



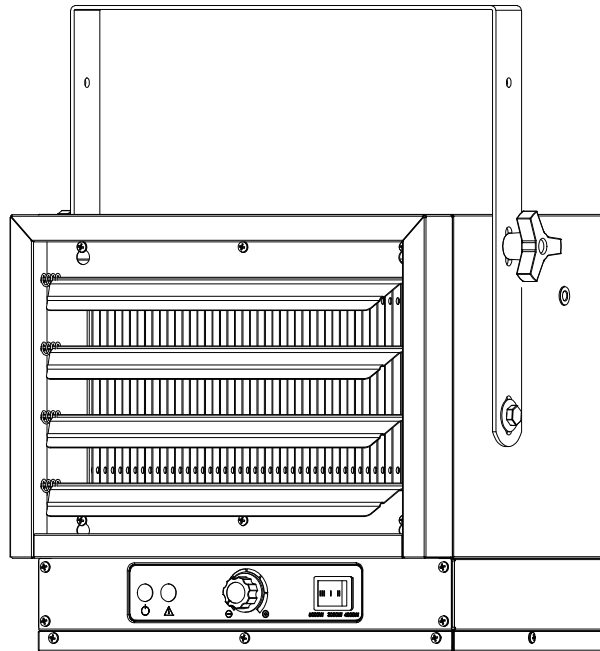
USER MANUAL

Garage Ceiling Mounted Heater

MODEL: SHAG-J02M

ITEM: HGM-50

240V/60Hz, 5000W



PET OWNERS WARNING: Health warning for some small pets, including birds, as they are extremely sensitive to the fumes produced during the first-time use of many appliances.

These fumes are not harmful to humans but we recommend that you do not use your heater around birds and small pets during its initial use until the manufacturing corrosion (anti-corrosion) coatings burn off.

READ & SAVE THESE INSTRUCTIONS

Questions, problems, missing parts? Before returning the product,

please e-mail our customer service by

hicfm@outlook.com

IMPORTANT INSTRUCTIONS

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

1. Read all instructions before using this heater.
2. **WARNING:** In order to avoid overheating, do not cover the heater.
3. **CAUTION:** Never leave the heater operating if unattended. Extreme caution is necessary when any heater is used by or near children or invalids and whenever the heater is left operating and unattended.
4. The appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.
5. Always turn this appliance off when not in use.
6. Do not operate any heater after it malfunctions, or has been dropped or damaged in any manner. Disconnect power at the service panel and have heater inspected by authorized service facility for examination and/or repair.
7. Do not use this product outdoors or expose it to weather or elements.
8. This heater is not intended for use in bathrooms, laundry areas and similar indoor locations. Never locate this appliance where it may fall into a bathtub or other water container.
9. To disconnect heater, turn controls to off, and turn off power to heater circuit at main disconnect panel (or operate internal disconnect switch if provided).
10. 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. To prevent a possible fire, do not block air intakes or exhaust in any manner. Do not use on soft surfaces, like a bed, where opening may become blocked.
12. 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. This heater should not be used as a drying rack for clothing.
13. All wiring must be carried out by a certified electrician and must be in accordance to national and local electrical codes in the United States.
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. This heater is hot when in use. To avoid burns, do not let bare skin touch hot surfaces. If provided, use handles when moving this heater. Keep combustible materials, such as furniture, pillows, bedding, papers, clothes, etc. and curtains at 3 feet (0.9m) from the front of the heater and keep them away from the sides and rear. (sides and rear restrictions apply to location dedicated heaters only).
16. The heater must not be located immediately below socket-outlet. Do not use this heater in the immediate surroundings of a bath, a shower or a swimming pool.

IMPORTANT INSTRUCTIONS (CONTINUED)

17. This heater is designed to be directly wired to 240 volt electric power. Never use with an extension cord or relocatable power trap (outlet/power strip).

18. This heater may include an audible or visual alarm to warn that parts of the heater are getting excessively hot. If the alarm sounds (or illuminates), immediately turn the heater off and inspect for any objects on or adjacent to the heater that may have blocked the airflow or otherwise caused high temperatures to have occurred. **DO NOT OPERATE THE HEATER WITH THE ALARM SOUNDING (OR ILLUMINATING).**

SAVE THESE INSTRUCTIONS.

DESCRIPTION

The garage ceiling mounted heater is designed for garages, workshops and similar locations to meet a variety of heating requirements. It features 3 heat settings and heat output ranges from 11,285 BTUs per hour 17,065 BTUs per hour. It includes horizontal and vertical air flow and built-in thermostat with overheating safety thermal cut-out.

SPECIFICATIONS

RATING	VOLTAGE	AMPS	BTU/HOUR
5000W III	240V	20.9	17,065
4000W II	240V	16.7	14,105
3000W I	240V	12.5	11,285

HEATER RATING & VOLTAGE	HEATER AMPS	MAX. FUSE SIZE	MIN. WIRE SIZE 75°C COPPER
5000W@240V	20.9	30	#10

SPECIFICATIONS (CONTINUED)

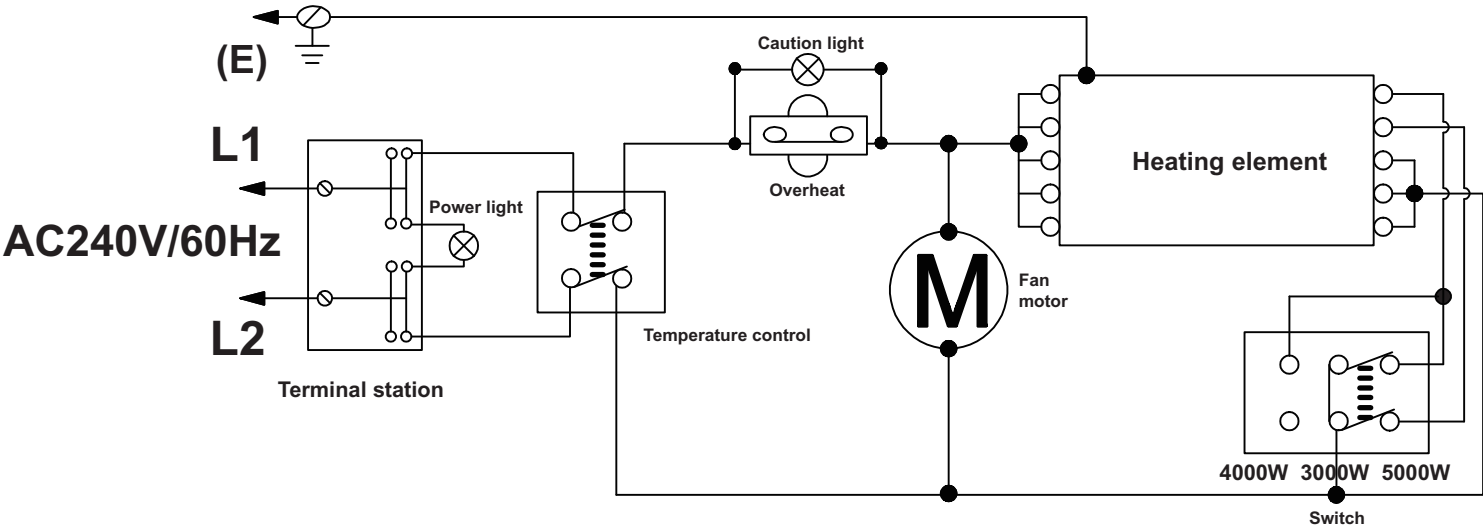


Figure 2

WARNING: This appliance must be grounded!

WARNING: Proper size fuses and circuit breakers in accordance with the National Electric Code must be used.

WARNING: The appliance must be connected to a current protection circuit or device at 32-40 Amp before being connected to power supply!

GENERAL SAFETY INFORMATION

WARNING: This heater requires hardwire installation (no plug). The installation of this product must be carried out by a certified electrician. Wiring procedures and connections shall be in accordance with the national and local codes having jurisdiction.

NOTE: Compatible with a 240v line voltage double pole wall thermostat. This heater must be installed by a certified electrician.

WARNING: Read and understand all installation and operation instructions prior to operating this unit. Observe all safety instructions.

1. Use only copper wires for supply connections use. The wire should be properly sized and insulated. Do not use aluminum wire with this installation. Use 10 AWG or larger wires suitable rated for at least 167°F (75°C).

2. Heater airflow must be directed parallel to or away from adjacent wall.

3. Observe wall, floor and ceiling clearance requirements.

4. All wiring must be carried out by a certified electrician and must be in accordance with national and local electrical codes in the United States. The heater must be grounded as a precaution against possible electrical shock. Heater circuit must be protected with proper fuses.

5. The mounting structure and the anchoring hardware must be capable of reliably supporting the weight of the heater and the mounting bracket (if used).

6. All electrical power must be disconnected and the main service box, which must be locked before connecting, inspecting, cleaning or servicing the heater. This is a precaution to prevent serious electric shock.

7. This heater is not suitable for use in hazardous locations as defined by the national fire protection association (NFPA) in the United States. This heater has hot and arcing sparking parts inside. Do not use it in areas where gasoline paint or flammable liquids are used or stored.

8. This heater is not suitable for use in corrosive atmospheres such as marine greenhouses or chemical storage areas.

9. The heater must be mounted at least 8 feet above the floor. Do not install closer than 11 inches to a vertical surface.

10. To reduce the risk of fire, do not store or use gasoline or other flammable vapors and liquids in the vicinity of the heater.

WARNING: Improper installation or failure to follow the procedures outlined in this instruction manual can result in serious electrical shock.

CAUTION– High temperature, risk of fire, keep electrical cords, drapery, furnishings, and other combustibles at least 3 feet (0.9 m) from the front of the heater and away from the side and rear.

LOCATING THE HEATER

Install heater out of traffic areas, maintaining clearances stated in figure 3. The direction of airflow should not be restricted by columns or machinery and the airflow should wipe exposed walls rather than blowing directly on them. When more than one heater is used in an area, the heaters should be installed so that the air discharge of each heater supports the air flow of the others, to provide best circulation of warm air as indicated in figure 4.

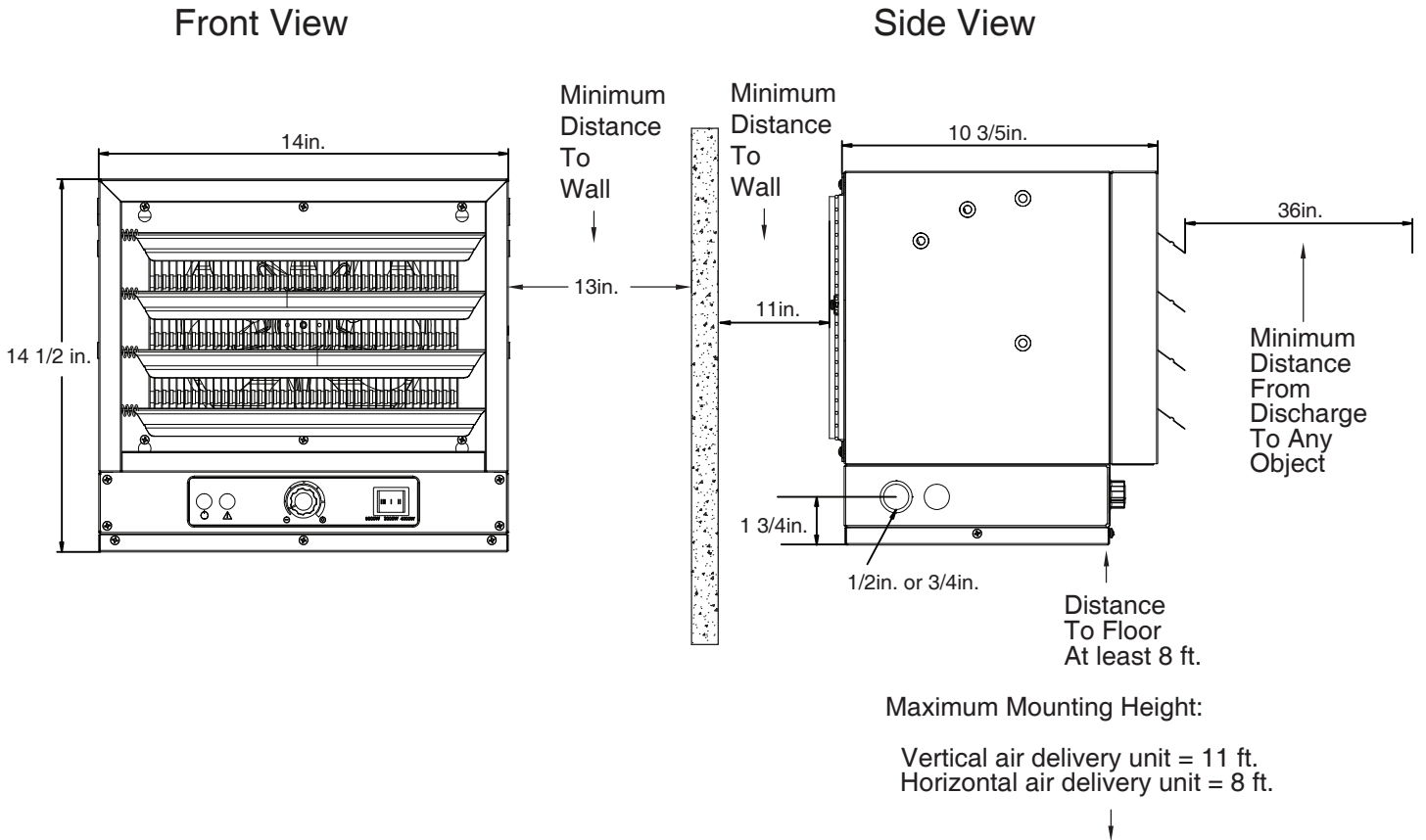


Figure 3

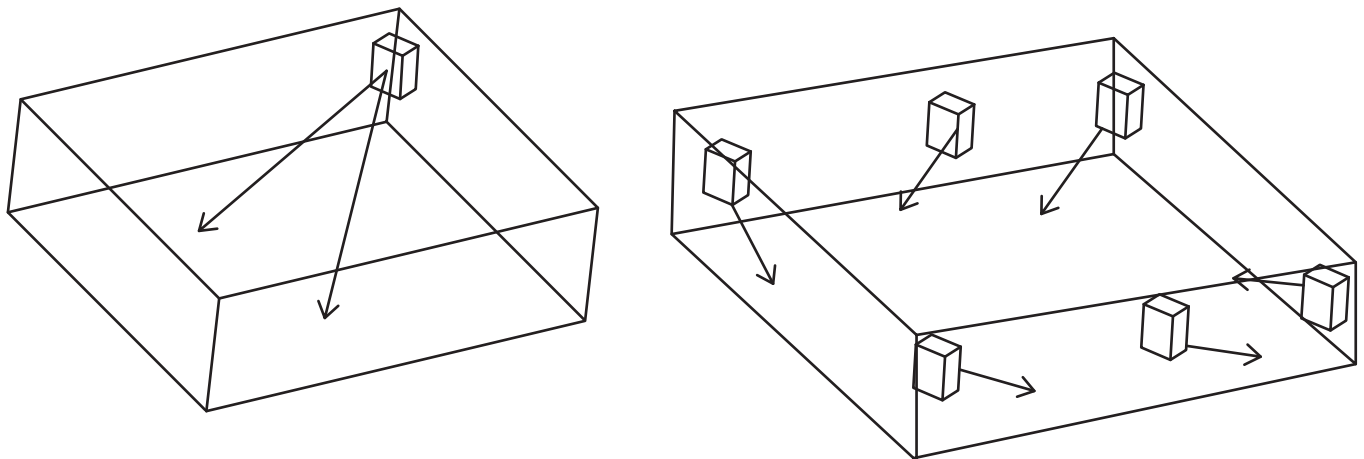


Figure 4

INSTALLATION

Hardware needed

You will also need the following hardware, which can be purchased from your local hardware store or electrical supply store:

- Electric wire in the adequate gauge and length for your application;
- Proper size fuse or breaker for your heater's amperage;
- Proper wire connectors for your application;

Mounting the bracket

Refer to Figures 5a and 5b.

1. Locate a wood stud in the wood ceiling joist. If you cannot locate a wood stud, you have to install a wood piece on the ceiling as this heater must be securely fastened.

2. Remove the mounting bracket from the heating unit by loosening bracket screws with a wrench and slipping the handle off over the screw heads.

3. Drill a 1/4in. pilot hole in ceiling joist. Place a washer on screws before inserting through the holes in the mounting bracket and screw them securely into a ceiling joist.

NOTE: If you want to swivel the heater either to the right or left, adding a washer to both sides of the bracket is recommended. A longer lag bolt may be required to properly secure the unit. See Figure 5a.

4. Tighten screws enough to securely hold heating unit with airflow pointed in proper direction.

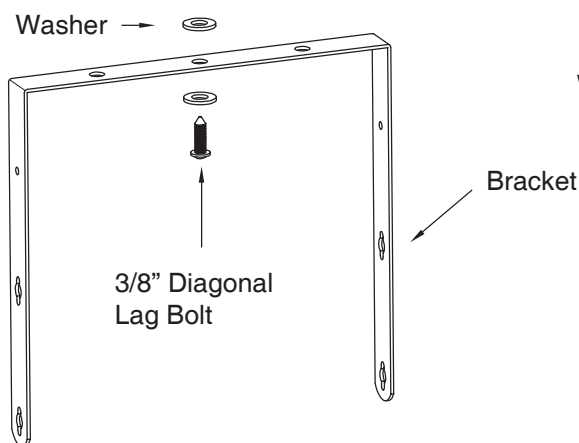
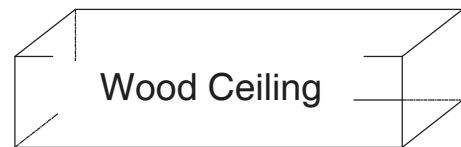
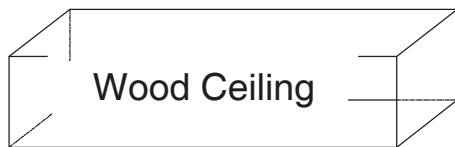


Figure 5a-Single-Screw Mounting

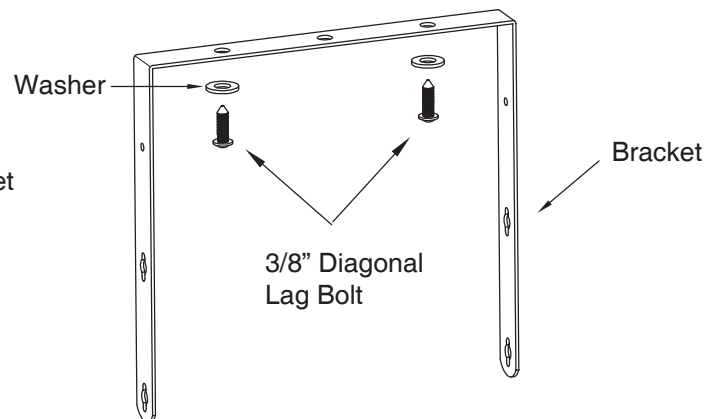


Figure 5b-Double-Screw Mounting

INSTALLATION (CONTINUED)

Hanging The Heater

- 1) Lift the heater up and into the mounting bracket.
- 2) Align the bracket screws with the Keyhole slots in the mounting bracket.
- 3) If the heater is to be tilted, it must be positioned in the keyhole slots. (See figure 6)
- 4) Tighten the bracket screws with a wrench so the unit is securely suspended at horizontal or vertical level.

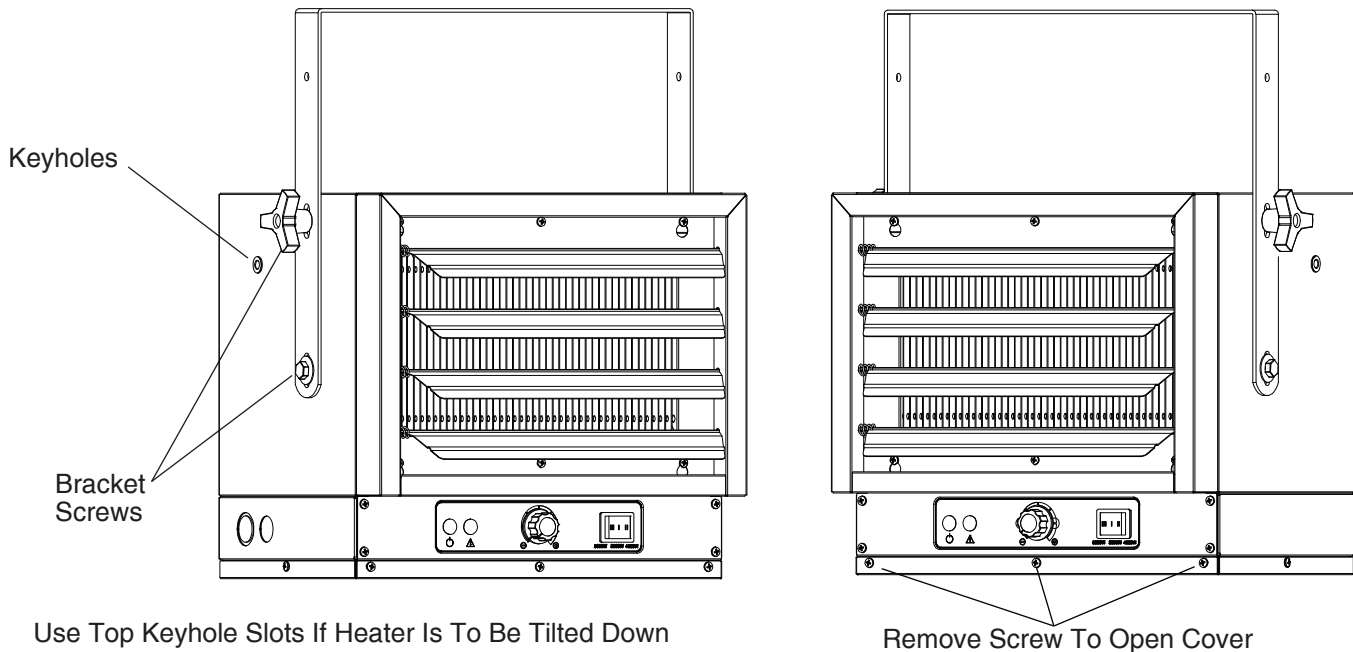


Figure 6

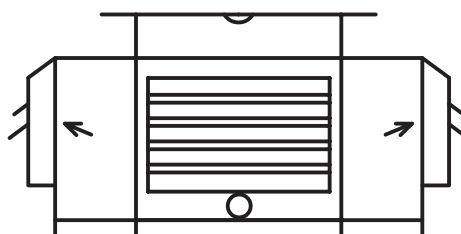
Adjusting Airflow Direction

1. To turn the unit horizontally when it has been installed with a single lag bolt (as shown in figure 5a), simply turn the entire heater as needed. (as shown in figure 7- rotate). The unit cannot be turned horizontally if it has been installed with 2 lag bolts.
2. To tilt the unit vertically, loosen the bracket screws (see figure 6) and see figure 8 to view multiple vertical angles.
3. Adjust louvers to the desired position.

NOTE: The louvers are designed so they cannot be completely closed. Do not attempt to defeat this feature; damage to the unit can result.

NOTE: To prevent possible overheating, to tilt the heater it must be mounted in bottom keyhole slots of mounting brackets to maintain adequate clearance as shown in figure. 3.

Figure 7



INSTALLATION (CONTINUED)

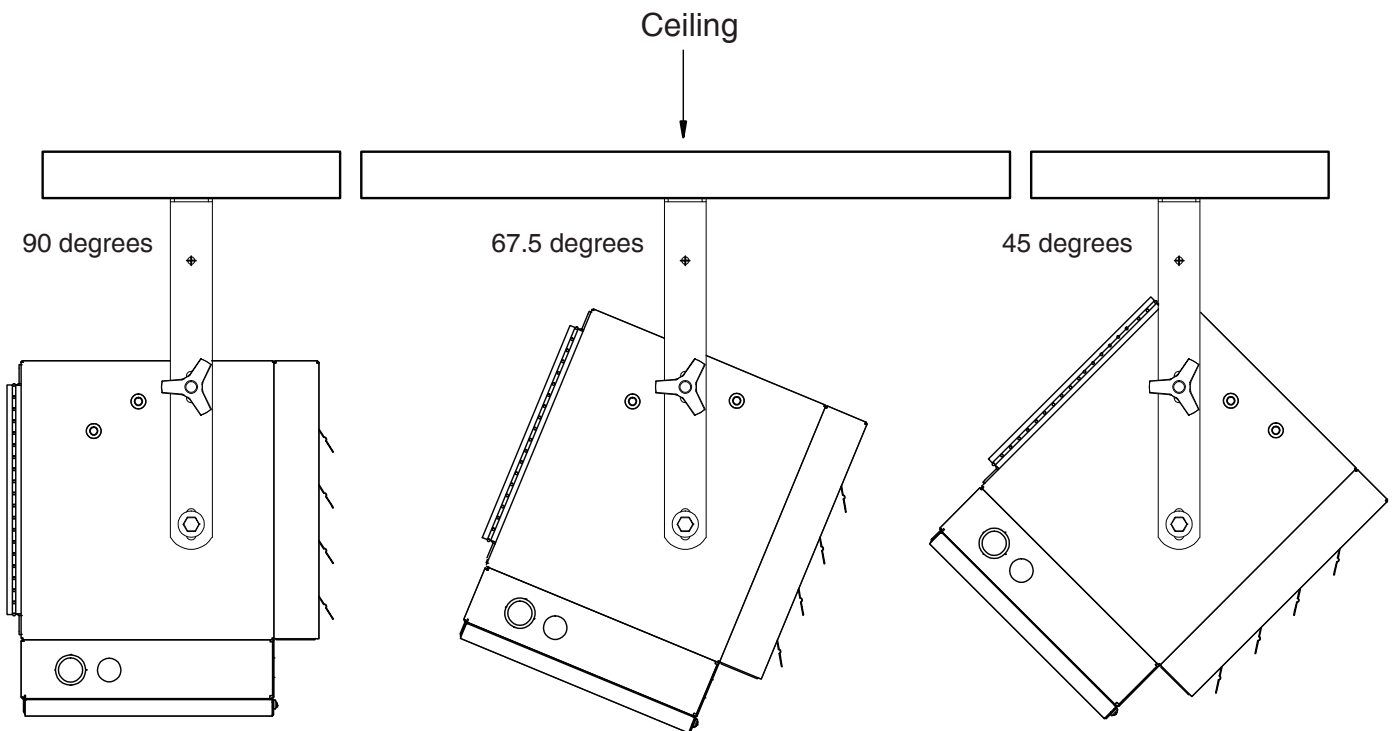


Figure 8

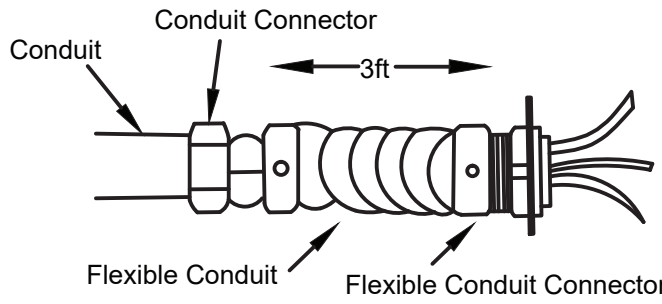
CONNECTING THE POWER

1. Remove the screws from the front of the heater to connect the power to the unit.
2. Attach the cable connectors to the unit (See Figure 9) and slide the 10-gauge wire through the cable connector.
3. Pull enough properly sized wire through cable connector and connect the wire to the power block located in the base of the heater - See Figure 10.
4. Turn on the power at the main service.

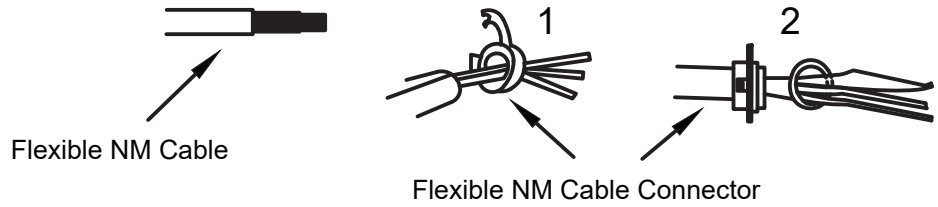
NOTE: All wiring must be carried out by a certified electrician and must be in accordance to national and local electrical codes in the United States. For certain applications, conduit may be required (as shown in figure 9). Check local electrical codes. If you run the wiring in conduit and wish to be able to turn the heater be sure to purchase enough flexible conduits to allow the heater to be turned.

CONNECTING THE POWER (CONTINUED)

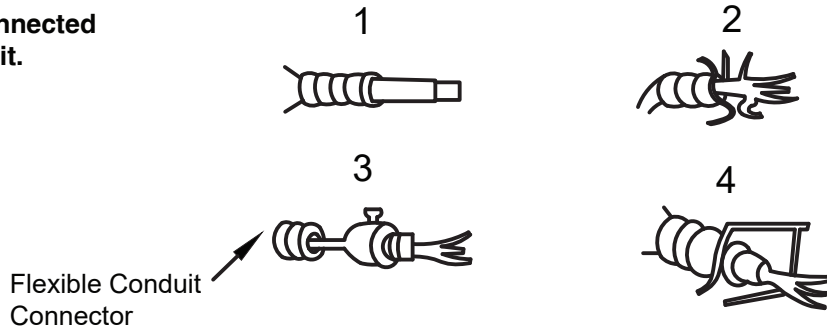
If Heater is to be turned and wire is inside conduit.



If Heater is to be connected with NM Cable.



If Heater is to be connected with Flexible Conduit.



Connector, Cable, and hardware used to wire the heater

Figure 9

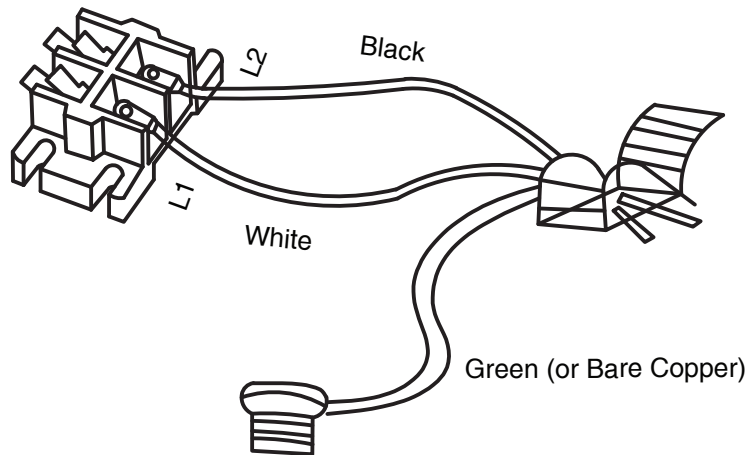
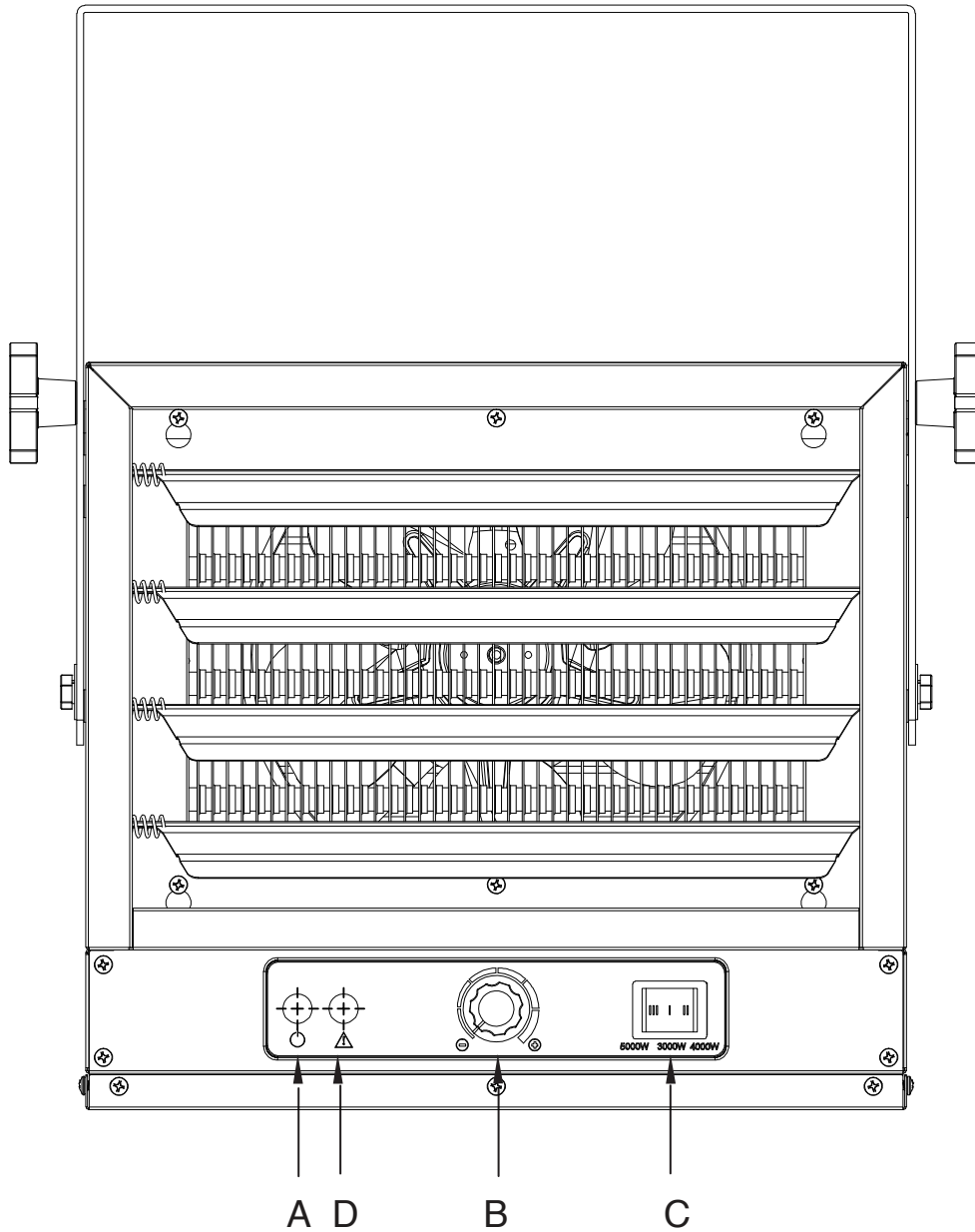


Figure 10

OPERATION INSTRUCTIONS

Figure 11

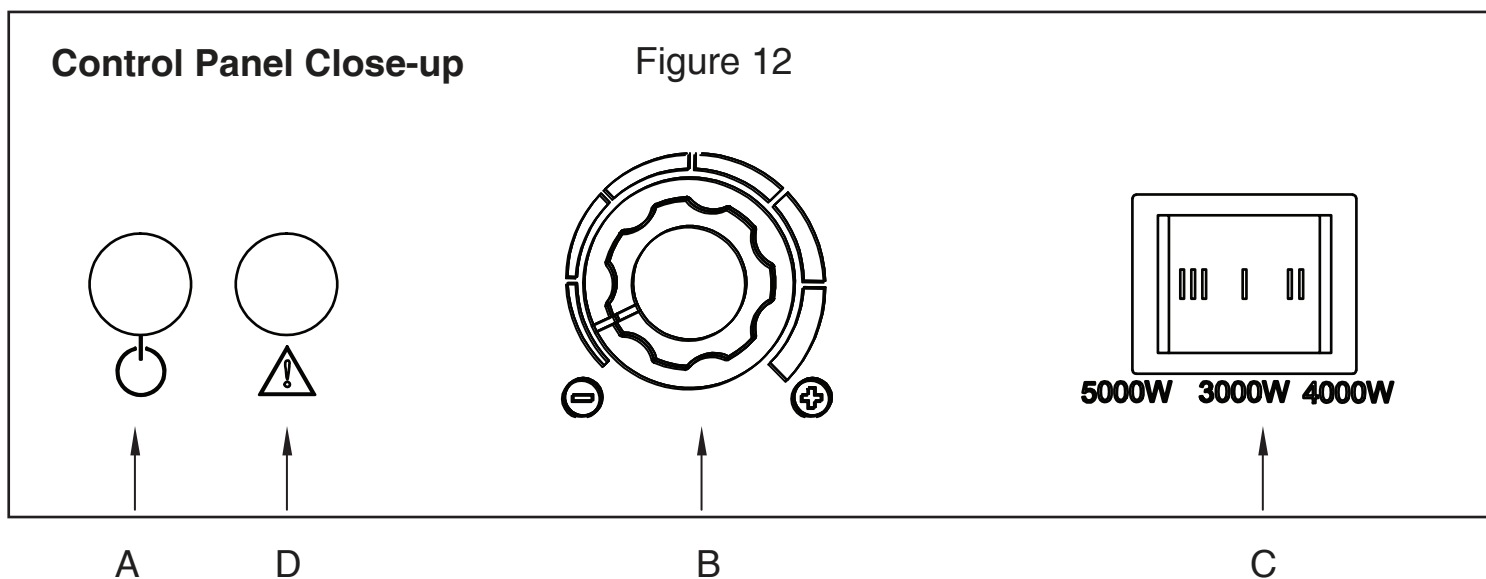


- A. Power Indicator (Amber)
- B. Thermostat
- C. Power Selection
- D. Caution Indicator (Red)

OPERATION INSTRUCTIONS (CONTINUED)

Control Panel Close-up

Figure 12



- A. Power Indicator (Amber)
- B. Thermostat
- C. Power Selection
- D. Caution Indicator (Red)

WARNING: the heater must be properly installed before it is used.

Setting The Thermostat

- 1) When connect to the power supply, the amber POWER INDICATOR light will turn on.
- 2) After room reaches desired comfort level, rotate thermostat knob counterclockwise until a click is heard. then rotate it slightly higher (toward Max).

NOTE: Heater will cycle on and off to maintain room temperature. The heater may smoke slightly on first time operation. It is caused by residual cleaning agents used to clean the element when heater is manufactured. This is normal and does not indicate a problem with the unit. The condition will stop after the heater has been in operation for a few minutes.

Power Selection Switch

Using the POWER SELECTION switch to select the heating output: I for 3000W, II for 4000W and III for 5000W.

Thermal Cut-Out

The heater is equipped with a thermal cutout which will automatically turn off the heater in the event of overheating. When this happens, the red indicator will turn on. After the unit has cooled back down to a normal level, the heater will turn ON again and the red indicator will turn off, but the reason of the overheating must be determined and corrective action must be taken before further operation.

THE HEATER MUST BE TURNED OFF IMMEDIATELY WHEN THE CAUTION INDICATOR IS GLOWING RED.

NOTE: When the thermal cut-out is activated, the caution indicator will turn red. In this case, immediately turn the heater OFF and inspect for any objects on or adjacent to the heater that may cause high temperatures.

CARE AND MAINTENANCE

1. Before cleaning, make sure the power has been turned off at the circuit breaker panel and the heating element of the heater is completely cool.
2. To maintain the heater's appearance, it needs only to be wiped over occasionally with a dry duster. During the summer months, or at other times when the appliance is not in use and is completely cold, wipe over with a damp cloth. Never allow water to drip into the heater.
3. Do not use abrasive cleaning powders or furniture polish. Do not use chemical or abrasive products, metallic scourers and so on, which may deteriorate the surface, to clean the appliance.

Cleaning The Heating Element

WARNING

- 1) To prevent possible electric shock, all power must be shut off at the main service before inspecting or cleaning.
- 2) To clean the heating element, loosen (but do not remove) the 4 Phillips head screws located behind the louvers in the corners of the louver housing on both sides, lift up and pull out (see Figure 13). This provides access to the heating element.
- 3) Remove dust or lint with a soft brush or a vacuum cleaner. Replace the louver housing and tighten the Phillips head screws.

WARNING

- 4) Use care to prevent damage to internal heater wiring when cleaning element. Make sure all connections remain tight and all wiring is routed away from element fins when reassembling the unit. Allowing wiring to touch the element fins could result in a fire hazard.

Figure 13

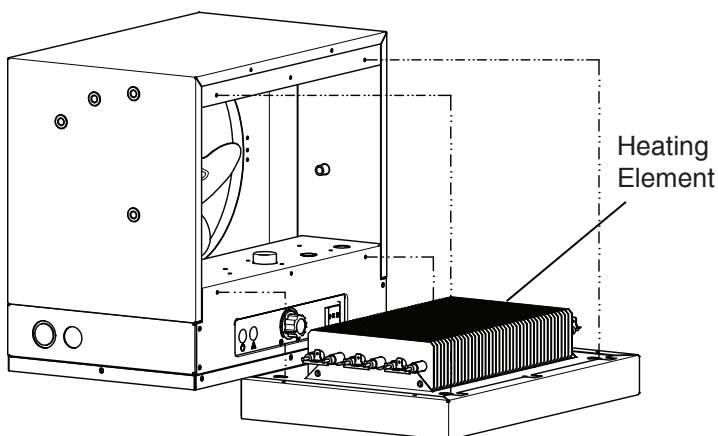
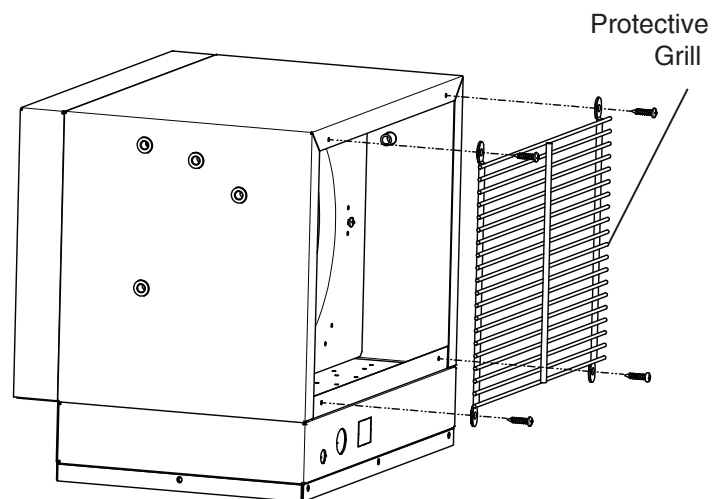


Figure 14



CARE AND MAINTENANCE (CONTINUED)

Cleaning The Fan And Motor

WARNING

- 1) To prevent possible electric shock, all power must be shut off at the main service before inspecting or cleaning.
- 2) Remove the protective grille from the rear of the heater. This provides access to the fan and motor. Wipe off the fan and the motor with a soft cloth or brush. The fan motor does not require lubrication. Replace protective grille (see Figure 14).
4. During the summer months, or at other times when the appliance will not be used for extended periods of time, disconnect the power supply and cover the whole appliance with a dust cloth. Store the heater in a dry and cool place.
5. All other servicing should be performed by qualified service personnel. Do not try to repair the heater yourself.

ONE (1) YEAR LIMITED WARRANTY

Every product is thoroughly inspected and tested before leaving the factory. It is warranted to be free of defects in workmanship and materials for a period of ONE YEAR from the date of purchase.

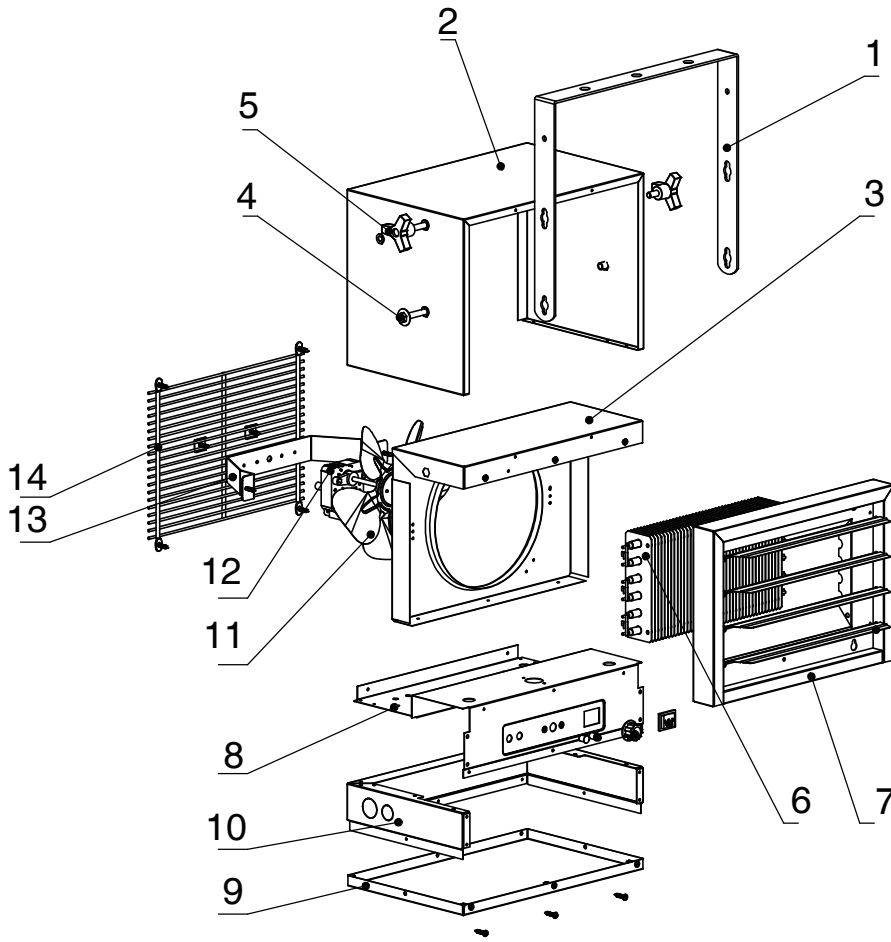
This warranty does not cover:

- Alterations have been made to the product.
- Repairs are required because of normal wear and tear.
- Repairs have been made or attempted by anyone other than the manufacturer.
- The product has been mistreated, misused or improperly maintained and operated.

This warranty covers only new products purchased from our authorized dealers or retailers. It does not cover used, salvaged, or refurbished products.

As some states do not allow the limitation or exclusion of incidental or consequential damages, or do not allow the limitation on implied warranties, the above limitation and exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

PARTS LIST



PART	DESCRIPTION	QUANTITY	PART#
1	Handle	1	J02M-01
2	Top Housing	1	J02M-02
3	Back Housing	1	J02M-03
4	Screw	2	J02M-04
5	Screw Knobs	2	J02M-05
6	Heating assembly	1	J02M-06
7	Front Housing	1	J02M-07
8	Electricity Box Cover	1	J02M-08
9	Cover	1	J02M-09
10	Electricity Box Housing	1	J02M-10
11	Fan Blade	1	J02M-11
12	Motor	1	J02M-12
13	Motor Bracket	1	J02M-13
14	Rear Grill	1	J02M-14