## **Automotive Troubleshooting Trainers**

Educational Training Equipment for the 21st Century

Bulletin 194-1

#### H-AUTO-ICS

#### **Automotive Charging System Trainer**

### **Purpose**

The Hampden **Model H-AUTO-ICS** Automotive Charging System Trainer demonstrates the principles of operation and troubleshooting techniques on an automobile.

The left side of the panel contains an automobile graphic, test meters and component isolate buttons.

The right side of the panel contains a schematic diagram of the automobile's electrical, starting and mechanical systems with test buttons and indicator lamps.

The bottom of the panel contains the alternator schematic, which contains test buttons, for circuit tests.

There are many types of automobile charging systems in service, each with their own unique parts. This trainer assumes standard parts that might be encountered in the field, so the troubleshooting, diagnostics, and repair techniques are similar for all automobile starting systems.

The computer screen provides visual feedback on automotive systems with the following components: Gear Selection, Ignition Switch, and Brake Pedal.

## **Testing Capabilities**

Hampden's **Model H-AUTO-ICS** provides training in the principles of automotive charging systems, displaying both internal and external voltage regulators. Simplified techniques are demonstrated to pinpoint problems in automotive charging systems.

- Battery
- Battery Cables
- Battery Tests
- Alternator
- · Alternator Drive Belt
- Charging System Volts
- Voltage Regulator
- Electrical Connections



Model H-AUTO-ICS Automotive Charging System Trainer Dimensions: 25"H x 24"W x 12"D Shipping Weight: 110 bs

- Starter Motor
- · Starter Solenoid
- Starter Contact
- Fuses
- Start Switch
- · Transmission Gear Selection

#### **Real-Time Performance**

Hampden's line of **Computer Assisted Panel Instruction Modules** have been designed to provide realistic System Operation & Troubleshooting functions to virtually *ANY CLASSROOM!* Each module's front panel is silkscreened with a complete schematic & pictorial layout of all system operations and combined with actual test-point pushbuttons, LEDs and meters.

All units are controlled via a PC using supplied Hampden software and USB I/O Interface.

# Realistic Problem Solving in the Classroom

All Instruction Modules have the capability of inserting system specific Mechanical & Electrical malfunctions. This gives students the added experience of resolving realistic problem situations which would otherwise be very difficult for an instructor to create in a classroom.

#### Standard Features

- · Schematic and Pictorial Test Points
- Specification Chart
- Improper Equipment Use Warning
- Component Isolate Switch
- Malfunction Indication
- · Windows Digital Control System
- Duplex Socket for Power
- Power Indicator Lamp

All Hampden units are available for operation at any voltage or frequency

