



# OPERATION INSTRUCTIONS FOR THE FLUSH FIT REGISTER BOOSTER™

## READ AND SAVE THESE INSTRUCTIONS

### IMPORTANT NOTICE

MODEL: HC500

With the use of any electrical appliance, it is important to observe all basic precautions to minimize the risk associated with use, such as electrical shock, fire, or injury to persons. Read these instructions before using your Flush Fit Register Booster™.

### NEVER EXPOSE YOUR FLUSH FIT REGISTER BOOSTER™ TO TEMPERATURES OVER 140°F (60°C)

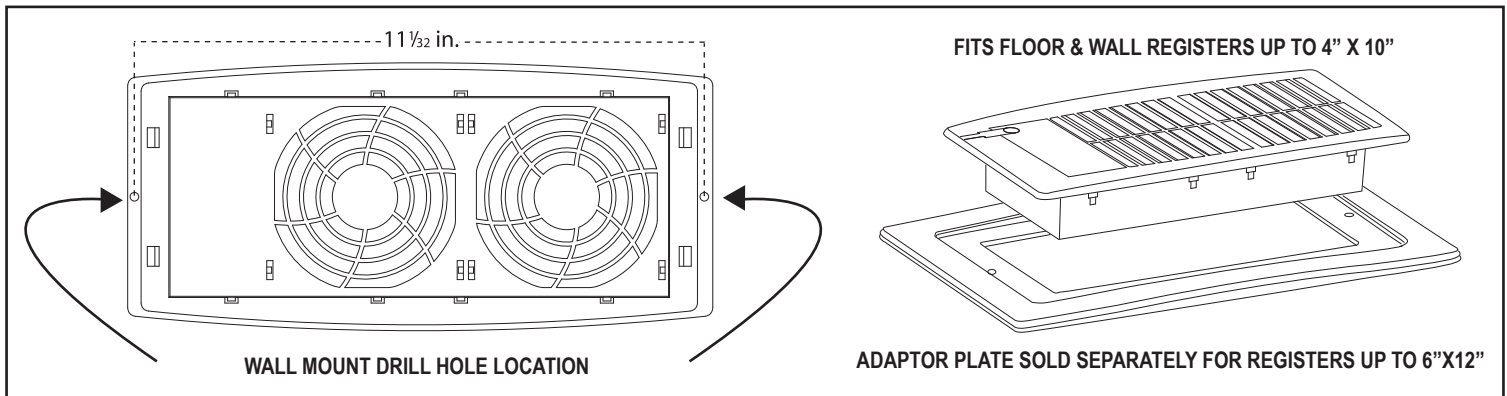
#### IMPORTANT WARNINGS

1. The Flush Fit Register Booster™ will be as warm as the air that is delivered from the register of your forced air furnace and/or cooling system. The maximum temperature for the register is 140° Fahrenheit or 60° Centigrade. Your Flush Fit Register Booster™ should never be exposed to higher temperatures or temperatures below freezing.
2. Do not in any way block the air grilles of the Flush Fit Register Booster™. Pressure on the bottom or top grilles of the Flush Fit Register Booster™ may cause the fan impeller to contact these grilles and damage the unit.
3. Unplug the Flush Fit Register Booster™ when not in use. Turn the unit off before unplugging.
4. Do not operate the Flush Fit Register Booster™ with a damaged plug or cord, if the unit malfunctions, becomes noisy when operating, has been dropped or otherwise damaged, or if the housing is damaged or broken. Discard or return the unit for inspection, replacement, or repair.
5. Do not run cord under carpeting. Do not cover cord with throw rugs, runners, or similar coverings. Do not route cord under furniture or appliances. Arrange cord away from traffic area and where it will not be tripped over.
6. The Flush Fit Register Booster™ should never be exposed to moisture. Do not use the unit in an open window, bathroom, or laundry area where it may come in contact with water.
7. The Flush Fit Register Booster™ is designed for indoor use only.
8. Never insert any object or allow any object to enter the Flush Fit Register Booster™ through the bottom or top grilles, as this may damage the unit or cause it to malfunction.
9. Do not use the Flush Fit Register Booster™ near flammables such as gasoline, paint, or natural gas.
10. The Flush Fit Register Booster™ is intended for use as described in the instructions only. Other use may cause fire, electrical shock, damage to the unit, or injury to persons and will void any warranty by the manufacturer.
11. Do not use strong detergents or flammable liquids to clean the Flush Fit Register Booster™.
12. The housing of your Flush Fit Register Booster™ is sealed at the factory. THERE ARE NO SERVICEABLE PARTS INSIDE. Attempting to open the housing will expose you to dangerous electricity, may cause fire and will void any and all warranty.

#### INSTALLATION **DO NOT INSTALL IN CEILING.**

##### (4" X 10") WALL REGISTER APPLICATIONS

1. Drill (two) holes with a 3/16" drill bit from the bottom side of the Flush Fit Register Booster™ grille. The holes should be drilled in the pre-molded location as pictured below.
2. Secure the Flush Fit Register Booster™ in place.



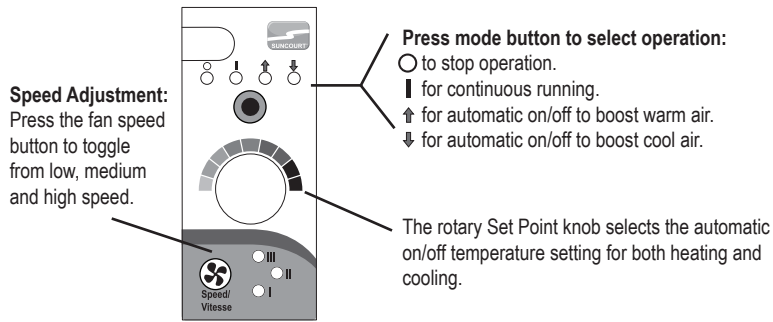
#### CLEANING AND MAINTENANCE

Before cleaning the Flush Fit Register Booster™ disconnect the power cord from the outlet. Dust may be removed from the exterior surfaces using a soft cloth, the round brush attachment of your vacuum cleaner, or a cloth that has been lightly moistened with water and a mild, non-abrasive detergent. Dust accumulation in the interior of the unit may be removed by using the small round brush attachment of your vacuum cleaner. Accumulation of dust in the interior will be minimized by regular replacement of your furnace filter as recommended by the manufacturer.

#### ONE YEAR LIMITED WARRANTY

Subject to the following limitations, Suncourt Inc. (manufacturer) warrants that the Flush Fit Register Booster™ will, for 1 (one) year from date of original retail purchase, but not exceeding 2 (two) years from date of manufacture, remain free from appearance of defects in workmanship or materials. This warranty is subject to the following limitations: (a) manufacturer's liability is limited to the replacement or repair of the unit, as decided by the manufacturer; (b) a defective unit must be returned, prepaid, with proof of purchase, well packaged to avoid damage in transit; and (c) this warranty does not apply to defects resulting from the alteration, abuse, accidental damage, unauthorized repair, or misuse of the unit. This warranty is given in lieu of all other warranties, guarantees, and conditions on manufacturer's part, and the manufacturer shall have no tortious or other liability in respect to this Flush Fit Register Booster™. Ship unit to Suncourt Inc. only after obtaining a Return Goods Authorization (RGA) number. Returns without this RGA number will not be accepted. Actual product appearance may differ from illustrations. Suncourt reserves the right to modify any or all of its products' features, designs, components and specifications without notice.

## OPERATION SETTINGS



## STEPS FOR HEATING MODE

When the HEAT (↑) light is on, the Flush Fit Register Booster™ will turn on as temperature rises.

**Allow your unpacked unit to acclimate to room temperature for several hours before applying power or making initial settings.**

1. Start the operation settings with the Flush Fit Register Booster™ in the register and when the forced air system is not running.
2. Remove the register and insert the Flush Fit Register Booster™ in the opening. Insert the small end of the power supply cord into the receptacle on the Flush Fit Register Booster™. Plug the power supply into your 110V outlet. Additional length can be added to the power supply cord using a 2.1mm ID / 5.5mm OD low-voltage extension cord.
3. Press the mode button until the OFF light is lit. The OFF light will dim 4 seconds after this mode selection is confirmed.
4. Turn the rotary setpoint knob clockwise until it stops. DO NOT FORCE.
5. Press the mode button twice. The red HEAT (↑) light will be lit and the fans will not be operating.
6. Wait for your furnace to start. Allow 60 seconds of furnace blower operation before proceeding to next step.
7. Slowly turn the rotary setpoint knob counterclockwise until the fans turn on. Move the dial across one "square" each 4 to 5 seconds.
8. The Flush Fit Register Booster™ is now set to turn on when the warm air from the furnace reaches the register boot.
9. Allow the furnace cycle to end and observe that the fans turn off. If your furnace has a 'purge' cycle (60 seconds of blower operation after heat has stopped), the fans should stop toward the end of the purge cycle or several seconds later. If your furnace does not have a purge cycle, the fans will continue operating after the blower has ended until the air in the ductwork is no longer warm.
10. Observe the next furnace cycle and make note of when the Flush Fit Register Booster™ fans turn on.
  - a. If the fans do not start soon enough (within 60 seconds of furnace blower operation), move the dial slightly more counterclockwise to choose a lower starting temperature setpoint.
  - b. If the fans never turn on at all during the furnace cycle, move the dial slightly more clockwise to choose a higher temperature setpoint. The Flush Fit Register Booster™ must detect a temperature drop in between furnace cycles that is several degrees below the setpoint. A setpoint that is too low (too close to room temperature) will not allow the unit to operate.

## STEPS FOR COOLING MODE

When the COOL (↓) light is on, the Flush Fit Register Booster™ will turn on as temperature drops.

**Allow your unpacked unit to acclimate to room temperature for several hours before applying power or making initial settings.**

1. Start the operation settings with the Flush Fit Register Booster™ in the register and when the forced air system is not running.
2. Remove the register and insert the Flush Fit Register Booster™ in the opening. Insert the small end of the power supply cord into the receptacle on the Flush Fit Register Booster™. Plug the power supply into your 110V outlet. Additional length can be added to the power supply cord using a 2.1mm ID / 5.5mm OD low-voltage extension cord.
3. Press the mode button until the OFF light is lit. The OFF light will dim 4 seconds after this mode selection is confirmed.
4. Turn the rotary setpoint knob counterclockwise until it stops. DO NOT FORCE.
5. Press the mode button three times. The blue COOL (↓) light will be lit and the fans will not be operating.
6. Wait for your air conditioning to start. Allow 60 seconds of central blower operation before proceeding to next step.
7. Slowly turn the rotary setpoint knob clockwise until the fans turn on. Move the dial across one "square" each 4 to 5 seconds.
8. The Flush Fit Register Booster™ is now set to turn on when the cool air from the A/C reaches the register boot.
9. Allow the A/C cycle to end and observe that the fans turn off. If your central blower has a 'purge' cycle (60 seconds of blower operation after cooling has stopped), the fans should stop toward the end of the purge cycle or several seconds later. If your central blower does not have a purge cycle, the fans will continue operating after the blower has ended until the air in the ductwork is no longer cool.
10. Observe the next A/C cycle and make note of when the Flush Fit Register Booster™ fans turn on.
  - a. If the fans do not start soon enough (within 60 seconds of central blower operation), move the dial slightly more clockwise to choose a higher starting temperature setpoint.
  - b. If the fans never turn on at all during the A/C cycle, move the dial slightly more counterclockwise to choose a lower temperature setpoint. The Flush Fit Register Booster™ must detect a temperature rise in between A/C cycles that is several degrees above the setpoint. A setpoint that is too high (too close to room temperature) will not allow the unit to operate.

To reduce observable noise, select the lowest fan speed that adequately delivers the required air to the room.

The Flush Fit Register Booster's™ memory will retain all settings automatically (speed, function, and temperature set point). The HC500 has 3 speeds.

## HEAT-COOL SETTING LOGIC

This device is designed to turn on and off from temperature rise and fall. If you want the Flush Fit Register Booster™ to turn on with warm air from your furnace set the mode to HEAT (↑). If you want the Flush Fit Register Booster™ to turn on with cool air from the A/C set the mode to COOL (↓). In either mode the fans will start when the temperature rises/falls above/below the setpoint. The fans will stop when the sensor detects the end of the heating/cooling cycle or if the temperature returns to the initial setpoint (whichever occurs first).

Settings should be done with the highest fan speed selected so that verification of operation in steps 7 and 9 is readily apparent.