

# Oil Burner Demonstrators and Trainers

Educational Training Equipment for the 21st Century

Bulletin 229-106-1F

## H-OBT-2 Oil Burner Trainer

### Purpose

The Hampden **Model H-OBT-2** Oil Burner Trainer is a fully functional oil burner & supply system—unassembled kit form. It is designed to familiarize the student with the system components and principles of operation.

### Description

The components included are as follows: Oil Burner, Combustion Chamber, Primary Control, Oil Filter, Shut-Off Valve—Fused, Pressure Gauge, Vacuum Gauge, Fuel Line Tubing, Thermostat, and Base

Typical Operations of the **H-OBT-2** include: Oil Burner Assembly, One Pipe System, Two Pipe System, Oil Pressure, Oil Line Restriction, Oil Line Air Leak, Combustion Air, and Cad Cell Resistance



**MODEL H-OBT-2** Oil Burner Trainer (shown assembled)  
Dimensions: 18"H x 48"W x 18"D, Shipping Weight: 120 lbs.

### Optional Components:

- A. 5-Gallon Oil Tank with filler, gauge and fittings
- B. Nozzle Set
  - 1 - 0.5 to 0.75 gph
  - 1 - 0.85 to 1.75 gph

**NOTE:** This unit must be used in an area where proper ventilation for this type of unit is available and in-use. **NEVER** run this trainer without proper ventilation.

## H-OBD-5B

### Domestic Oil Furnace Demonstrator

#### Purpose

The Hampden **Model H-OBD-5B** Domestic Oil Furnace Demonstrator consists of a standard domestic oil fired furnace modified for educational purposes. The control panel has electrical controls that include: flame detector, fan control, thermostat, and control transformer. Also included is a plenum cabinet with registers. Faults include: ignition failure, flame failure, electrical power failure, and high limit conditions. The unit is mounted on a mobile bench.

This unit is provided with thermometer access ports for testing stack and limit controls and it is designed to interface with the following separately sold Add-On units:

**MODEL H-OBD-5PH** Power Humidifier

**MODEL H-OBD-5C** Cooling unit



**MODEL H-OBD-5B**  
Domestic Oil Furnace Demonstrator  
Dimensions: 81-1/8"H x 48"W x 24"D  
Shipping Weight: 550 lbs.

## H-OBD-1T Oil Burner Test Kit

### Purpose

The **H-OBD-1T** Oil Burner Test Kit contains the equipment necessary to make tests and perform experiments with all **MODEL H-OBD** and **H-OBT** Oil Burner Demonstrators.

### Description

- 3 1/2 digit DMM, LCD readout, w/case
- Oil Burner Combustion Testing Kit, consisting of the following:
  - 1 - Case, carrying
  - 1 - Tester, smoke
  - 1 - Fire efficiency finder
- 1 - Moisture absorption material
- 1 - Sampling hose assembly
- 1 - CO<sub>2</sub> indicator
- 1 - Thermometer, 1000°F
- 1 - Draft gauge
- 1 - Manual

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

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