaways Available



Air Conditioning Trainer

Model: MEG-660A or MEG-660M

- Hands on training for air conditioning systems
- Teaches basic test and maintenance procedures for the refrigerant loop
- Based on OBDII compliant model AC unit
- Available in either Ford or Audi
- Pre-assembled with a compressor operating with R134a refrigerant
- Charging hoses, manifold gauges, and battery cables included
- Sight Glass to view Phase Change
- Fault Box



MEGART10650
Air Conditioning Model

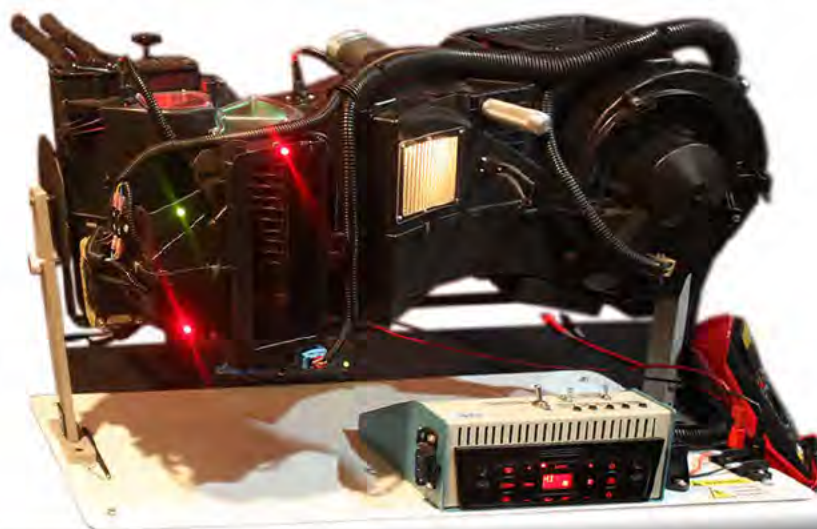


MEGART1097
Climatic Compressor



HVAC Blend Door Trainer

Model: MEG-660BD



Manual Drivetrain & Axle



Custom Cutaways Available



MEGART1360
6 Speed Manual Transmission



MEGART1092
Locking Differential



MEGART1353
7 Gear Dual Clutch Transmission



MEGART1133
5 Speed Front Transmission



MEGART11300
4x4 Vehicle Transmission Assembly



MEGART1089
Transmission w/ Differential



MEGART1356
Rear Axle Differential



MEGART
Clutch Demo



MEG-PNTY
Planetary Gear

MEG-DRIVESHAFT

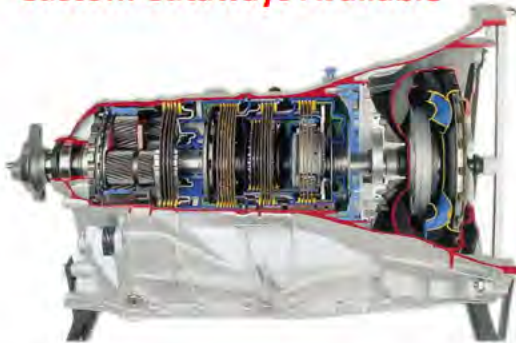


Automatic Transaxle Trainer Model: MEG-620T

The Megatech Automatic Transaxle Trainer is designed to assist in educating the fundamentals of the front drive transaxle. The trainer features a fully functioning automatic transaxle that can be manually shifted through all forward and reverse gears. It features the popular A604 Automatic Transaxle found on most Chrysler front wheel drive vehicles. The package includes a complete competency based training program which instructs the student from basic operation and adjustment to complete overhaul of the transmission.



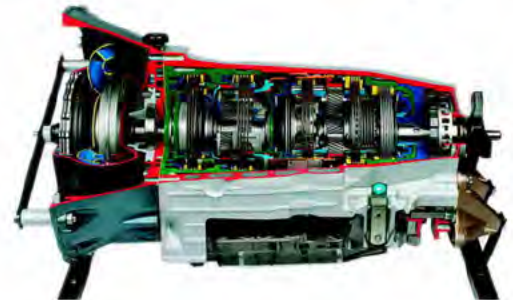
Custom Cutaways Available



MEGART1282
6 Gear Automatic Transmission



MEG-PNTY-R
Ravineaux Gear Model



MEGART1310
7 Gear Automatic Transmission



Subaru CVT



MEGART1261
5 Gear Front Automatic
Transmission w/ Torque Converter



MEGART-CVT
CVT Demonstrator



**MEG003-E
Engine**



**MEG003-SC
Start Cart**

Engine Repair Program

Model: MEG003-SC & MEG003-E

Combination of engine and fully functioning start cart, cluster, and the proper components to run the engine and verify correct engine function

- Custom engine models available
- GDI, MPI, SPFI, and Hybrid
- Diesel Engine and Start Cart also available



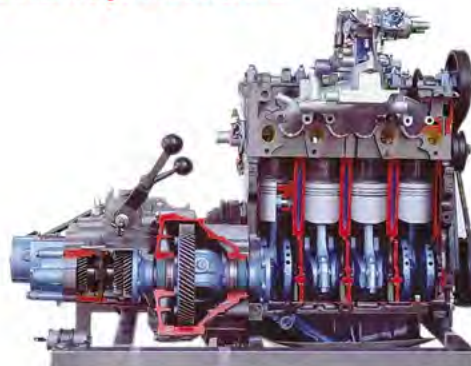
Custom Cutaways Available



**MEGART-IVDB01
Engine Cutaway**



**MEGART1343
MB GDI Engine Cutaway**



**MEGART1249
MB A Class Gas Engine Cutaway**



**MEGART1001
VW Engine with Transmission**

Hybrid Engine Performance

Model: MEG007-HYB

(Honda • Ford • Toyota • & More)

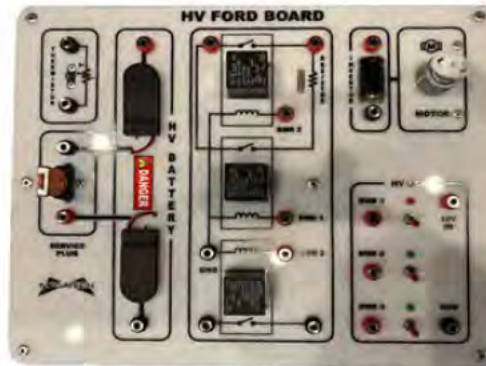
This unit is built from a hybrid model vehicle and converted into an Engine Performance Trainer with built-in fault simulation. It is complete with a running engine, transaxle, drivetrain, suspension, front brakes, dashboard electrical system and compute



MEG007-HYB-TP

Prius Hybrid with Technology Package / ADAS

MEGFORD-HV



MEGEGART-FORD-HYB Ford Hybrid Drive Cutaway



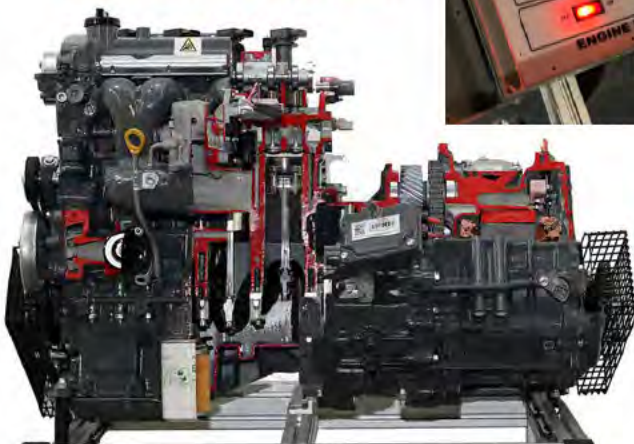
EV TRAINING Model: MEG-007-EV w/Faults



MEG-MG1/MG2 Toyota Hybrid Drive Cutaway



MEGART34500 Hybrid Engine Cutaway



Custom Cutaways Available



**System Main
Relay Trainer**
Model: MEG-SMR

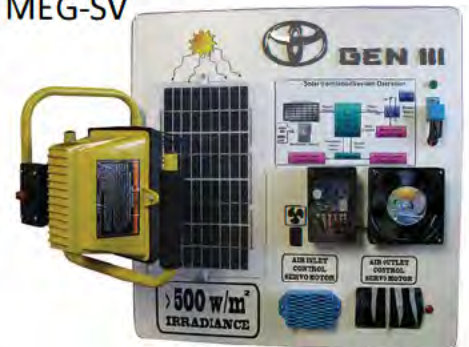


**Electric Vehicle
Battery Demonstrator**
Model: MEG-EVB

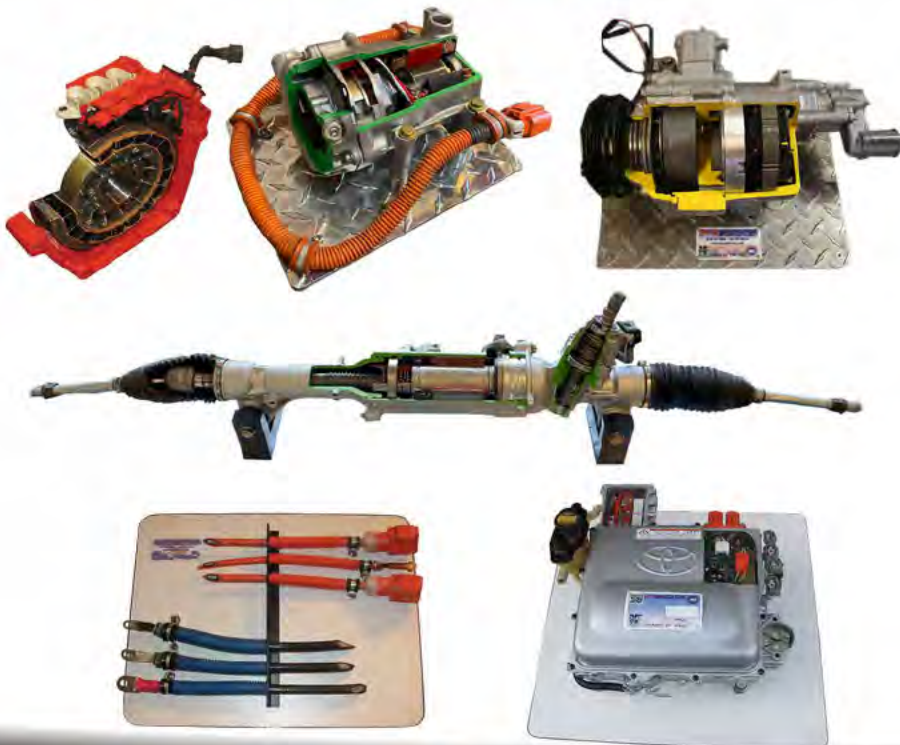
EV/Hybrid High Voltage Batteries
Model: MEGLOC-5281



**Automotive Solar
Ventilation Trainer**
Model: MEG-SV

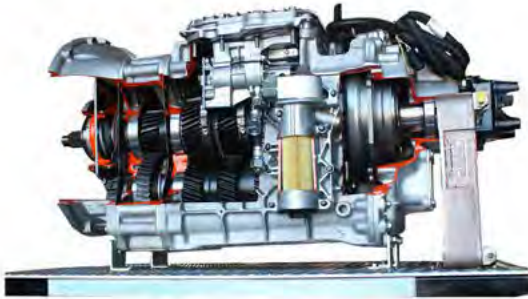


Hybrid Cutaways



**MEG-HV
OEM**





MEGART-mDrive
MACK mDrive Cutaway



MEGART-Fuller13
Fuller Transmission Cutaway



MEGART-ALL3200SP
Allison 3200SP Transmission Cutaway



MEGARTD6K
Dozer Final Drive Differential



MEGART6015
Diesel Engine Cutaway



MEGART6083-MX13
PACCAR MX-13 Engine

Custom Cutaways Available



MEGARTF88
Ford 8.8 Differential



MEGART1108
Diesel Cylinder



MEGART1338M
Injection Pump



MEGART10430
Turbo Supercharger

Light / Mid Duty Diesel Trainers



Light/Mid Duty Diesel Program

Models: MEG320 & MEG007-D

Megatech produces the largest number of training aids for comprehensive training for light & mid duty diesels. The MEG320 and MEG007-D programs consist of instructional modules on diesel engines, NATEF based worksheets, engines on a test bed or clip vehicle with a fuel and battery stand. Models include Cummins, Ford, GM Dodge, and others. The MEG320 model can be mounted with our custom closed-loop dyno.



MEG007-D (GM)



MEG007-D
(Ford)



MEG320
(Cummins 6.7L)

Standard Features:

- Full Aftertreatment
- DPF & SCR
- Tier IV Final
- Fault Box
- Breakout Box

Single Cylinder Diesel Program

Model: MEG310



The MEG310 program provides advanced experiments in operating a single cylinder diesel engine by measuring torque and speed with the aid of an electric dynamometer.
(Data Acquisition is also available: MEG310-DAD)



MEG320
(VW 2.0L TDi)

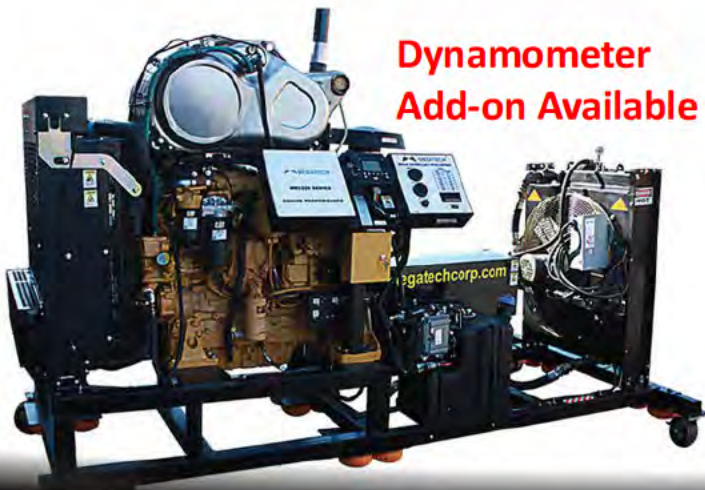
Truck/Heavy Duty Diesel Program

Model: MEG320



These programs introduce the Cummins, Caterpillar, Navistar, Detroit Diesel, or other engines with all components assembled and ready for operation. The manuals provide full information and procedures for troubleshooting diesel engines. Potential problems are listed, diagnostic methods are indicated and repair procedures are detailed. These units are available with hydraulic/water absorption dynamometers for accurate HP/Torque measurements.

Included: Fault device, Breakout Box, Heavy Duty Casters, Aftertreatment (Dyno available)



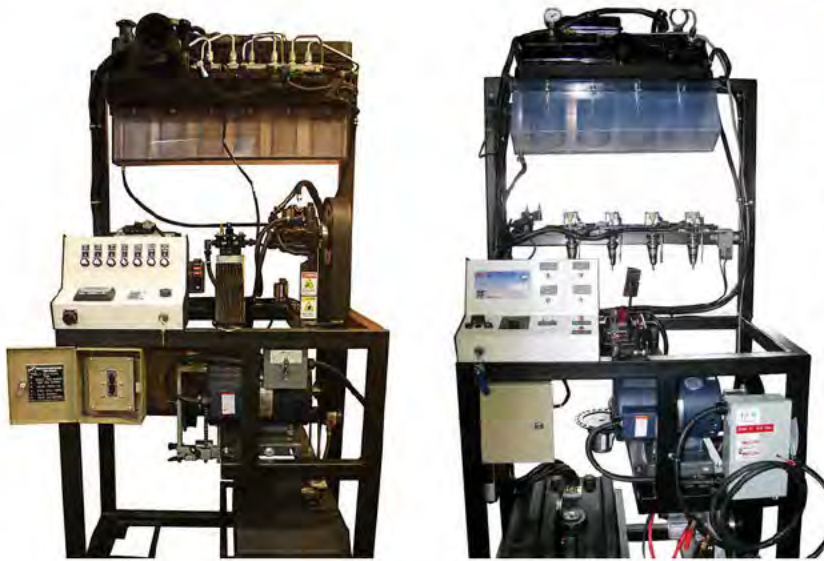
**Dynamometer
Add-on Available**

Diesel Exhaust Aftertreatment Demonstrator

Model: MEGART10630



Truck / Heavy Diesel Trainers

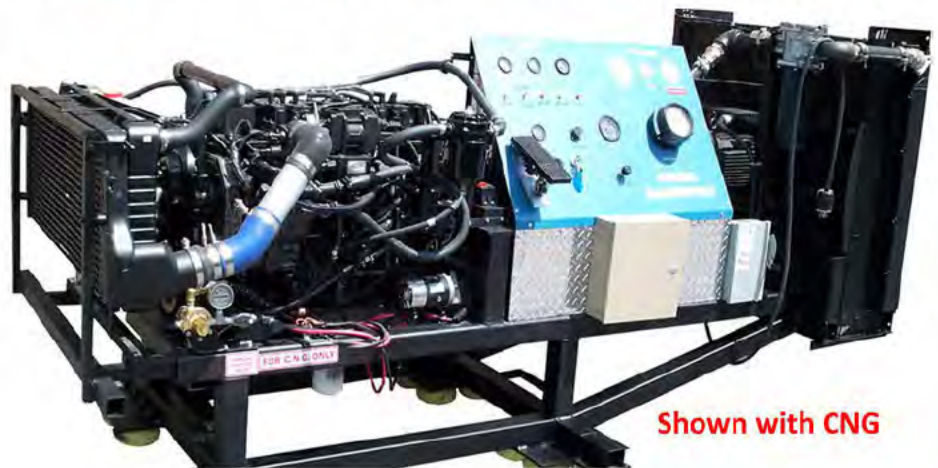


**Cummins Diesel Trainer:
Electronically Controlled
Common Rail & Power Stroke**
Models: MEG550-DCR6 & MEG550-D

The Cummins Diesel Trainers are constructed from a Cummins ISB-type vehicle using an electronically controlled diesel fuel injection. The program consists of genuine equipment and educational materials to teach the fundamentals of Common Rail fuel injection and engine control. The electronics are faulted for student diagnosis and practice. (Ford model also available)

Engine Test Stand with CNG
Model: MEG330

The MEG330 trainer is a full turn-key CNG engine training unit based on a larger diesel engine or gasoline based version as well (LPG). Trainers can be built with or without a closed-loop dyno.



Shown with CNG

Truck Lighting System Trainer
Model: MEG80107-T



Heavy Duty Starting & Charging
Model: MEG690



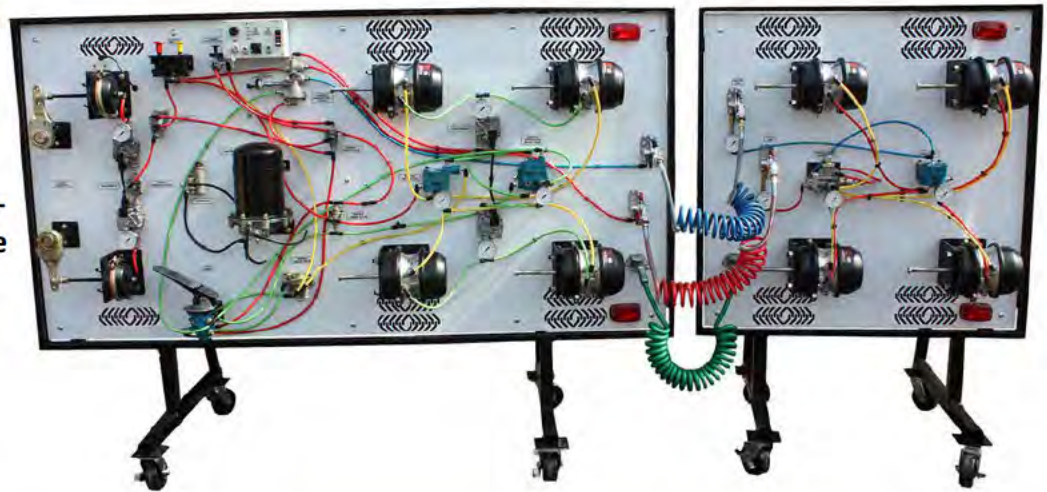
Heavy Duty CANbus Systems
Model: MEGCANbus-Truck



Airbrake & ABS Trainer

Model: MEG685-ABS

Fully functioning Bendix Truck Airbrake system with real truck brake parts (air valves, brake boosters, control devices, etc.)

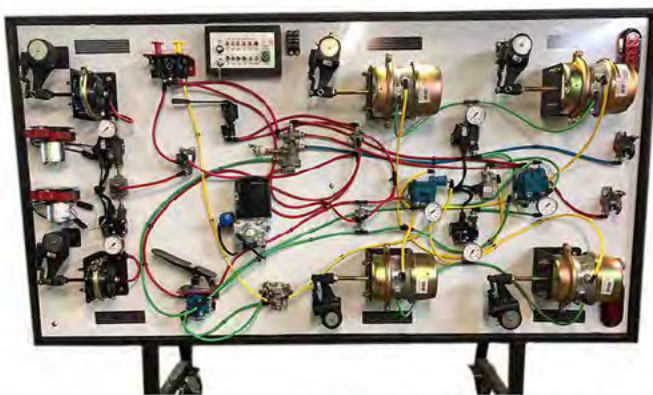


Truck Airbrake Trainer

Model: MEG685

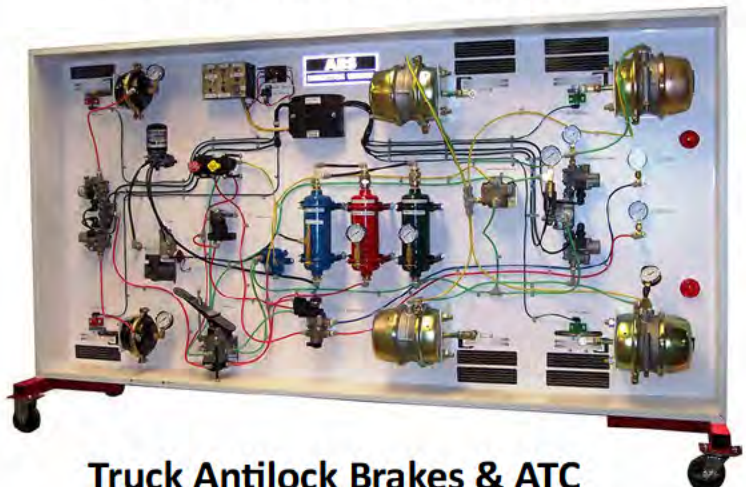


*Truck Brake Lab
 at Pikes Peak Community College*



Truck Airbrake and ABS Trainer

Model: MEG-ABS-EC60



Truck Antilock Brakes & ATC

Model: MEG-ABS/ATC

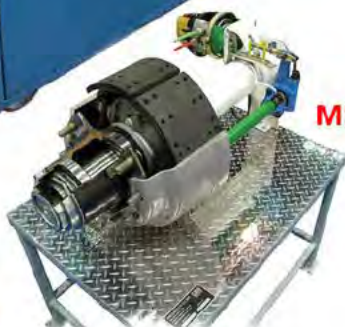


Mobile Hydraulics

Model: MEG820 (Vertical Workstation Available)

This program provides hands-on activities with components commonly used in construction equipment, agricultural and utility vehicles. It includes: Instructional modules, audio/visual presentations, instructor's guide, hydraulic tester, and mobile hydraulic workstation. It has a variable working pressure capacity of 500-1000 PSI and includes a heavy-duty workbench with instruments and gauges.

MEGCUT-DRUM



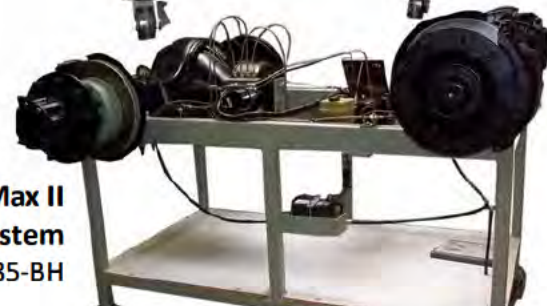
MEGCUT-CHAMBER



MEGCUT-DISC

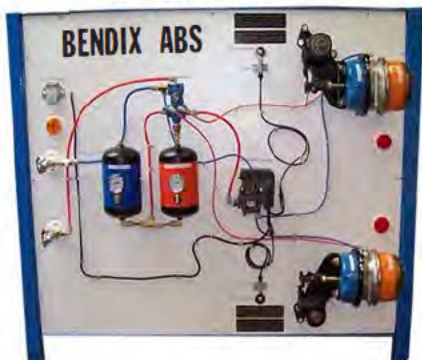


**Meritor Steer Axle
Drum Brake Trainer**
Model: MEG685-MSA

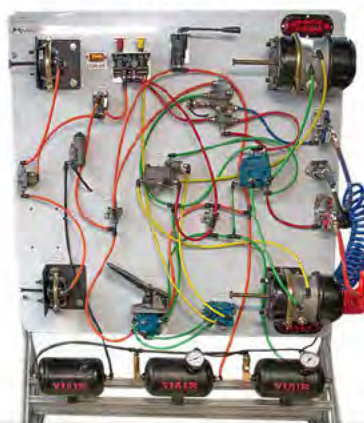


**Bosch Hydro-Max II
Brake System**
Model: MEG685-BH

**BENDIX Trailer
Air Brake ABS Trainer**
Model: MEGABS-BX
WABCO system available



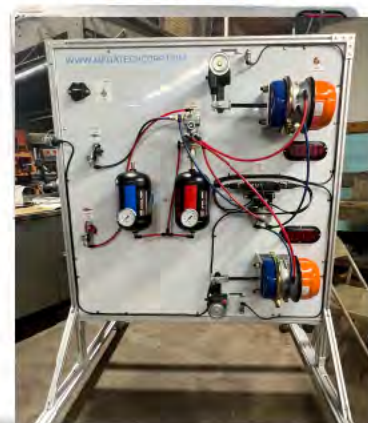
Model : MEG685-TR



**Tractor + Trailer
Air Brake System**

WABCO or BENDIX
systems available

Model : MEG685-TL



ASE CASE CERTIFIED TRAINING



Providing Training in:

- Hybrid and Electric Vehicle
- Sensors and Controls
- CANbus technology
- Engine Performance
- Electrical
- STEM



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