

ALTERNATIVE FUELS



ALTERNATIVE FUEL ENGINE PROGRAM MEG150H

A Multi-Fuel 4-Cycle Internal Combustion Engine Emissions and Dynamic Performance Studies program. This Megatech MARK III Engine in combination with the Electric Dynamometer/Generator has made the study of 4-Cycle engines a simple task and opened the door for the student to conduct multiple experiments. This patented and unique engine features transparent engine construction, which exposes all the moving parts. Since MARK III is oil-less too, it enables the student to clearly observe the crankcase components and internal combustion of the engine. The student can conduct performance tests and read engine speed, torque, cylinder pressure, manifold pressure, and power output on the dynamometer.

Virtually any fuel, either liquid or gaseous, is adequate for the MARK III. Gasoline, methanol, acetone, ether, propane, or natural gas may be used without any modification to the engine. The MARK III is equipped with a spark-timing lever which can vary the timing angle from -20 to $+20$ as the engine is operating. Horsepower changes can be observed and measured.

HYBRID VEHICLE MEGSTAR

Megatech's patented technology in electric dynometers has enabled the design of this hybrid vehicle for dual purposes. The Megastar I is propelled by a 2.5 hp DC motor and batteries. Solar cells provide charging, as does the on-board 4-cycle propane/natural gas engine. This enables the Megastar I to operate as a "0" emissions or low emissions vehicle and lead the way into the 21st century!

