## **OWNER'S GUIDE**



For how-to videos or more information, please visit: <a href="http://cadetheat.com/install/btf">http://cadetheat.com/install/btf</a>

ESPAÑOL ver la guía del propietario en cadetheat.com/espanol/btf







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

- 1. Read all instructions before installing or using this thermostat.
- 2. Use this thermostat only described in this manual. Any other use not recommended by the manufacturer may cause fire, electric shock, or injury to persons.
- 3. 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 or thermostat
- 4. To disconnect thermostat turn off power to heater circuit at main disconnect panel.
- 5. Do not operate any thermostat after it malfunctions. Disconnect power at main disconnect panel and have thermostat inspected by a qualified electrician before reusing.
- 6. A thermostat has arcing or sparking parts inside. Do not use in areas where gasoline, paint, or flammable liquids are stored.

#### **♠ WORKING WITH ELECTRICITY ♠**

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

Unanswered questions? Call our technical support team in Vancouver, Washington at **855.223.3887** or outside the USA 360.693.2505.

#### REQUIRED TOOLS



Wire Strippers



Volt Meter



Wire Connectors



Straight and Phillips Screwdrivers .





1/2" Cable Clamp Connector

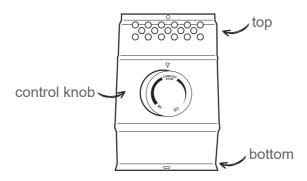
# INSTALLATION INSTRUCTIONS

- 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.
- 2. Use copper conductors only.
- Use only on series F baseboard heaters.
- 4. Turn off power to heater at main disconnect panel.
- 5. Connect grounding lead to grounding screw provided on the heater.
- 6. Use wire connectors (not included) for all connections.

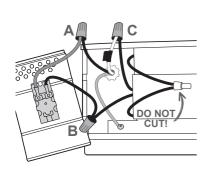
#### TIPS BEFORE YOU BEGIN

- Verify power has been turned off before starting any work!
- Follow the instructions in your Baseboard Owner's Guide (included with your heater) until
  prompted to make thermostat connections.
- **IMPORTANT:** If wiring on the left side, cut **ONLY ONE** factory connection and **ONLY** on the side you will be wiring! If your baseboard is a 120 volt model, cut ONLY the factory connection that has one black and one white wire!

#### PARTS OF YOUR THERMOSTAT



## SINGLE POLE (2-WIRE) BTF1 - 240/208 or 208 VOLT

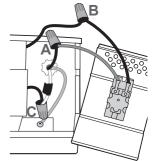


240/208 Volt LEFT SIDE

- **A.** Connect one supply wire to the red thermostat wire.
- **B.** Connect the black thermostat wire to one of the heater wires.
- **C.** Connect the remaining supply wire to the remaining heater wire.

Wrap supply (white) wire with black tape to identify it as hot!

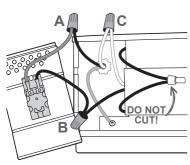
Tuck all the wires back into the individual wiring compartments, and make sure the connections are tight. Attach with small screw at bottom.



240/208 Volt RIGHT SIDE

# **INSTALLATION INSTRUCTIONS**

## SINGLE POLE (2-WIRE) BTF1 - 120 VOLT



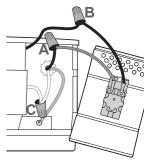
120 Volt LEFT SIDE

**A.** Connect the hot supply wire to the red thermostat wire.

**B.** Connect the black thermostat wire to the black heater wire.

**C.** Connect the neutral (white) supply wire to the white heater wire.

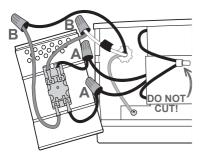
Tuck all the wires back into the individual wiring compartments, and make sure the connections are tight. Attach with small screw at bottom.



120 Volt RIGHT SIDE

Proceed to OPERATING INSTRUCTIONS.

### DOUBLE POLE (4-WIRE) BTF2 - 240/208 or 208 VOLT

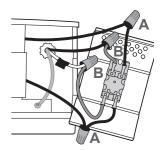


240/208 Volt LEFT SIDE

- **A.** Connect the two black thermostat wires to the two loose heater wires.
- **B**. Connect the two hot supply wires to the two red thermostat wires.

Wrap supply (white) wire with black tape to identify it as hot!

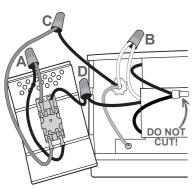
Tuck all the wires back into the individual wiring compartments, and make sure the connections are tight. Attach with small screw at bottom.



240/208 Volt RIGHT SIDE

Proceed to OPERATING INSTRUCTIONS.

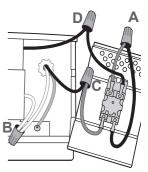
## **DOUBLE POLE (4-WIRE) BTF2 - 120 VOLT**



120 Volt LEFT SIDE

- **A.** Connect the red thermostat wire labeled L2 to the black thermostat wire labeled OFF.
- **B.** Connect the neutral (white) supply wire to the white heater wire.
- **C.** Connect the hot supply wire to the remaining red thermostat wire.
- **D.** Connect the remaining black thermostat wire to the remaining heater wire.

Tuck all the wires back into the individual wiring compartments, and make sure the connections are tight. Attach with small screw at bottom.



120 Volt RIGHT SIDE

# INSTALLATION INSTRUCTIONS

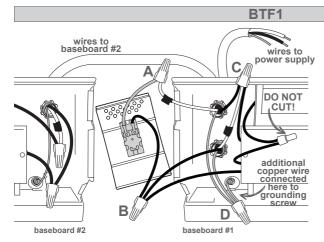
#### **MULTIPLE BASEBOARDS WITH ONE THERMOSTAT**

Multiple baseboards can be wired in parallel on the same circuit (check national and local codes for safety requirements). Additional electrical supply wire and cable clamp connectors are required. The heaters must be in the same room.

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**.

Cut one factory connection on each baseboard on the side you will be wiring. Two sets of electrical supply wire go through two cable clamp connectors of baseboard #1. One set of wires goes to the power supply and the other set goes to baseboard #2.

There are two supply ground wires. You'll need another short piece of copper wire to make the 3-wire connection with the ground screw in baseboard #1.

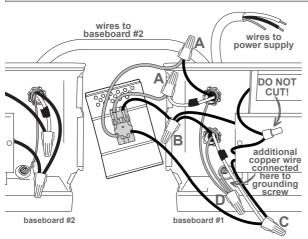


- **A**. Connect one supply wire to the red thermostat wire.
- **B**. Connect the black thermostat wire to one wire from each heater.
- **C**. Connect the remaining wire from each heater to the remaining supply wire.
- **D**. Make a 3-wire connection with the two supply ground wires and the ground screw in heater #1.

For 240 or 208 volt, both black and white supply wires are hot. Wrap supply (white) wires with black tape to identify them as hot!

See Baseboard Owner's Guide for baseboard #2 connections.

#### BTF2



- **A**. Connect each of the two supply wires coming directly from the power supply, to each of the red thermostat wires.
- **B**. Connect one black thermostat wire to one wire from each heater.
- **C**. Connect the remaining black thermostat wire to the remaining wire from each heater.
- **D**. Make a 3-wire connection with the two supply ground wires and the ground screw in heater #1.

For 240 or 208 volt, both black and white supply wires are hot. Wrap supply (white) wires with black tape to identify them as hot!

See Baseboard Owner's Guide for baseboard #2 connections.

Tuck all the wires back into the individual wiring compartments, and make sure the connections are tight. Attach with small screw at bottom.

Proceed to OPERATING INSTRUCTIONS.

# PERATING INSTRUCTION

Make sure all wires are properly connected and installation is complete before you turn on the heater.

Turn power back on at the main disconnect panel.

- 1. Turn the thermostat knob all the way to the right. For tamper proof models, remove small plastic plug first, then turn the thermostat shaft all the way to the right.
- 2. When the room reaches your comfort level, turn the knob/shaft to the left, just until it clicks and the heater turns off. The heater will automatically keep the room temperature at 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.

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

#### 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 ONE YEAR WARRANTY: Cadet will repair or replace any Cadet BTF thermostat found to be defective within one year after the date of purchase.

These warranties do not apply:

1. Damage occurs to the product through improper installation or incorrect supply voltage;

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 Cadet website or call customer service at 855.223.3887 or 360.693.2505 for list of authorized accessories and

components.
4. CADET'S WARRANTY IS LIMITED TO REPAIR OR REPLACEMENT.

5. IN THE EVENT CADET ELECTS TO REPLACE ANY PART OF YOUR CADET 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 CADET PRODUCT OR PART DOES NOT CREATE ANY NEW WARRANTIES.

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

Parts and Service

Visit <u>cadetheat.com/parts-service</u> for information on where to obtain parts and service.

### To register your product, visit <u>cadetheat.com/product-registration</u>



#### 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.

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