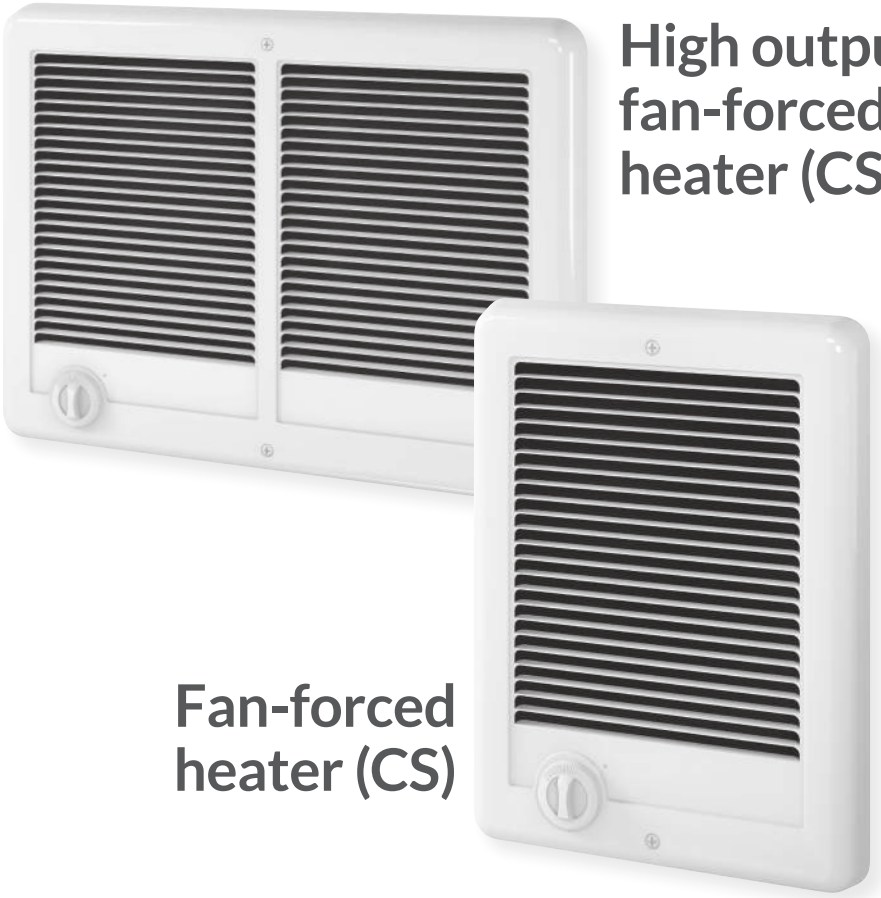


High output fan-forced heater (CST)

Fan-forced heater (CS)

WARRANTY 2 YEAR

Thank you for your purchase! Question or problem? Let us solve it with a single phone call, email or online chat! We'll save you a trip back to the store!

Customer Service:
Phone: **888-346-7539** (from US or Canada)
Email: cs@glendimplexamericas.com

Assembled in USA
gdaheat.com

Glen Dimplex AMERICAS

IMPORTANT INSTRUCTIONS

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

1. Read all instructions before installing or using this heater.
2. 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 meters) from the front of the heater and keep them away from the sides.
3. 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. Do not operate any heater after it malfunctions. Disconnect power at service panel and have heater inspected by a reputable electrician before reusing.
5. Do not use outdoors.
6. To disconnect heater, turn control(s) to off, and turn off power to heater circuit at main disconnect panel.
7. 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.
8. To prevent a possible fire, do not block air intakes or exhaust in any manner.
9. 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.
10. 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.
11. This heater must be installed in a fixed, permanent location.

SAVE THESE INSTRUCTIONS

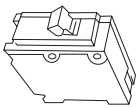
⚠ KNOW YOUR VOLTAGE! ⚠

If you are uncomfortable working with electricity, running electrical supply wire or installing a circuit breaker, please consult a licensed electrician. Make sure power to the heater is turned off at the main disconnect panel whenever doing any work on a heater. Serious injury or electrocution can result from electric shock.

- CHECK YOUR BREAKER! If you're replacing an existing heater, check the labels of the old heater and use the same voltage.

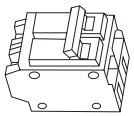
single-pole breaker

120 volt



double-pole breaker

240 volt



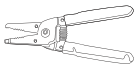
WARNING: Connecting a heater to a voltage higher than what's listed on its rating label will destroy the heater and could start a fire. A heater will not heat properly when connected to a voltage lower than what's listed on its rating label.

Unanswered questions? Call our technical support **888-346-7539**.

INSTALLATION INSTRUCTIONS

1. All electrical work and materials must comply with the National Electric Code (NEC), the Occupational Safety and Health Act (OSHA), and all state and local codes. Canadian installations must comply with Codes Canada and provincial codes.
2. Use copper conductors only.
3. DO NOT install the heater directly above bathtub or sink. DO NOT install in shower stall area. Manufacturer recommends installing your heater at least 2 feet (61 cm) away to prevent contact with water.
4. Heater must be installed in a wall can:
   Model CS - wall can models CC or CCSM
   Model CST - wall can model CTC (WC1)
5. DO NOT install the heater in a floor, below a towel bar, behind a door, or anywhere the air discharge may be blocked in any manner.
6. To reduce the risk of fire, do not store or use gasoline or other flammable vapors and liquids in the vicinity of the heater.
7. Connect grounding lead to grounding screw provided. Keep all foreign objects out of heater.
8. 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.

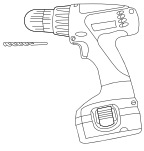
TOOLS REQUIRED

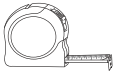

Wire Strippers

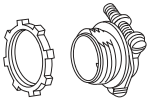

Wire Connectors


1½" Wood Screws

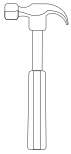

Straight and Phillips Screwdrivers


Drill and Drill Bits


Tape Measure


½" Cable Clamp Connector

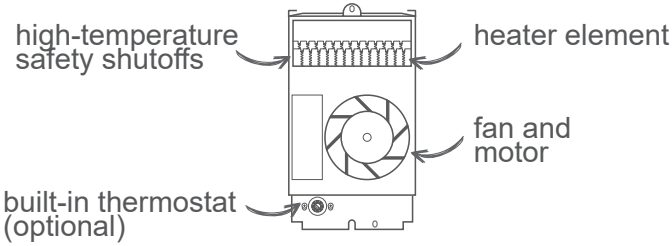

Volt Meter


Hammer


Stud Finder

A multi-purpose tool or something to cut your existing drywall or gypsum board.

PARTS OF YOUR HEATER



INSTALLATION INSTRUCTIONS

TIPS BEFORE YOU BEGIN

- **Verify power has been turned off before starting any work!**
- **Model CS** can be mounted with the element up, or with the element on the left. For ceiling installation, see page 5. For multiple heater wiring, see page 6. All the fan-forced heaters have a minimum clearance of 10" (25.4 cm) from the ceiling and 4' (1.2 m) from sprinkler heads.
- **Model CST** can only be mounted with the elements up. It cannot be mounted in the ceiling.
- For cleaner performance and longer heater life, install your heater 12 inches (30.5 cm) from the floor.
- All models can be installed to be Americans with Disabilities Act (ADA) compliant. Check your state and local requirements.
- A thermostat is required for models that do not come with a built-in thermostat. An electronic wall thermostat is recommended for ultimate comfort and energy savings.
- The wall can label arrows show the correct mounting orientation (arrows must point up).

STEP 1 Cut a hole in the wall next to a wall stud

If you haven't installed drywall yet, skip this step.

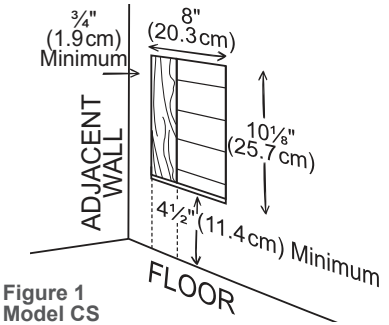


Figure 1
Model CS

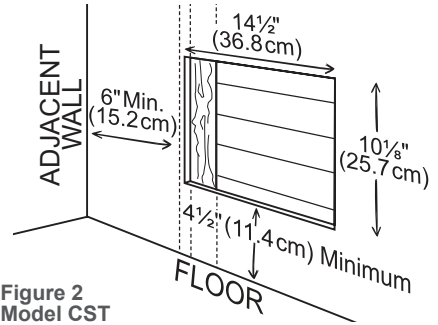


Figure 2
Model CST

STEP 2 Locate or route electrical supply wires

If you're wiring a wall thermostat, route the electrical supply wire from the circuit breaker to the wall thermostat, and then to the heater location. If your heater has a built-in thermostat, route the electrical supply wire from the circuit breaker directly to the heater location.

Remove a knockout from the wall can and attach the supply wire with a cable clamp connector (not included) leaving a minimum of 6 inches wire lead (See Figure 3).

STEP 3 Mount the wall can

If you haven't installed drywall yet, make sure the front of the wall can extends beyond the front edge of the wall stud to match the drywall depth (Figure 3).

If you already have drywall installed, place the can into the cutout so the front is flush with the drywall.

Fasten the wall can to the stud with 2 screws (Model CS) or 4 screws (Model CST) (not included), through holes provided in the wall can (Figure 3). As an option on model CS, the foam pad provided may be attached to the side of the wall can to square the wall can to the stud (See Figure 3).

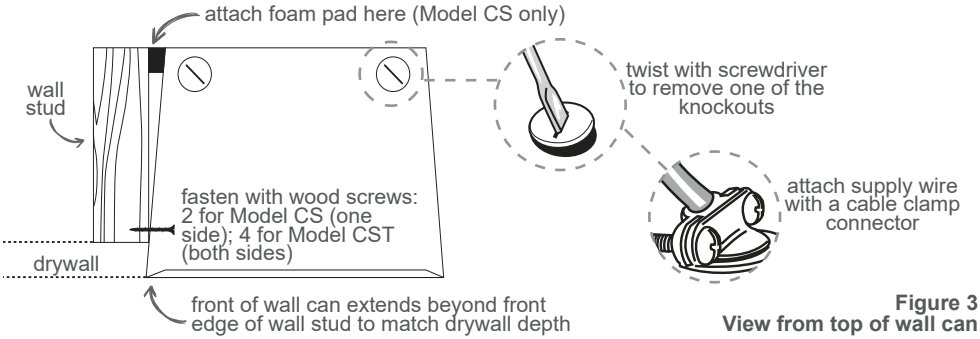


Figure 3
View from top of wall can

INSTALLATION INSTRUCTIONS

INSERT THE HEATER ASSEMBLY IN THE WALL CAN

STEP 4 Wire connections

1. Your heater has two connection wires on the back. Your supply wire has two connection wires and a supply ground wire.

   A. Connect supply ground wire to grounding screw in wall can (See Figure 4 or 5).

   B. Connect one supply wire to one heater wire with a wire connector (not included):

   For 240 or 208 volts, it doesn't matter which heater wire. Both supply wires (black and white) are hot. Wrap supply (white) wire with black tape to identify it as hot (Figure 4).

   For 120 volts, connect the neutral (white) supply wire to the white heater wire (Figure 5).

   C. Connect the remaining supply wire to the remaining heater wire with a wire connector (not included) (See Figure 4 or 5).

2. Turn the heater back around and insert the bottom edge of the heater assembly into the D-shaped tabs at the bottom of the wall can.
3. Push all wires back into the bottom of the wall can. Make sure connections are tight and that none of the wires are caught between the motor and the wall can.
4. Attach the heater assembly at top of the wall can with screw provided.

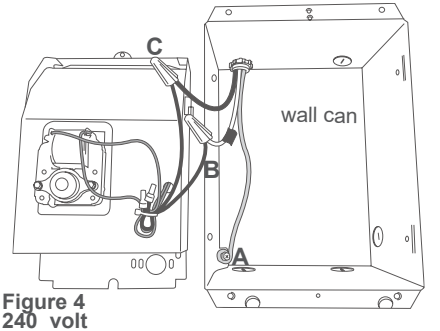


Figure 4
240 volt

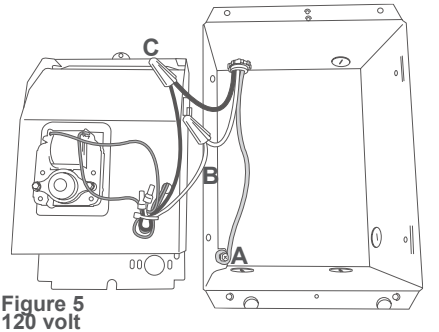


Figure 5
120 volt

STEP 5 Install Grill

Attach grill with screws provided. If you have a built-in thermostat, slide thermostat knob onto shaft. If you have a model without a thermostat, snap in the grill plug provided.

Turn power on at the main disconnect panel.

Proceed to OPERATING INSTRUCTIONS.

CEILING MOUNT (MODEL CS ONLY)

STEP 1 Mount The Wall Can

Important:

1. **Only for Model CS up to 1,500 Watts – MAXIMUM.**
2. **Do not mount the heater in low density fiberboard or false ceilings.**
3. **Models with a built-in thermostat are not recommended.**

Fasten the wall can to ceiling rafters on any two sides (See Figure 6) with a minimum of 4 screws (not included). You may need to install an additional rafter perpendicular to your ceiling rafters. The front edge of the wall can must extend beyond the front edge of the ceiling rafter(s) to match the drywall depth.

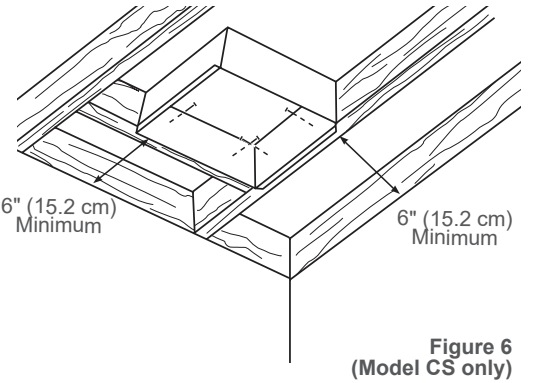


Figure 6
(Model CS only)

STEP 2 Route Supply Wires

Important: Supply connections must use wires suitable for at least 167˚F (75˚C) in the ceiling.

Route the electrical supply wire from the circuit breaker to the wall thermostat, and then to the wall can. Remove a knockout from the wall can and attach the supply wire with a cable clamp connector (not included) leaving a minimum of 6 inches wire lead (See Figure 3).

Continue to STEPS 4 and 5 above.

INSTALLATION INSTRUCTIONS

MULTIPLE HEATERS WITH ONE THERMOSTAT (MODEL CS ONLY)

More than one heater can be wired in parallel on the same circuit breaker (be sure to check national and local codes for safety requirements). Additional electrical supply wire and cable clamp connectors are required, and you'll need to use a wall thermostat. When wiring multiple heaters to one thermostat, the heaters must be in the same room and be spaced a minimum of three feet apart.

The maximum amperage load you can put on one circuit breaker is limited to either 80% of the circuit breaker capacity, or the maximum amperage rating of the thermostat, **whichever is lower**.

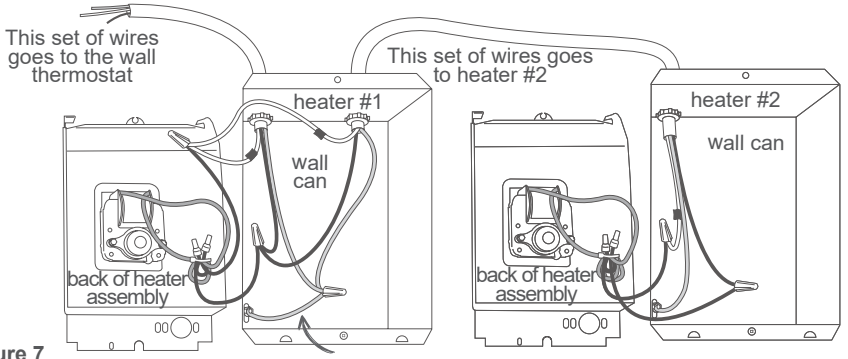


Figure 7

additional ground wire is used here to make the 3-wire connection

1. Route the electrical supply wire from the circuit breaker to the wall thermostat. At the wall can of heater #1, attach two sets of electrical supply wires with two cable clamp connectors (not included), leaving a minimum of 6 inches wire lead. One set of electrical supply wire goes to the wall thermostat and the other set goes to heater #2 (See Figure 7).
2. There are two supply ground wires in the wall can of heater #1. You'll need to add a small piece of copper wire (not included) to make the 3-wire connection with the ground screw (See Figure 7).
3. For heater #1, connect each heater wire to one of the supply wires going to the thermostat, and to one of the supply wires going to the heater #2. Both wires from heater #1 must have a 3-wire connection.
4. For heater #2, make the connections in the wall can as shown in Figure 7 above. Proceed with STEP 4 Wire connections, number 2 on page 5.
5. Turn power back on at the main disconnect panel.
6. Proceed to OPERATING INSTRUCTIONS.

WARRANTY

For more effective and safer operation and to prolong the life of the heater, read the Owner's Guide and follow the instructions. Failure to properly maintain the heater will void any warranty and may cause the heater to function improperly.

LIMITED TWO YEAR WARRANTY: Manufacturer will repair or replace any Fan-forced (CS) or High-output Fan-forced (CST) heater found to be defective within two years after the date of purchase.

These warranties do not apply:

1. Damage occurs to the product through improper installation or incorrect supply voltage;
2. Damage occurs to the product through improper maintenance, misuse, abuse, accident, or alteration;
3. The use of unauthorized accessories or unauthorized components constitutes an alteration and voids all warranties. Refer to website or call customer service at 888-346-7539 for list of authorized accessories and components.
4. Manufacturer's warranty is limited to repair or replacement.
5. In the event Manufacturer elects to replace any part of your product, the replacement parts are subject to the same warranties as the product. The installation of replacement parts does not modify or extend the underlying warranties. Replacement or repair of any product or part does not create any new warranties.

If you believe your product is defective, please contact Manufacturer during the warranty period, for instructions on how to have the repair or replacement processed.

Parts and Service

Visit gdaheat.com/parts for information on where to obtain parts and service.

To register your product, visit gdaheat.com/register

OPERATING INSTRUCTIONS

1. Make sure all wires are properly connected and installation is complete before you turn on the heater.
2. Do not operate without grill.
3. Do not tamper with the high-temperature safety shutoff.

Complete installation

After installation, turn your heater to the highest setting and let it run for 30 minutes. Some smoking may occur as the element initially burns off residue from manufacturing.

If your heater shows signs of overheating, such as glowing red or repeatedly getting unusually hot and shutting off, immediately turn off the circuit breaker and review the “KNOW YOUR VOLTAGE” section or call us.

If the high-temperature safety shutoff trips more than once a day, replace the heater.

How to operate your heater

The room temperature is controlled by a thermostat located either on the wall, or on the heater. Once installation is complete and power is on, follow the steps below for your thermostat.

If you have a wall or built-in thermostat with a knob:

1. Turn the thermostat knob all the way to the right.
2. When the room reaches your comfort level, turn the knob to the left, just until it clicks and the heater turns off. The heater will automatically keep the room temperature around this setting.
3. To reduce the room temperature, turn the knob to the left. To increase the room temperature, turn the knob to the right.

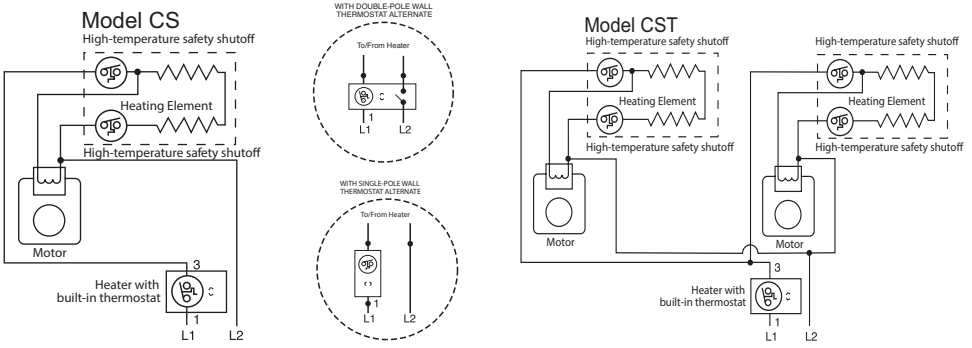
If you have an electronic wall thermostat, follow the instructions in the programming and operating guide included with your thermostat.

More frequently asked questions on our website here: gdaheat.com/FAQ

Reduce-Reuse-Recycle

This product is made primarily of recyclable materials. You can reduce your carbon footprint by recycling this product at the end of its useful life. Contact your local recycling support center for further recycling instructions.

INTERNAL HEATER WIRING DIAGRAMS



MAINTAINING YOUR HEATER

Clean heater at least every 6 months or as required. Do not lubricate motor.

WARNING: Risk of electrical shock, turn off power before removing grill.

1. Turn off power at the main disconnect panel.
2. Wait for the heater to cool.
3. Remove thermostat knob (if any) and grill.
4. Wash grill with hot soapy water and dry.
5. Blow air through the heating element with a hair dryer or shop vacuum on blow cycle.
6. Clean the fan with a vacuum cleaner.
7. Replace grill and thermostat knob (if any).
8. Turn power back on at the main disconnect panel.

Any service other than cleaning should be performed by an authorized service representative.

High-temperature safety shutoff

All CS and CST fan-forced heaters come with built-in high-temperature safety shutoffs that stop electricity flowing to the heater if it gets too hot inside. See TROUBLESHOOTING below if you're experiencing problems with your heater.

TROUBLESHOOTING

Symptom	Problem	Solution
Heater doesn't work at all.	1. Supply connections are loose.	1. Turn off power at main disconnect panel. Inspect and/or tighten all the wire connectors inside the heater and at any connection points inside junction boxes or at the wall thermostat.
	2. Heater has tripped one of its high-temperature safety shutoffs.	2. TO RESET: Turn power off at main disconnect panel. Allow 20 minutes to cool. Make sure heater is not blocked and is clean. Restore power. If the high-temperature safety shutoff trips more than once a day, replace the heater.
	3. Heater has tripped its secondary high-temperature safety shutoff.	3. Replace heater.
	4. Supply circuit is faulty.	4. Call a licensed electrician.
Breaker trips immediately after installing heater.	1. A short circuit exists in the electrical supply wires or heater wiring.	1. An incorrect connection in the heater or electrical supply wires may cause sparking or arcing. Inspect all heater and electrical supply wiring insulation for damage or call an electrician.
	2. Circuit breaker and heater are not the same voltage.	2. Double check the voltage of the heater to make sure it matches the voltage of the circuit. Replace heater with a model that is 240 volts.
	3. Circuit is overloaded.	3. Use a lower wattage heater, or reduce the number of heaters on the circuit.
	4. Supply circuit is faulty.	4. Call a licensed electrician.
Heater blows cold air or doesn't get hot.	1. Element has failed.	1. Replace heater.
	2. Only one side heats and the other side has tripped one of its high-temperature safety shutoffs (Model CST only).	2. TO RESET: Turn power off at main disconnect panel. Allow 20 minutes to cool. Make sure heater is not blocked and is clean. Restore power. If the high-temperature safety shutoff trips more than once a day, replace the heater.
Heater smells after installation or not being used.	1. Odor from element manufacturing process.	1. In a new installation, some smoking may occur as the element initially burns off residue from manufacturing. It typically goes away within several hours.
	2. Dust or lint inside the heater.	2. Clean heater (see "MAINTAINING YOUR HEATER" on page 8 for instructions).
	3. Supply connections are loose.	3. Turn off power at main disconnect panel. Inspect and/or tighten all the wire connectors inside the heater and at any connection points inside junction boxes or at the wall thermostat.
Fan/motor doesn't spin or spins slow.	1. Circuit breaker is 120 volts and heater is 240 volts.	1. Double check the voltage of the heater to make sure it matches the voltage of the circuit. Replace heater with a model that is 120 volts.
	2. Defective motor or motor out of alignment.	2. Replace motor.
Heater doesn't turn off.	1. Thermostat is defective.	1. Replace thermostat.
	2. No thermostat hooked up to control heater.	2. A thermostat is required for all fan heaters. Purchase a built-in or wall thermostat for your heater.
	3. Incorrect heater wattage for room size.	3. Install higher wattage model or additional heaters if circuit allows.

If you are uncomfortable working with electricity, running electrical supply wire or installing a circuit breaker, please consult a licensed electrician.

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