

## H-AUTO-CS

### Automotive Cooling System

### Purpose

The Hampden **Model H-AUTO-CS** Automotive Cooling System demonstrates the principles of operation and troubleshooting techniques on an automobile cooling system. The trainer panel is divided into four distinct sections.

First, the right side of the panel contains a graphic of the interior/engine compartment with test buttons and lamps for testing specific systems in the automobile, such as the engine, radiator pressure cap, radiator, electric fan, blower, hoses, water pump, coolant and thermostat.

Second, the left side of the panel contains a ladder diagram of the automobile's electrical systems with test buttons for each component and voltmeter, and an ohmmeter for circuit tests along with a component isolation button.

Third, the top right of the panel contains the pressure gauge and temperature gauge with test buttons for the engine, radiator and exterior.

Fourth, the bottom right of the trainer contains the heater controls found in a typical automobile. There are many types of automobile electrical 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 electrical systems.

The computer screen provides visual feedback on automotive cooling systems with the following components: gear selection, ignition switch, blower speed, blower vent, brake pedal, start condition, ambient temperature control, and coolant mixture state with active add buttons for water and antifreeze for changing their ratios.

### Testing Capabilities

Hampden's **Model H-AUTO-CS** demonstrates cooling system fundamentals, troubleshooting and repair. Radiator status is presented.

- Coolant Capacity



**Model H-AUTO-CS Automotive Cooling System**  
Dimensions: 25"H x 24"W x 12"D  
Shipping Weight: 110 lbs

- Water Pump Drive Belt
- Radiator Cap
- Coolant Mixture %
- Radiator Hose
- Water Pump
- Coolant Leak
- Radiator
- Thermostat
- Blower Speed Indicator
- Electrical Control

### 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

**Hampden**  
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