

OPERATING INSTRUCTIONS AND OWNERS MANUAL



PORTABLE RADIANT GOLF CART HEATER

Model #

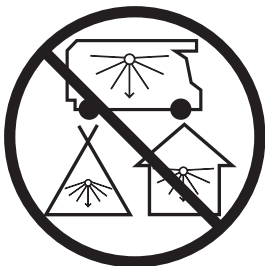
MH4GC

READ INSTRUCTIONS CAREFULLY: Read and follow all instructions. Place instructions in a safe place for future reference. Do not allow anyone who has not read these instructions to assemble, light, adjust or operate the heater.



PORTABLE PROPANE HEATER FOR
RECREATIONAL AND COMMERCIAL USE

 **DANGER**



CARBON MONOXIDE HAZARD

This appliance can produce carbon monoxide which has no odor.

Using it in an enclosed space can kill you.

Never use this appliance in an enclosed space such as a camper, tent, car or home.

FOR YOUR SAFETY

If you smell gas:

1. Do not attempt to light appliance.
2. Extinguish any open flames.
3. Disconnect from fuel supply.

FOR YOUR SAFETY

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

WARNING:

⚠ Any changes to this heater or its controls can be dangerous.

WARNING:

⚠ Early signs of carbon monoxide poisoning resemble the flu, with headache, dizziness and/or nausea. If you have these signs, heater may not be working properly. Get fresh air at once! Have heater serviced.

WARNING:

⚠ Every time hose or tank is connected to unit, connection must be checked for leaks in one or more ways: Apply soapy water to connection, look for bubbles, listen for hiss of escaping gas, feel for extreme cold, smell for rotten egg odor. Do not use if leaking!

THE STATE OF CALIFORNIA REQUIRES THE FOLLOWING WARNINGS:

WARNING: Combustion by-products produced when using this product contain carbon monoxide, a chemical known to the State of California to cause cancer and birth defects (or other reproductive harm).

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NOTICE: Not for use in a "dwelling home" in California.

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SPECIFICATIONS

MODEL NO.	MH4GC
GAS TYPE.....	PROPANE
MANIFOLD PRESSURE.....	1.0 PSI
INPUT BTU/HR.....	4,000

CLEARANCE TO COMBUSTIBLES

TOP	24"
FRONT	18"
SIDES	6"
REAR	0"



GENERAL SAFETY INSTRUCTIONS

THIS IS A HEATING APPLIANCE. DO NOT OPERATE THIS APPLIANCE WITHOUT THE FRONT WIRE GUARD INSTALLED. DO NOT ATTEMPT TO WARM OR COOK FOOD ON THIS HEATER.

- Only cylinders marked with propane may be used with the appliance.
- Do not use non-approved attachments on this heater.
- Due to high temperatures, the appliance should be located out of traffic and away from combustible materials.
- Children and adults should be alerted to the hazard of high surface temperatures and should stay away to avoid burns or clothing ignition.
- Young children should be carefully supervised when they are near the appliance.
- Do not place clothing or other flammable material on or near the appliance.
- This heater is for outdoor use only.
- GAS PRESSURE AT HEATER IS REGULATED AND FIXED AT 1 PSI.
- REGULATOR IN HEATER MUST ALWAYS BE IN PLACE DURING OPERATION.
- Any safety screen or guard removed for servicing the appliance must be replaced prior to operating the heater.
- The appliance should be inspected before each use. Frequent cleaning may be required. The control compartments, burner and circulating air passageways of the appliance must be kept clean, see MAINTENANCE.
- DO NOT use this heater if any part has been under water. Immediately call a qualified service technician to inspect the heater and to replace any part of the control system and any gas control, which has been under water.
- When used without adequate combustion and ventilation air, this heater may give off excessive CARBON MONOXIDE, an odorless, poisonous gas.
- Some people - pregnant women, persons with heart or lung disease, anemia, those under the influence of alcohol, those at high altitudes - are more affected by carbon monoxide than others.
- THIS HEATER IS EQUIPPED WITH A TIP OVER SWITCH THAT WILL SHUT THE HEATER OFF IF THE HEATER TIPS OVER HOWEVER, DO NOT LEAVE HEATER UNATTENDED OR WHERE CHILDREN MAY CAUSE THE HEATER TO TIP OVER. NEVER OPERATE THE HEATER WHILE SLEEPING!
- Do not leave this appliance unattended while it is in operation.



GENERAL INFORMATION:

- When the heater is cold, it will take a few minutes for the burner tile to turn bright orange. This is normal and the heater is working properly. If burner tile is visibly flaming, turn heater off and call a qualified service technician.
- When the unit is lit, there should be about a quarter inch border around the tile that will not turn bright orange. This is normal.
- When operating the heater for the first time, the top area of the reflector may discolor. This is also normal and is no reason for concern.
- Designed to operate at altitudes up to 7,000 feet. When operating the heater at altitudes over 7,000 FT. above sea level, the unit may not burn as bright as in lower altitudes. This is normal. At higher altitudes, the heater may shut-off. If this happens, provide fresh air, wait 5 minutes and re-light. If the heater continues to shut off, there may not be enough oxygen available to feed proper combustion.
- Operating time will be approximately 5 1/2 hours on a one 1lb cylinder. Due to the properties of LP gas, runtimes can be significantly reduced when operating continuously at temperatures below 20°F.
- This heater is equipped with a tip-over safety switch. Nuisance shut-downs may be experienced if the unit is bumped or moved. If this occurs simply relight the heater.
- Due to natural operation of small tanks, condensation may build up on tank and drip on surface under heater. Sometimes this condensation may freeze due to the extreme cold caused when propane vaporizes. This is normal and no reason for alarm.

LIGHTING / OPERATING INSTRUCTIONS

WARNING: Always inspect propane cylinder and heater propane connections for damage, dirt, and debris before attaching propane cylinder. Do not use if head of cylinder is damaged, punctured or deteriorated.

ALWAYS ATTACH OR DETACH CYLINDER OUTDOORS AWAY FROM FLAMES, OTHER IGNITION SOURCES, AND ONLY WHEN HEATER IS COOL TO TOUCH. NEVER SMOKE WHEN ATTACHING OR REMOVING PROPANE CYLINDER!

- LP cylinders must be marked in accordance with "Cylinders, Spheres and Tubes for Transportation of Dangerous Goods, CAN/CSA B339".
- Use only LP-gas cylinders marked in accordance with the U.S. Dept. of Transportation (DOT).
- Use only 16.4 oz. (1 lb.) disposable cylinders that mate with No. 600 valve connection.
- Heater and attached cylinder must be in an upright position during operation.
- Screw 1 lb. disposable LP-gas supply cylinder clockwise (from bottom) into portable heater until hand-tight and fit cylinder into cup adapter. Do not use thread sealant on this connection. Be sure cup adapter fits tightly into cup holder before moving.
- Check cylinder connection for leaks with soapy water at the threaded connection under the domed plastic cover where the cylinder screws into the regulator. SEE WARNING! ON PLASTIC COVER.
- Depress "ON" button to light pilot flame (repeat until pilot lights) and continue to hold for 30-60 seconds.
- After lighting pilot, release "ON" button to light heater. The white tile will take a few moments to start to glow.
- To shut off heater, press the "OFF" button.
- **CAUTION:** After turning heater off, wire guard will remain hot. Allow to thoroughly cool before storing.
- Do not operate, store or remove cylinder near flammable items or ignition sources.
- LP-GAS CYLINDERS MUST BE DISCONNECTED FROM HEATER WHEN NOT IN USE!
- Heater must not be exposed to flammable vapors or liquids during ignition or operation.

MAINTENANCE:

Always keep the heater area clear and free from combustible materials, gasoline and other flammable vapors and liquids.

Keep the vent areas (slots in the bottom and top of the heater) clear at all times.

Visually inspect the pilot flame and burner periodically during use. The pilot flame should be blue in color (not yellow) and will extend to the thermocouple. The flame will surround the thermocouple just below the tip, see Figure 2.

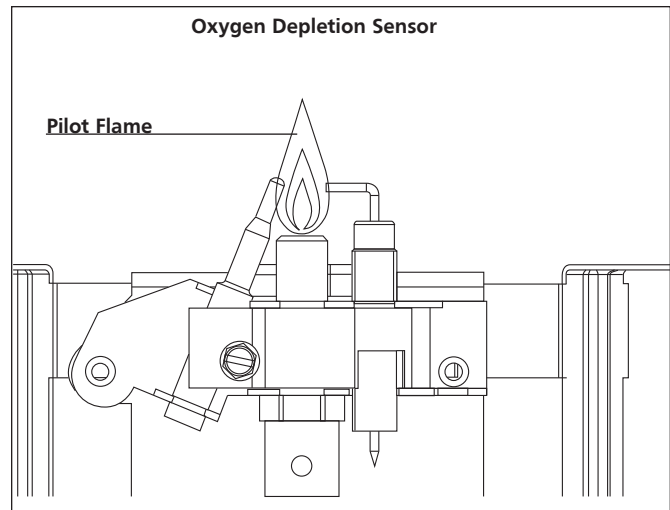


Figure 2

A slight yellow flame may occur where the pilot flame and main burner flame meet. The burner should be bright orange (with a slight blue color around the border, a red-orange haze that is visible on the ceramic tile is acceptable) and without a noticeable flame.

A blue flame that rolls out at the top of the ceramic tile indicates an accumulation of dust, lint or spider webs inside the housing assembly and main burner assembly. If the pilot is yellow or the burner has a noticeable flame, cleaning may be required. Use the following procedure to inspect the casing assembly and main burner assembly. It is necessary to periodically check the burner orifice and burner venturi to make sure that they are clear of insects/nests or spider webs that may accumulate over time. A clogged tube can lead to a fire.

CLEANING INSTRUCTIONS:

1. Allow heater to thoroughly cool before performing any maintenance.
2. Remove disposable 1 lb. propane cylinder from heater.
3. Remove right side plastic service panel (Parts diagram ref. 4) by removing the four screws holding it in place.
4. Inspect the interior of casing for accumulation of dust, lint or spider webs. If necessary, clean the interior of the casing assembly with a vacuum cleaner or compressed air (max 30 psi). Do not damage any components within the casing assembly when you are cleaning.
5. Inspect and clean main burner (Parts Diagram ref. 3) and orifice (ref. 8) by using a vacuum or compressed air (max 30 psi).
6. Inspect and clean pilot tube (Parts Diagram ref. 7). Insert a doubled over pipe cleaner into the pilot tube until it bottoms against the pilot orifice (approximately 2"). Rotate the pipe cleaner a couple of times and remove. Blow out the remaining debris using compressed air.

WARNING: Never use needles, wires or similar cylindrical objects to clean the pilot to avoid damaging the calibrated ruby that controls the gas flow through the pilot orifice.

7. Apply compressed air (max 30 psi) into the ceramic tile of burner assembly and venturi tube to remove dust, lint and spider webs.
8. Reinstall the right side plastic service panel.

TROUBLESHOOTING INFORMATION:

If Spark electrode does not produce spark.

CHECK

- Spark electrode broken – replace.
- Igniter wire may not be attached to spark electrode. – attach
- Igniter wire damaged – replace.
- Piezo igniter defective – replace gas valve assembly.

If Spark electrode produces spark but pilot does not light.

CHECK

- No gas to heater – re-install or replace gas cylinder.
- Pilot is blocked from spider web or dirt – clean pilot, see MAINTENANCE.

If Pilot flame does not stay lit when button is released.

CHECK

- "Pilot/Ignition" button not held long enough to purge air from line.
- Pilot flame not surrounding thermocouple – clean pilot, see MAINTENANCE.
- Pilot Assembly defective – replace.
- Tip switch wires disconnected – connect tip switch (check off switch and off switch wiring).

If Main burner does not ignite.

CHECK

- Main burner orifice is blocked – clean burner, see MAINTENANCE.

If Heater keeps shutting "OFF" during normal operation.

CHECK

- Pilot is blocked – clean pilot, see MAINTENANCE.
- Tip over switch activated from bumping heater. Re-light

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WARNING:

USE ONLY MANUFACTURER'S REPLACEMENT PARTS. USE OF ANY OTHER PARTS COULD CAUSE INJURY OR DEATH. REPLACEMENT PARTS ARE ONLY AVAILABLE DIRECT FROM THE FACTORY AND MUST BE INSTALLED BY A QUALIFIED SERVICE AGENCY.