# **INSTALLATION AND MAINTENANCE**



# KTENT Tent Heater (Rated for Outdoor Use)





Figure 1



### **WARNING**



**READ CAREFULLY -** Use the heater only as described in this manual. Any other use is not recommended and could result in fire, electric shock, and personal injury. Following these instructions will prevent difficulties that might occur during the installation and use of the heater. Please study the instructions first, as they may save considerable time and trouble during use addition to providing important safety information. Make sure to save these instructions for future use.

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  - A 1. **WARNING:** This heater is hot when in use. To avoid burns, do not let bare skin touch hot surfaces. Keep combustible materials, such as furniture, pillows, bedding, papers, clothes, etc. and curtains at least 3 feet (0.9 m) from the front of the heater and keep them away from the sides and rear.
  - Extreme caution is necessary when heater is used by or near children or invalids and whenever the heater is left operating and unattended.
  - 3. Always unplug heater when not in use.
- A
  - 4. WARNING: Do not operate heater with damaged cord or plug, after it malfunctions, has been dropped, or damaged in any manner. Discard heater or return to authorized service facility for examination and/or repair.



- 5. **WARNING:** A GFCI rated circuit breaker is required.
- 6. This heater is not intended for use in bathrooms, laundry and similar indoor areas. Never locate heater where it can fall into a bathtub or other water container.



7. **WARNING:** Do not run cord under carpeting. Do not cover cord with throw rugs, runners, or similar coverings. Do not route cord under furniture or appliances. Arrange cord away from traffic area and where it will not be tripped over.

- 8. To disconnect heater, turn controls to off, then remove plug from outlet.
- 9. Connect to properly grounded outlets only.



10. **WARNING:** Do not insert or allow foreign objects to enter any ventilation or exhaust opening as this may cause an electric shock or fire, or damage the heater.



11. WARNING: To prevent a possible fire, do not block air intakes or exhaust in any manner.



- 12. WARNING: A heater has hot and arcing or sparking parts inside. Do not use it in areas where gasoline, paint, or flammable vapors or liquids are used or stored.
  - 13. Use this heater only as described in this manual. Any other use not recommended by the manufacturer may cause fire, electric shock, or injury to persons.
  - 14. Always plug heater into wall outlet or receptacle. Never use with extension cord or relocatable power tap, or power strip.



CAUTION-RISK OF ELECTRIC SHOCK DO NOT OPEN HEATER SHELL NO USER—SERVICEABLE PARTS INSIDE



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## **ASSEMBLY & SETUP**

### **CAUTION!**

Remove power by unplugging the Heater while setting up or placing

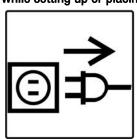






Figure 3



### **HEATER SETUP**

- 1. Unpack and inspect your heater for any damage. Any damage discard heater or return to authorized service facility immediately.
- Place heater at least 6" (15cm) away from vertical surfaces and keep the
  intake clear of obstructions. Keep all combustible materials, such as furniture, papers, clothes, drapes, and curtains at least 3 feet (0.9 m) from the
  front of the heater and keep them away from the sides and rear.
- Route power cord away from traffic areas to avoid tripping. NEVER route power cord under carpets, rugs, drops cloths, furniture or other equipment.
- 4. Plug power cord into a grounded wall outlet only DO NOT use an small wire size extension cord or power strip.
- 5. WARNING: This heater is for floor use ONLY and should not be tipped on side, placed upside down, mounted on or inserted into a wall. The heater is provided with 6 ft long power cord and the proper twist lock plug, if used in an outdoor application the outdoor rubber boot must be used.

- 6. DO NOT use heater in areas where gasoline, paint, or other flammable liquids are used.
- 7. Heater is rated for outdoor use, but every attempt should be made to keep direct rain and water from entering the inlet or outlet of the heater. Keep drain holes clear.
- 8. Store unplugged and in a dry indoor location.
- 9. This heater is for use on 120 or 240/208 volts depending on model. The heater requires a grounding outlet. When properly installed, it provides a ground connection through the cord to the heater to protect the operator from electric shock.
- 10. GFCI Breaker is required if used outdoors.
- 11. A U-channel is supplied to allow heaters installation under the edge of the tent. Insert tent material in this channel to prevent the tent from blocking outlet of heater.

		Cord		Nylon Clamp-type		Nylon Co Clamp-type		Equipmer	d Devices nt Base with Vhite Cup
Rating		Diameter	Description	Tripple Gripper	Regular	Tripple Gripper	Regular	Male	Female
NEMA L5-	15, 15A 125V	.300"655"	Black/White	4721NP	_	4732NC	4730	4716MB	4715ER
Plug	Connector	(7.6-16.6)	All Black	4721NPB	4726BRY	4732NCB	_	_	_
( <u>, , , , )</u>	(B)		Corrosion-Resistant Yellow	4721NPCR	_	4732NCCR	-	_	-
			Angled 12-position Black/White	_	4722N	_	-	_	_
NEMA L6-15, 15A 250V		.300"655"	Black/White	70615NP	_	70615NC	_	70615MB	70615ER
Plug	Connector	(7.6-16.6)							
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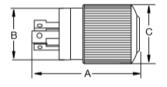
#### Weather Protective Boots

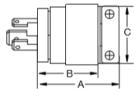
Description	For use with	Color	For Use with Plugs	For Use with Connectors
Thermoplastic elastomer boot	7465N plug when used with 7464N connector or 7468N female equipment receptacle, also for use with connector when used with 7466N male base	Black	7460BP	1 <del></del>
	7464N connector when used with 7465N plug	Black	( <del>)_</del> ()	7460BC
Neoprene boot	15 amp 2-pole 2-wire and midget locking nylon plugs and connectors, NEMA L1-15, ML-2 and ML-3	Yellow	7400BCR	7400BCR

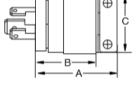


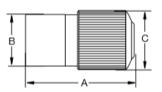
#### Product Dimensions Inches (mm)

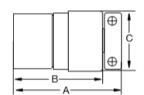
	Triple Gripper	Locking (B/W)	Locking (All Black)			
	Plug	Connector	Plug	Connector		
Α	2.18" (55.4)	2.95" (75.0)	2.00" (50.8)	2.78" (70.6)		
В	1.38" (35.1)	1.38" (35.1)	1.56" (39.6)	2.33" (59.2)		
С	1.53" (38.9)	1.53" (38.9)	1.53" (38.9)	1.53" (38.9)		















# **OPERATION AND ADJUSTING THERMOSTAT**

This heater must be properly placed before it is used.

DO NOT tamper with or change the operating of this heater. All service should be preformed by a authorized service representative. Only replace components with King approved replacement parts.

#### Operation:

- After the electric heater has been completely placed, the thermostats should be turned to LOW or NO HEAT position.
- Plug unit into grounded outlet, Do not use extension cords. 2.
- Turn thermostats to highest position and wait 3 to 5 minutes. Check to see that all heaters are operating. Should any not be operating, disconnect power and check wiring.
- Allow entire system to operate steadily for 1/2 hour. This should remove oily residue from manufacturing. (Some smoking may occur).

#### Selecting desired temperature on the thermostat:

To adjust the temperature to your requirements, turn the dial on the thermostat clockwise all the way to turn heater on. When the room reaches the desired temperature, turn the thermostat knob counter clockwise until you hear the click. Leave in this position to maintain the room temperature at this setting. For additional heat, turn clockwise until you the click and the heater will turn on.

A safety limit control is provided to turn off the heater automatically if it is blocked or otherwise overheats due to an abnormal condition. DO NOT bypass



or remove this safety device from the electrical circuit. During normal use, this safety control should not operate. If you find that this control is operating, make sure the heater is not being blocked. If it continues to cycle the heater off, disconnect power to heater and have it checked and repaired by a qualified electrician.

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## **CLEANING INSTRUCTIONS**

#### Before cleaning this heater, heating element must be cool.

- 1. Before removing the grill, turn the electrical power OFF by unplugging it. If not, electricity may still be flowing to the heater. If you are uncomfortable working with electrical appliances consult a qualified electrician. Once power is off completely, proceed to the next step.
- 2. Remove grill and cover screws located on the sides of the cover. Wipe housing with soft cloth or brush.
- 3. Using a hair dryer or vacuum on blow cycle, blow debris back through the element. Do not touch element. Vacuum or blow loose debris without touching the elements. Keep elements clear. Clean both Tangential fans with a paint brush and oil both the motor Bearings and end bearing with a synthetic #10 weight small motor oil.
- 4. Replace cover and grill to housing and secure with screws.
- 5. Inspect cord and plug and strain relive for integrity and safety

### **TROUBLESHOOTING**

#### Troubleshooting Chart for Electric Heaters

SYMPTOM	PRO	OBLEM	SOL	LUTION			
Breaker Trips	1.	Short Circuit		1. Find source of short. Trace heater circuit and verify the heater is wire properly.			
	2.	Overloaded Circuit	2.	Reduce wattage in circuit. Refer to circuit sizing table for maximum wattage.			
	3.	Improper Voltage	3.	Verify the heater voltage matches the supply voltage.			
Heater not working	1.	No Power Loose Connections Defective Limit	1.	Turn Breaker ON, turn thermostat ON, check that the breaker is position properly on panel busbar. A 2-Pole breaker must be connected to both busbars (A&B phase) to produce 240V power. Tighten wire connections.			
	3.		3.	By-pass the limit to test. If heater works, replace the limit.			
Heater Smokes	1.	Oil on Element	1.	It is normal for the element to burn off some light finishing oil used in the manufacturing process when first energized. Open windows and allow room to vent until it stops, usually within a few minutes.			
	2.	Needs Cleaning	2.	Remove any dust or dirt accumulations.			
Room Temperature does not match thermostat	1.	Thermostat affected by another heat source.		Sunlight or other heat sources can affect the thermostat. Move the thermostat to another loca-			
setting	2.	Improper calibration		or remove the heat source.			
			2.	Remove cover and adjust calibration screw.			
Room Temperature swings from too hot to too cold	1.	Defective or low quality thermostat	1. ic	Replace with a better quality thermostat. Anticipated thermostats are fairly accurate; an electron-			
				thermostat is best.			

### **Heater Safety Limit Tripped?**



This heater is equipped with a thermal overload Smart Limit Protection which disconnects elements and motor in the event normal operating temperatures are exceeded. If thermal overload trips due to abnormal operating temperatures, thermal overload shall remain open until manually reset by turning the heater OFF for fifteen minutes. Inspect for any objects on or adjacent to the heater that may cause high temperatures. After inspecting the heater, keep the power to the heater off for 15 minutes to reset the SLP thermal protector. If the SLP thermal protector shuts the heater off again, immediately turn the heater OFF at the circuit breaker and inspect the heater for possible fan motor failure or dirt and lint on the heating element. Repeat the starting procedure.

DO NOT TAMPER OR REMOVE THIS THIS DEVICE

#### Maintenance

With proper care your electric heater should last a lifetime, however, seasonal cleaning is recommended to maintain the efficiency of the heater. Keep heating element, fan and motor free of debris. Use compressed air to blow out any debris.

### We're Here to Help!

For any difficulties installing or operating this product **Call Us Toll Free at:** 

1-800-603-5464

7:00 am -3:30 pm PST Mon-Fri Visit king-electric.com or email us at info@king-electric.com