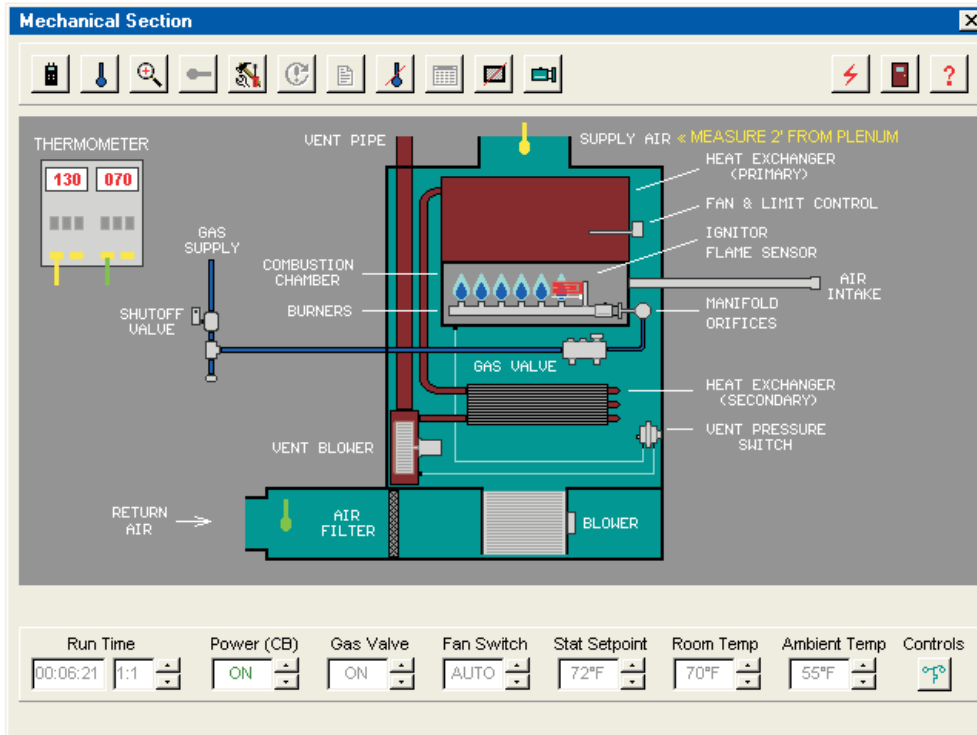
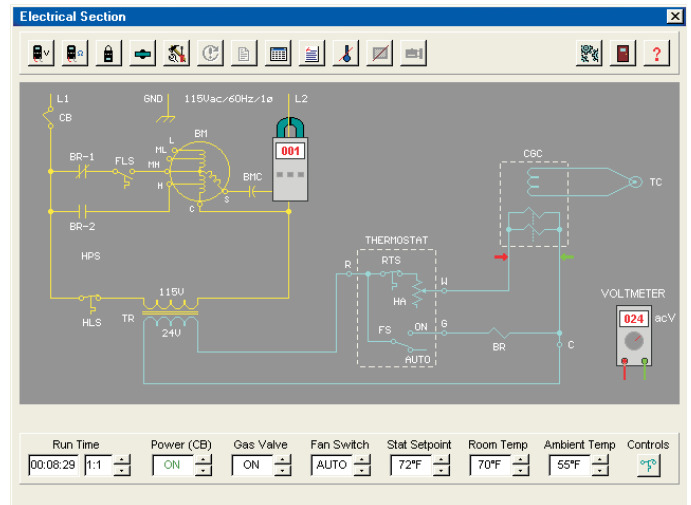
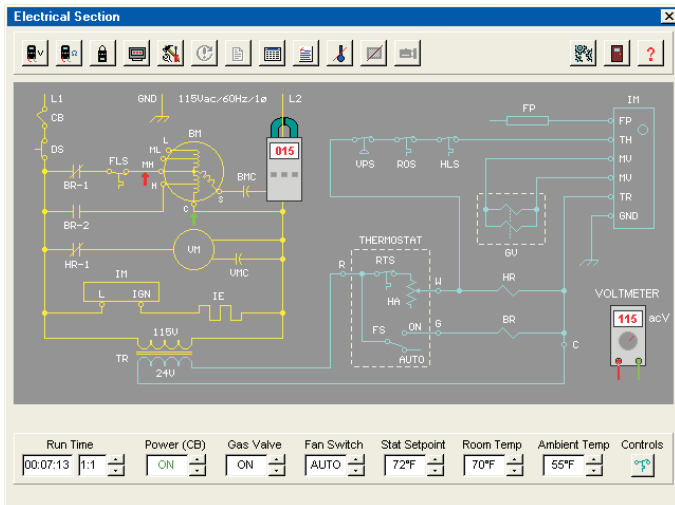


GAS FURNACE SIMULATOR *SIMUGAS*™

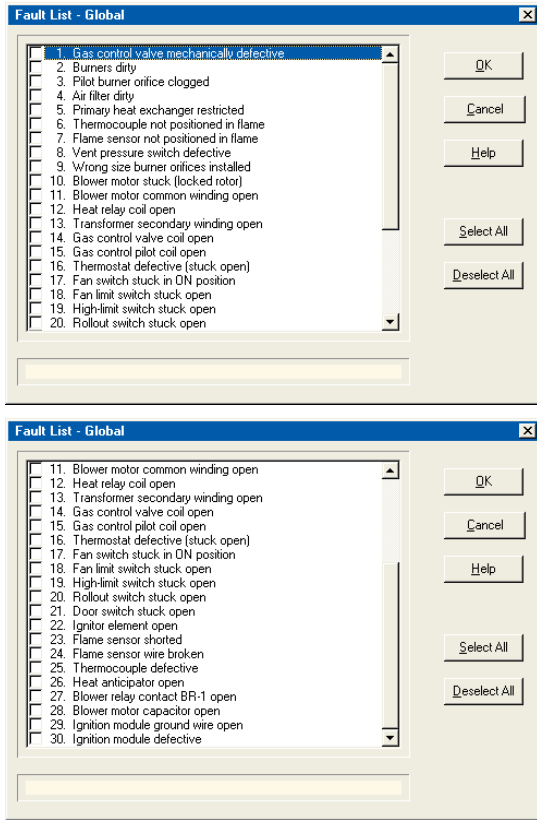


SIMUGAS™ simulates two *generic* versions of gas furnaces. These include a **high-efficiency condensing furnace** with *hot-surface ignition (HSI)*, and a **standard-efficiency furnace** with **standing pilot ignition**. Either *natural gas* or *liquid-petroleum (LP) gas* may be selected for simulation. Room and ambient temperatures, room thermostat, burner air-shutters, fan limit, high limit, heat anticipator, and manifold pressure are all adjustable. The room and ambient temperatures, in either *Fahrenheit* or *Celsius*, are constantly updated and displayed.

Animated mechanical and electrical schematic diagrams of the simulated gas furnace are provided in “real-time”. The **mechanical diagrams** show the burner flames, gas flow, and blower rotation. In the **electrical ladder diagrams**, the controls and switch contacts constantly change state as the system operates. The trainee can “zoom” into the furnace to visually inspect various components, including checking for a dirty air filter or heat exchanger, and the position of the flame sensor. Typical types of burner flames are also shown. Up to 30 commonly



GAS FURNACE SIMULATOR SIMUGAS™



Primary heat exchanger	Blower relay
Secondary heat exchanger	Heat relay
Combustion chamber	Gas control valve
Manifold	Ignitor element
Burners	Ignition module
Orifices	Gas control coil
Air filter	Flame sensor
Gas valve	Run capacitor
Vent pipe	Room thermostat
Draft hood	High limit switch
Pilot burner	Fan switch
Thermocouple	Vent pressure switch
Blower motor	Rollout switch
Vent blower motor	Door switch
Transformer	Circuit breaker

SIMUGAS provides testing and troubleshooting of the devices listed above, which are commonly found in gas furnaces.

SYSTEM REQUIREMENTS

SIMUGAS requires the following minimum IBM compatible computer:

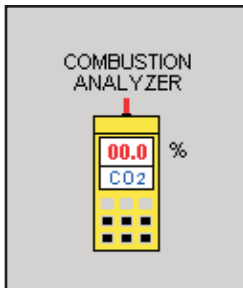
- Pentium, Core, or equivalent processor (32 or 64-bit)
- Windows XP, Vista, 7, 8, 8.1, 10
- Hard drive, 17MB available disk space

SIMUGAS network version is compatible with Novell and Windows Server 2003, Server 2008, Server 2012

encountered mechanical and electrical faults may be selected, as shown in the *Fault Lists* above.

SIMUGAS provides easy-to-use “point-and-click” selection of meters and test points, which are saved to an *Instrument Log* to monitor the users’ troubleshooting skill. Temperatures may be displayed in either *Fahrenheit* (°F) or *Celsius* (°C), and pressures may be displayed in either *imperial* (in. w.c.) or *metric* (kPa). The on-screen test instruments include:

- Manometer
- Thermometers
- Combustion analyzer
- Ignition module tester
- Voltmeter
- Millivoltmeter
- Ohmmeter
- Clamp-on ammeter
- Microammeter



ORDERING INFORMATION

SIMUGAS™ Gas Furnace Simulator

Standalone Licenses

MF-500	1 computer license	\$695.00
MF-505	5 computer licenses	\$1,295.00
MF-511	10 computer licenses	\$1,695.00
MF-515	15 computer licenses	\$1,995.00
MF-520	20 computer licenses	\$2,295.00

Network Licenses

MF-540	10 seats	\$1,595.00
MF-560	25 seats	\$1,895.00
MF-570	50 seats	\$2,695.00

For further prices and ordering information, please see Page 20

ORDERING INFORMATION

METHODS OF ORDERING

MAIL

Simutech Systems, Inc.
PO Box 7212
Beaverton OR 97007 (U.S.A.)

PHONE

(800) 648-6209 (USA & Canada)
(503) 649-9076
Hours: 8:00 am to 5:00 pm Pacific Time

FAX

(503) 649-8972

ON-LINE STORE / E-MAIL

www.simutechsystems.com
sales@simutechsystems.com

METHODS OF PAYMENT

U.S. CUSTOMERS

- Purchase Order from government agency, school, or corporation (OAC), Net 30-days
- Visa, MasterCard, or American Express
- Prepaid by check



CANADA & INTERNATIONAL CUSTOMERS

- Purchase Order from government agency or school, Net 30-days, payable in U.S. funds
- Visa, MasterCard, or American Express
- Prepaid by International Bank Check, payable in U.S. funds

SHIPPING

All orders are shipped *FOB shipping point* and a shipping charge is added to invoice. Shipment is normally via *UPS ground* in USA and *UPS Air* to Canada and international. *Next-day* or *second-day air* is available upon request. For Canada and international orders, GST, local taxes, and duty are not included in our prices.

Orders are normally shipped within 24-hours

SYSTEM CONTENTS

Each simulator system includes the following:

- CD-ROM
- User's Manual
- Instructor's Manual
- Technical Support, unlimited, with toll-free number (USA and Canada)

- (1) Additional licenses are required if simulators are installed and used on more than one standalone computer at same campus or training facility
- (2) Network versions are valid for installation on a LAN server at one campus or training facility, for concurrent use by maximum licensed users
- (3) Network versions for more than 50 users are also available
- (4) May be used on tablets and iPads when a remote access server is used

Prices are subject to change without notice

Note: Simutech reserves the right to refuse any order, including shipment to countries where prohibited by U.S. export laws or lacking proper international copyright protection. Export, reshipment, or resale is prohibited without prior written permission, subject to U.S. export laws.

INSTRUCTOR INTERFACE MODULES

These *optional* programs are installed on the instructor's computer to *preselect faults* for all users at one time. Using a CD or flash drive, the faults are then uploaded to each workstation. In addition, when a printer isn't available at each workstation, these interfaces can be used to download reports, for display and printout at the instructor's computer. **These are recommended when six or more workstations are utilized without a network.** Prices are shown below:

DESCRIPTION	PART NO.	UNIT PRICE
ACINST™ Version 5.1	TA-500	\$ 195.00
HPINST™ Version 5.1	TP-500	\$ 195.00
REFRINST™ Version 5.1	TR-500	\$ 195.00
MKTINST™ Version 5.1	TS-500	\$ 195.00
GASINST™ Version 5.1	TF-500	\$ 195.00
OILINST™ Version 5.1	TO-500	\$ 195.00
HYDROINST™ Version 1.1	TB-500	\$ 195.00
GEOINST™ Version 1.0	TG-500	\$ 195.00

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iPad is a registered trademark of Apple Inc.