

User's manual

Manual del usuario

Manuel de l'utilisateur

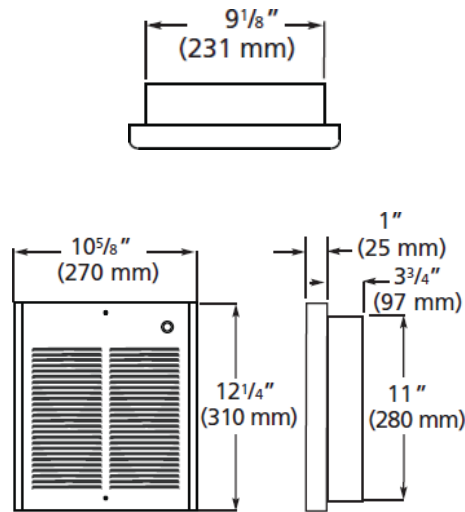
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# Fan Forced Wall Heater

Model(s): 246744, 246745



Please read carefully before attempting to assemble, install, operate or maintain the product described. Protect yourself and others by observing all safety information. Failure to comply with instructions could result in personal injury and/or property damage! Retain instructions for future reference.

## SPECIFICATIONS

Model number	Volts	Phase	Watts	Amps	Min. Supply Wire Gauge
246744	120	1	1500	12.5	12
			750	6.25	12
246745	240/208	1	2000/1500	8.3/7.2	14

NOTE : This full wattage heater can be converted to half wattage in the field or at the factory

# Fan Forced Wall Heater

## GENERAL INSTRUCTIONS



### **WARNING**

When using electric appliances, care must always be followed to ensure a reduced risk of fire, electric shock and injury to persons. Take the following precautions to reduce said risks:

1. Read ALL instructions before installing or using this heater.
2. Use this heater only as described in this manual. Any uses not recommended by the manufacturer are liable cause fire, electric shock, or injury to persons.
3. Heater surfaces become hot during use. To avoid burns, do not let bare skin touch hot surfaces. To avoid fire, keep combustible materials, such as furniture, pillows, bedding, papers, clothes, curtains, etc. at least 3 ft (0.9m) from the front of the heater.
4. Extreme caution is necessary when any heater is used by or near children or people with disabilities, and whenever the heater is left operating and unattended.
5. In the event of any malfunction, cease operation of the heater. Disconnect power at main service panel and have heater inspected by a trained professional electrician before next use.
6. Do not use heater outdoors.
7. To disconnect heater, set on/off switch to off, and disconnect power to heater circuit at main service panel.
8. Do not allow any foreign object to enter or block any air intake, ventilation or exhaust opening as this may cause an electric shock, fire, or damage to the heater.
9. The heater produces high heat, electrical arks and sparks inside. Do not use it in areas where gasoline, paint, or flammable liquids are used or stored.
10. In the event that the heater overheats, the unit will shut down and a red light will turn on. When the light is on, **DO NOT ATTEMPT TO OPERATE THE HEATER.** Disconnect the power supply and inspect intake, ventilation and exhaust ports for any blockages that may have caused the overheating.
11. Do not use the heater in damp or wet environments such as marine establishments or in the presence of corrosive or hazardous chemicals such as greenhouses or laboratories.
12. Review **INSTALLATION INSTRUCTIONS** to ensure safe and effective installation of heater.
13. Review **MAINTENANCE AND OPERATION** for safe and efficient operation of heater and to prolong service life of heater.

# Fan Forced Wall Heater

## SAFETY INSTRUCTIONS

### **WARNING**

To prevent a possible fire, injury to persons or damage to the heater, adhere to the following guidelines:

1. Before wiring or servicing, disconnect all power coming to heater at main service panel.
2. All wiring procedures and connections must be in accordance with National and Local Codes having jurisdiction.
3. Heater must be properly grounded.
4. Power supply must enter back box through the knockouts
5. Heater nameplate states voltage rating for unit. IF THE HEATER POWER SUPPLY IS GREATER THAN THE RATED VOLTAGE, PERMANENT DAMAGE TO THE HEATER MAY OCCUR AND WARRENTY WILL BE VOIDED. HIGH VOLTAGE ALSO PRESENTS RISK OF FIRE, DO NOT EXCEED VOLTAGE ON NAMEPLATE.
6. CAUTION: Keep combustibles such as electrical cords, draperies, furnishings, and paper goods at least 3 ft (0.9 m) from front of heater. DO NOT install heater behind doors, below towel racks, or in areas where it may be blocked by furniture, curtains or storage materials. Hot air from heater also may damage furniture and plastic goods. DO NOT store or use gasoline or other flammable vapors or liquids in the vicinity of the heater.
7. Do not operate the heater without the grille installed.
8. This heater must be mounted to a wall using the back box. Unit may be installed with the back box recessed or surface mounted as described within this manual.
9. The following minimum clearances must be adhered to:
  - Heater bottom to floor: 4" (102 mm), optimum height 18" - 24" (457 - 610 mm)
  - Heater sides to adjacent wall: 4 ½" (114 mm), optimum distance 12" (305 mm)
  - Heater top to ceiling: 12" (305 mm), optimum distance 36" (915 mm)
10. Do not use the heater for drying purposes. Paint, plaster, sawdust, drywall sanding and other materials may cause permanent damage to the heater and must be kept out of the ventilation system.

# Fan Forced Wall Heater

## INSTALLATION INSTRUCTIONS

NOTE: Heater is designed for recessed installation into wall using 2" x 4" studs

### FOR NEW CONSTRUCTION

1. Determine which side of the back box is to be mounted against a stud and bend the tabs at the rear corners out 90 degrees so that the back box will be square with the stud after installation (see Figure 1).
2. Remove one of the knockouts on the socket side and install a cable or conduit connector.
3. Position back box against side of studs and secure using nails or screws as shown in Figure 1.

NOTE: The back box must be installed with the front edge flush with the finished surface

4. Run power supply cable through the connector into the box. Leave about 8" of wire inside the box.
5. Connect the supply cable ground wire to green ground screw provided.

NOTE: Lead holes for a #8 sheet metal screw have been provided in the sides of the back box. After the finished wall has been put up, drive a #8 or M4 sheet metal screw (1" or 13 mm length recommended) through the side of the box that isn't mounting into the stud, this will help stop the box from pulling out during heater assembly (see Figure 1)

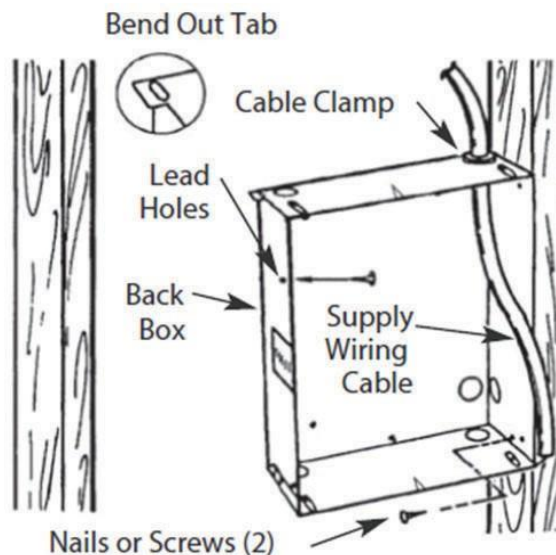


Figure 1 -Locating Recessed Back Box in New Construction

### FOR EXISTING CONSTRUCTION

1. Carefully mark and cut a rectangular hole measuring 9 1/4" (235 mm) wide by 11 1/8" (283 mm) tall. One edge of the hole must be cut along the edge of a stud.

CAUTION: Cutting through wiring or piping can produce an electrical shock, fire or water damage. Make sure that all wiring and piping are clear of area before cutting.

2. Proceed with installation of Back Box "For New Construction" steps 1 through 5

# Fan Forced Wall Heater

## FIELD CONVERSION FOR LOWER WATTAGE RATINGS

NOTE: Refer to "Specifications" for available lower wattage ratings

To convert heater to lower wattage rating, completely remove red jumper wire from both heating elements (see Figure 2). Do not remove or damage other wires or pins in the process. Discard the removed jumper wire.

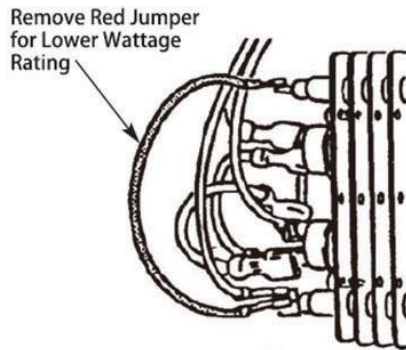


Figure 2 - Converting Heater to Half Wattage

## INSTALLATION AND WIRING OF HEATER/FAN ASSEMBLY

1. Use the following wiring diagram (Figure 3) to connect supply wiring to heater lead wires in back box.
2. Connect the white neutral supply lead to the heaters white pigtail lead, and connect the black supply lead to the heater black pigtail lead.
3. Two (2) metal retaining straps are provided in back box to secure wires. Carefully fold supply and heater wires along side of box and secure by bending the retaining straps up and over the wires.
4. Insert wiring plug from heater/fan assembly into socket in back box.

CAUTION: The supply and heater wires in the back box could be damaged if they are allowed to contact the heating element of fan blade. Be sure are secured by bending the straps up and over the wires to hold them in place.

5. Fit heater/fan assembly into back box and secure in place with (2) screws provided through the center slots in the fan assembly.

NOTE: Use the screws provided by the factory to install fan deck to the back box.

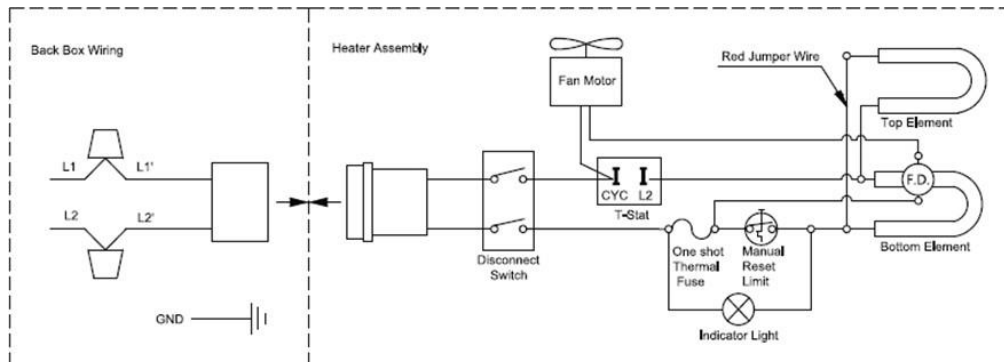


Figure 3 -Wiring diagram

## Fan Forced Wall Heater

# INSTALLATION OF FRONT GRILLE AND THERMOSTAT KNOB

1. Fasten front cover to heater assembly using the (2) long screws supplied.
2. Fit the thermostat knob on to the thermostat shaft and push into place.

## MAINTENANCE AND OPERATION

CAUTION: Heater must be installed properly before operation.

1. After heater assembly is complete, rotate the thermostat knob fully counterclockwise. This is the minimum heat setting.
2. Turn the heater's power supply switch to the "ON" position  
NOTE: THE HEATER SHOULD NOT ACTUALLY TURN ON AT THIS POINT. IF HEATER BEGINS OPERATION, TURN SWITCH OFF, DISCONNECT POWER SUPPLY AND RECHECK WIRING.
3. Rotate thermostat knob fully clockwise to reach the maximum heat setting.
4. Wait at least 2 minutes, the fan control will not allow the fan to run until the heating element is warm.
5. If fan does not come on after extended period of time, check to see if heating element is on and check wiring.
6. Allow heater to continue operating until desired room temperature is reached, then turn thermostat knob counterclockwise until thermostat clicks off. The fan will continue operating until the element cools.
7. Readjust thermostat settings until room remains comfortable temperature. Turning the thermostat clockwise will increase the duration of heat production while turning it counterclockwise will decrease the duration.  
NOTE: It is advised to leave the thermostat fully clockwise when heating room from cold temperatures.  
NOTE: If the heating element is on and the heater is suddenly turned off, the fan will continue to run to help the heating element cool until it reaches a low enough temperature, at which point it will shut off.

CAUTION: Operation of the manual reset safety thermal limit control is an indication that the heater has been subjected to some abnormal condition, It is recommended that the heater be checked by a reputable electrician or repair service to ensure the heater has not been damaged.

# Fan Forced Wall Heater

## HOW TO RESET OVER-TEMPERATURE SAFETY CONTROL

This heater features an over-temperature safety control that will turn off the heater if it overheats. If this control engages, a red warning light, visible through the front of the grille, will shine to alert the owner that the heater is shut down and may require maintenance. This reset switch for this control is located behind the grille just above the red warning light, and can be seen through the front grille when the heater is installed. Before resetting, first allow the heater to cool, then using something that will fit through the louvers such as a small flathead screwdriver, push the reset button. The heater should immediately return to normal operation. If the alarm light remains on after the heater has cooled and the manual-reset button has been pressed the thermal fuse may have blown. In this situation, the heater must be checked and repaired by a qualified electrician.

**CAUTION:** Do not continue to attempt to use the heater if the safety control repeatedly operates after being reset. To do so could permanently damage the heater or create a fire or safety hazard.

### **WARNING**

Do not tamper with or bypass any safety limits inside the heater

**SPECIAL NOTE:** In addition to the over temperature safety control, this heater is provided with a back-up thermal fuse (one shot) that will permanently shut the heater off if for some reason the over-temperature safety control should not function as intended. If this thermal fuse activates, the heater will cannot be reset and must be repaired by a qualified electrician

## BASIC UPKEEP

### **WARNING**

All servicing beyond simple cleaning that requires disassembly should be performed by qualified service personnel.

### **WARNING**

Before performing any maintenance or service, disconnect all power coming to heater at main service panel and check that the element is cool. This must be done to ensure a reduced risk of fire and electric shock or personal injury.

It is important to keep this heater clean, just like any heater. Your heater will give you years of service and comfort provided you take care of it. To ensure efficient operation and a long service life, adhere to the simple instructions that follow:

1. When the heater is cool, use a vacuum cleaner with a brush attachment to remove dust and lint from exterior surfaces, including the grille openings.
2. With a damp (not wet) cloth, wipe dust and lint from grille and other exterior surfaces.
3. Return power to heater and check to see if it is operating properly.

**CAUTION:** At least annually, the heater should be cleaned and serviced by a qualified service person to assure safe and efficient operation. This should include the removal of the grille and, as necessary, the heater from the back box to clean dust and residue from the unit. After completing the cleaning and servicing, the heater should be fully reassembled and checked for proper operation.