Digital Instruction Modules

Educational Training Equipment for the 21st Century

Bulletin 193-110C

H-DRFS-CSI

Digital Refrigeration/Freezer Simulator

Purpose

The Hampden Computer Simulated Instruction Modules are designed to demonstrate the principles of operation and troubleshooting of various types of systems. These "modules" provide a complete aid for the teacher who desires to teach appliance analysis and troubleshooting.

Description

Each module's front panel displays both a complete schematic and pictorial of the system. All functions operate as on the actual equipment and present the student with realistic problem situations that would be very difficult for the instructor to create. Both mechanical and electrical problems are simulated. Pushbuttons are used to "replace" suspected defective parts. Simulator includes H-LTCS Laptop Computer.

Standard Features

- Schematic and pictorial test points
- Specification chart
- Improper equipment use warning
- Component isolate switch
- Line cord disconnect/connect switch
- Malfunction indication
- · Windows Digital control system

Options

MODEL H-CSI-CS

Pentium™ Desktop Computer System

MODEL H-CAI-PO

Printer to provide the instructor with a color hard copy of the students' progress.

Model H-DRFS-CSI

The Hampden **Model H-DRFS-CSI** Digital Refrigeration/Freezer Simulator demonstrates the principles of operation and troubleshooting techniques used on a top-of-the-line residential refrigerator- freezer.

Additional Features:

- Suction and Discharge Pressure Gauges
- Refrigerator/Freezer thermometers
- Adjustable temperature control
- Charge (Refrigerant) control
- Condenser/evaporator air flow indicators
- Six customer control switches
- Separate meters for voltage, watts, resistance readings

Typical Malfunctions:

- Open-winding in freezer fan
- Upper freezer door switch open
- Open relay contacts
- Open "cooling" contacts in defrost timer
- Open run winding
- · Overload open

Typical Malfunctions (continued):

- Defrost timer motor open
- · Open defrost thermostat
- · Open "defrost" contact on timer
- · Corroded contact in freezer door switch

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- · Open temperature control
- Leak, low on gas
- Compressor not pumping
- Open condenser fan motor winding
- · Dirty condenser
- "Cooling" and "Defrosting" contacts shorted in timer
- Water valve solenoid open
- Upper freezer door switch shorted
- Defrost heater open
- · Open cabinet Mullion heater
- Open water line heater



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



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