

INSTALLATION AND MAINTENANCE



PCKW Series Industrial Portable Heater

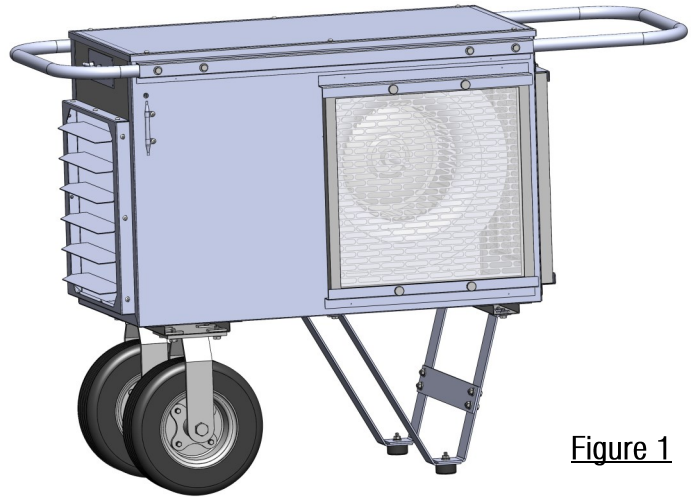
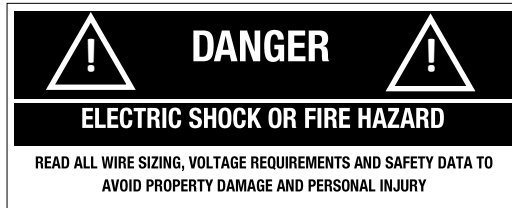


Figure 1



WARNING



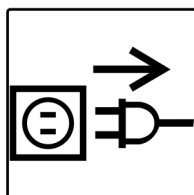
READ CAREFULLY - Use the heater only as described in this manual. Any other use is not recommended and could result in fire, electric shock, and personal injury. Following these instructions will prevent difficulties that might occur during the installation and use of the heater. Please study the instructions 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.

NEVER LEAVE HEATER UNATTENDED WHILE CONNECTED TO A POWER SOURCE

Read all instructions before using this heater.

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.
2. 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.
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:** Do not use outdoors.
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.

ASSEMBLY & SETUP



CAUTION!

Remove power by unplugging the Heater while setting up or placing

Figure 2

Rating Label Location

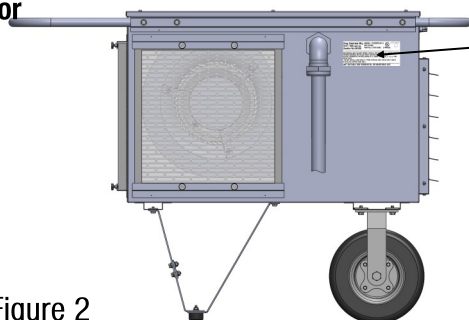


Figure 2

MODEL: PCKW4815-3
VOLTS: 480 50/60 Hz PHASE: 3
WATTS: 15 KW AMPS: 18
MOCP: 50

King Electrical Mfg.
9131 10th Ave. So.
Seattle WA 98108

king
04/13/23

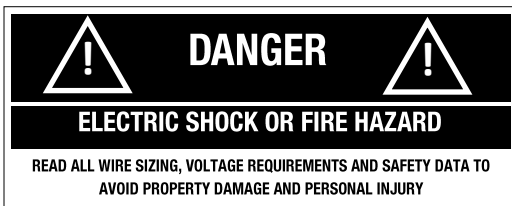
UL APPROVED FOR OUTDOOR USE WITH PROPER INTAKE RAIN SHIELD, DUCTED OUTLET AND FLANGED ELECTRICAL COVER WITH SEALING WASHERS INSTALLED.
TIP OVER PROTECTION INSTALLED, DO NOT BYPASS, FAN WILL DELAY DURING OFF CYCLE.

DANGER: WARNING:

SERVICING SHOULD ONLY BE DONE WHILE THE HEATER IS DISCONNECTED FROM THE SUPPLY CIRCUIT AND BEFORE MOVING OR SERVICING.
NO USER SERVICEABLE PARTS INSIDE.



103873



PCKW PLUG SELECTION

Check rating label on heater (See Figure 2) and verify the proper voltage and SO cord type. PCKW Series requires the below rated plug and receptacle per the amperage requirement (Not provided). No adapter is available for this blade configuration.

HUBBELL®
Wiring Device-Kellems

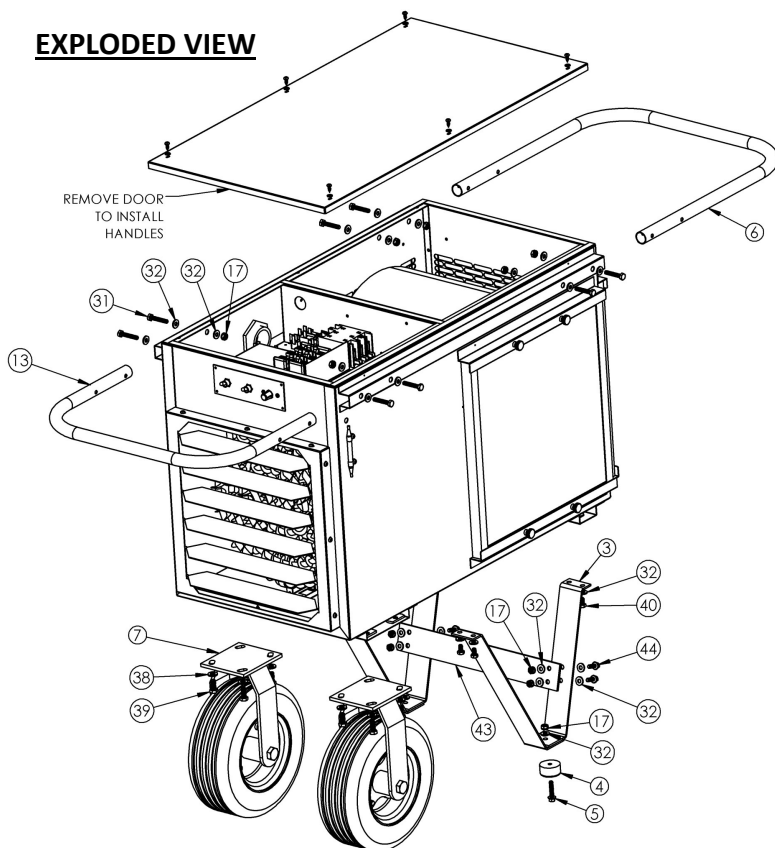


Dual-Certified IEC Pin & Sleeve Devices

MODEL	PHASE	VOLTS	AMPS	SOOW CORD GAUGE	Rating		Watertight Devices	
					Amps	Poles/ Wires Recep/Conn. Plug/Inlet	Receptacle	Plug
PCKW2010-1	1	208	48.1	6	60/63	2P 3W	HBL360R6W	HBL360P6W
PCKW2015-1	1	208	72.1	2	100	2P 3W	HBL3100R6W	HBL3100P6W
PCKW2410-1	1	240	41.7	6	60/63	2P 3W	HBL360R6W	HBL360P6W
PCKW2415-1	1	240	62.5	4	100	2P 3W	HBL3100R6W	HBL3100P6W
PCKW2010-3	3	208	27.7	8	60/63	3P 4W	HBL460R9W	HBL460P9W
PCKW2015-3	3	208	41.6	5	60/63	3P 4W	HBL460R9W	HBL460P9W
PCKW2020-3	3	208	55.5	4	60/63	3P 4W	HBL460R9W	HBL460P9W
PCKW2025-3	3	208	69.4	2	100/125	3P 4W	HBL4100R9W	HBL4100P9W
PCKW2410-3	3	240	24.0	10	60/63	3P 4W	HBL460R9W	HBL460P9W
PCKW2415-3	3	240	36.1	6	60/63	3P 4W	HBL460R9W	HBL460P9W
PCKW2420-3	3	240	48.1	4	60/63	3P 4W	HBL460R9W	HBL460P9W
PCKW2425-3	3	240	60.1	4	100/125	3P 4W	HBL4100R9W	HBL4100P9W
PCKW4810-3	3	480	12.0	14	60	3P 4W	HBL460R7W	HBL460P7W
PCKW4815-3	3	480	18.0	12	60	3P 4W	HBL460R7W	HBL460P7W
PCKW4820-3	3	480	24.0	10	60	3P 4W	HBL460R7W	HBL460P7W
PCKW4825-3	3	480	30.1	8	60	3P 4W	HBL460R7W	HBL460P7W

ASSEMBLY & SETUP

EXPLODED VIEW

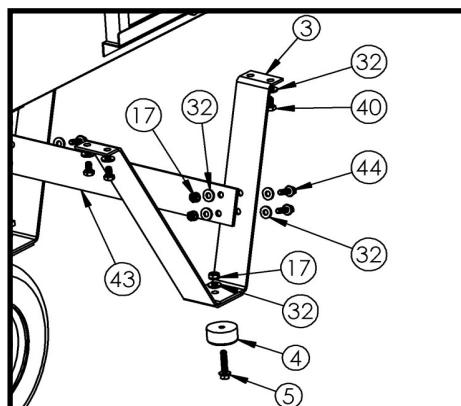
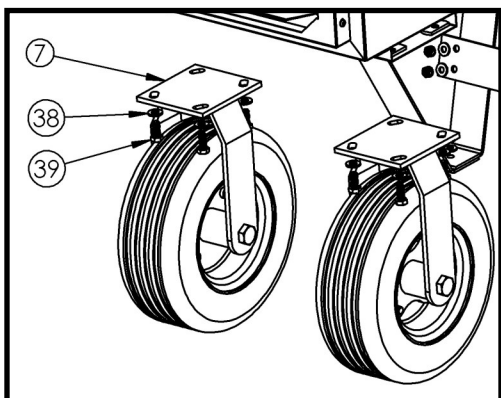


BILL OF MATERIALS

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
3	103891	WELDMENT, PCKW LEGS	2
4	102360	PKB 1" RUBBER FOOT	2
5	103875	BOLT, 1/4-20 X 1 1/4, GRADE 5 STEEL, FLANGED HEX HEAD	2
6	103868	WPCK REAR HANDLE	1
7	103873	CASTER, RIGID, PNEUMATIC 10 IN TIRE	2
13	103869	WPCK FRONT HANDLE	1
17	64033	1/4-20 KEPS NUT	14
31	100906	BOLT, HEX, 1/4-20 X 1.5 IN, GRADE 2 STEEL	8
32	100903	WASHER, FLAT, 1/4 NOMINAL, .281 ID X .625 STEEL-ZINC	34
38	103881	WASHER, 5/16, ID .344 X OD .688 X THK .051-.080	8
39	103882	BOLT, 5/16-18 X 3/4, GRADE 5 STEEL, FLANGED HEX HEAD	8
40	66278	1/4-20X1 1/2 STEEL HEX BOLT ZINC FOR KB'S 1/6 HP MOTOR	8
43	103871	WPCK, REAR LEG CROSS MEMBER	1
44	64075	1/4-20 X 3/4 IND HEX SLOT W/TYPE "F" ZINC	4

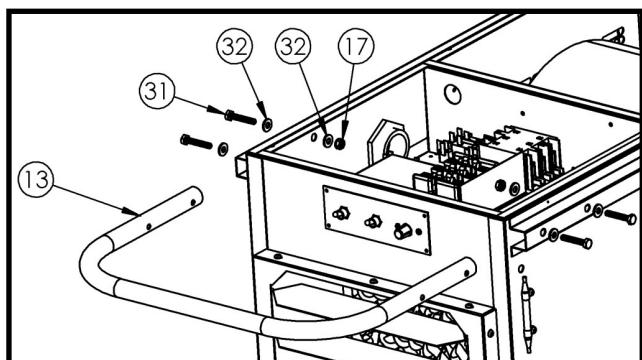
HEATER SETUP

1. Unpack & inspect your heater for any damage. If damage is found contact factory or return to authorized service facility.
2. Install 2 Front Wheels (#7) according to the assembly
3. Install Rear Legs (#3) and Cross Member (#43) Assembly according to the assembly diagram, using bolts (#44 & #40), washers (#32) and nuts (#17) provided. Install Rubber Feet Stoppers (#4) using bolts (#5), washers (#32) and nuts (#17) provided.

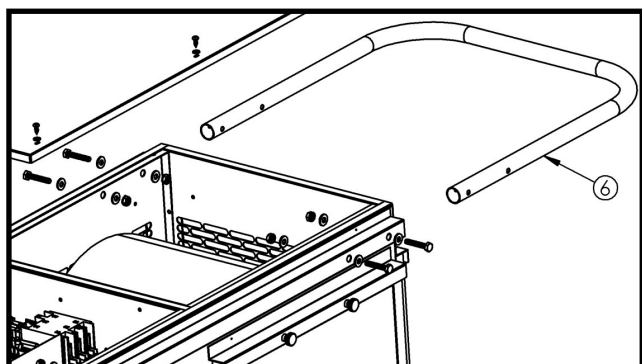


HEATER SETUP

4. Prepare for Front and Rear Handles installation by first removing the Top Cover (Door) to gain access to mounting the handles.
5. Insert Front Handle (#13) into metal channels on sides of the unit, according to the assembly drawing. Secure with bolts (#31), washers (#32) and nuts (#17)



6. Install Rear Handle (#6) following this same pro-



7. Reattached Top Cover, making sure screws are properly tightened.
8. Install proper plug configuration (Plug: Hubbell #HBL4100P9W) at the end of the power cord. (See Page 2 for details).
9. 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.
7. NEVER rout power cord under carpets, rugs, drops furniture or other equipment.
8. Plug power cord into a grounded wall outlet (Hubbell # HBL4100R9W) (See Page 2 for details) only. DO NOT use an extension cord.
9. Wiring diagram located in wiring housing.
10. 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. A tip-over auto disconnect switch will activate when tipped more than 30°.
11. DO NOT use heater in areas where gasoline, paint, or other flammable liquids are used.
12. DO NOT use heater outdoors or in wet or moist indoor areas such as bath or laundry rooms.
13. Store unplugged and in a dry indoor location.
14. This heater is for use on 208 volts. The type outlet is a 208 volt grounding outlet. When properly installed, it provides a ground connection through

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.

1. After the electric heater has been completely placed, the thermostats should be turned to LOW or NO HEAT position.
2. Plug unit into grounded outlet. Do not use extension cords.
3. 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.

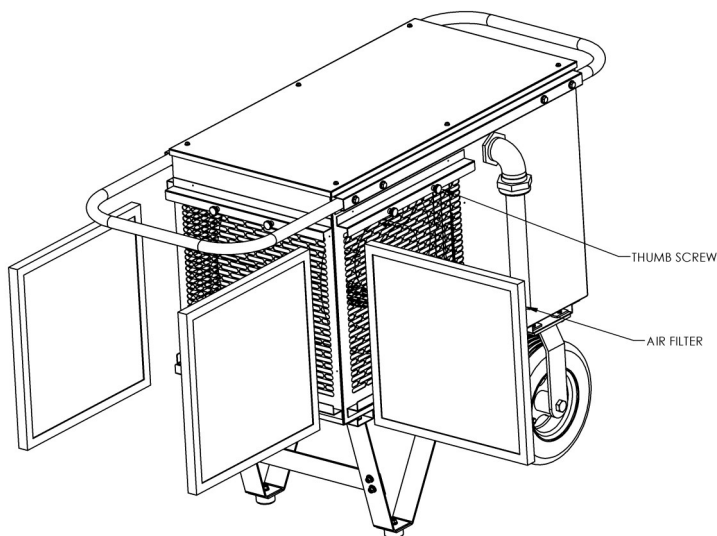
4. Allow entire system to operate steadily for 1/2 hour. This should remove oily residue from manufacturing. (Some smoking may occur).

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

FILTER REPLACEMENT

1. Turn power OFF to unit before replacing filters.
2. Loosen 4 thumb screws per air filter.
3. Slide old filter out from support channels.
4. Slide new air filter into support channels.
5. Retighten thumb screws to secure air



CLEANING INSTRUCTIONS



Before cleaning heater, heating elements must be cool.

1. Before removing front louver housing, 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 screws located on the sides of the front louver housing. 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 elements. Vacuum lose debris without touching the elements.
4. Replace front louver housing and secure with screws.
5. Wipe the fan and motor with a soft cloth or brush.

TROUBLESHOOTING

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 thermostat 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.

SMART LIMIT PROTECTION AND MAINTENANCE



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



Smart Heating Solutions