Automotive Troubleshooting Trainers

Educational Training Equipment for the 21st Century

Bulletin 194-4

H-AUTO-ED

Automotive Electrical Diagnosis Training System

Hampden Hampden Hampden Hampden

Model H-AUTO-ED Automotive Electrical Diagnosis Training System
Dimensions: 25"H x 24"W x 12"D
Shipping Weight: 110 lbs

Purpose

The Hampden **Model H-AUTO-ED** Automotive Electrical Diagnosis Training System demonstrates the principles of operation and troubleshooting techniques on an automobile. The trainer panel is divided into three distinct sections.

First, the left side of the panel contains an automobile graphic with toggle switches for controlling specific systems in the automobile, such as, head lights, blower, wipers, dome light, and opening and closing the automobile door.

Second, the right side of the panel contains a ladder diagram of the automobile's electrical systems with test buttons and indicator lamps.

Third, the top left of the panel contains the meter section, which contains an ammeter, voltmeter, and an ohmmeter for circuit tests. 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 systems with the following components: Battery Ground, Wipers, Gear Selection, Ignition Switch, Blower Vent, and Brake Pedal.

Testing Capabilities

Hampden's **Model H-AUTO-ED** emphasizes applying the basics of electricity to troubleshooting automotive electrical and electronic systems.

- · Battery Test
- · Charging System
- · Short in a Circuit
- Open
- · Identify Component Cluster
- Pinpointing Shorts to Ground
- · Pinpointing Opens in Circuit

- Select Faults
 - No Dome Light
 - No Brake Light
 - No Lights
 - No Blower
 - No Wipers
 - Slow Cranking
 - Won't Start

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



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