

SORRENTO

OVERHEAD PATIO HEATER



UP TO 8 HRS RUN TIME

WEIGHTED BASE

AUTOMATIC ELECTRONIC IGNITION

TILT SWITCH AUTO-SHUTOFF

OWNER'S MANUAL

PROPANE POWERED

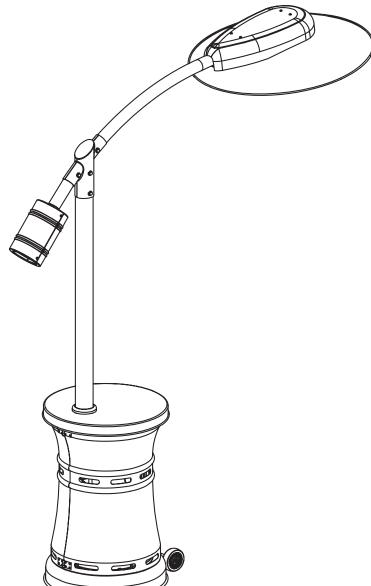




WWW.LAVAHEAT.COM









WARNING

If you smell gas:

- 1. Shut off gas to the appliance.
- 2. Extinguish any open flame.
- 3. If odor continues, keep away from the appliance and immediately call you gas supplier or fire department.



WARNING

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

An LP-cylinder not connected for use shall not be stored in the vicinity of this or any other appliance



WARNING

FOR OUTDOOR USE ONLY

CAUTION:

Installer: Leave the manual instructions to the user for future use.

Consumer: Please keep this manual for

future reference.

Read the instructions before use. This appliance must be installed in accordance with such regulations as are in force.

MODEL: SORRENTO

Owner's Manual



Questions, problems, missing / replacement parts? Before returning to your retailer, call our customer service department at 1.888.779.5282, Monday-Friday 9 a.m.-6:00 p.m. PST, or email cs@lavaheat.com





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 or home.

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

SPECIFICATION

Certification	CSA
Product size	74" x 31.5" x 93.7" (1880x800x2380mm)
Rated heat input	32,000 BTU/hr
Fuel	LP
Gas Supply	20 lb (9 kg) LP gas cylinder
Manifold pressure	3PSI
Diameter of injector	0.039" (0.99 mm)
Safety features	Flame failure device, anti-tilt switch
Gas supply pressure	Max. 250 PSI, Min. 5 PSI
Battery	Size D 2pcs

NOTE: PLEASE READ THE FOLLOWING SAFETY RULES

WARNING:

The installation must conform with local codes or, in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1/NFPA 54, NFPA58 Natural Gas and Propane Installation Code, CSA B149.1, or Propane Storage and Handling Code, B149.2

The heater, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, with the National Electrical Code, ANSI/NFPA 70, or the Canadian Electrical Code, CSA C22.1.

Prior to use, check for damaged parts such as hoses, regulators, pilot or burner.

All leak tests should be done with a soapy solution. NEVER USE AN OPEN FLAME TO CHECK FOR LEAKAGE.

The propane hose with regulator assembly shall be located out of pathways where people may trip over it or in areas where the hose will not be subject to accidental damage.

Children and adults should be alerted to the hazards of high surface temperatures and should stay away to avoid burns or clothing ignition.

Young children should be carefully supervised when they are in the area of the heater.

Clothing or other flammable materials should not be hung from the heater, or placed on or near the heater.

Any guard or other protective device removed for servicing the heater must be replaced prior to operating the heater.

Installation and repair should be done by a qualified service person. The heater should be inspected before use and at least annually by a qualified service person.

More frequent cleaning may be required as necessary. It is imperative that control compartment, burners and circulating air passageways of the heater be kept clean.

Keeping the appliance area clear and free from combustible materials, gasoline and other flammable vapors and liquids.

Not obstructing the flow of combustion and ventilation air.

Keeping the ventilation opening(s) of the cylinder enclosure free and clear from debris.

This appliance shall be used only in a well-ventilated space and shall not be used in a building, garage or any other enclosed area.

An appliance may be installed with shelter no more inclusive than:

With walls on all sides, but with no overhead cover.

Within a partial enclosure which includes an overhead cover and no more than two side walls. These side walls may be parallel, as in a breezeway, or at right angles to each other.

NOTE: PLEASE READ THE FOLLOWING SAFETY RULES

WARNING:

Within a partial enclosure which includes an overhead cover and three side walls, as long as 30 percent or more of the horizontal periphery of the enclosure is permanently open.

This appliance requires 9kg(20lb) LP-gas supply cylinder.

The LP-gas supply cylinder to be used must be: Constructed and marked in accordance with the Specifications for LP-gas cylinders of the U.S. Department of Transportation (DOT); or the Standard for Cylinders, Spheres and Tubes for Transportation of Dangerous Goods and Commission, CAN/CSA-B339, as applicable;

Provided with a listed overfilling prevention device; and provided with a cylinder connection device compatible with the connection for the appliance.

The cylinder be disconnected when the appliance is not in use.

Storage of an appliance indoors is permissible only if the cylinder is disconnected and removed from the appliance.

A cylinder must be stored outdoors in a well-ventilated area out of the reach of children. A disconnected cylinder must have dust caps tightly installed and must not be stored in a building, garage or any other enclosed area.

The pressure regulator and hose assembly supplied with the appliance must be used, replacement pressure regulators and hose assemblies must be those specified by the appliance manufacturer.

Do not store a spare LP-gas cylinder under or near this appliance;

Never fill the cylinder beyond 80 percent full;

Do not clean the heater with cleaners that are combustible or corrosive.

Place the dust cap on the cylinder valve outlet whenever the cylinder is not in use. Only install the type of dust cap on the cylinder valve that is provided with the cylinder valve. Other types of caps or plugs may result in leakage of propane.

Certain materials or items, when stored under the heater, will be subjected to radiant heat and could be seriously damaged.

Inspect the visible portion of the hose before each use of the appliance and inspect the entire hose assembly at lease annually.

The cylinder used must include a collar to protect the cylinder valve.

NOTE: PLEASE READ THE FOLLOWING SAFETY RULES:

Perform a leak test with a soapy solution:

- 1. To check gas connections.
- 2. After connecting a new cylinder.
- 3. Upon re-assembly after disassembly.

This heater is designed to operate with a standard 20 lb propane cylinder with Approved Cylinder Connection.

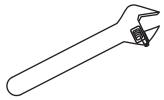
PREPARATION

Before beginning assembly of product, make sure all parts are present. If any part is missing or damaged, do not attempt to assemble the product. Contact customer service for replacement parts. Please wear protective gloves when assembling this product.

TOOLS NEEDED: (NOT INCLUDED)

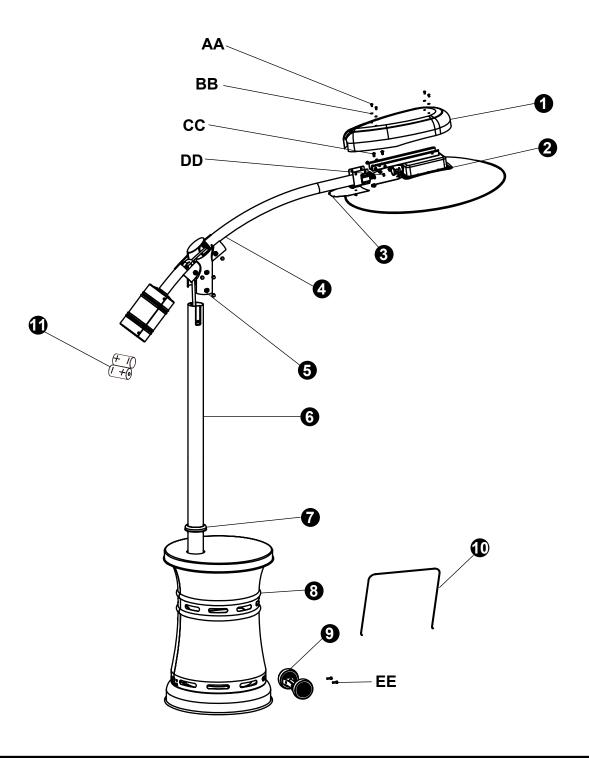
Philips screwdriver
Adjustable open end wrench
Estimated time for assembly: 40 minutes.





EXPLODED VIEW

Please check the contents of the packaging as to whether anything is missing!



PARTS LIST

Part #	Description	Qty
1	Cover	1
2	Head assembly	1
3	Cover fixed plate	1
4	Transom control assembly	1
5	Transom mounting plate	1
6	Pole	1
7	Decorative cover	1
8	Base assembly	1
9	Wheel kit	1
10	Cylinder fixing hook	1
11	1.5V D size battery	2(Not included)

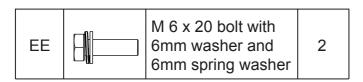
HARDWARE

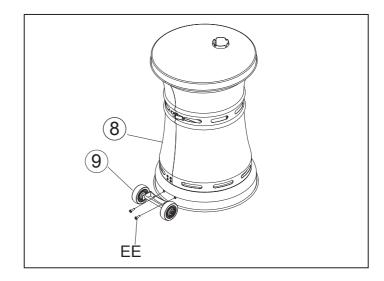
Part #	Description	Picture	Qty
AA	M4 x 10 bolt		6
BB	4mm washer	(a)	4
СС	M6 x 14 bolt		8
DD	M6 nut		2
EE	M6 x 20 bolt with 6mm washer and 6mm spring washer		2

STEP 1

Attach wheel kit (9) to base assembly (8) with 2pcs M6 x 20 bolts with 6mm washers and 6mm spring washers (EE).

Hardware Used

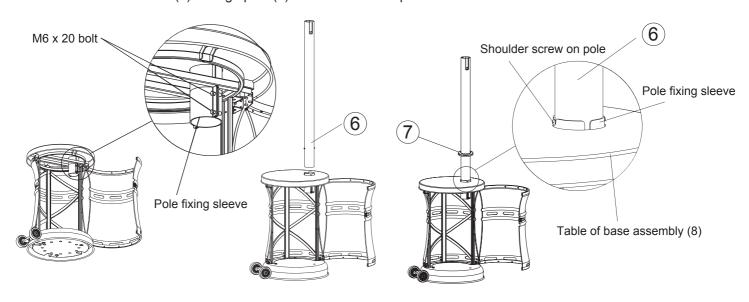




STEP 2

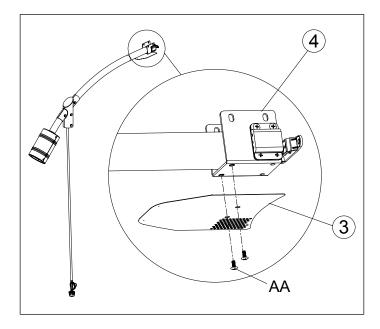
Open the door of base assembly (8). Half-loosen 2pcs M6 x 20 bolts on pole fixing sleeve and insert the pole (6) into the pole fixing sleeve, make sure the shoulder screw on pole sit into the slot on pole fixing sleeve. Then tighten 2pcs M6 x 20 bolts on pole fixing sleeve.

Place the decorative cover (7) through pole (6) and on the tabletop.



STEP 3

Attach cover fixed plate (3) to transom control assembly (4) with 2pcs M4 x 10 bolts (AA).



Hardware Used



STEP 4

Attach head assembly (2) to transom control assembly (4) with 4pcs M6 x 14 bolts (CC) at sides first, next 2pcs M6 x 14 bolts (CC) on the top.

Caution: Don't fully tighten hardware until entire step is completed.

Attach nozzle fixing plate to induct pipe with 2pcs M6 x 14 bolts (CC) and 2pcs M6 nuts (DD).

CC

Hardware Used

CC

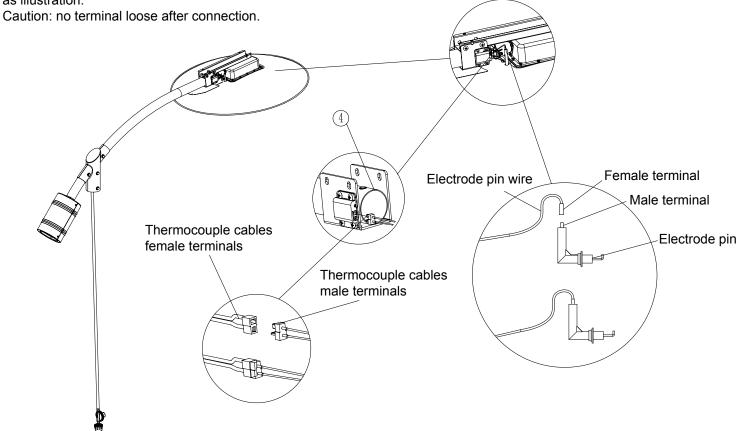
M6 x 14 bolt 8pcs

DD

M6 nut 2pcs

STEP 5

Connect the terminals of wires to the terminals of thermocouple, and connect the electrode pin wire to electrode pin as illustration.

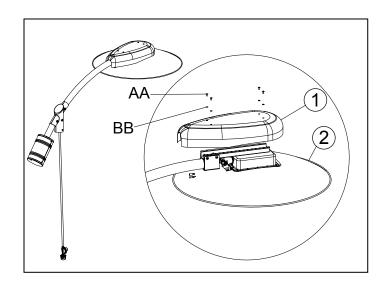


STEP 6

Fix cover (1) to head assembly (2) with 4pcs M4 x 10 bolts (AA) and 4pcs 4mm washers (BB).

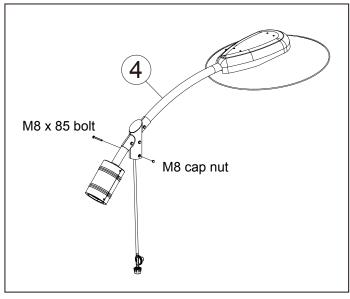
Hardware Used

AA	(<u></u>	M4 x 10 bolt	4pcs
BB		4mm washer	4pcs



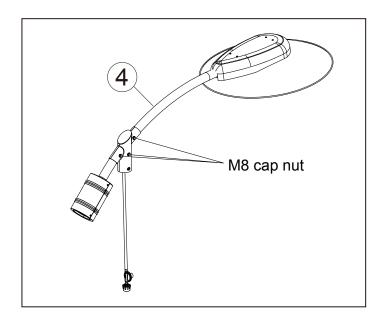
STEP 7

Unscrew and take out 1pc M8 x 85 bolt and 1pc M8 cap nut on transom assembly (4) as illustration.



STEP 8

Half-loosen other 3pcs M8 cap nuts on transom assembly (4).

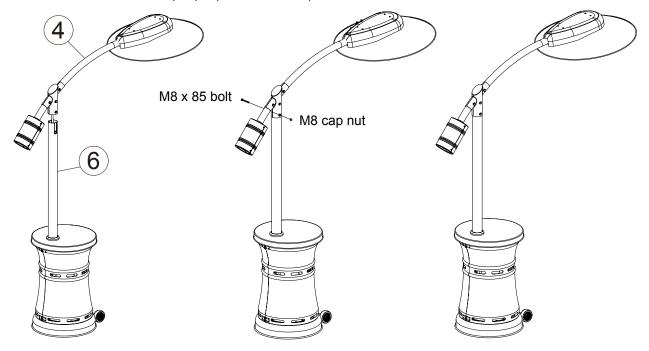


STEP 9

Make sure the reflector is at the same side as wheels.

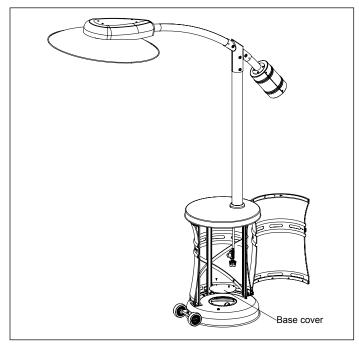
Insert the hose and regulator through the pole (6) and place the transom assembly (4) on the pole (6). Insert M8 x 85 bolt through the holes of transom assembly (4) and pole (6) and secure them with M8 cap nut. Finally tighten other 3pcs M8 cap nuts.

Note: It is recommended that two people perform this step with extra caution.



STEP 10

Unscrew 4pcs M4 x 10 bolts to take off the base cover, fill sand into the hole of base till full. Then secure the base cover back to position with 4pcs M4 x 10 bolts.



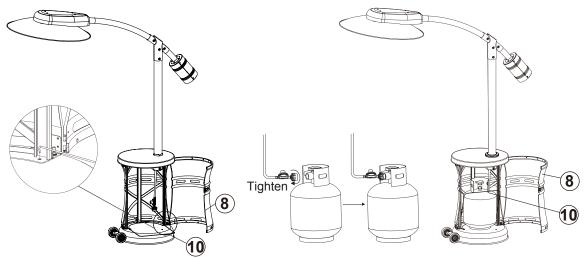
STEP 11

Insert cylinder fixing hook (10) into holes on base assembly (8).

Place the gas cylinder (not included) into the base assembly (8) and fix it with cylinder fixing hook (10).

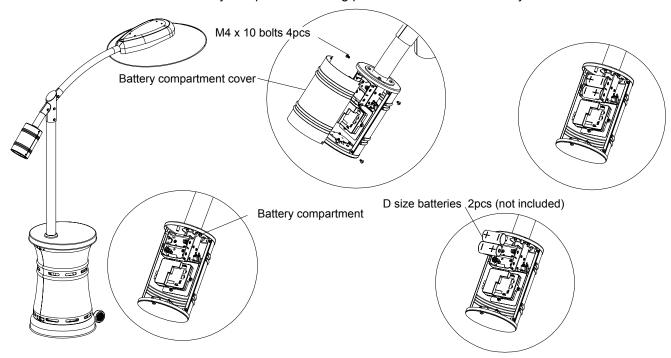
Attach the regulator to the cylinder and turn clockwise to securely tighten the valve. Close and latch the door.

Note: Make sure to check for leaks after attaching the cylinder. (For instructions, refer to the "check for leaks" section of this manual.)



STEP 12

Unscrew 4pcs M4 x 10 bolts to take off battery compartment cover, put 2pcs 1.5V D size batteries (not included) into battery compartment. Then secure the battery compartment cover back to position with 4pcs M4 x 10 bolts. Note: Please take out batteries from battery compartment during periods of extended inactivity.



SAFETY CHECK

WARNING: ONLY AN AUTHORIZED GAS TECHNICIAN SHOULD INSTALL THIS PRODUCT.

Check for leaks

All connection on the patio heater have been checked for leakage at the factory. In transportation and handling some connections may have loosened. Follow these steps to check the gas hose/regulator/cylinder connections:

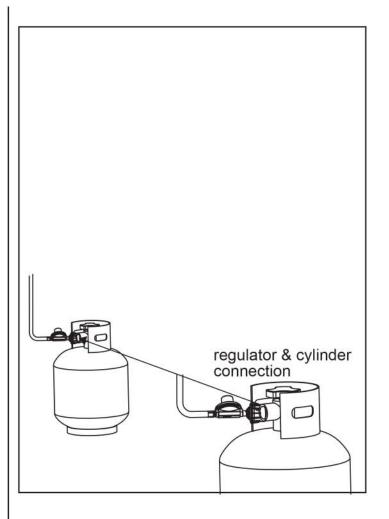
- 1) Make leakage solution by mixing 1 part liquid dish soap and 3 parts water.
- Spoon or brush several drops (or use squirt bottle) of the solution onto hose connection, regulator & cylinder connection.
- Turn on gas cylinder valve. Inspect the connections and look for bubbles.
- 4) If no bubbles appear, the connection is safe.
- 5) If bubbles appear, there is leakage. Loosen and re-tighten this connection. If connection still leaks, please call customer service: 888.779.5282

Note:

- 1) The cylinder supply system must be arranged for vapor withdrawal;
- The cylinder used must include a collar to protect the cylinder valve.

The hose assembly must be replaced prior to the appliance being put into operation if there is evidence of excessive abrasion or wear, or if the hose is damaged.

At least once a year, a complete inspection of the entire gas path components should be performed. If there is need to replace parts, proceed to leak test after reassembly (These procedures should be performed by a professional technician).

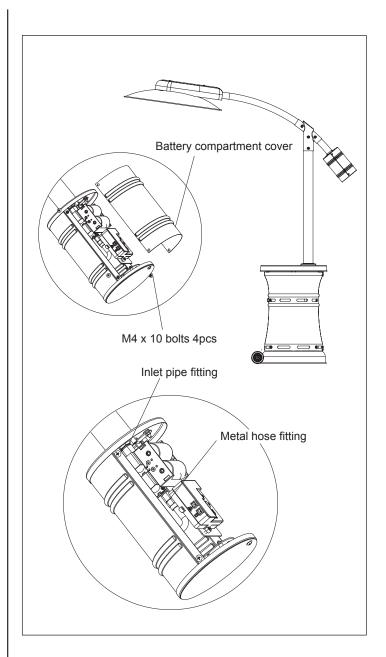


SAFETY CHECK

WARNING: ONLY AN AUTHORIZED GAS TECHNICIAN SHOULD INSTALL THIS PRODUCT. PROPER ASSEMBLY IS THE RESPONSIBILITY OF THE INSTALLER.

Annual check operation:

- a. Remove the battery compartment cover by un-screwing 4pcs M4 x 10 bolts.
- b. Turn on LP gas cylinder valve.
- Spoon several drops (or use squirt bottle) of the solution onto inlet pipe fitting and metal hose fitting.
- d. Inspect the connections and look for bubbles.
- e. If no bubbles appear, the connection is safe.
- f. If bubbles appear, there is a leak. Shut off the LP gas cylinder valve, loosen and then re-tighten this connection.
- g. Check for leaks again.
- h. If bubbles still appear, close the LP gas cylinder valve and call our customer service line. Do not attempt to use the heater.
- i. Hose checking step:
- (1) Unscrew 2pcs M8 x 55 bolts, 2pcs M8 x 85 bolts and 4pcs M8 cap nuts from transom control assembly and transom mounting plate.
- (2) Pull out the transom control assembly, hose & regulator from the pole.
- (3) Check if there are cracks or worn sections on the hose. If yes, replace the hose & regulator immediately.
- (4) Check for leaks according to the above step by step after replacing the hose & regulator.



WARNING: DO NOT ATTEMPT TO OPERATE HEATER UNTIL YOU HAVE READ AND UNDERSTAND ALL PRECAUTION. FAILURE TO DO SO CAN RESULT IN SERIOUS PERSONAL INJURY, DEATH, OR PROPERTY DAMAGE.

Before turning gas supply ON

Your heater was designed and approved for OUTDOOR USE ONLY. DO NOT use it inside a building 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.

Lighting instructions

- 1) Turn LP Cylinder gas valve to fully open position and press "O" button on the control panel. If the sparks stop and burner does not stay lit, press the button "O" again to ignite after 10 seconds.
- 2) When the burner is lit, press " * * or " * " to desired heat output between High and Low.
- 3) To shut off heater, press " $_{\circlearrowleft}$ "again, then turn LP cylinder gas valve to closed position. If you want to relight the heater, wait 5 minutes, and then repeat the Steps 1 to 2.

WARNING

FOR YOUR SAFETY:

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. If after 1 minute, you are unable to light burner, wait 5 minutes and allow flammable vapors to dissipate before attempting to light heater.

WARNING

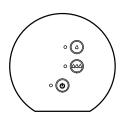
FOR YOUR SAFETY:

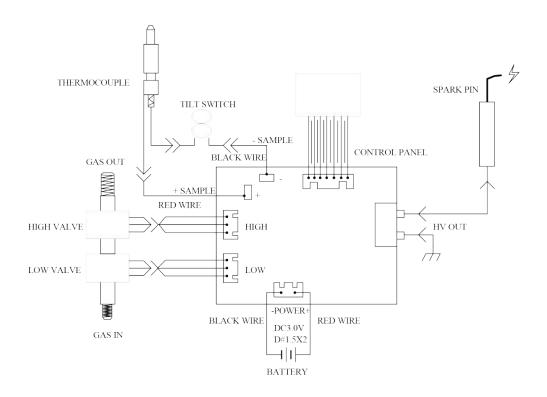
DO NOT touch or move heater for at least 45 minutes after use.

Allow emitter and dome to cool before touching.

WARNING

Lighting operations should comply with Lighting Instruction section. Improper lighting operations will cause serious injure and explosion.

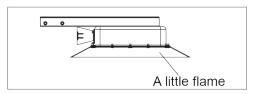


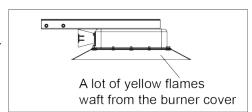


Flame Characteristic

The flames on sintered metal wire are red, a little flame is acceptable.

If the flame burns on sintered metal wire isn't red, or there are a lot of yellow flames waft from the burner cover, the heater should be turned off immediately. The heater should not be operated again until the unit is serviced and or repaired.





OPERATION

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 15 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, press the control knob to the " • " position. Then, press 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 red flame. These flames should not be yellow or produce thick black smoke, indicating an obstruction of airflow through the burners.

Operation pressure checked:

If the flame is very small, this is because the supply pressure is not enough. Please refill gas cylinder.

Shut down instructions:

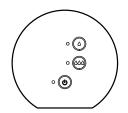
To shut off heater, press" (1) "and then turn LP cylinder gas valve to close position.

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

The Event of Gas Leakage:

- 1) Turn LP cylinder valve to "OFF" position.
- 2) Wait 5 minutes to allow gas to dissipate.
- 3) If odor continues, immediately call gas supplier.

WARNING : Heater will be hot after use. Handle with extreme care.



LOCATING HEADER FOR USE

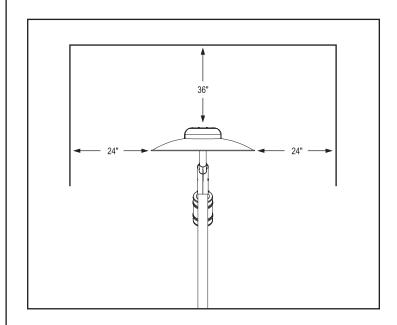
CAUTION: WHEN CERTAIN MATERIALS OR ITEMS ARE LEFT, ABOVE, BESIDE OR UNDER THIS HEATER WHILE IN USE, THEY WILL BE SUBJECT TO RADIANT HEAT AND COULD BE SERIOUSLY DAMAGED.

This heater is primarily used for the heating of outdoor patios, decks, spas, pools and open working areas.

Always make sure that adequate fresh air ventilation is provided. Follow the spacing tolerances shown in the following figure right at all times.

This heater must be placed on level, firm ground.

Never operate in an explosive atmosphere. Keep away from areas where gasoline or other flammable liquids or vapors are stored or used.



MAINTENANCE/STORAGE

CLEANING AND MAINTENANCE:

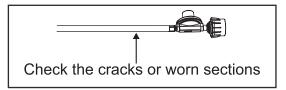
To enjoy years of outstanding performance from your heater make sure you perform the following maintenance activities on a regular basis:

- Keep exterior surfaces clean.
- Use warm soapy water for cleaning. Never use flammable of corrosive cleaning agents.
- While washing your unit, be sure to keep the area around the burner and pilot assembly dry at all times. If the gas control is exposed to water in any way, do NOT try to use it. It must be replaced.
- Keep the appliance area free and clean from combustible materials, gasoline and other flammable vapors and liquids; not obstructing the flow of combustion and ventilation air; keeping the ventilation opening(s) of the cylinder enclosure free and clear from debris.
- Visually check burner flames.
- Unscrew gas hose and regulator with adjustable open end wrench.
- Unscrew the screws and nuts on transom control assembly and transom mounting plate, take out the burner head assembly.
- Check if there are cracks or worn sections on hose. If yes, please call our customer service to replace hose.
- At least once a year, the unit should be inspected for the presence of spiders, spider webs or other insects.
- 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.

WARNING:

FOR YOUR SAFETY;
DO NOT touch or move heater for

at least 45 minutes after use. Allow all burner elements to cool before touching.



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.

NOTE:

wait until heater is cool before covering.

MAINTENANCE/STORAGE

- 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 with warm soapy water if any carbon deposits develop.

STORAGE:

Between uses:

- Turn LP cylinder to "OFF" position.
- 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.

During periods of extended inactivity or when transporting;

- Take out the batteries from the battery compartment.
- Disconnect the regulator from the LP Cylinder by turning counter-clockwise and move to a secure, well-ventilated location outdoors. DO NOT store in a location that will exceed 125 degrees F.
- 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.

TROUBLESHOOTING

PROBLEM	PROBABLE CAUSE	SOLUTION
Press the " (J)" button	a. Battery is dead	a. Replace new battery.
indicator light doesn't work	b. Power cord fall off	b. Connect the power cord according instruction.
	c. Interval between off and on is too short	c. Turning on the heater after 1 minute.
	d. Touch panel is damaged	d. Replace the touch panel or, call customer service for replacement.
Failed ignition 1 when there are some sparks	a. The switch of gas cylinder is closed	a. Turn on the LP Cylinder
on the top of electrode pin	b. Gas used up	b. Replace new LP cylinder with enough gas
	c. Not enough battery power	c. Replace new battery
	d. Hole of ignition is in windward position	d. Move the heater and make the ignition hole in leeward position.
	e. Electrode pin is deflective	e. Adjust the electrode pin and make the spark in the area of front of hole
Failed ignition 2 There is not any spark on the top of electrode pin	a. When there is not impulse sound, the power of battery is not enough	a. Replace new battery
top of electrode pill	b. When there is impulse sound, the distance between top of electrode pin to the burner is too far	b. Adjust the space to 3-4(mm)
	c. There is some spark out of electrode pin top(creepage)	c. Replace electrode pin or, call customer service for replacement.
"ది" and "దది" button switch	a. Power of battery is not enough	a. Replace new battery
failure	b. The touch panel is damaged	b. Replace new touch panel or, call customer service for replacement
Flameout when heat is on normal working status	a. Gas used out	a. Replace a new LP gas bottle with enough gas
	b. Thermocouple aging	b. Replace thermocouple or, call customer service
	c. Power of battery is not enough	c. Replace new battery
	d. Controller glitch	d. Replace controller or, call customer service
Emitter screen damaged, anamorphic	The emitter screen aging due to used for long time	Replace emitter screen or, call customer service
Burner fall off	The burner aging due to used for long time	Replace the burner or, call customer service

FIVE-YEAR LIMITED WARRANTY

The appliance has been manufactured under the highest standards of quality and workmanship. We warrant to the original consumer purchaser that all aspects of this product will be free of defects in material and workmanship for five (5) year from the date of purchase. A replacement for any defective part will be supplied free of charge for installation by the consumer. Defects or damage caused by the use of other than genuine parts are not covered by this warranty. This warranty shall be effective from the date of purchase as shown in the purchaser's receipt.

This warranty is valid for the original consumer purchaser only and excludes industrial, commercial or business use of the product, product damage due to shipment or failure which results from alteration, product abuse, or product misuse, whether performed by a contractor, service company, or consumer. We will not be responsible for labor charges and/or damage incurred in installation, repair or replacement, nor for incidental or consequential damage.

When You Receive Your Product:

If Your Product is...

- Damaged
- Requires Technical Support
- Requires Parts
- Or If You Have A Sales Question Or You Would Like To Offer Product Feedback

Please contact the manufacturer:

LAVA HEAT ITALIA

888.779.5282 or CS@LAVAHEAT.COM
DO NOT RETURN PRODUCT TO RETAILER!

LAVA HEAT ITALIA

Toll free No.: 1.888.779.LAVA 1.888.779.5282 Addr.: 5999 Malburg Way, Vernon, CA, 90058



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Congratulations and welcome to the Lava Heat Italia family.
Our mission is to design and construct beautifully engineered, high quality products for all to use and enjoy for years to come.
Lava Heat was originally founded by lead designer and chief engineer, Mr. JR Zioni in Modena, Italy in 1997. Today Lava Heat Italia has expanded to the USA and offers well over 100 innovative heating, cooling and home appliance products worldwide.
We encourage you to visit our website; www.LavaHeat.com to get a detailed view of our most up to date list of cutting-edge products.

We appreciate your business.

Sincerely,

F. Fioni.









MANUFACTURED BY:



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