# Gas Controls Trainers

Educational Training Equipment for the 21st Century

Bulletin 229-1H

#### H-GT-1

#### **Gas Control Demonstration Trainer**

The Hampden **Model H-GT-1** Gas Control Demonstration Trainer provides students with experience in operating and testing the gas controls, electrical circuits, and gas burner operation of a pilot flame-type gas ignition system. It contains all the components of a pilot flame type gas burner system, completely assembled, prewired and tested. With the addition of a propane fuel tank (not supplied), the trainer is ready to plug into any standard single-phase AC supply and operate. The low voltage thermostat is typical of those found in actual installations. A potentiometer on the high voltage side of the transformer demonstrates the effect of a low line voltage or complete loss of power. A ten-turn loop current multiplier is provided for current measurement in the low voltage circuit



MODEL H-GT-1 Dimensions: 20"H x 20"W x 12"D Shipping Weight: 120 lbs

## H-EIG-1C

#### **Electronic Ignition Gas Trainer**

The Hampden **Model H-EIG-1C** Electric Ignition Gas Trainer provides students with the opportunity to operate, test, and troubleshoot the gas controls, electrical circuits, and electronics components of an electronically-controlled direct spark ignition system. It contains all the components of a direct spark ignition gas burner system, completely assembled, prewired, and tested. With the addition of a propane fuel tank (not supplied), the trainer is ready to plug into any standard single-phase AC supply and operate. All components function exactly as they do on the job with the exception of the simulated combustion air fan. The instructor has the ability to provide students with realistic troubleshooting experience by inserting up to nine faults via toggle switches on the side. A  $20\mu A$  DC ammeter is included for convenience. Components may easily be isolated from the test points for resistance and continuity testing. Furnished complete with cords.

To order this unit for mounting on a Mobile Frame stand specify mobile frame.



MODEL H-EIG-1C Dimensions: 36"H x 36"W x 13"D Shipping Weight: 255 lbs

## H-GT-2

### Gas Trainer with Vent Damper & Retrofit Ignition

The Hampden **Model H-GT-2** Gas Trainer with Vent Damper and Retrofit Ignition provides students with experience in operating and testing a retrofit spark-ignited pilot gas system with automatic operation of a vent damper to retain heat when burner is off. It contains all the actual control components of an energy efficient spark-ignited, pilot fired furnace control system having automatic vent damper control. The trainer is supplied assembled, prewired, and tested. It contains an automatic vent damper, a thermostat, a temperature sensor, a control transformer, main valve, electronic spark ignition control, retrofit pilot igniter and flame sensor, and fan/limit control. With the addition of a propane fuel tank (not supplied), it is ready to plug into any standard single-phase AC supply and operate. On a call for heat, events occur in the following sequence: (1) the vent damper opens, (2) pilot flame is ignited by electronic spark, (3) sensing probe proves pilot flame, (4) main gas valve opens. The gas valves and damper close when the temperature sensor mounted above the main burner warms to the preset temperature.



MODEL H-GT-2 Dimensions: 20"H x 20"W x 12"D Shipping Weight: 120 lbs

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

