

MODEL NUMBERS:

MH-80TBOA-KFA

CONSUMER: READ AND SAVE THESE IMPORTANT INSTRUCTIONS



Locating Your Serial Number:

Your serial number can be found on a white label on the right side cover of your heater. For Example: 150812779. Have your Serial Number ready before calling customer service at 800-641-6996.

⚠ DANGER

GENERAL HAZARD WARNING: READ AND UNDERSTAND ALL OF THE INSTRUCTIONS IN THIS MANUAL BEFORE ASSEMBLING, STARTING, OR SERVICING THE HEATER.

Be sure to comply with the instructions and warnings provided with this heater. Failure to comply can result in fire or explosion that can cause property loss, bodily injury, or loss of life. Persons who are impaired or under the influence of alcohol or drugs should not operate heater. Only persons who can follow and understand these instructions should operate or service this heater. If you need heater info; such as an operating manual, labels, etcetera, contact Pinnacle Climate Technologies at 800-641-6996.

⚠ DANGER

NOT FOR USE IN RESIDENTIAL LIVING AREAS OR IN ENCLOSED SPACES WITHOUT ADEQUATE VENTILATION. THIS HEATER IS NOT FOR USE WHERE EXPOSED TO THE WEATHER, AND

INDOOR USE ONLY IN WELL-VENTILATED AREAS. INDOOR USE PERMITTED ONLY FOR: THE TEMPORARY HEATING OF ADEQUATELY VENTILATED BUILDINGS OR STRUCTURES UNDER CONSTRUCTION, ALTERATION OR REPAIR. This is an unvented portable heater that uses air (Oxygen) from within the area in which it is used. Failure to provide adequate combustion and ventilation air will result in asphyxiation, carbon monoxide poisoning, bodily injury or death. Refer to "Ventilation" on Page 5.

⚠ WARNING

Heater is intended for use without ducts. DO NOT connect to ducts. DO NOT tamper with the unit. Have a competent serviceman make any adjustment or repair. DO NOT operate the unit in close proximity to combustible surfaces or materials. Allow the unit to cool before shut down. Remove battery if the heater is not in use.



FACTORY ID: 500

PINNACLE
CLIMATE TECHNOLOGIES™

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TABLE OF CONTENTS

Safety Information	2-3	Maintenance	8-9
What's in the Box	4	Wiring Diagrams	10
Specifications	4	Troubleshooting Guide	11
Features	4	Exploded View	12
Assembly Instructions	4	Parts List	13
Operation	5-6	Limited Warranty	14
Battery Operation Instructions	7		

SAFETY INFORMATION

⚠ WARNING

FIRE, BURN, INHALATION AND EXPLOSION HAZARD. Keep combustibles such as; building materials, paper or cardboard a safe distance away from the heater as recommended by these instructions.

Never use the heater in spaces which contain products such as; gasoline, solvents, paint thinners, dust particles, volatile or airborne combustibles or any unknown chemicals. This is an unvented portable heater. It uses air (Oxygen) from the area in which it is used. Adequate combustion and ventilation air must be provided. Refer to "Ventilation" on page 5. Bulk fuel storage should be a minimum of 25 feet (7.6 m) from heater.

⚠ WARNING

DO NOT OPERATE THIS HEATER UNTIL YOU HAVE READ AND THOROUGHLY UNDERSTAND THESE SAFETY AND OPERATING INSTRUCTIONS.

Failure to comply with the precautions and instructions provided with this heater can result in death, serious bodily injury, property loss or damage from the hazards of fire, soot production, explosions, burns, asphyxiation or carbon monoxide poisoning. Only persons who can read and understand these instructions should use or service this heater.

⚠ WARNING

DO NOT START THE HEATER WHEN EXCESS OIL HAS ACCUMULATED.

⚠ WARNING

DO NOT START THE HEATER WHEN THE CHAMBER IS HOT.

⚠ WARNING: This product can expose you to chemicals, including lead and lead compounds, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

MASSACHUSETTS RESIDENTS: Massachusetts state law prohibits the use of this heater in any building which is used in whole or in part for human habitation. Use of this heating device in Massachusetts requires local fire department permit (M.G.L.C. 148, Section 10A).

NEW YORK CITY RESIDENTS: The New York City Fire Code prohibits the storage, handling and use of kerosene fueled heaters for space heating. Any person violating that provision may be punished by a fine up to \$10,000 and a term of imprisonment of up to 6 months.

THE INSTALLATION OF THE EQUIPMENT SHALL BE IN ACCORDANCE WITH THE REGULATION OF AUTHORITIES HAVING JURISDICTION AND CSA STANDARD B139.

 Look for this icon throughout the manual for helpful tips on how to assemble, use and clean your KFA Heater.

SAFETY INFORMATION (CONT.)

⚠ WARNING

RISK OF INDOOR AIR POLLUTION!

The products described in this manual are kerosene direct-fired, forced air heaters. Kerosene forced air heaters are primarily intended for use for temporary heating of buildings under construction, alteration or repair. Direct-fired means that all of the combustion products of the heater enter the heated space. This appliance is rated at 98% combustion efficiency, but does produce small amounts of carbon monoxide.

⚠ DANGER

CARBON MONOXIDE POISONING MAY LEAD TO DEATH!

Carbon monoxide is toxic. Humans can tolerate only small amounts of carbon monoxide and so precautions should be taken to provide proper ventilation. Failure to provide proper ventilation in accordance with the instructions in this manual can result in death. People with breathing problems should consult a physician before using this heater. Early signs of carbon monoxide poisoning resemble the flu. Symptoms of improper ventilation/carbon monoxide poisoning are:

Headache • Dizziness • Nausea • Dry Mouth Sore Throat • Burning of Nose and Eyes

If you experience any of these symptoms: **GET FRESH AIR AT ONCE!** Have your heater serviced and check for proper ventilation. Some people are more affected by carbon monoxide than others. These include: pregnant women, those with heart or lung problems, anemia or those under the influence of alcohol or at high altitudes.

NOT FOR USE WHERE EXPOSED TO THE WEATHER, INDOOR USE PERMITTED ONLY FOR: The temporary heating of adequately ventilated buildings or structures under construction, alteration or repair. Provide at least a three square foot (2,800 sq cm) opening of outside air for every 100,000 Btu/Hr (29 kW) heater rating. Refer to "Ventilation" on page 6 for further instructions.

⚠ WARNING

RISK OF ELECTRIC SHOCK!

ALWAYS use only the electrical power (voltage and frequency) specified on the model plate of the heater. ALWAYS use only three-prong, grounded outlet and extension cord.

ALWAYS use only 14 AWG or better extension cord.

ALWAYS unplug the heater when not in use.

ALWAYS install the heater so that it is not directly exposed to water spray, rain, dripping water, or wind.

NEVER use fuels such as gasoline, benzene, paint thinners or other oil compounds in this heater.

NEVER refill the heater's fuel tank while the heater is operating or still hot. This heater is **EXTREMELY HOT** while in operation.

NEVER block air inlet (rear) or air outlet (front).

NEVER use duct work in front or rear of heater.

NEVER move or handle heater while still hot.

NEVER transport heater with fuel in tank.

NEVER use with an external fuel tank.

⚠ WARNING

RISK OF BURNS, FIRE AND EXPLOSION!

Keep all combustible materials away from this heater.

Minimum Clearance From Combustibles

	MH-80TBOA-KFA
Top	4 ft. (122 cm)
Sides	4 ft. (122 cm)
Front	8 ft. (244 cm)

ALWAYS locate heater on a stable and level surface.

If your heater is equipped with a thermostat, once it is plugged in, it can start at anytime in accordance with the thermostat setting.

Do not add fuel when the heater is running.

Heater should be re-started within 24 hours of operation.

⚠ WARNING

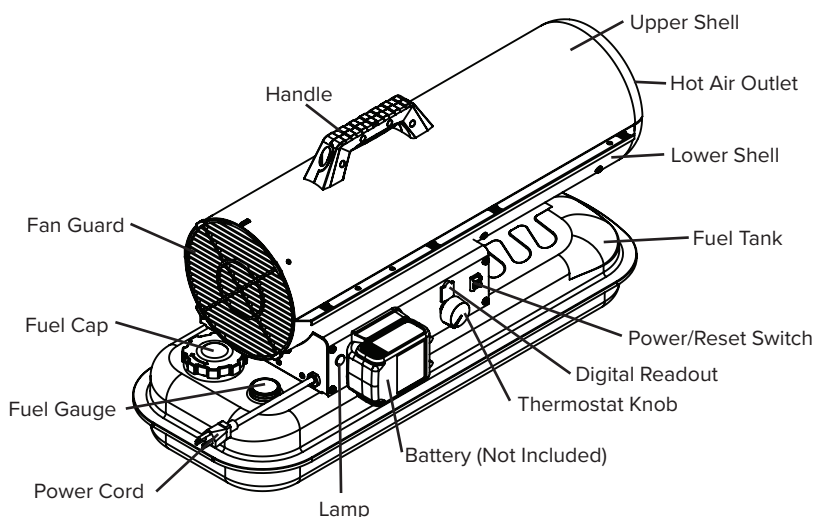
CAUTION! HOT WHILE IN OPERATION. DO NOT TOUCH. KEEP CHILDREN, ANIMALS, CLOTHING AND COMBUSTIBLES AWAY FROM HEATER.

SPECIFICATIONS

Model #	MH-80TBOA-KFA
Rating: Btu/Hr / kW	80,000 / 23.4
Fuel Consumption: Gal/Hr / L/Hr	0.63 / 2.38
Fuel Tank Capacity: Gallons / Liters	5 / 19
Pump Pressure: psi / BAR	120 / 8.27
Volts: AC/Hz	120VAC / 60Hz
Amps	5
Heating Area: ft ²	2000
Max. Operating Hours	8
Battery Voltage	18VDC Nominal
Battery Amps.	5

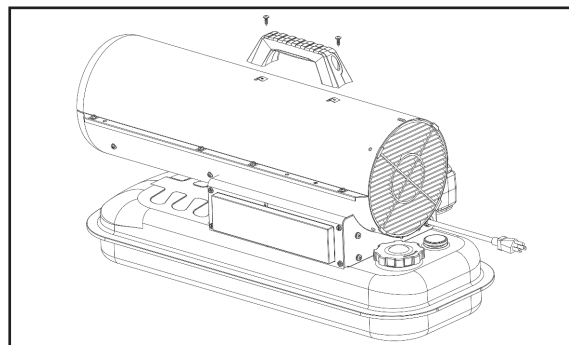
Specifications subject to change without notice.

FEATURES

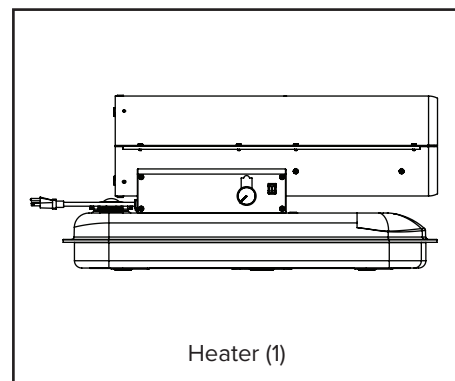
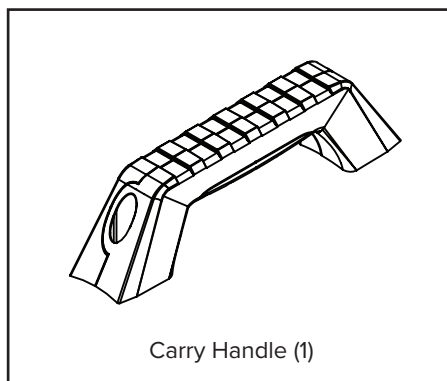
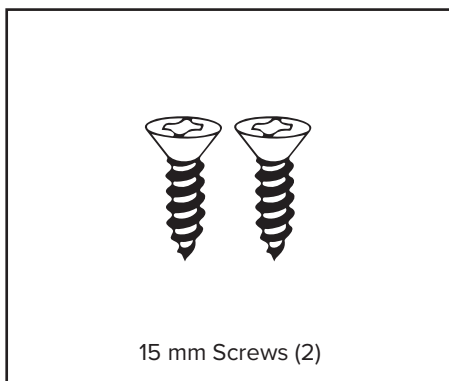


ASSEMBLY

1. Install handle with two 15mm Philips screw on upper shell



WHAT'S IN THE BOX (MH-80TBOA-KFA)



- Remove the heater and all packaging materials from the shipping carton

Note: Save the box and packaging materials for future storage.

OPERATION

Fueling The Heater:

Kerosene (K-1)

For optimal performance of this heater, it is strongly suggested that K-1 kerosene be used, especially in temperatures lower than 26°F (-3°C). K-1 kerosene has been refined to virtually eliminate contaminants, such as sulfur, which can cause a rotten egg odor during the operation of the heater. Using diesel fuel can cause excess soot production. Do not use Bio-Diesel as this fuel will damage your heater's seals and filter.

CSA certified for use with only No. 1 K kerosene fuel. Factory Tested: Kerosene, Diesel #1 and #2, Fuel oil #1 and #2, JP8 (Jet A fuel).

⚠ DANGER NEVER REFUEL THIS HEATER WHILE IT IS HOT OR OPERATING. FIRE OR EXPLOSION COULD RESULT.

⚠ CAUTION NEVER FILL THE FUEL TANK IN-DOORS. ALWAYS FILL THE TANK OUTDOORS. BE SURE THAT THE HEATER IS ON LEVEL GROUND WHEN FUELING, AND NEVER OVERFILL THE TANK.

⚠ WARNING DO NOT USE GASOLINE OR CRANK-CASE DRAININGS.

NOTE: Kerosene should only be stored in a blue container that is clearly marked "Kerosene." Never store kerosene in a red container. Red is associated with gasoline.

⚠ DANGER
CARBON MONOXIDE POISONING MAY LEAD TO DEATH!

Ventilation:

- Risk of indoor air pollution and Carbon Monoxide Poisoning. Use heater only in well ventilated areas.
- Refer to Safety Information on page 3 for information about Carbon Monoxide Poisoning.
- **ALWAYS** provide a fresh air opening in the heated space of at least three square feet (2,800 sq. cm) for each 100,000 Btu / Hr. (29 kW) of heater output. Provide a larger opening if more heaters are being used.

Minimum Ventilation Opening Needed
MH-80TBOA-KFA
2.4 ft. ²
2230 cm ²

DO NOT use any fuel that is not approved above.

- NEVER use fuel such as, benzene, alcohol, white gas, camp stove fuel, paint thinners, or other oil compounds in this heater. THESE ARE VOLATILE FUELS THAT CAN CAUSE A FIRE OR EXPLOSION.
- NEVER store kerosene in the living space. Kerosene should be stored in a well ventilated area outside the living area.
- NEVER store kerosene in direct sunlight or near a source of heat.
- NEVER use kerosene that has been stored from one season to the next. Kerosene deteriorates over time. OLD KEROSENE WILL NOT BURN PROPERLY IN THIS HEATER.

OPERATION (CONT.)

Pre-Lighting Instructions:

Charge the Battery

Ensure battery is fully charged for best run time. Follow battery manufactures instructions for use, charging and storing. Heater does not charge the battery.

Over Discharge Protection

Heater has a built in battery protection circuit that will shut the heater off to protect the battery from over discharging.

⚠ CAUTION Use only Master approved batteries —CONTACT YOUR LOCAL SERVICE CENTER OR CALL 800-641-6996 FOR MORE INFORMATION

Starting the Heater: (Ignition)

1. Fill the tank with kerosene or other approved fuel until needle on fuel gauge points to "F".
2. Replace fuel cap and tighten firmly.
3. Connect the heater to power source, either approved battery or a three prong (grounded) power source. You must use a three prong (grounded) extension cord that is at least 6 feet long and is a minimum of 14 AWG rating.
4. Turn thermostat control knob to desired temperature setting.
5. Move the power switch to the "On" position. The power indicator light will illuminate and heater will ignite.

NOTE: On first ignition or after refueling, you may hear a grinding sound just before ignition. This is the fuel pump removing the air from the fuel line. Your heater will start up within seconds. If it does not start repeat start-up procedures with fuel gauge reading at least 1/2 tank.

NOTE: Smoking may occur on first ignition.

NOTE: The electrical components of these heaters are protected by a fuse mounted in the PC board. If the heater fails to ignite, check this fuse first and replace if necessary. Also check the power source to be sure the proper voltage is being provided to the heater.

i TIP: If the heater does not ignite; move switch to "Off" position, check steps 1-3 above and then move switch to "On" position.

Stopping the Heater (Cool Down):

Turn the power switch to the "Off" position. Combustion will stop and the Cooling Cycle will begin and last approx. 5 mins. When the Cooling Cycle is complete the fan will stop running and it will be safe to unplug the heater or disconnect the battery.

NOTE: Unplugging the heater or disconnecting the battery before the Cooling Cycle has been completed may cause overheating, possible damage to the heater and heat plate.

Restarting the Heater:

1. Wait ten seconds after Cooling Cycle has been completed.
2. Follow all ignition procedures.

Long Term Storage:

Use an approved siphon to drain fuel through the fuel cap opening.

IMPORTANT: Never store leftover kerosene or diesel between seasons, using old fuel can damage heater. **DO NOT** disconnect heater from power source before cooling cycle has been completed.

i TIP: If the heater does not ignite, the thermostat may be set too low. Turn the control knob to a higher setting until the heater ignites. If the heater does not ignite; move switch to "Off" position, check steps 1-5 above and then move switch to "On" position.

⚠ DANGER RISK OF FIRE! Never transport heater with battery attached

⚠ DANGER RISK OF FIRE! REMOVE BATTERY FROM HEATER WHEN NOT IN USE

BATTERY OPERATION INSTRUCTIONS

Adapter Part Number	ASM-00040	ASM-00040	ASM-00038	ASM-00038	ASM-00039	ASM-00071
Manufacturer	DEWALT®	Milwaukee®	BLACK+DECKER®	Porter Cable®	Makita®	Mastercraft®
Model	20V Max. & FlexVolt, 18V	M18	20V Max.	20V Max.	18V	20V Max.
Technical Spec. (AH)	4-12	4-12	4-12	4-12	4-12	4-12
Battery Watt/hr	80-240	72-216	80-240	80-240	72-216	80-240
Battery Models	DCB080, DCB200, DCB201, DCB203BT, DCB203G, DCB204, DCB204BT, DCB205, DCB8205G, DCB206, DCB207, DCB208, DCB210, DCB230, DCB240, DCB404, DCB406, DCB609, DCB612	48-11-1815, 48-11-1820, 48-11-1828, 48-11-1835, 48-11-1840, 48-11-1845, 48-11-1850, 48-11-1860, 48-11-1865, 48-11-1860, 48-11-1890, 48-11-1812	LBXR36, LBX1540, LBXR2036, LBX2040, LBX2540	PCC685, PCC685L	BL1815N, BL1820B, BL1830, BL1830B, BL1840B, BL1850B, BL1860B	054-3124-0 054-7553-4 054-7557-6
Battery Certification	UL	UL	UL	UL	UL	UL
Battery Charger Models	DCB1106, DCB1112	48-59-1811, 48-59-1810, 48-59-1802	BDCA202	PCC690L, PCC691L, PCC692L, PCC695L, PCC699L	DC18RC, DC18RA, DC18SD	054-3126-6
Battery Charger Certification	UL	UL	UL	UL	UL	UL

⚠ WARNING: Battery requirements: The batteries (Lithium-ion Battery Packs) used with this machine must be certified products that comply with local safety regulations.

⚠ WARNING: Charger requirements: Please use only the charger specified by the battery manufacturer for charging. Charging with another battery pack may cause a fire hazard.

⚠ WARNING: Do not ignite or overheat the battery or equipment, it may cause an explosion if it catches fire or is higher than the battery's required limit temperature.

⚠ WARNING: It is strictly prohibited to use damaged or illegally modified batteries for this machine as a power source, which may cause fire, explosion, personal injury, property damage and other hazards.

NOTE:

1. This product will not charge the battery. Please remove the battery after using the product. If you do not use it for a long time, you need to charge the battery regularly to avoid affecting the battery life.
2. If the existing battery cannot be installed with the device, please check Local after-sales solution.

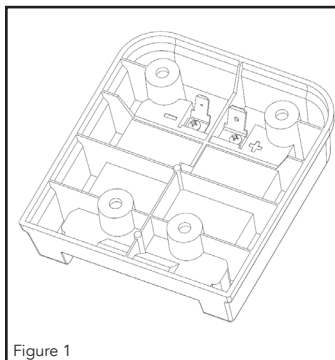


Figure 1

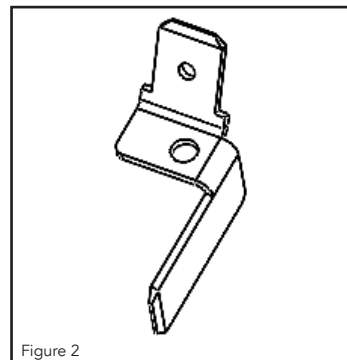


Figure 2

Battery Run Time Estimated

Battery Voltage	18/20					
Battery Pack Amp Hour	4	5	6	8	9	12
Estimated Run Time (Hour)	1.7	2.1	2.6	3.4	3.9	5.1

NOTE: Actual run time may vary due to battery condition and ambient temperature.

If you intend to use a Milwaukee® battery you will have to replace the battery connection terminals.

1. Make sure heater is not plugged into a power source.
2. Locate terminals within the battery connection port. (See Figure 1)
3. Using a Phillips screwdriver, unscrew the screws holding in current terminals by turning the screws counterclockwise.
4. Replace terminals with terminals provided in the bag. (See Figure 2)
5. Be sure to tighten screws to ensure a good connection.

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MAINTENANCE

Service:

DO NOT TAMPER WITH THE UNIT. HAVE A COMPETENT SERVICEMAN MAKE ANY NECESSARY ADJUSTMENT OR REPAIRS.

Use only original equipment parts. The use of alternate or third party components can cause unsafe operating conditions and will void your warranty.

We suggest following a maintenance schedule as follows:

FUEL / FUEL TANK:

Flush tank every 200 hours of operation or as needed. DO NOT flush with water; use fresh K-1 kerosene only.

NOTE: Use of diesel fuel may require additional maintenance

FAN BLADES:

Blades should be cleaned at least once per heating season, depending on conditions. Remove all accumulated dust and dirt with a damp cloth, taking care not to bend any of the fan blades. Be sure the blades are dry before re-starting the heater.

FUEL FILTER:

The fuel filter should be cleaned at least twice per heating season. Clean the filter by rinsing it in clean K-1 Kerosene. Contaminated fuel could make cleaning the fuel filter necessary immediately.

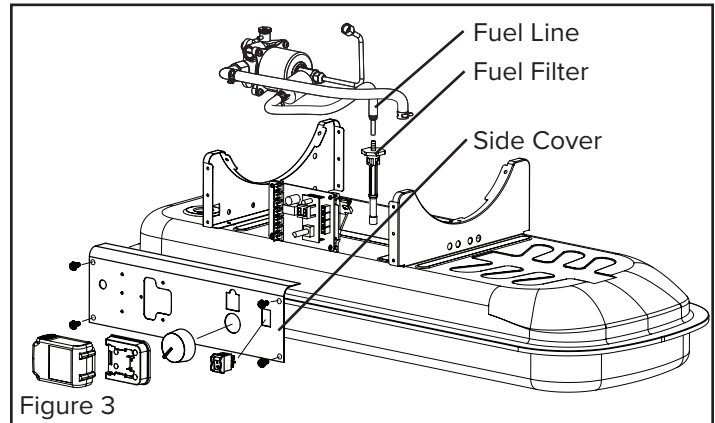
NOTE: To remove the filter from KFA turn filter 90° counterclockwise. See Figure 3.

THERMISTER PLACEMENT:

Ensure the thermister wire is in the proper place. The wire should be lying on the bottom shell inside the heater with the plastic end placed under the motor support/motor and away from fan blade.

! WARNING

Never service heater while it is plugged in or hot!

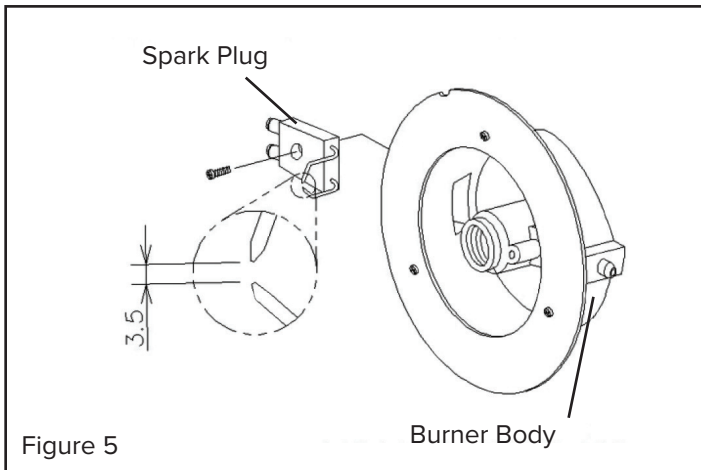


MAINTENANCE (CONT.)

Service (Continued):

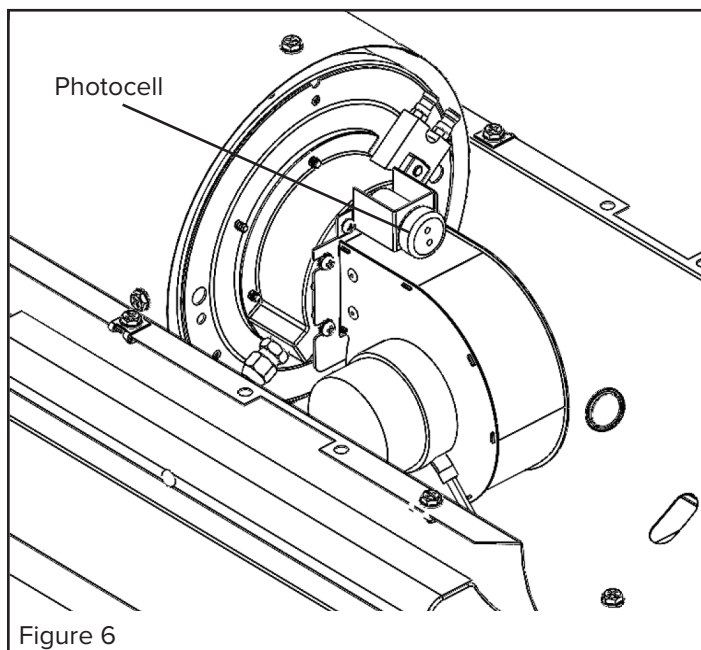
SPARK PLUG:

Clean and re-gap every 600 hours of operation, or replace as needed. After removing the spark plug, clean the terminals with a wire brush. Re-gap the terminals to 0.140" (3.5mm). See Figure 5.



PHOTOCELL:

The photocell should be cleaned using a cotton swab dipped in alcohol or water at least once per heating season, or more depending on conditions. See Figure 6.



PUMP PRESSURE:

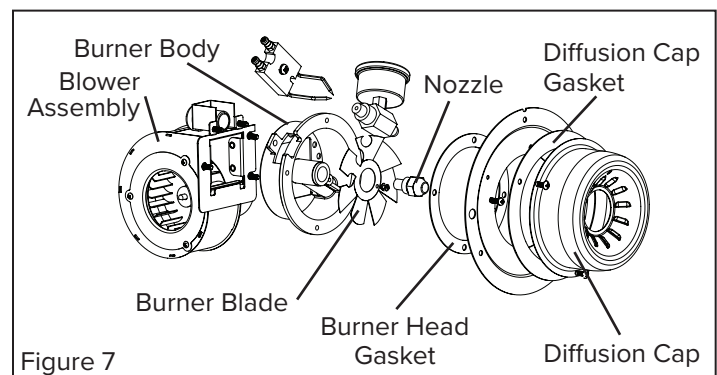
While heater is operating, turn adjusting screw clockwise to increase, counter-clockwise to decrease pressure. Correct pump pressure is as follows:

Model Number	Pump Pressure
MH-80TBOA-KFA	120 PSI (8.27 BAR)

Tolerance $\pm 10\%$

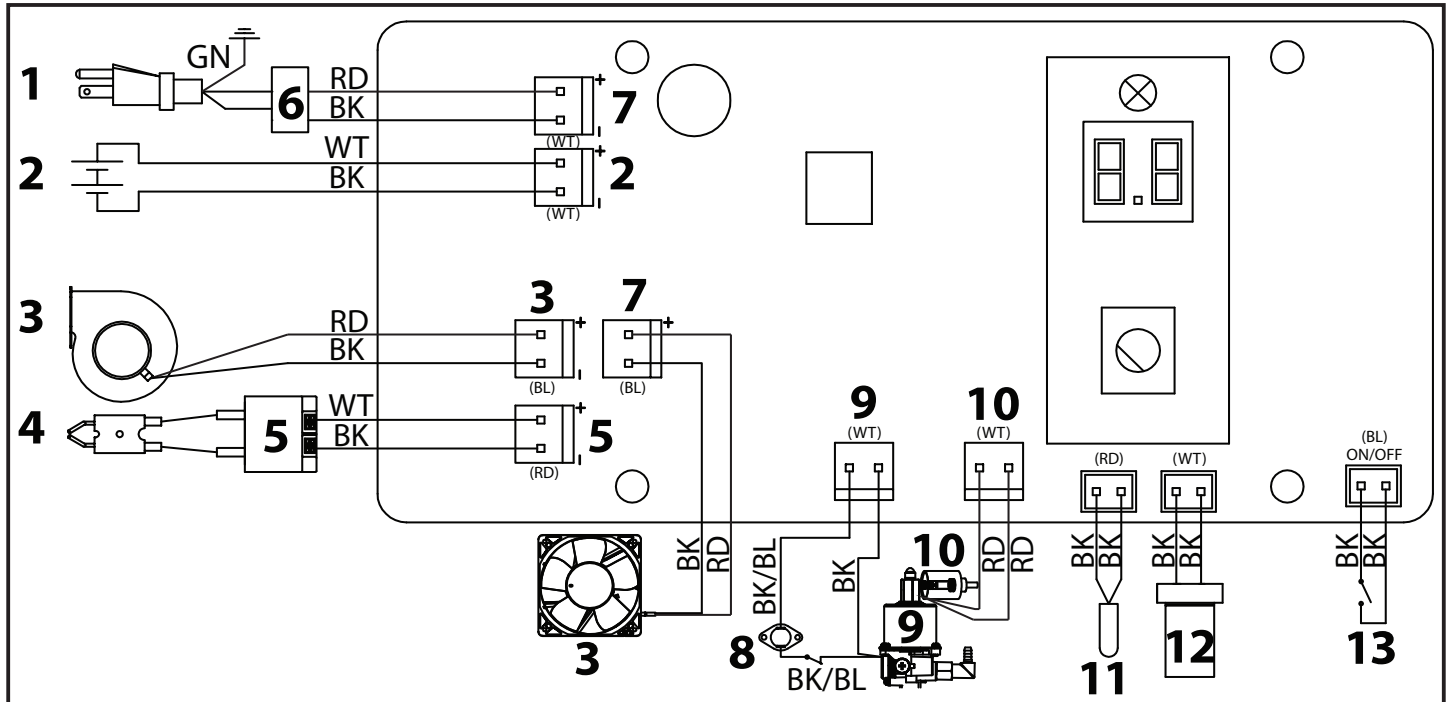
NOZZLES:

Nozzles should be cleaned or replaced at least once per heating season. Contaminated fuel could make this necessary immediately. To clean dirt from nozzle, blow compressed air through nozzle front. It may be necessary to soak the nozzle in K-1 kerosene to loosen any dirt particles. See Figure 7.



WIRING DIAGRAMS

MH-80TBOA-KFA

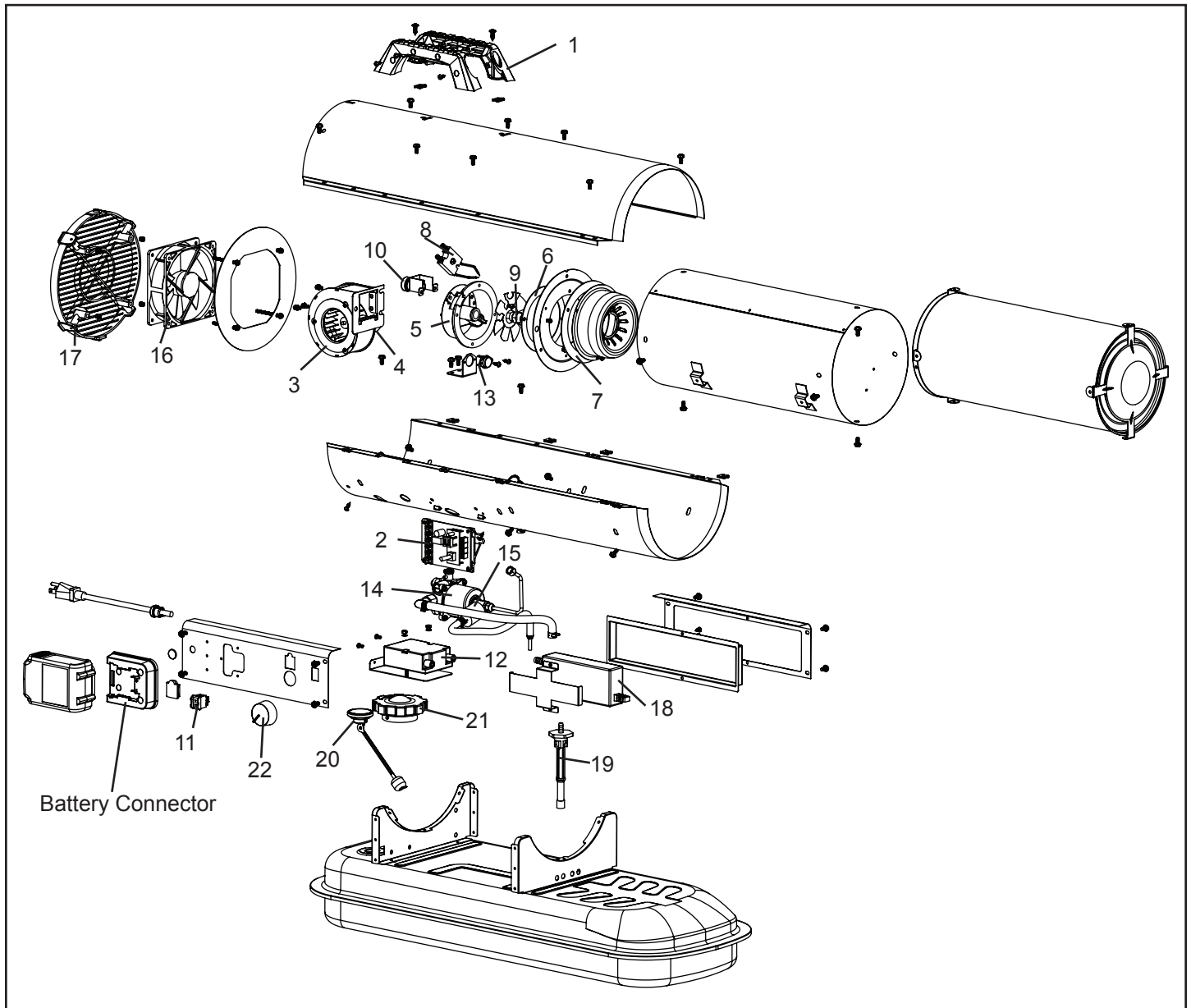


- | | | |
|-------------------|------------------------|-----------|
| 1. AC 120V | 8. Thermostat | RD. Red |
| 2. Battery | 9. Pump | BK. Black |
| 3. 12V Fan | 10. Valve | WT. White |
| 4. Spark | 11. Temperature Sensor | GN. Green |
| 5. Ignition | 12. Photocell | |
| 6. Adaptor 18V 5A | 13. Switch | |
| 7. DC | BL. Blue | |

TROUBLESHOOTING GUIDE

Problem	Possible Cause	Solution
Heater Ignites, but main PCB shuts off after a short period of time. Lamp flickers and LED display shows "E1".	<ol style="list-style-type: none"> 1. Incorrect pump pressure. 2. Dirty fuel filter. 3. Nozzle is dirty. 4. Photocell lens is dirty. 5. Photocell not installed properly. 6. Photocell is defective. 7. Improper electrical connection between main PCB and photocell. 8. Improper location of thermister sensor 9. Improper electrical connection within the temperature limit switch 	<ol style="list-style-type: none"> 1. Adjust pump pressure. 2. Clean / replace fuel filter. 3. Clean / replace Nozzle. 4. Clean / replace photocell. 5. Adjust photocell position 6. Replace photocell 7. Check wiring connections (see wiring diagrams on page 9). 8. Check thermister placement 9. Replace temperature limit switch
Heater will not operate or motor runs for a short time. Lamp flickers and LED display shows "E1".	<ol style="list-style-type: none"> 1. No kerosene in the fuel tank. 2. Incorrect pump pressure. 3. Corroded spark plug or incorrect plug gap. 4. Dirty fuel filter. 5. Dirty nozzle. 6. Moisture in fuel tank. 7. Improper electrical connection between transformer and circuit board. 8. Ignitor wire not connected to spark plug. 9. Defective ignitor. 	<ol style="list-style-type: none"> 1. Fill tank with fresh kerosene. 2. Adjust pump pressure. 3. Clean / replace spark plug. 4. Clean / replace fuel filter. 5. Clean / replace nozzle. 6. Rinse fuel tank with clean, fresh kerosene. 7. Inspect all electrical connections (see wiring diagrams on page 9). 8. Re-attach ignitor wire to spark plug. 9. Replace ignitor.
Fan does not operate when heater is plugged in and power switch is in the "ON" position. The lamp is flickering or and LED display shows "E1" or "E2".	<ol style="list-style-type: none"> 1. Thermostat is set too low. 2. Broken electrical connection between main PCB and motor. 3. Not enough amps available to power heater. 	<ol style="list-style-type: none"> 1. Rotate thermostat to a higher setting 2. Inspect all electrical connections (see wiring diagrams on page 9). 3. Use a new extension cord or try another electrical socket.
Lamp is flickering and LED display shows.	<ol style="list-style-type: none"> 1. Thermostat switch has failed. 	<ol style="list-style-type: none"> 1. Replace thermostat switch (see Wiring diagrams on page 9).
Poor combustion and / or excess soot production.	<ol style="list-style-type: none"> 2. Dirty fuel filter. 3. Poor quality of fuel. 4. PSI is too high or too low. 5. Dirty nozzle 	<ol style="list-style-type: none"> 1. Clean / replace fuel filter. 2. Flush fuel tank and refuel heater. 3. Use proper pressure. 4. Clean / replace nozzle
Heater does not turn on and the lamp is not lit.	<ol style="list-style-type: none"> 1. Temperature limit sensor has overheated. 2. No electrical power. 3. Fuse is blown. 4. Improper electrical connection between temperature limit sensor and circuit board. 	<ol style="list-style-type: none"> 1. Push power switch to "OFF" and allow heater to cool for 10 minutes. Restart heater. 2. Check power cords for proper connection and test the power supply. Ensure battery is fully charged. 3. Check / replace the fuse. 4. Inspect all electrical connections (see wiring diagrams on page 9).

EXPLODED VIEW



PARTS LIST

#	Description	MH-80TBOA-KFA
1	HANDLE ASSEMBLY	ASM-00026
2	PCB	EL-00064
3	BLOWER ASSEMBLY	ASM-00107
4	BLOWER FAN MOTOR	EL-00065
5	BURNER BODY	01.01.75.007020686
6	BURNER BODY GASKET	01.03.72.012510047
7	DIFFUSION CAP GASKET	01.03.75.007010043
8	SPARK PLUG ASSEMBLY	01.04.75.007010078
9	NOZZLE	75-036-0460
10	PHOTOCELL ASSEMBLY	GC-00196
11	POWER SWITCH	EL-00072
12	SPARK MODULE	EL-00073
13	HIGH LIMIT SWITCH	01.04.22.004010173
14	FUEL PUMP	EL-00075
15	DUMP VALVE	EL-00076
16	COOLING FAM	EL-00077
17	FAN GUARD	GC-00247
18	POWER ADAPTER	EL-00086
19	FUEL FILTER	01.02.70.004510003
20	FUEL GAUGE	01.04.70.012510020
21	FUEL CAP	70-006-0140
22	THERMOSTAT KNOB	GC-00188



TIP: To order parts call 800-641-6996.

LIMITED WARRANTY

Pinnacle Climate Technologies, Inc. warrants this product to the original retail purchaser only, to be free from defects in material and workmanship for a period of one (1) year from the date of initial purchase. This product must be properly installed, maintained and operated in accordance with the instructions provided.

Pinnacle Climate Technologies, Inc. requires reasonable proof of your date of delivery from an authorized retailer or distributor. Therefore, you should keep your sales slip, invoice or cancelled check from the original purchase. This Limited Warranty shall be limited to the repair or replacement of parts, which prove defective under normal use and service within the warranty period, and which **Pinnacle Climate Technologies, Inc.** shall determine at its reasonable discretion.

This Limited Warranty does not cover any failures or operating difficulties due to normal wear and tear, accident, abuse, misuse, alteration, misapplication, improper installation or improper maintenance and service by you or any third party. Failure to perform normal and routine maintenance on the product, shipping damage, damage related to insects, birds or animals of any kind, and damage due to weather conditions are also not covered. In addition, the Limited Warranty does not cover damage to the finish, such as scratches, dents, discoloration, rust or other weather damage, after purchase.

All transportation costs for the return of damaged product or parts will be the responsibility of the purchaser. Upon receipt of the damaged item, **Pinnacle Climate Technologies, Inc.** will examine the item and determine if defective. **Pinnacle Climate Technologies, Inc.** will repair or replace and return the item, freight pre-paid.

Locating Your Serial Number:

Your serial number can be found on a white label on the right side cover of your heater. It will be a series of 9 digits. For Example: 131234956. Have your Serial Number ready before calling customer service at 800-641-6996.

Model #: _____

Serial #: _____

Date of Purchase: _____

If **Pinnacle Climate Technologies, Inc.** finds the item to be in normal operating condition, or not defective the item will be returned freight collect. This Limited Warranty is in lieu of all other express warranties. **Pinnacle Climate Technologies, Inc.** disclaims all warranties for products that are purchased from sellers other than authorized dealers or distributors.

AFTER THE PERIOD OF THE ONE (1) YEAR EXPRESS WARRANTY EXPIRES, **Pinnacle Climate Technologies, Inc.** DISCLAIMS ANY AND ALL IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR APPLICATION. FURTHER, **Pinnacle Climate Technologies, Inc.** SHALL HAVE NO LIABILITY WHATSOEVER TO PURCHASER OR ANY THIRD PARTY FOR ANY SPECIAL, INDIRECT, PUNITIVE INCIDENTAL, OR CONSEQUENTIAL DAMAGES. **Pinnacle Climate Technologies, Inc.** 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 states 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.

Pinnacle Climate Technologies, Inc. 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 **Pinnacle Climate Technologies, Inc.**

Always be sure to specify the model number and serial number when making any claim with **Pinnacle Climate Technologies, Inc.** For your convenience, use the space provided below to list this information.

