



WARNING; FIRE, BURN, INHALATION, AND EXPLOSION HAZARD. KEEP SOLID COMBUSTIBLES, SUCH AS BUILDING MATERIALS, PAPER OR CARDBOARD, A SAFE DISTANCE AWAY FROM THE HEATER AS RECOMMENDED BY THE INSTRUCTIONS NEVER USE THE HEATER IN SPACES WHICH DO OR MAY CONTAIN VOLATILE OR AIRBORNE COMBUSTIBLES, OR PRODUCTS SUCH AS GASOLINE, SOLVENTS, PAINT THINNER, DUST PARTICLES OR UNKNOWN CHEMICALS.

OPERATING INSTRUCTIONS

PREPARING FOR OPERATION

1. Inspect the heater for possible shipping damage. If any is found, immediately notify the dealer.
2. Follow all of the "Safety Precautions" and "Operating Information" on page 1, and "Propane Fuel Information" on page 4.
3. Refer to the exploded view on page 3 for general assembly layout. Regulator: Heater is to be hooked up to the regulator (set at 28" water column) supplied with the heater.
4. HEATER ASSEMBLY:
 - a) Lay the heater reflector down on a flat level surface (the manifold mounting lug will be up).
 - b) Attach the manifold to the burner/reflector assembly as shown in the exploded view.
 - c) Be sure that the neck(s) of the manifold are pushed all of the way into the one (1) inch tube(s) of the burner assembly(s).
 - d) Position and tighten the adapter clamp(s).
 - e) The manifold mounting lug (the rectangular piece of 1/8" thick steel that is welded to the manifold) must face the direction shown in the exploded view.
 - f) Attach the loose thermocouple end to the connection at the thermoelectric valve.
 - g) Tighten the connection finger tight, then tighten an additional maximum 1/4 turn using a 3/8" open end wrench.
5. If you have the 24,000 BTU w/Piezo (all others go to step 7):
 - a) Place the piezo mounting bracket with the attachment surface on the left side of the manifold mounting lug, the piezo bracket will cross over the lug.
 - b) Lineup the mounting holes on the piezo bracket and the lug, then securely attach the piezo bracket to the lug with the two 10-24x3/8 machine screws and hex nuts provided.
 - c) Insert the loose end of the electrode wire onto the terminal on the piezo igniter.
6. HEATER MOUNTING (for Quad Heater go to step 7):
 - a) Assemble the flattened end of the heater support to the manifold mounting lug with a lock bolt (3/8-16 x 1 1/4 bolt).
 - b) Place the 3/8-16 whiz nut onto the remaining 3/8-16 x 1 1/4 bolt, with the nut serrations away from the bolt head.
 - c) Attach the lock bolt assembly into the remaining base support weld nut, making sure that the nut serrations face the base support.
 - d) Mount the heater onto a standard 20 or 40 # propane cylinder by placing the slot in the heater support over the propane cylinder flange. Tighten the lock bolt assembly, then secure with the nut.
7. QUAD-HEAD HEATER MOUNTING
 - a) Mount the quad-head heater onto a 100# cylinder

by placing the collar assembly over the threaded neck (for cylinder valve cover) and tighten the wing nut.

- b) Place the slot in the heater support over the propane cylinder flange.
 - c) Tighten the lock bolt assembly, then secure with the nut.
8. Check the 'O' ring on the POL before each use (see page 4). Replace the 'O' ring if there is any sign of wear or damage.
 9. After the heater is securely attached to the propane cylinder connect the POL fitting of the hose and regulator assembly to the propane cylinder by rotating the POL nut counterclockwise into the propane cylinder's valve outlet. Securely tighten with a wrench.
 10. Securely tighten all gas connections.
 11. Open the cylinder's gas valve and check all gas connections with a soap and water solution. **DO NOT USE A FLAME.**



WARNING: DO NOT LOOK OVER TOP OF HEATER (REFLECTOR) DURING IGNITION.

This heater may produce a small puff of flame during ignition, which could result in serious bodily injury.

START

1. Fully open the valve on the propane cylinder.
2. Depress the red button on the safety valve admitting gas to the heater. Place a lighted match near the face of the ceramic element using the hole located on the side of the reflector. If the hose is filled with air, allow a few seconds for gas to reach element. **DO NOT LIGHT AT THE ORIFICE.**
3. 24-IRP: Depress the red button on the safety valve admitting gas to the heater. Push and release the piezo ignition button until the gas on the surface of the grid ignites. This may take several strikes of the piezo. Ignition may be observed using the holes located on the sides of the reflector. **DO NOT LOOK OVER TOP OF REFLECTOR!** If the hose is filled with air allow a few seconds for the gas to reach the grids.
4. When the gas on the face of the ceramic element lights, continue to hold the button depressed for 30 seconds, then release. On multiple head units, check to see that all elements are burning.
5. If the flame goes out, wait 5 minutes and repeat the lighting procedure.

STOP

1. Securely close valve at propane cylinder.
2. Do not attempt to relight for 5 minutes.

RESTART AFTER SAFETY SHUTDOWN

1. Securely close valve at propane cylinder.
2. Wait 5 minutes.
3. Restart following "Start" procedure.

INSTRUCTIONS FOR ORDERING PARTS -

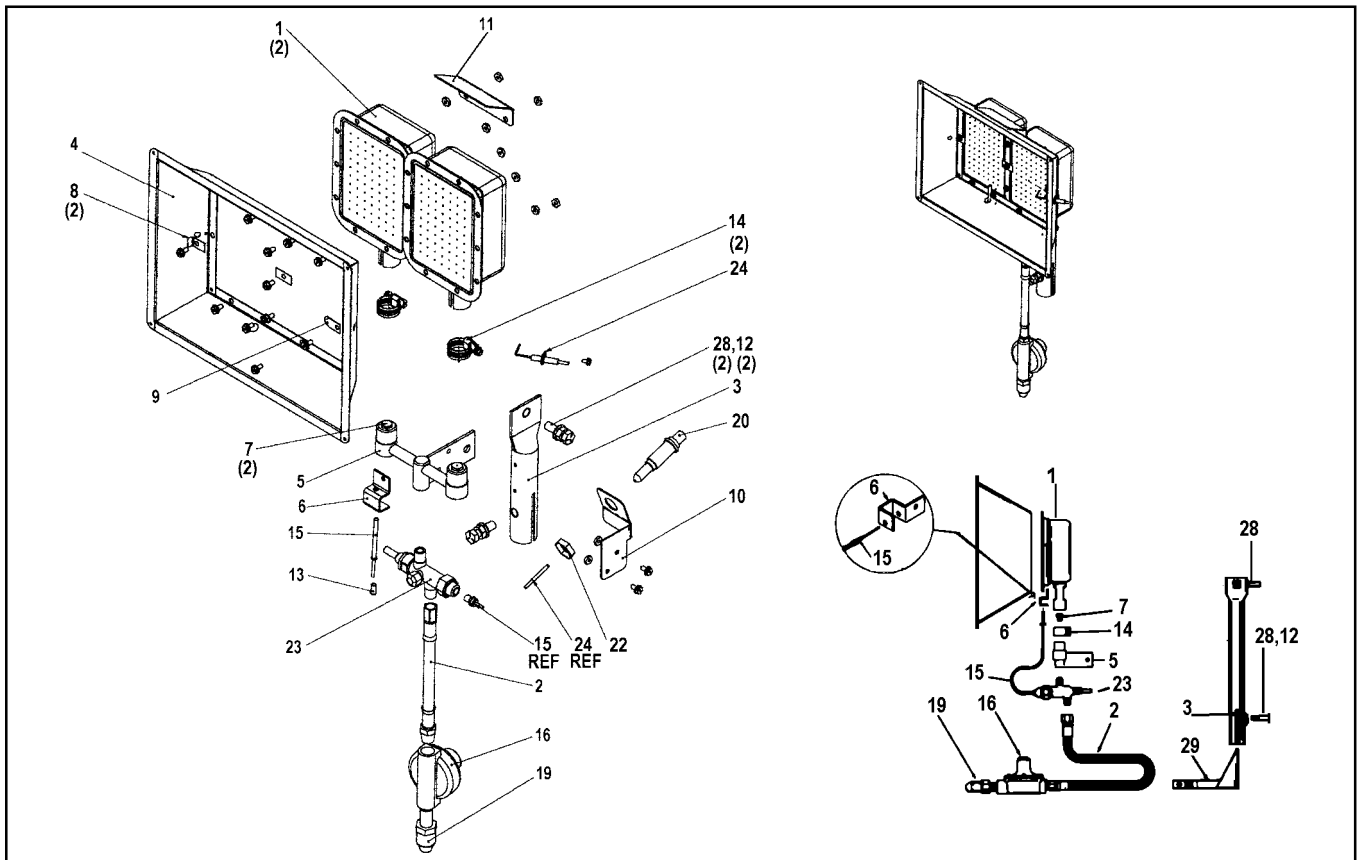
All parts orders must show Heater Model No., Item No., Part No. and Description. Only parts supplied by the manufacturer should be used on this unit. A locally purchased part may appear to be identical, although in reality it might endanger the heater or the persons operating the heater.

The heater should be serviced only by a trained, experienced service person.

Read the section on "Servicing" before ordering parts.

For parts order, call (909) 981-5343.

Item No.	Description	12IR	Qty.	24IR	Qty.	24IRP	Qty.	36IR	Qty.	48IR	Qty.
1	Burner Assembly w/ceramic grid	1010	1	1010	2	1010	2	1010	3	1010	4
2	Hose Assembly	1016	1	1016	1	1016	1	1016	1	1016	1
3	Support Tube Assembly	1017	1	1017	1	1017	1	1017	1	1017	1
4	Reflector Assembly	1009	1	1019	1	1019	1	1022	1	1025	1
5	Manifold Assembly	1014	1	1021	1	1021	1	1024	1	1027	1
6	Bracket, Thermocouple	3003	1	3003	1	3003	1	3003	1	3003	1
7	Orifice, LP #69 Drill	3008	1	3008	2	3008	2	3008	3	3008	4
8	Keeper, Grid	3017	2	3017	3	3017	2	3017	4	3017	5
9	Bracket, Electrode Ground					3645	1				
10	Bracket, Piezo Mounting					4291	1				
11	Bracket, Label					4292	1				
12	Nut, flange Lock 3/8-16	6042	2	6042	2	6042	2	6042	2	6042	2
13	Clip, Thermocouple	6045	1	6045	1	6045	1	6045	1	6045	1
14	Clamp, Loop 1" Dia.	6069	1	6069	2	6069	2	6069	2	6069	2
15	Thermocouple, 12"	6233	1	6233	1	6233	1	6233	1	6233	1
16	Regulator 28" W.C. 1/4 x 3/8 FPT	6257	1	6257	1	6257	1	6257	1	6257	1
*	Manual, Operating Instructions	6326	1	6326	1	6326	1	6326	1	6326	1
*	Label, Warning, Fuel	6369	1	5369	1	6369	1	6369	1	6369	1
19	POL, Excess Flow 1/4 MPT	6433	1	6433	1	6433	1	6433	1	6433	1
20	Piezo Igniter					6473	1				
*	Label, Hangtag	6712	1	6712	1	6712	1	6712	1	6712	1
22	Nut, Piezo					7161	1				
23	Valve, Thermoelectric	7285	1	7285	1	7285	1	7285	1	7285	1
24	Electrode					7395	1				
*	Label, Mode/Opr. Instructions	7608	1	7608	1	7608	1	7608	1	7608	1
*	Label, Light Here	7609	1	7609	1	7609	1	7609	1	7609	1
*	Label, Warning/Ignition Flash					8186	1				
28	Screw, Machine 3/8-16 x 1 1/4 Grd 5	8190	2	8190	2	8190	2	8190	2	8190	2
29	Collar, Assembly, 48IR									1028	1



SERVICING

A hazardous condition may result if a heater is used that has been modified or is not functioning properly. When the heater is working properly:

- The flame is contained near the surface of the ceramic grid(s).
- The flame is essentially blue.
- There is no strong disagreeable odor, eye burning or other physical discomfort.
- There is no smoke or soot internal or external to the heater.
- There are no unplanned or unexplained shutdowns of the heater.

The parts list shows the heater as it was constructed. Do not use a heater which is different from that shown. In this regard, use only the hose, regulator and cylinder connection fitting (called a POL fitting) supplied with the heater. Do not use alternates. For this heater, the regulator must be set to supply 28" water column (W.C.) outlet pressure (1.0 psig). If there is any uncertainty about the regulator setting, have it checked.

A heater which is not working right must be repaired, but only by a trained, experienced service person. Contact the factory for the service center closest to you, phone number (909) 981-5343.

You may also obtain in-warranty or out-of warranty service by returning the product freight prepaid to:

Scheu Products Company
8855 Baker Avenue
Rancho Cucamonga, CA 91730

In-warranty products returned to the Service Department will be repaired with no charge for either parts or labor and will be returned to you freight prepaid. Please include a brief statement indicating date, place of purchase, the nature of the problem and proof of purchase.

Out of warranty products returned to the Service Department will be repaired with a charge for parts and labor and will be returned to you freight collect.

MAINTENANCE AND STORAGE

1. The heater should be inspected before each use, and at least annually by a qualified person.
2. Before each use, check the soft "O" ring seat at the bullnose of the POL fitting. If the "O" ring is cut, scuffed, or otherwise damaged, replace it with part number 6681.
3. Turn off the gas at the LP-gas supply cylinder(s) when the heater is not in use.
4. When the heater is to be stored indoors, the connection between the LP-gas supply cylinder(s) and the heater must be disconnected and the cylinder(s) removed from the heater and stored outdoors and in accordance with Chapter 5 of the Standard for Handling of Gases ANSI/NFPA 58-1998.

WARNING

Local codes for installation of propane systems may vary considerably. Therefore, ask your local propane supplier for advice on propane system installation in your particular area. In the absence of local codes, install in accordance with American National Standards Institute (ANSI)/National Fire Protection Association (NFPA) publication 58-1998 Standard for the Storage and Handling of Liquefied Petroleum Gases and ANSI Z223.1/NFPA 54 National Fuel Gas Code. Your supplier, fire marshal or library should have copies of these standards.

The propane supply system must be arranged for vapor withdrawal. Propane cylinders must be secured in the upright position to keep them from falling or being knocked over.

MINIMUM RECOMMENDED PROPANE CYLINDER SIZE:

HEATER MODEL	CYLINDER SIZE	OPERATING TIMES @ 60°F*
12IR/SPC-12IR	20# (5 - Gallons)	30 - hours
24IR/SPC-24IR	20# (5 - Gallons)	15 - hours
24IR/SPC-24IRP	20# (5 - Gallons)	15 - hours
36-IR/SPC-36IR	40# (10 - Gallons)	20 - hours
48IR/SPC-48IR	100# (25 - Gallons)	35 - hours

* If ambient temperatures will be less than 60°F increase propane supply accordingly.

PROPANE FUEL INFORMATION

During use, liquid propane in a container vaporizes. As it vaporizes, the propane cools itself. This cooling process is known as the refrigeration effect. If it continues long enough and proceeds fast enough, the propane temperature and pressure will fall so low that heater operation may be improper or even impossible even though plenty of propane remains in the container. Often frost forms on the outside of the propane container as a warning of excessive refrigeration.

Recommendations to reduce the ill effects of refrigeration effect are:

Provide considerable more propane than you plan to consume. As a rule of thumb, provide twice as much. Fill containers frequently, especially in cold weather. Never allow propane to fall below one-third of container capacity.

If possible, keep containers in a warm area (**under no circumstances should the heater exhaust be directed toward the propane container**).