

# Endless Summer

Outdoor Patio Heater



## Owners Manual Manual del Usuario

Model No.  
**233000**

U.S. Patent Number: 6,6102,031; 6,470,877;  
Hong Kong Patent Number: 1108587.1;  
All Other Foreign Patents May Apply.



### **WARNING** **FOR YOUR SAFETY**

*For Outdoor Use Only  
(Outside any enclosure)  
Solamente Para Uso En  
Exteriores  
(Fuera de cualquier recinto)*



### **WARNING** **FOR YOUR SAFETY**

*Improper installation,  
adjustment, alteration,  
service or maintenance  
can cause injury or property  
damage. Read the installation,  
operation and maintenance  
instructions thoroughly before  
installing or servicing this  
equipment.*



**WARNING**  
**FOR YOUR SAFETY**

*For Outdoor Use Only  
(Outside any enclosure)*



**WARNING**  
**FOR YOUR SAFETY**

*If you smell gas:*

- 1. Shut off gas to the appliance.*
- 2. Extinguish any open flame.*
- 3. If odor continues, immediately call your gas supplier.*



**WARNING**  
**FOR YOUR SAFETY**

- 1. Gas leaks may cause a fire or explosion which can cause serious bodily injury or death, or damage to property.*
- 2. You must follow all leak checking procedures as outlined in step 12 before operating this unit.*
- 3. Never use an open flame to check for leaks.*



**WARNING**  
**FOR YOUR SAFETY**

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



**WARNING**  
**FOR YOUR SAFETY**

*Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Read the installation, operation and maintenance instructions thoroughly before installing or servicing this equipment*



**WARNING**

*California Proposition 65:  
Chemicals known to the state of California to cause cancer, birth defects, or other reproductive harm are created by the combustion of propane.*



**WARNING**  
**FOR YOUR SAFETY**

- Purchaser assumes all risk in the assembly and operation of this unit. Failure to follow this manual's WARNINGS and instructions can result in severe personal injury, death or property damage.*
- Do not use in an explosive atmosphere. Keep heater away from areas where flammable liquids, gasoline, vapors, or explosives are stored or used.*

**Contact 1-800-762-1142 for assistance.  
Do not return to place of purchase.**

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The use and installation of this product must conform to local codes. In absence of local codes, use the National Fuel and Gas Code, ANSI Z223, 1/NFPA 54, Storage and Handling of Liquid Petroleum Gases, ANSI/NFPA 58 or CSA B149.1, Natural Gas and Propane Installation Code.

Save these instructions for future reference. If you are assembling this unit for someone else, give this manual to him or her to save for future reference.



**Before you do anything else,  
read and understand all  
precautions in Safety First!**



**WARNING  
FOR YOUR SAFETY**

- **Purchaser assumes all risk in the assembly and operation of this unit. Failure to follow this manual's WARNINGS and instructions can result in severe personal injury, death or property damage.**
- **Do not use in an explosive atmosphere. Keep heater away from areas where flammable liquids, gasoline, vapors, or explosives are stored or used.**

## **Safety First!**

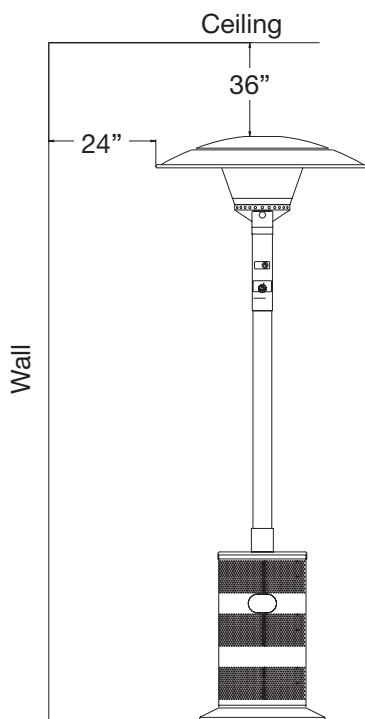
Read and become familiar with this entire manual, especially the following precautions.

If you are unsure of anything in these instructions, STOP and contact 1-800-762-1142 for assistance.

**Caution: This appliance is for outdoor use only (outside any enclosure). Always make sure there is fresh air ventilation.**

- Always maintain at least 36" clearance (top) and 24" clearance (side) from combustible materials.
- Always place heater on a hard and level surface.
- Do not use if the wind velocity is greater than 10 miles per hour.
- Unit will operate at reduced efficiency below 40°F (5°C).
- Keep sprinklers and other water sources away from burner and controls.
- **Always use extreme caution when near heater. Alert both children and adults to the hazards of high temperatures, especially to avoid burns or clothing catching fire.**
- **Young children and pets should be carefully supervised when they are in the area of heater.**
- **Do not hang clothing or other flammable materials either on or near heater.**
- **Any guard or other protective device removed for servicing the heater must be replaced prior to operating the heater.**
- Certain materials or items, when stored under heater, will be subjected to radiant heat and could be seriously damaged.
- Do not alter heater in any manner.
- The pressure regulator and hose assembly supplied with the appliance must be used and replacements must be those specified by the manufacturer.
- Inspect heater before each use. If a damaged part is detected, do not operate until an original equipment replacement part has been properly installed. Use of unauthorized parts will void warranty and create an unsafe condition.
- Do not attempt to use this appliance without a functional factory-supplied gas regulator in place. If regulator becomes damaged, use only a factory-supplied replacement.
- Prior to operating heater, replace any guards or protective devices removed for servicing.
- During operation, do not touch burner assembly. The surface of heater's emitter can reach temperatures approaching 1600°F.
- After shutdown, do not touch burner assembly until heater has cooled (approximately 45 minutes after use).

**Notice:** This product should not be used with any fuel other than liquid propane. Use of other fuels will detract from heaters performance and will void your warranty.



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**Endless Summer** 

**Caution: Liquid propane (LP) gas is flammable and hazardous if handled improperly. Become aware of the characteristics before using any LP product.**

- LP Characteristics – Flammable, explosive under pressure, heavier than air - settles in pools in low areas.
- In its natural state, propane has no odor. For your safety, an odorant is added that smells like rotten cabbage.
- Contact with LP can cause freeze burns to skin.
- This heater is shipped from the factory for LP gas use only.
- Use only Department of Transportation (DOT) approved “20 lb.” LP gas tanks (same as those commonly used on gas grills) with Acme / Type 1 / QCC safety valves. These valves can be quickly identified because they have external and internal threads.
- Never use an LP tank with a damaged body, valve, collar, or footing.
- Dented or rusted LP tanks may be hazardous and should be checked by your LP gas supplier.
- The tank supply system must be arranged for vapor withdrawl.
- The tank used must include a collar to protect the tank valve.
- When heater is not in use, turn LP tank OFF.
- Always perform a leak test on gas connections whenever a tank is connected. Never use a flame to test for leaks. Do not smoke while performing a leak test.

**Caution: It is essential to keep the heater’s valve compartment, burners, and circulating air passages clean.**

- Spiders and insects can create a dangerous condition that may damage heater or make it unsafe. Keep burner area clean of all spiders, webs, or insects.
- Inspect heater before each use.
- **Have heater inspected annually and repairs should be made by a qualified service person.**
- Check heater immediately if any of the following conditions exist:
  - The smell of gas in conjunction with extreme yellow tipping of burner flames.
  - Heater does not reach proper temperature.

*Note:* At temperatures less than 40°F, heat output will be reduced.

- Heater’s glow is excessively uneven
- Burner makes popping noises during use.

*Note:* A slight pop is normal when burner is extinguished.

- Carbon deposits may create a fire hazard. Keep dome and emitter clean at all times.
- Do not clean heater with combustible or corrosive cleaners. Use warm, soapy water.
- Do not paint engine, engine access panel or dome.

**“20 lb.” LP Tank**



### **FOR YOUR SAFETY:**

#### ***Beware of Spiders***

*Spiders or small insects can get into the burner tube or other openings of your heater, and spin webs or build nests. These obstructions can lead to gas flow problems. It is important to make frequent inspections of these areas and clean them when necessary.*

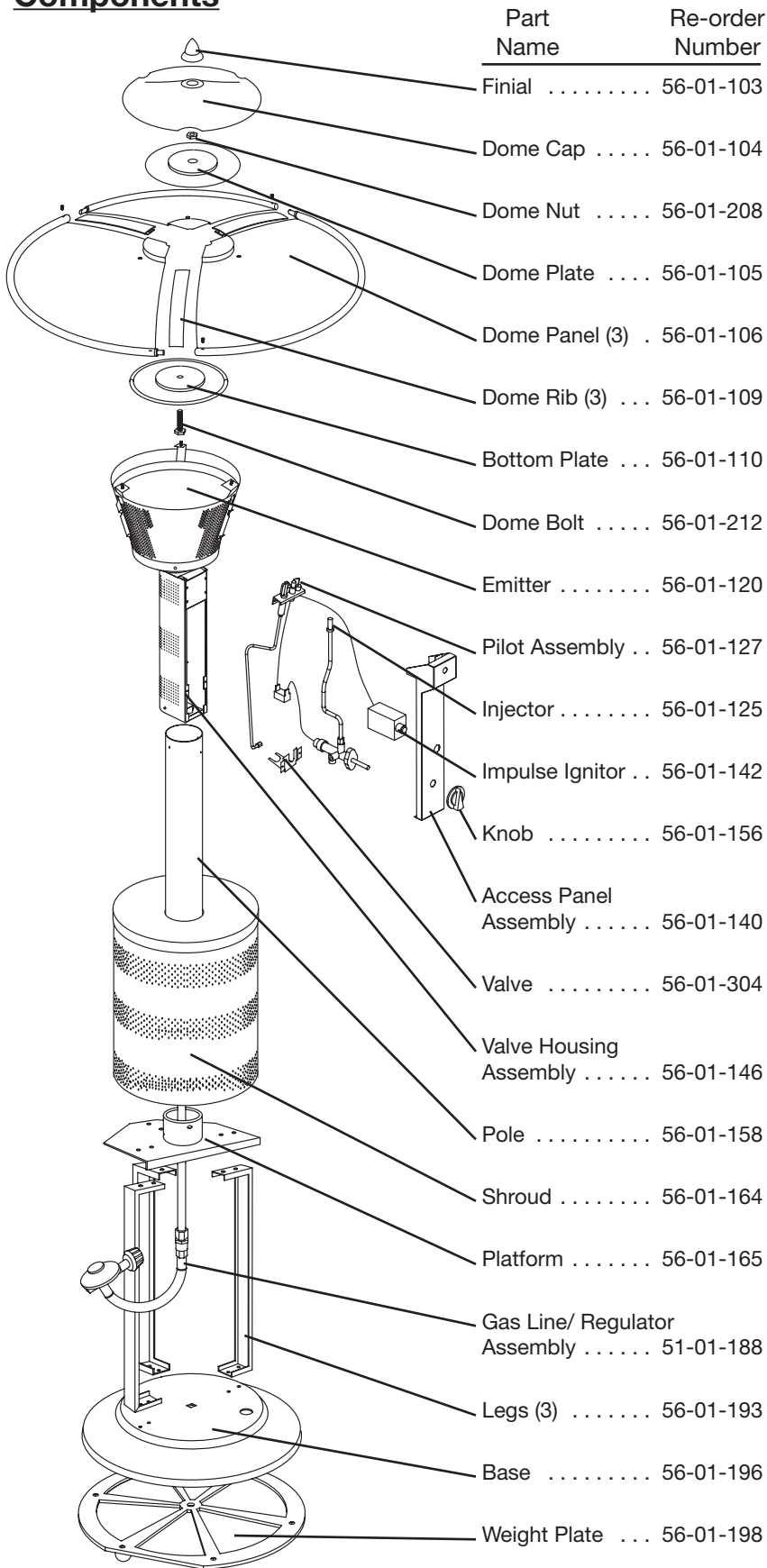
*Before operating your heater for the first time, be sure to check for obstructions that may have occurred during shipment.*

### **Need a tank or gas?**

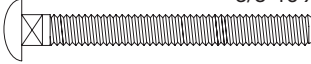
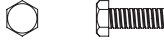
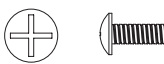










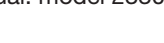
Try Blue Rhino tank exchange service. It's easy, fast, safe, and available at tens of thousands of conveniently located retail outlets nationwide. You can purchase a new full tank or exchange your empty for a precision filled one.

For your nearest Blue Rhino retailer visit [www.bluerhino.com](http://www.bluerhino.com).

## Components



## Hardware

Picture	Qty	Description	Used in Step(s)
	1	Carriage Bolt 3/8-16 x 3-3/4" Zinc Plated Bolt 56-01-199	3
	12	Bolt 1/4-20 x 3/4" Nickel Plated Hex Head Bolt 56-01-200	1 & 2
	1	Large Screw 1/4-20 x 13/16" Nickel Plated Philips Truss Head Screw 56-01-327	2
	4	Small Screw 1/4-20 x 3/8" Stainless Steel Philips Truss Head Screw 56-01-203	5
	3	Dome Screw 5/32-32 x 1/4" Stainless Steel Round Head Screw 56-01-205	8
	12	Small Lockwasher M6 Nickel Plated Lockwasher 56-01-328	1 & 2
	1	Large Lockwasher M10 Nickel Plated 56-01-207	3
	1	Large Nut 3/8-16 Nickel Plated Hex Nut 56-01-208	3
	1	Medium Nut 3/8-16 Stainless Steel Hex Nut 56-01-330	8
	12	Small Nut 1/4-20 Nickel Plated Hex Nut 56-01-209	1 & 2
	3	Cap Nut 5/16"-18 Stainless Steel Cap Nut 56-01-210	9
	1	Gas Line Clip 56-01-213	2
	1	Finial 56-01-103	8
	1	Allen Wrench 56-01-215	6

**Contact 1-800-762-1142 for assistance.  
Do not return to place of purchase.**

**Endless Summer** 

## Assembly Instructions

### General Components & Features

Familiarize yourself with all components before proceeding. Refer to page 5 for hardware and components, and page 21 for specifications.

**The white ceramic cone in the top of the engine is an important piece. DO NOT REMOVE.**

Do NOT attempt assembly unless all components are available. If you believe a component is missing or damaged, contact 1-800-762-1142 for assistance.

*Note:* All hardware is mounted on a cardboard pack and numbered to match their assembly step.

### Additional Requirements

The following items are not included, but are necessary for the proper assembly of your heater. Do NOT attempt to assemble without proper tools. A hex (Allen) wrench is necessary and is included in the parts bag.

- (1) 7/16" Wrench
- (1) 9/16" Wrench
- (1) 7/16" Socket Wrench
- (1) #2 Phillips Head Screwdriver
- (1) Leak Detection Solution (Instructions on how to make solution are included in step 12)
- (1) Precision Filled LP Gas Grill Tank with Acme Type 1 external threaded valve connection (4-5 gallon size)

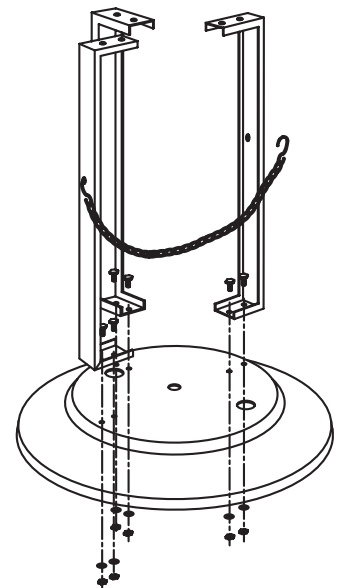
*Note:* You must follow all steps to properly assemble heater.

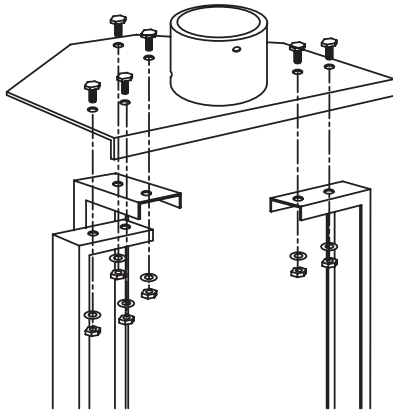
### Step 1 – Attach Legs to Base

Secure Legs to Base using (2) Small Bolts, (2) Small Lock Washers and (2) Small Nuts per leg. Finger tighten only.

Do not fully tighten until Step 2.

Attach small 'S' hook on Tank Restraint Chain to left leg.





## **Step 2 – Attach Platform to Legs**

Line up hole in Clip with small threaded hole on bottom of Platform.

Attach Clip loosely to Platform with (1) Large Screw.

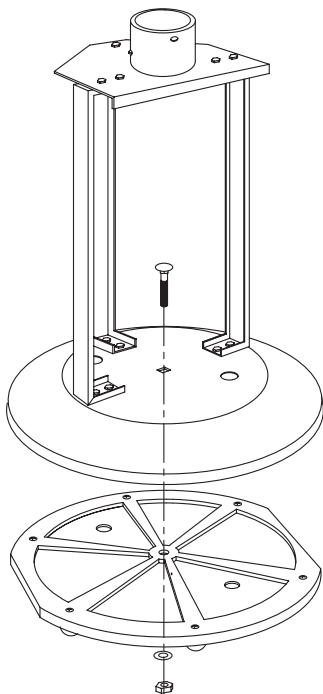
*Note:* Do not tighten until step 10.

Using 7/16" wrench, secure Platform to Legs using (2) Small Bolts, (2) Small Lock Washers and (2) Small Nuts per Leg. Tighten fully.

Fully tighten all nuts and bolts from Step 1.

### **TIP:**

To tighten use a 7/16" wrench on Bolt and a 7/16" socket wrench on Nut.



## **Step 3 – Attach Weight Plate to Base**

Lay Base Assembly on its side.

Place Weight Plate in Base, feet out.

*Note:* If you plan to anchor your heater permanently, be sure to line up two outer holes in Base with those in Weight Plate so that your anchor bolt will pass through both holes.

Insert Carriage Bolt through center holes of Base and Plate.

Using 9/16" wrench, secure Plate to Base using (1) Large Lock Washer and (1) Large Nut.

Place Base Assembly upright.

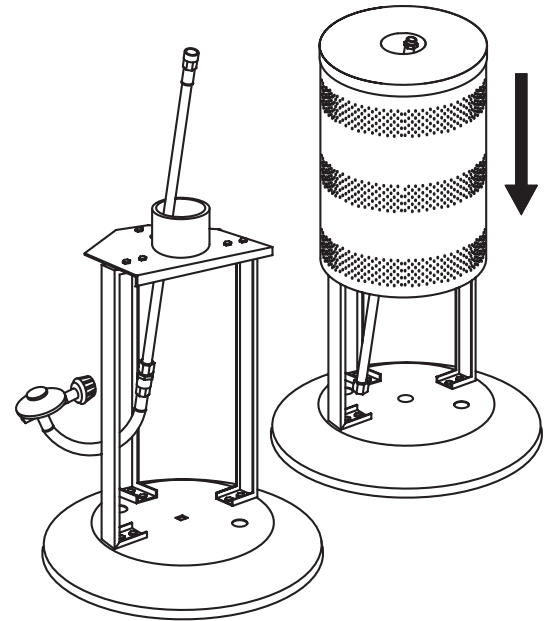
**Contact 1-800-762-1142 for assistance.  
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#### **Step 4 – Insert Gas Line through Platform/Attach Shroud Cover**

Insert Gas Line up through large hole in Platform from underneath between center and left leg as shown in illustration.

Slide Shroud Cover over Gas Line, then over Platform/Leg assembly until bottom of Shroud rests on Base.



#### **Step 5 – Attach Engine to Post**

Lay Engine Assembly on its side, using carton for support.

Remove and save Control Knob.

Remove and save Engine Access Panel by removing (1) black Thumbscrew from bottom of Access Door.

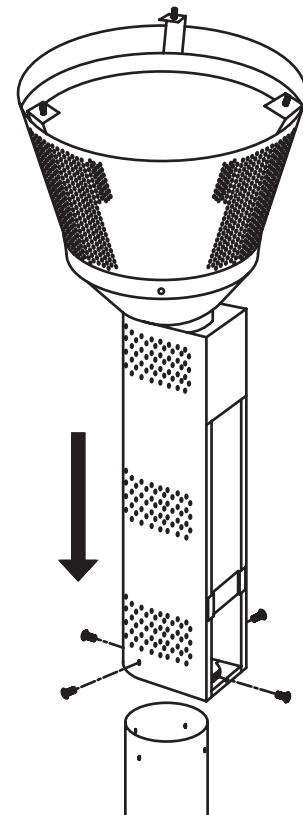
Disconnect wire from Igniter by gently pulling wire from back of box.

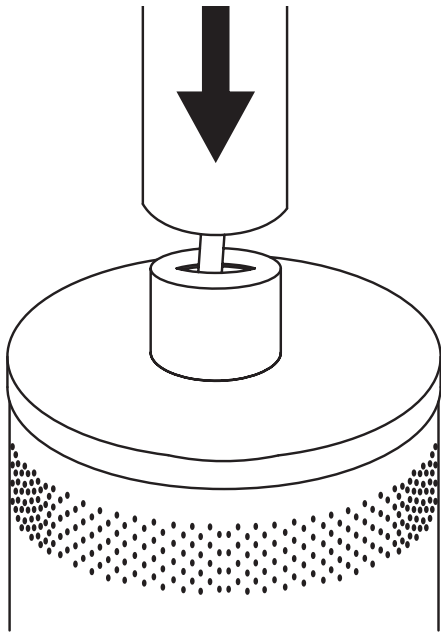
Align (4) holes in top of Post with (4) holes in bottom of Engine.

*Note:* One hole is at a different level than the rest. Make sure that all 4 holes line up properly.

Insert (4) Small Screws enough to hold Engine in place. They will be fully tightened at the end of Step 7.

*Note:* Do not replace Engine Access Panel until Step 13.





## **Step 6 – Attach Engine/Post to Platform**

Insert end of Post without holes over Gas Line, being careful not to bend Gas Line.

Slide Post into collar of Platform so Post rests completely on Platform.

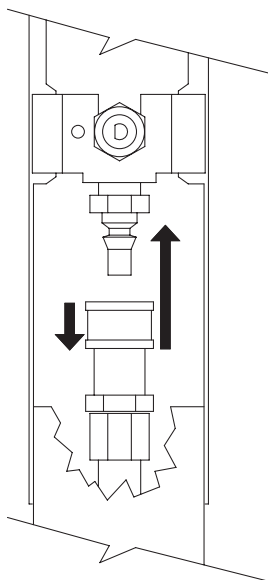
Tighten bottom three setscrews with hex (Allen) wrench supplied.

Make sure Post is perpendicular to Base.

Use top three setscrews to adjust Post's angle as necessary.

Tighten all six setscrews.

*Note:* Post must be perpendicular to Base. Failure to do so will adversely affect burner performance.



## **Step 7 – Connect Gas Line to Engine**

Attach Gas Line to Control Valve:

Pull collar of Gas Line back.

Insert Gas Line over Control Valve.

Release collar and it should lock in place. (Tip – push Gas Line up from bottom of Post to make a good seating before releasing the collar.)

Gently tug on line to test for proper connection. If Gas Line moves it is not properly connected. Do not proceed until you have a proper connection.

Fully tighten the (4) screws from Step 5.

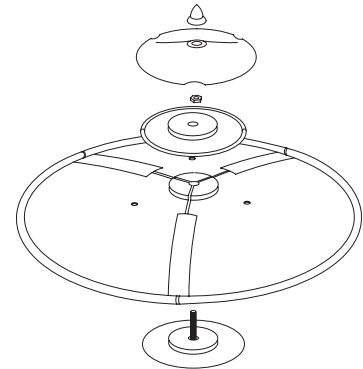
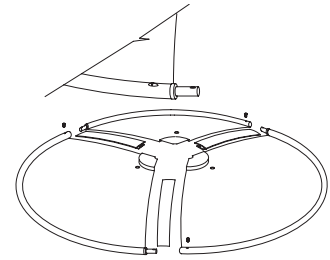
**Contact 1-800-762-1142 for assistance.  
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### **Step 8 – Assemble dome**

*Note:* Each dome section has a pin mounted in place in the rolled bottom edge. If necessary for proper alignment of dome sections, loosen each screw prior to further assembly and retighten after sections are aligned.

- With the large side facing up, slide a dome rib on to the same side of one dome section as the pin. Slide two dome sections together, allowing the exposed end of the pin slide into the rolled edge of the next dome section. Line up hole in dome with threaded hole in pin.
- Insert one Dome Screw and secure loosely.
- Repeat procedure to complete the assembly of all three sections.
- Slide Dome bolt through bottom check plate (with small center hump), being sure that the rolled edge faces down.
- Slide bolt from previous step through the center of the assembled dome sections, and be sure that the rolled edge of the check plate fits inside of the ends of the three Dome Ribs. Also be sure that the slots in the check plate line up with the holes on the dome sections.
- Slide the other check plate over the Center bolt with the rolled edge facing up, again making sure that the plate fits inside of the Ribs and the holes line up with those in the dome.
- Spin the medium nut all the way down the bolt, clamping all of the pieces in place, making sure that all of the humps fit inside one another.
- Fully tighten all of the screws in the rolled edge.
- Slide Dome Cap over Dome Bolt, lining up notches in cap with Dome Ribs. Thread on finial until tight.



**NOTE:**

The white ceramic cone in the top of the engine is an important piece.  
**DO NOT REMOVE.**

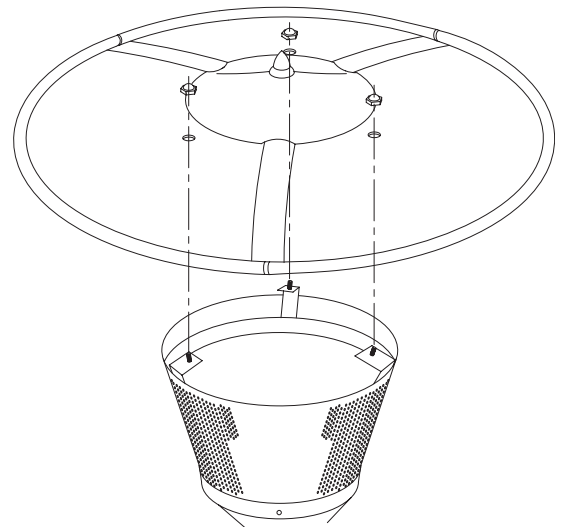
### **Step 9 – Attach Dome to Emitter**

Gently lay heater on its side using one styrofoam end to prop up top half.

Align holes in Dome with threaded studs in Emitter brackets.

Secure Dome to Emitter using (3) Cap Nuts.

Leave Heater on its side for next step.



## **Caution**

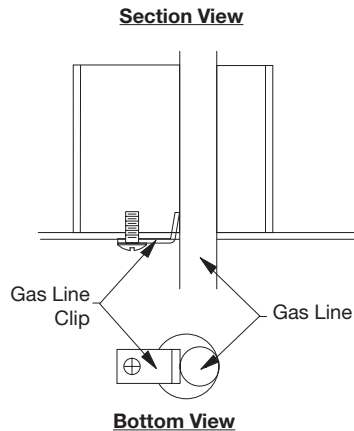
***Before you attempt to use a propane tank, understand all tank and propane related precautions in Section #1 - "Safety First."***

## **Step 10 – Secure Gas Line**

Make sure angled side of Gas Clip pokes up through large hole in Platform.

Tighten screw until Gas Line is held securely in place.

Stand Heater upright.



## **Caution**

***Your Endless Summer® Heater has been checked at all factory connections for leaks. Recheck all connections, as movement in shipping can loosen connections. Check for leaks even if your unit was assembled for you at the store.***

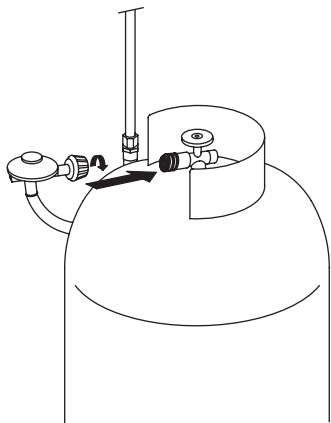
## **Step 11 – Connect Gas Line to Tank**

The pressure regulator and hose assembly supplied with the appliance must be used and replacements must be those specified by the manufacturer.

- Slide full Propane Tank onto Heater Base.
- Attach Gas Line to Tank by turning black plastic knob clockwise over Tank valve until tight.

*Note:* Be careful not to kink flexible hose of Gas Line.

- Secure tank in place by attaching loose end of Tank Restraint Chain to hole in right leg.

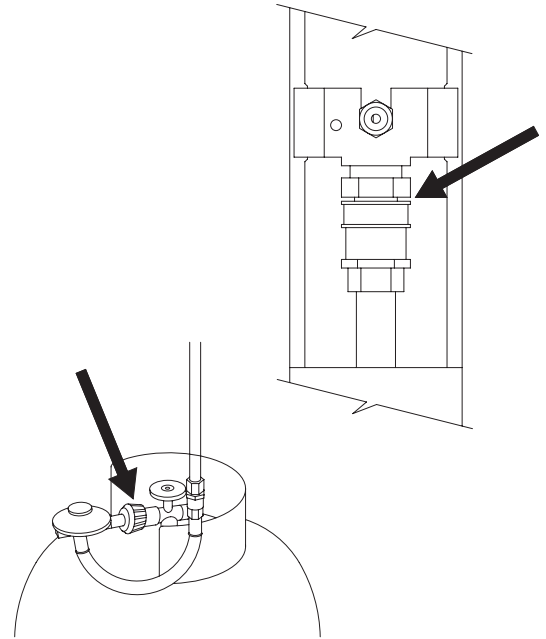


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**Endless Summer** 

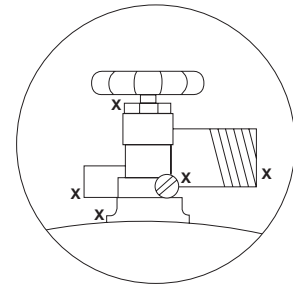
### **Step 12 – Check for Leaks**

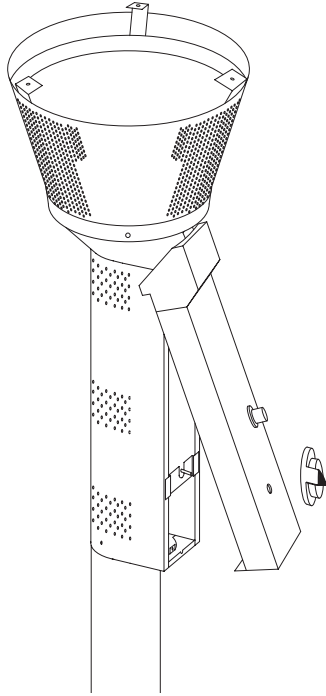
- Make 2-3 oz. of leak check solution by mixing one part liquid dishwashing soap and three parts water.
- Turn tank valve ON.
- Check Gas Line / Control Valve for leaks:
- Spoon several drops of solution onto Gas Line and Control Valve connection.
- Inspect the solution at the connection to look for bubbles.
- If NO bubbles appear, then the connection is secure.
- If bubbles appear, there is a leak -
  - Turn Tank valve OFF.
  - Loosen screw on Clip.
  - Release Gas Line fitting from control valve and re-attach making sure connection is secure (see Step 7).
  - Retighten Clip.
- If you continue to see bubbles after several attempts, contact 1-800-762-1142 for assistance.



### **Check Gas Line / Tank valve for leaks:**

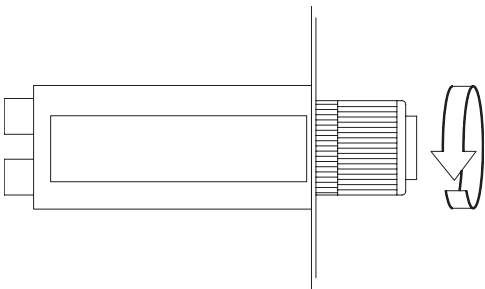
- Turn tank valve ON.
- Spoon several drops of solution onto Gas Line and Tank valve connection.
- Inspect the solution at the connection to look for bubbles.
- If NO bubbles appear, then the connection is secure.
- If bubbles appear, there is a leak:
  - Turn Tank valve OFF.
  - Release Gas Line fitting from Tank valve and re-attach making sure connection is secure (see Step 12).
  - If you continue to see bubbles after several attempts, contact 1-800-762-1142 for assistance.
  - Turn Tank Valve OFF.





### **Step 13 – Replace Engine Access Panel**

- Slide Igniter wire onto Igniter post.
- Slide tab at top of Access Panel into slot in Emitter bottom.
- Rotate Panel down until holes line up at bottom.
- Secure Access Panel in place with thumbscrew.
- Replace Control Knob.



### **Step 14 – Install Igniter Battery**

*Note:* This step is required only for models with electronic ignition.

- Remove battery cover cap by turning cap counterclockwise.
- Install (1) AA battery. Negative end of battery goes in first.
- Replace battery cover cap by turning cap clockwise.

*Note:* Once you have successfully completed assembly steps 1-14 you are ready to begin operating your heater.

**Contact 1-800-762-1142 for assistance.  
Do not return to place of purchase.**

**Endless Summer** 

## Operation

**Caution:** Do NOT attempt to operate heater until you have read and understand all precautions in section 1 "Safety First."

### Before Turning Gas Supply ON

- Your heater was designed and approved for OUTDOOR USE ONLY. DO NOT use it inside a building, garage, or any other enclosed area.
- Make sure surrounding areas are free of combustible materials, gasoline, and other flammable vapors or liquids.
- Ensure that there is no obstruction to air ventilation.
- Be sure all gas connections are tight and there are no leaks.
- Be sure the access panel is clear of debris.
- Be sure any component removed during assembly or servicing is replaced and fastened prior to starting.

### Before Lighting

- Heater should be thoroughly inspected before each use, and by a qualified service person at least annually.
- If relighting a hot heater, always wait at least 5 minutes.
- Inspect the hose assembly for evidence of excessive abrasion, cuts, or wear. Suspected areas should be leak tested. If the hose leaks, it must be replaced prior to operation. Only use the replacement hose assembly specified by manufacturer.

### Lighting

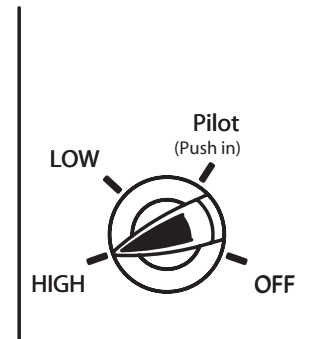
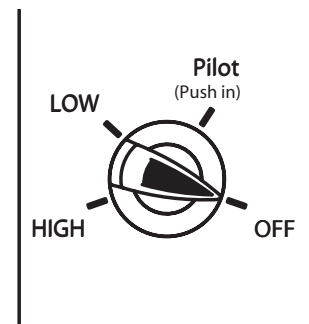
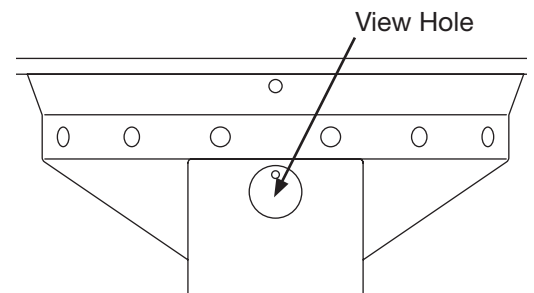
**Note:** This heater is equipped with a Pilot Light that allows for safer startups and shutdowns. Pilot must be lit before Main Burner can be started.

- Turn Tank Valve OFF.
- Push Control Knob IN and turn to OFF.
- Wait 5 minutes for any gas to clear.
- Turn Tank Valve ON.
- Open Viewing Hole by sliding cover to either side.
- Push Control Knob IN and rotate to Pilot position.
- Note - For initial start or after any tank change, hold Control Knob IN for 2 minutes to purge air from gas lines before proceeding.
- Push Igniter button once. Pilot Light flame will appear and be visible through Viewing Hole.
- Release Control Knob after 30 seconds. Pilot Light will remain lit. If not, return to step 1.
- Turn Control Knob to ON. Main Burner will light immediately. Flame is visible through Viewing Hole. If not, return to step 1.



### **WARNING** **FOR YOUR SAFETY**

- Do NOT attempt to operate heater until you have read and understand all precautions in Section 1 "Safety First." Failure to do so can result in serious personal injury, death, or property damage.
- If at any time you are unable to light burner and smell gas, wait 5 minutes to allow gas to dissipate before attempting to light heater.
- Do NOT touch emitter or dome or move heater for at least 45 minutes after use.





**WARNING**  
**FOR YOUR SAFETY**

***Be careful when attempting to manually ignite this heater. Holding in the control knob for more than 10 seconds before igniting the gas will cause a ball of flame upon ignition.***

- If for some reason your ignitor fails to deliver a spark, your heater can be started by inserting a lit match through the pilot view hole while pushing the control knob in while in the PILOT position.

If you experience any ignition problem consult “Troubleshooting” on page 17.

***Caution: Avoid inhaling fumes emitted from the heater’s first use. Smoke and odor from the burning of oils used in manufacturing will appear. Both smoke and odor will dissipate after approximately 30 minutes. The heater should NOT produce thick black smoke.***

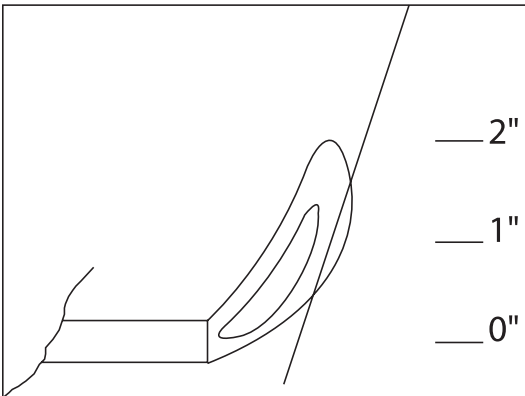
*Note:* The burner may be noisy when initially turned on. To eliminate excessive noise from the burner, turn the Control Knob to the Pilot position. Then, turn the knob to the level of heat desired.

**When heater is ON:**

Emitter screen will become bright red due to intense heat. The color is more visible at night.

Burner will display tongues of blue and yellow flame. These flames should not be yellow or produce thick black smoke, indicating an obstruction of airflow through the burners. The flame should be blue with straight yellow tops.

If excessive yellow flame is detected, turn off heater and consult “Troubleshooting” on page 17.



**Re-lighting**

*Note:* For your safety, Control Knob cannot be turned OFF without first depressing Control Knob in PILOT position and then rotating it to OFF.

Turn Control Knob to OFF.

Wait at least 5 minutes, to let gas dissipate, before attempting to relight Pilot.

Repeat the “Lighting” steps on prior page.



**WARNING**  
**FOR YOUR SAFETY**

***Heater will be hot after use.  
Handle with extreme care.***

**Shut Down**

Turn Control Knob clockwise to Pilot. (Normally, burner will make a slight popping sound when extinguished.) Burner will extinguish but Pilot will remain ON.

To extinguish Pilot, depress Control Knob and continue to turn it clockwise to OFF.

Turn Tank Valve clockwise to OFF and disconnect Regulator when heater is not in use.

*Note:* After use, some discoloration of the emitter screen is normal.

**Contact 1-800-762-1142 for assistance.  
Do not return to place of purchase.**

**Endless Summer** 

## **Operation Checklist**

For a safe and pleasurable heating experience, perform this check before each use.

### **Before Operating**

- I am familiar with entire owner's manual and understand all precautions noted in "Safety First".
- All components are properly assembled, intact and operable.
- No alterations have been made.
- All gas connections are secure and do not leak.
- Wind velocity is below 10 mph.
- Outdoor temperature is greater than 40 degrees F.
- Heater is outdoors (outside any enclosure).
- There is adequate fresh air ventilation.
- Heater is away from gasoline or other flammable liquids or vapors.
- Heater is away from windows, air intake openings, sprinklers and other water sources.
- Heater is at least 36" clearance (top) and 24" clearance (side) combustible materials.
- Heater is on a hard and level surface.
- There are no signs of spider or insect nests.
- All burner passages are clear.
- All air circulation passages are clear.
- Children, pets, clothing, flammable materials and items that can be damaged from radiant heat are away from the heater.
- Children and adults in the area have been alerted to the high temperature hazards: especially burns and clothing fires.
- Children and adults in the area have been warned not to touch heater near engine during operation and until unit has cooled.

### **After Operation**

- Gas control is in OFF position.
- Gas tank valve is OFF
- Disconnect Gas line.
- Heater is upright in a secure location.

## Troubleshooting

<b><u>If the problem is:</u></b>	<b><u>And this condition exists:</u></b>	<b><u>Then do this</u></b>
<b>Pilot won't light</b>  <i>Note: Heater operates at reduced efficiency below 40°F (5°C).</i>	Tank valve is closed	Open valve
	Blockage in orifice or pilot tube	Clean or replace orifice or pilot tube
	Air in gas line	Open gas line and bleed it (pressing control knob in) for not more than 1 - 2 minutes or until you smell gas
	Low gas pressure with tank valve fully open	Turn tank valve OFF and replace tank
	Igniter fails	Use match to light pilot; obtain new igniter and replace
<b>Pilot won't stay lit</b>	Dirt built up around pilot	Clean dirt from around pilot
	Connection between gas valve and pilot assembly is loose	Tighten connection and perform leak check
	Thermocouple is not operating correctly	Replace thermocouple
<b>Burner won't light</b>	Gas pressure is low	Turn tank valve OFF and replace tank
	Blockage in orifice	Clear blockage
	Control knob is not in ON position	Turn control knob to ON
<b>Burner flame is low</b>	Gas pressure is low	Turn tank valve OFF and replace tank
	Outdoor temperature is less than 40°F and tank is less than 1/4 full	Use a full tank
	Supply hose is bent or kinked	Straighten hose
	Control knob fully ON	Check burner and orifices for blockage
<b>Emitter glows uneven</b>  <i>Note: Bottom 1" of emitter normally does NOT glow.</i>	Gas pressure is low	Turn tank valve OFF and replace tank
	Base is not on a level surface	Place heater on a level surface
	Heater is level	Clean burner
<b>Carbon build-up</b>	Dirt or film on reflector and emitter	Clean reflector and emitter
<b>Thick black smoke</b>	Blockage in burner	Remove blockage and clean burner inside and outside

**Contact 1-800-762-1142 for assistance.  
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**Endless Summer** 

## **Maintenance**

To enjoy years of outstanding performance from your heater, make sure you perform the following maintenance activities on a regular basis:

Keep exterior surfaces clean.

Use warm soapy water for cleaning. Never use flammable or corrosive cleaning agents.

While cleaning your unit, be sure to keep the area around the burner and pilot assembly dry at all times. Do not submerge the control valve assembly. If the gas control is submerged in water, do NOT use it. It must be replaced.

Air flow must be unobstructed. Keep controls, burner, and circulating air passageways clean. Signs of possible blockage include:

Gas odor with extreme yellow tipping of flame.

Heater does NOT reach the desired temperature.

Heater glow is excessively uneven.

Heater makes popping noises.

Spiders and insects can nest in burner or orifices. This dangerous condition can damage heater and render it unsafe for use. Clean burner holes by using a heavy-duty pipe cleaner. Compressed air may help clear away smaller particles.

Carbon deposits may create a fire hazard. Clean dome and emitter with warm soapy water if any carbon deposits develop.

*Note:* In a salt-air environment (such as near an ocean), corrosion occurs more quickly than normal. Frequently check for corroded areas and repair them promptly.

### **TIP:**

Use high-quality automobile wax to help maintain the appearance of your heater. Apply to exterior surfaces from the pole down. Do not apply to emitter screen or domes.



### **WARNING FOR YOUR SAFETY**

- ***Do NOT touch or move heater for at least 45 minutes after use.***
- ***Dome is hot to the touch.***
- ***Allow dome to cool before touching.***

## **Storage**

### **Between uses:**

Turn Control Knob OFF.

Disconnect LP source.

Store heater upright in an area sheltered from direct contact with inclement weather (such as rain, sleet, hail, snow, dust and debris).

If desired, cover heater to protect exterior surfaces and to help prevent build up in air passages.

*Note:* Wait until heater is cool before covering.

### **During periods of extended inactivity or when transporting:**

Turn Control Knob OFF.

Disconnect LP source and move to a secure, well-ventilated location outdoors.

Store heater upright in an area sheltered from direct contact with inclement weather (such as rain, sleet, hail, snow, dust and debris).

If desired, cover heater to protect exterior surfaces and to help prevent build up in air passages.

Never leave LP cannister exposed to direct sunlight or excessive heat.

*Note:* Wait until heater is cool before covering.

## **Service**

To learn how to service and procure parts for worn out, defective or damaged components contact 1-800-762-1142 for assistance or e-mail [CustomerService@BlueRhino.com](mailto:CustomerService@BlueRhino.com). Please supply model number and serial ID number for best service support. These numbers can be found on a label on the rear of the Valve Housing.

***Caution: Use only original equipment replacement parts. Use of unauthorized parts or modification of parts will void warranty and create an unsafe condition.***

***Caution: Always allow heater to cool before attempting service.***

**Contact 1-800-762-1142 for assistance.  
Do not return to place of purchase.**

**Endless Summer** 

## Limited Warranty

Blue Rhino Global Sourcing, LLC (“Vendor”) warrants to the original retail purchaser of this heater, and to no other person, that if this heater is assembled and operated in accordance with the printed instructions accompanying it, then for a period of one (1) year from the date of purchase, all parts in such heater shall be free from defects in material and workmanship. Vendor may require reasonable proof of your date of purchase from an authorized retailer or distributor. Therefore, you should retain your sales slip or invoice. This Limited Warranty shall be limited to the repair or replacement of parts, which prove defective under normal use and service and which Vendor shall determine in its reasonable discretion upon examination to be defective. Before returning any parts, you should contact Vendor’s Customer Service Department using the contact information listed below. If Vendor confirms, after examination, a defect covered by this Limited Warranty in any returned part, and if Vendor approves the claim, Vendor will replace such defective part without charge. If you return defective parts, transportation charges must be prepaid by you. Vendor will return replacement parts to the original retail purchaser, freight or postage prepaid.

This Limited Warranty does not cover any failures or operating difficulties due to accident, abuse, misuse, alteration, misapplication, improper installation or improper maintenance or service by you or any third party, failure to perform normal and routine maintenance on the heater, shipping damage, normal adjustment to burner, damage or repairs related to insects, birds, or animals of any kind, and damage due to weather conditions as set out in this owner’s manual. In addition, the Limited Warranty does not cover damage to the finish, such as scratches, dents, discoloration, rust or other weather damage, after purchase.

This Limited Warranty is in lieu of all other express warranties. Vendor disclaims all warranties for products that are purchased from sellers other than authorized retailers or distributors. AFTER THE PERIOD OF THE ONE (1)-YEAR EXPRESS WARRANTY, VENDOR DISCLAIMS ANY AND ALL IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. FURTHER, VENDOR SHALL HAVE NO LIABILITY WHATSOEVER TO PURCHASER OR ANY THIRD PARTY FOR ANY SPECIAL, INDIRECT, PUNITIVE, INCIDENTAL, OR CONSEQUENTIAL DAMAGES. Vendor assumes no responsibility for any defects caused by third parties. This Limited Warranty gives the purchaser specific legal rights; a purchaser may have other rights depending upon where he or she lives. Some jurisdictions do not allow the exclusion or limitation of special, incidental or consequential damages, or limitations on how long a warranty lasts, so the above exclusion and limitations may not apply to you.

Vendor does not authorize any person or company to assume for it any other obligation or liability in connection with the sale, installation, use, removal, return, or replacement of its equipment, and no such representations are binding on Vendor.

Blue Rhino Global Sourcing, LLC  
104 Cambridge Plaza Drive  
Winston-Salem, North Carolina 27104 USA  
(800) 762-1142  
24 Hour Fax: (336) 659-6743  
CustomerService@BlueRhino.com

## Specifications

**Certifications:**

CSA International Requirement 5.90

Canadian National Standard CAN1-2.23-M82

**Rating:**

Maximum 40,000 BTU/hr. input

**Heat Range:**

Up to 20 foot diameter

**Fuel:**

Liquid Propane Gas (LP)

**Tank Size:**

Nominal 20 lb / 5 Gallon

**Inlet gas supply pressure:**

Maximum – 150 PSI

Minimum – 5 PSI

**Manifold Pressure:**

11.00 in. W.C.

**Engine:**

IPP E8

**Safety Features:**

100% Burner shut-off

Tilt Switch

**Manufacturer:**

Blue Rhino Global Sourcing, LLC

**Made In:**

China