

IMPORTANT INSTRUCTIONS



PKB Series Portable Heaters



Figure 1
Instructions include all units in the PKB Series

⚠ DANGER ⚠

ELECTRIC SHOCK OR FIRE HAZARD

Read all wire sizing, voltage requirements and safety data to avoid property damage and personal injury.



WARNING



Read Carefully - These instructions are written in an effort to prevent potential difficulties that might arise during installation. Studying the instructions first may save you considerable time and money later. Observing the following procedures will keep installation time to a minimum. **Save these instructions for future use.**

IMPORTANT INSTRUCTIONS

When using electrical heating appliances, basic precautions should always be followed to reduce the risk of fire, electric shock and injury to persons, including the following:

1. **Read all instructions before using this heater.**
- ⚠ 2. **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.
3. Extreme caution is necessary when heater is used by or near children or invalids and whenever the heater is left operating and unattended.
4. Always unplug heater when not in use.
- ⚠ 5. **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.
- ⚠ 6. **WARNING:** Do not use outdoors.
7. 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.
- ⚠ 8. **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.
9. To disconnect heater, turn controls to off, then remove plug from outlet.
10. Connect to properly grounded outlets only.
- ⚠ 11. **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.
- ⚠ 12. **WARNING:** To prevent a possible fire, do not block air intakes or exhaust in any manner.
- ⚠ 13. **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.
14. 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.
15. Always plug heater into a wall outlet or receptacle. Never use with an extension cord or relocatable power tap, outlet, or power strip

Figure 2



SAVE THESE INSTRUCTIONS

PKB SETUP INSTRUCTIONS

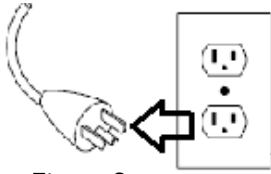


Figure 2

CAUTION!
Remove power by unplugging the Heater while setting up or placing.



Figure 3

1. Setting up Your Heater:
2. Unpack and inspect your heater for any damage. Any damage discard heater or return to authorized service facility immediately.

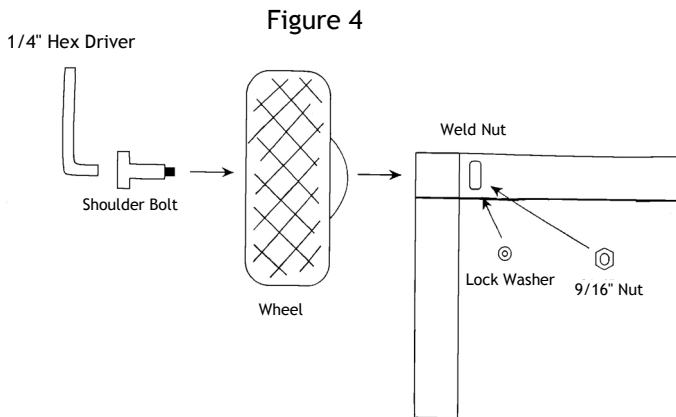


Figure 4

Wheel install Diagram

3. 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.
4. Route power cord away from traffic areas to avoid tripping. NEVER route power cord under carpets, rugs, drops furniture or other equipment.
5. Plug power cord into a grounded wall outlet only DO NOT use an extension cord or power strip.
6. Wiring diagram located in wiring housing.

Rating Label Location

Figure 5

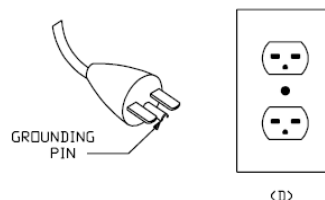
King Electrical Mfg. MODEL:KB2005-3MP
9131 10th ave so. VOLTS:208
Seattle Wa. 98166 WATTS:5 KW 60hz 1 OR 3 PHASE
UL LISTING #KB5-03MP

MP MODELS ARE FACTORY WIRED 3 PHASE. FOR CHANGE TO 1 PHASE SEE WIRING DIAGRAM. INSTALLER MUST INDICATE 1 OR 3 IN PHASE BLOCK.THERMOSTAT RATING:240VOLTS AC 25AMP RESISTIVE, 2 F.L.A. 40VA PILOT DUTY
DO NOT INSTALL LESS THAN 6" FROM VERTICAL SIDE WALLS OR 6" ABOVE FLOOR.USE COPPER WIRE ONLY.
NOT SUITABLE FOR RESIDENTIAL OR HOUSEHOLD USE05/14/13



7. Adjust the louvers to the desired position. The louvers are designed so they cannot be completely closed. Do not attempt to force this feature as this may damage the heater.
8. **WARNING:** This heater is floor ONLY and should not be tipped on side, placed upside down, mounted on or inserted into a wall. A tip over auto disconnect switch will activate when tipped more than 30°.
9. DO NOT use heater in areas where gasoline, paint, or other flammable liquids are used.
10. DO NOT use heater outdoors or in wet or moist indoor areas such as bath or laundry rooms.
11. Store unplugged and in a dry indoor location.
12. This heater is for use on 240 (or 208) volts. The cord has a plug as shown in D in Figure 65.1. No adapter is available for this blade configuration, and none should be used. The type outlet is a 240 (or 208) volt grounding outlet. When properly installed, it

provides a ground connection through the cord to the heater to protect the operator from electric shock.



OPERATING INSTRUCTIONS



Unit or Series

General information and Guidelines:

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 performed by a authorized service representative. Only replace components with King approved replacement parts.

Operation:

1. After the electric heater has been completely placed, all thermostats should be turned to LOW or NO HEAT. Plug unit into grounded outlet, no extension cords, wait 3 to 5 minutes and check to see that the heaters are not operating. If operating, disconnect power and check for improper wiring. If none are operating then 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.
2. Allow entire system to operate steadily for 1/2 hour. This should remove oily residue from manufacturing. (Some smoking may occur).
3. Select the setting for comfort on all thermostats.
4. 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.

Table 3
Troubleshooting Chart for Electric Heaters

SYMPTOM	PROBLEM	SOLUTION
Breaker Trips	<ol style="list-style-type: none"> 1. Short Circuit 2. Overloaded Circuit 3. Improper Voltage 	<ol style="list-style-type: none"> 1. Find source of short. Trace heater circuit and verify the heater is wire properly. 2. Reduce wattage in circuit. Refer to circuit sizing table for maximum wattage. 3. Verify the heater voltage matches the supply voltage.
Heater not working	<ol style="list-style-type: none"> 1. No Power 2. Loose Connections 3. Defective Limit 	<ol style="list-style-type: none"> 1. Turn Breaker ON, turn thermostat ON, check that the breaker is position properly on panel bus-bar. A 2-Pole breaker must be connected to both bus-bars (A&B phase) to produce 240V power. 2. Tighten wire connections. 3. By-pass the limit to test. If heater works, replace the limit.
Heater Smokes	<ol style="list-style-type: none"> 1. Oil on Element 2. Needs Cleaning 	<ol style="list-style-type: none"> 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. Remove any dust or dirt accumulations.
Room Temperature does not match thermostat setting	<ol style="list-style-type: none"> 1. Thermostat affected by another heat source. 2. Improper calibration 	<ol style="list-style-type: none"> 1. Sunlight or other heat sources can affect the thermostat. Move the thermo stat to another location or remove the heat source. 2. Remove cover and adjust calibration screw.
Room Temperature swings from too hot to too cold	<ol style="list-style-type: none"> 1. Defective or low quality thermostat 	<ol style="list-style-type: none"> 1. Replace with a better quality thermostat. Anticipated thermostats are fairly accurate; an electronic thermostat is best.

SAVE THESE INSTRUCTIONS

Maintenance & Warranty

Cleaning instructions

Before cleaning this heater, the heating element of the heater must be cool.

1. Before removing grille, turn the electrical power OFF by unplugging it. If it isn't unplugged electricity may still be flowing to the heater, even if the heater does not appear to be working. If you are uncomfortable working with electrical appliances, unable to follow these guidelines, or do not have the necessary equipment, consult a qualified electrician. Once you verify the power is off completely, proceed to the next step.
2. Remove 4 Phillips head screws located behind the louvers in the corners of the louver housing. Wipe louver housing with a 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 loose debris without touching the elements.
4. Replace louver housing and secure with screws.
5. To clean the fan and motor remove the safety grill from the rear of the heater. This provides access to the fan and motor. Wash Grill with hot soapy water and dry immediately
6. Wipe the fan and motor with a soft cloth or brush. The fan motor does not require lubrication.
7. Replace safety grill.
8. Plug the unit back in

Warranty Information

King Electrical Manufacturing Company will repair or replace, without charge to the original owner, any PKB Series portable heater found to be defective or malfunctioning within 1 year of installation. If the product becomes defective, contact King at 206-762-0400 for instructions on how to replace heater. Do not return the heater to the store. All returned goods require a Returned Goods Authorization. This warranty requires the owner or his agent install the heater in accordance with these instructions, the National Electrical Code and any other applicable heating or electrical codes. It further requires that reasonable and necessary maintenance be performed on the unit. The company is not liable for abuse or misuse of product. King Electrical Manufacturing Company is not responsible for replacement of discolored flooring material due to hot air from this heater. Suitable installation and placement selection for this heater is the responsibility of the installer and the end user.