

Wall Heater

READ AND SAVE THESE INSTRUCTIONS

IMPORTANT INSTRUCTIONS

READ ALL INSTRUCTIONS BEFORE INSTALLING OR USING THIS HEATER.

To reduce the risk of fire, electric shock, or injury to persons, observe the following:

1. Use this unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer at the address or telephone number listed in the warranty.
2. Before servicing or cleaning unit, switch power off at service panel and lock the service disconnecting means to prevent power from being switched on accidentally. When the service disconnecting means cannot be locked, securely fasten a prominent warning device, such as a tag, to the service panel.
3. Installation work and electrical wiring must be done by a qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction codes and standards.
4. When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.
5. 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.
6. Extreme caution is necessary when any heater is used by or near children or invalids and whenever the heater is left operating and unattended.
7. Do not operate any heater after it malfunctions. Disconnect power at service panel and have heater inspected by a reputable electrician before reusing.
8. Do not use outdoors.
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.
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.
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. Install heater at least 12 inches from floor or any adjacent wall.
15. To avoid electrical shock: Do not install unit in a tub or shower enclosure or any location where it may come in contact with water. Never place a switch where it can be reached from a tub or shower.
16. This product may ONLY be installed vertically in a wall. Do not mount in any other position.
17. Do not connect heater to dimmer switch or speed control.
18. This product must be grounded.

SAVE THESE INSTRUCTIONS

PLANNING

This heater is intended to be used to supply supplemental heat from a wall location in new or existing construction.

Choose a location where edge of heater will be at least 12" from the floor or any adjacent vertical surface.

The heater can be operated using its built-in thermostat or a remote thermostat (such as the Model 86W Line-Voltage thermostat or an appropriate low-voltage thermostat and transformer/relay). The Model 85 Kit is available for surface-mount applications. Purchase these accessories separately.

Plan to supply the heater with proper line voltage and appropriate power cable.

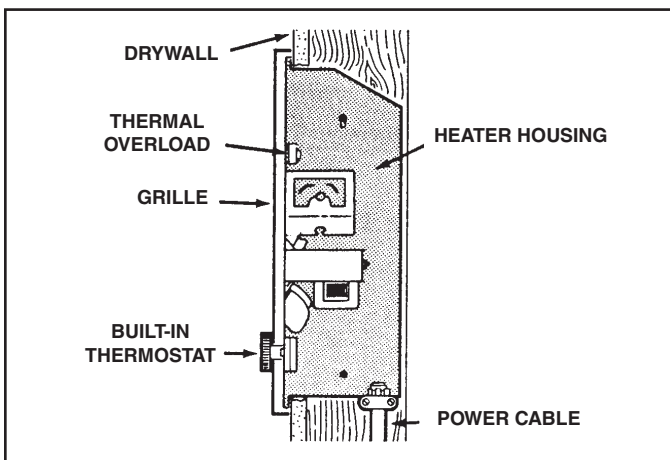
NOTE: Power can be tapped from a nearby circuit depending on the heater wattage required and the amperage rating of the circuit.

Heater can be converted to half-wattage to avoid overloading such circuits.

MODEL	VOLTS	AMPS	WATTS	BTU/HR
192	240	8.33/4.17	2000/1000	6827/3413
194	240	12.50/6.25	3000/1500	10240/5120
198	240	16.67/8.33	4000/2000	13653/6827

Bold ratings are factory wired.

See "OPTIONAL WIRING CONVERSIONS" section for wattage conversion instructions.



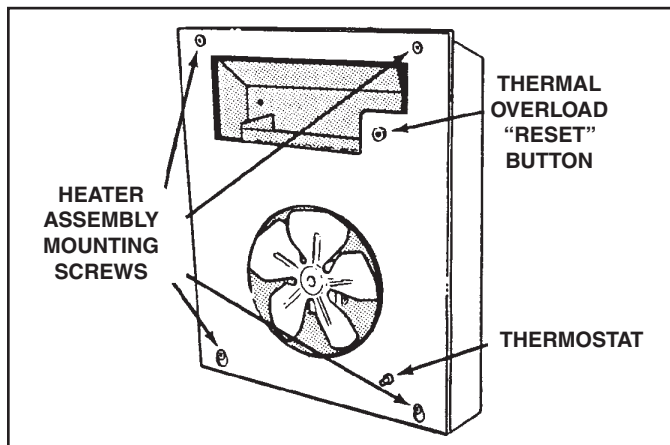
Follow these basic steps when installing this heater:

- 1) Nail housing to studs.
- 2) Connect power cable.
- 3) Fasten heater assembly and grille to housing.

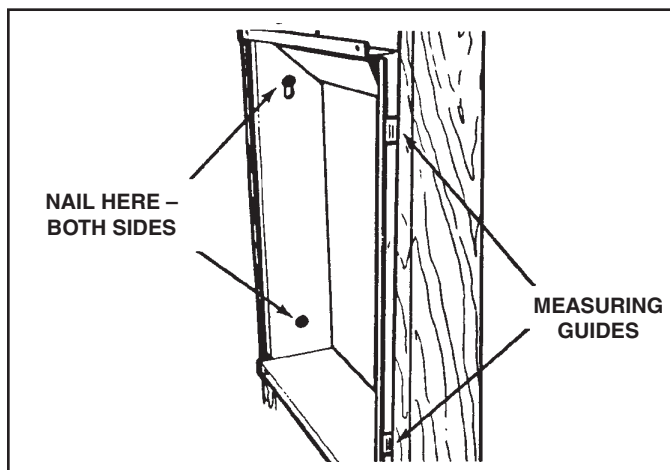
INSTALLATION

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

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.



1. Remove heater assembly from housing. Take out the four (4) screws shown and set heater assembly aside.



2. Attach housing to wall studs.

NOTE: Locate housing at least 12" from floor on any adjacent walls.

Use the measuring guides on the sides of housing to position housing so that it will be flush with finished wall. Nail the housing to studs through the hole and slot on both sides of housing.

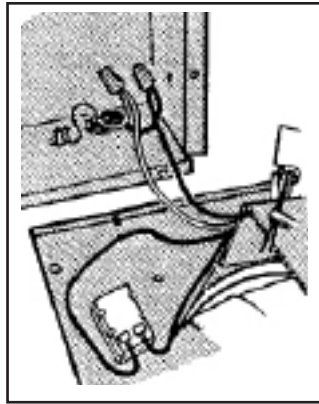
NOTE: In 24"-on-center stud construction, framing in between studs is necessary.

WIRING

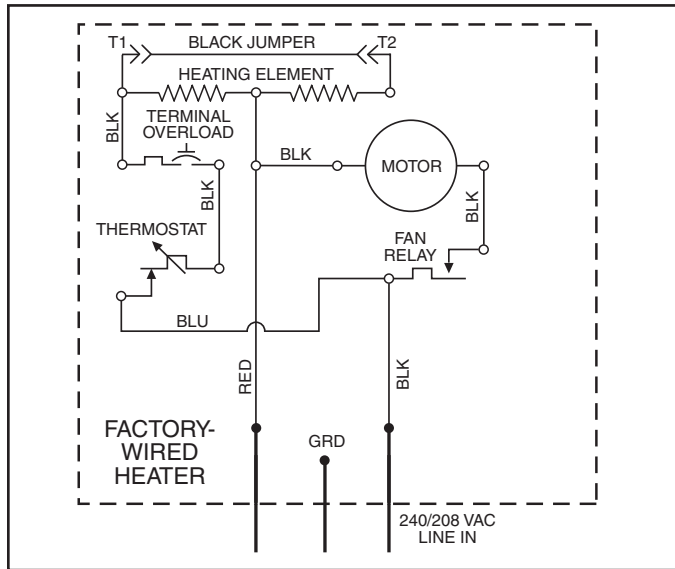
Installation work and electrical wiring must be done by a qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction codes and standards.

1. Connect power cable to housing. Attach electrical power cable to housing using appropriate connector. Allow 6" of wire inside housing.

2. Wire the heater assembly. Connect wires from heater assembly to power cable wires. Follow wiring diagram.



If heater is wired direct, use the built-in thermostat for temperature control.

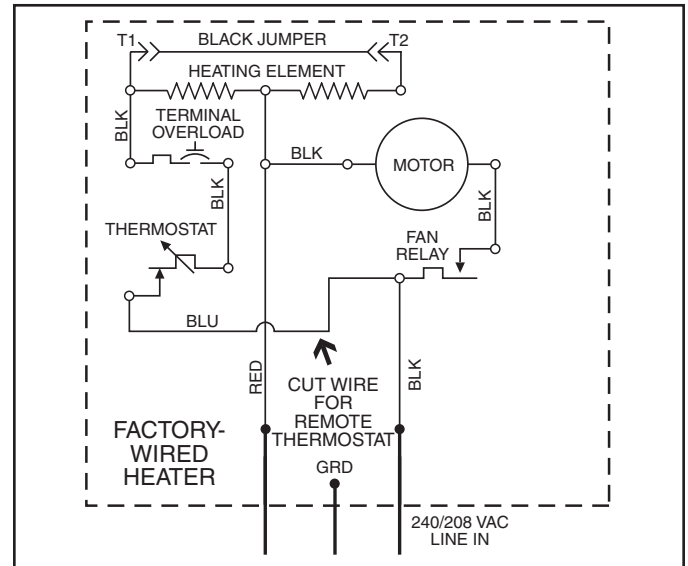


OPTIONAL WIRING CONVERSIONS

When using a separate wall control, simply turn the heater's built-in thermostat to its highest setting. There is no need to disconnect the built-in thermostat:

- a) Turn built-in thermostat to highest setting.
- b) Remove knob.
- c) Fasten security cover to grille.

LINE-VOLTAGE THERMOSTAT

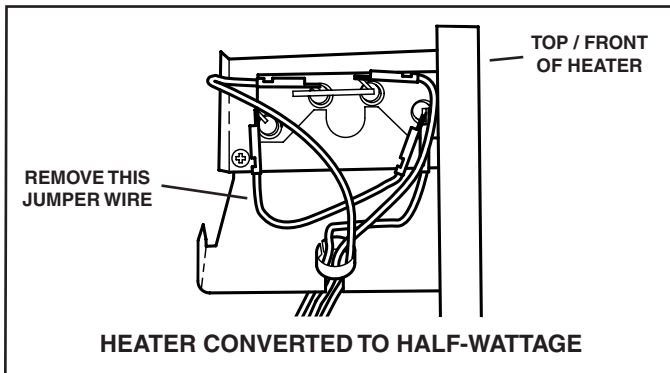


If wall-mounted control is desired, use the Model 86W Line-Voltage Thermostat. Purchase thermostat separately.

Cut blue wire. Strip 1/2" of insulation from each end. Connect wires from wall control to each stripped wire.

If wall-mounted control is desired, use a transformer/relay with an appropriate low-voltage thermostat (purchase separately). Follow the mounting and wiring instructions packed with the controls.

HALF-WATTAGE CONVERSION



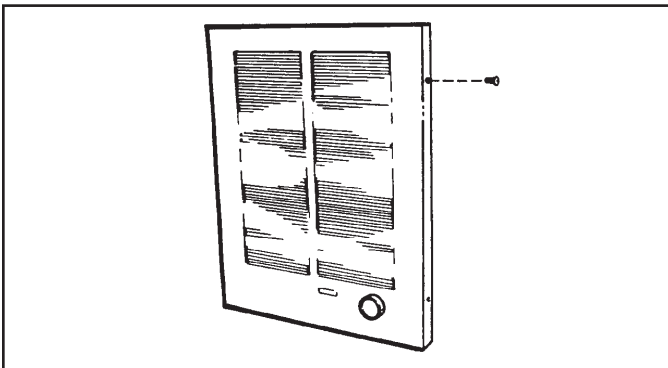
The heater will produce less heat and use less electricity if converted to half-wattage. Remove the black jumper wire from the heating element and discard wire.

COMPLETE THE INSTALLATION

1. Install housing mask. A housing mask has been provided to keep construction dust, drywall spray, paint, etc., from damaging the heater. Bend the flap on the mask and push it into the heater housing.

NOTE: Mask can be put into place before or after heater assembly is reinstalled. Remove mask before operation.

2. Reinstall heater assembly. Secure heater assembly to housing with four (4) screws. Check thermal overload button marked "RESET". Heater will not operate unless this button is depressed.



3. Install grille. Place grille over heater and attach with four (4) screws. Push knob onto thermostat stem.

4. Attach security cover to grille (optional). When heater is installed in a public area without a separate wall control, it is recommended that:
 - a) Built-in thermostat be set to desired temperature level.
 - b) Thermostat knob be removed.
 - c) Security cover be attached to grille with two (2) screws, provided.
5. Check operation. Turn on power at service entrance. Turn thermostat to its highest setting and make sure heating element and blower come on. Then turn it to its lowest setting and make sure element and blower shut off.

NOTE: The fan delay prevents the fan from coming on until the element is hot. Likewise, it keeps the fan running until the element cools down.

OPERATION

Before using heater, make sure heater has been properly installed according to installation steps under "INSTALLATION" on page 3.

The heater can be operated using its built-in thermostat or a remote thermostat (such as the Model 86W Line-Voltage thermostat or an appropriate low-voltage thermostat and transformer/relay). The Model 85 Kit is available for surface-mount applications. Purchase these accessories separately.

THERMAL OVERLOAD PROTECTOR

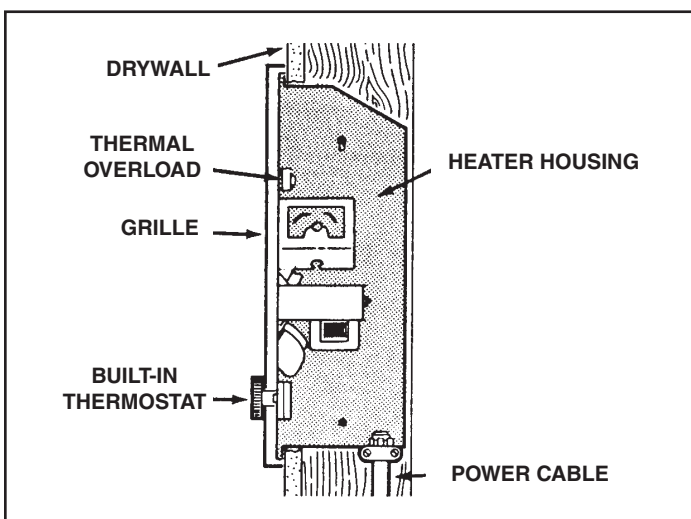
Your heater is equipped with a manual-reset thermal overload protector. If heater fails to operate when thermostat is turned to its highest setting:

- 1) Turn off power at service entrance.
- 2) Remove knob and grille.
- 3) Press button marked "RESET".

This type of device is particularly useful (compared to automatic reset devices) because it encourages the user to find and correct the cause of overheating unit when resetting the protector.

TO AVOID PROPERTY DAMAGE WHEN USING THIS HEATER TO PREVENT FREEZE-UPS:

Make sure heater functions properly before leaving unattended. A tripped protector will prevent the heater from operating.



MAINTENANCE

LUBRICATION

The heater is permanently lubricated and never needs oiling or disassembly.

CLEANING

Clean heater once a month as follows:

1. Turn off power at service panel.
2. Make sure heating element is cool.
3. Use a soft brush attachment to gently vacuum grille openings or wipe grille clean with a soft cloth.
4. Restore power.

CAUTION: METAL AND ELECTRICAL PARTS SHOULD NEVER BE IMMERSSED IN WATER.

SERVICE PARTS

KEY NO.	PART NUMBER	PART DESCRIPTION
3	99030190	Fan Delay
4	98006989	Element Bracket (2 Required)
5	99271155	Heating Element (Model 192)
	99270723	Heating Element (Model 194)
	99270724	Heating Element (Model 198)
6	99400061	Bushing
7	97008688	Black Wire Assembly (29-1/2")
8	97008690	Black Jumper Wire
9	*	Thermal Overload Bracket
10	*	Thermal Overload
11	97008692	Red Power Wire
12	99150491	Screw, 8-18 x 3/8 Ph. Pan Head (14 Required)
13	97008683	Partition Plate Assembly
14	93270619	Wire Clamp (3 Required)
15	99260425	Nut, 8-32 Hex Keps (2 Required)
20	99160350	Screw, 6-32 x 1/4 Ph. Pan Head (2 Required)
21	99030324	Thermostat
22	99080251	Motor (Model 198)
23	99080249	Motor (Models 192 & 194)
24	99020255	Fan Blade
25	97013822	Grille
26	99150478	Screw, 8-18 x 3/8 PH Truss Hd. (4 Required)
27	99090683	Grille Logo
29	99360136	Knob
30	99110687	Security Cover
31	93150462	Screw, 8-18 x 5/8 Oval Head (2 Required)
*	97013945	Assembly, Thermal Overload (Includes Key Nos. 9, 10, & 12 (2))

