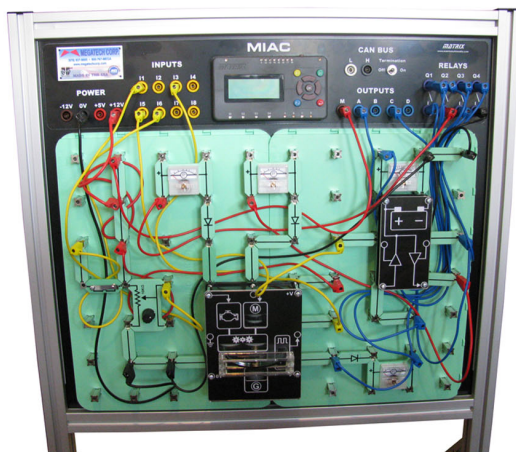
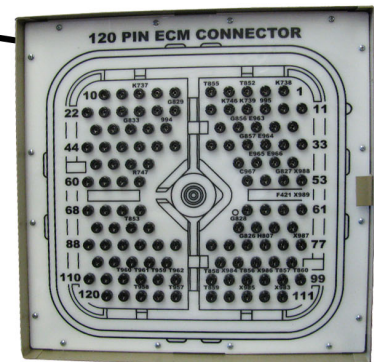


# HYBRID TECHNOLOGY

## HYBRID ENGINE PERFORMANCE TRAINER Model: MEG-007 HYB

This is the same trainer as our MEG-007, only built from a hybrid model 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 computer. Available, with our NEW Dynamic Fault/Breakout Box.



## HYBRID VEHICLE DEMONSTRATOR Model: MEGLOC HYB

The Hybrid demonstrator includes a Hybrid engine, a battery and an Electronic Control Unit, several meters showing power flow between the units, a brake switch and a potentiometer mimicking the accelerator pedal. The ECU controls the system to show students how the power is routed in a hybrid depending on the State of Charge of the Battery, and to allow them to make measurements on the engine performance under different load conditions. The system can also be used to show the effects of regenerative braking. Two models are available: a bench top version and a panel mounted version.

## HYBRID DRIVE CUTAWAY Model: MEG-MG1/MG2

This cutaway takes a Toyota hybrid transmission and fully sections it to allow all major components to be seen. It is a perfect unit to enhance any Toyota Hybrid curriculum.





# HYBRID TECHNOLOGY

## HYBRID VEHICLE

### Model: MEGASTAR

Megatech's patented technology in electric dynamometers has enabled the design of this hybrid vehicle for dual purposes. The MEGASTAR is propelled by a 2.5 HP DC motor connected by a bank of batteries. Solar cells provide substantial charging as does the onboard propane powered engine which is coupled to an electric dyno-generator model DG-3.

The trainer has a console panel to read DC current, voltage and outputs. A controller is in place for battery charge management. How solar energy can be integrated with alternative fueled engine power is taught by hands on activities which teaches the basics of hybrid propulsion with the MEGASTAR.



Megatech's patented technology in electric dynamometers has enabled the design of the hybrid vehicle to be utilized for dual purposes. The first objective is to deliver a vehicle of combined technologies, incorporating alternative energy use for transportation purposes. That is, the MEGASTAR can run on solar energy combined with gaseous fuels such as propane/natural gas or gasohol. In either case, even if the vehicle is not in use, energy from the sun or from the engine can charge the batteries.



## AUTOMOTIVE SOLAR VENTILATION TRAINER

### Model: MEG-SV

This trainer/program is designed to demonstrate the basic operation of the optional Solar HVAC assist offered on the 2010 GEN III Prius. The module includes the components as used in the Prius scaled down for quick and easy instruction. Included is a 12-20 Volt Solar Panel, Solar ECU, Blower, Relay High Output Blower Fan and Ventilation Control Switch. The air inlet/outlet Servo function is simulated with colored lights to show timed operation while the actual air flow comes through the live dash vent.

