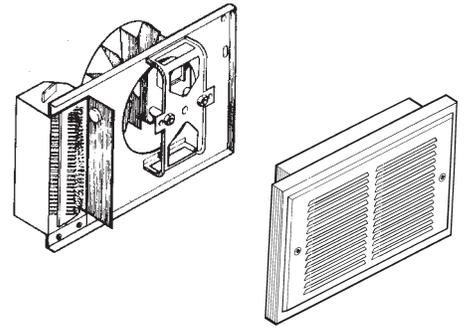




# MODELS 165F AND 167F FAN FORCED WALL HEATERS FINISH ASSEMBLIES

FOR USE WITH BROAN MODEL 171H ROUGH-IN HOUSING



## READ AND SAVE THESE INSTRUCTIONS

### WARNING

1. ALL ELECTRICAL WORK MUST BE DONE IN ACCORDANCE WITH LOCAL OR NATIONAL ELECTRICAL CODE AS APPLICABLE. **FOR SAFETY, THIS PRODUCT MUST BE GROUNDED.** IF YOU ARE UNFAMILIAR WITH METHODS OF INSTALLING ELECTRICAL WIRING, SECURE THE SERVICES OF A QUALIFIED ELECTRICIAN.
2. WHEN WIRING, SERVICING OR CLEANING THIS UNIT, TURN OFF POWER AND LOCK OUT SERVICE PANEL. FAILURE TO DO SO COULD ALLOW OTHERS OR THERMOSTAT TO TURN ON POWER UNEXPECTEDLY WHICH MAY CAUSE FATAL ELECTRICAL SHOCK.
3. 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.
4. DO NOT install this unit in an area where chemicals or other flammables are stored or used. Explosion and fire may result.

### CAUTION

1. This product may **ONLY** be installed horizontally in a wall. **DO NOT MOUNT IN ANY OTHER POSITION.**
2. Install heater at least 6" from floor or any adjacent vertical surface.
3. DO NOT locate heater behind a door, furniture, drapes, etc., where the air flow to the unit would be restricted.
4. Provide heater with an appropriately-rated electrical circuit to prevent tripped breakers or blown fuses. (See chart below).
5. **DO NOT CONNECT HEATER TO DIMMER SWITCH OR SPEED CONTROL.**
6. To avoid motor bearing damage and noisy and/or unbalanced impellers, keep drywall spray, construction dust, etc., off power unit.
7. Please read specification label on product for further information and requirements.

## PLAN THE INSTALLATION

This wall heater finish assembly is intended for installation into a Broan Model 171H rough-in housing — after the wall has been completed.

The heater can be operated using the Broan Model 86 Line-Voltage Thermostat from a wall location or the Broan Model 83 Integral Thermostat installed into heater. Purchase the control separately.

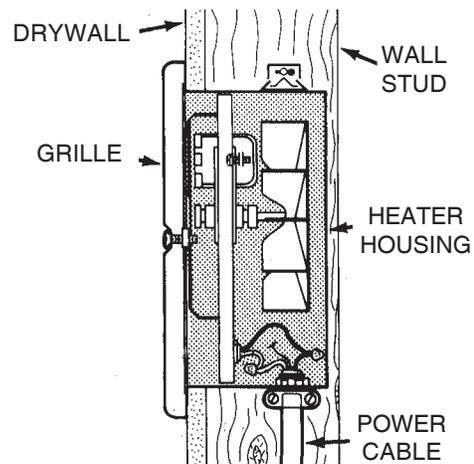
The table below lists the ratings for each model.

MODELS	VOLTS	AMPS	WATTS	BTU/HR
165F	120	4.17	500	1707
	<b>240</b>	<b>2.08</b>	<b>500</b>	<b>1707</b>
	208	1.8	375	1280
167F	<b>240</b>	<b>3.13/6.25</b>	<b>750/1500</b>	<b>2560/5120</b>
	208	2.71/5.41	563/1125	1922/3840

**BOLD** ratings are factory wired. See "OPTIONAL WIRING CONVERSIONS" section on pages 2 and 3 for wattage and voltage conversion instructions.

Follow these basic steps when installing this heater:

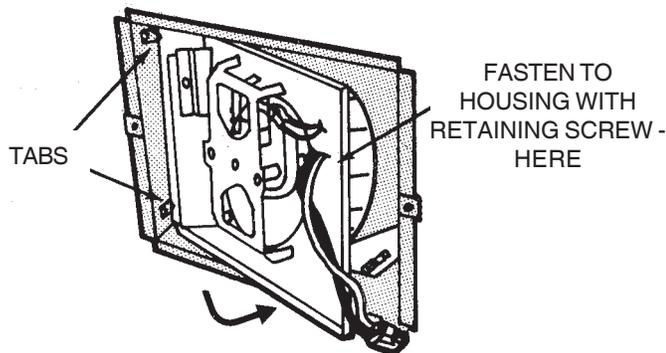
- Remove the housing mask.
- Fasten finish assembly inside housing.
- Plug assembly in.
- Attach grille.



# INSTALL THE HEATER ASSEMBLY

## 1. Remove housing mask.

Make sure wall has been finished (including paint or wall paper, etc.) Take out and discard the cardboard mask from inside of housing.



## 2. Install heater assembly into housing.

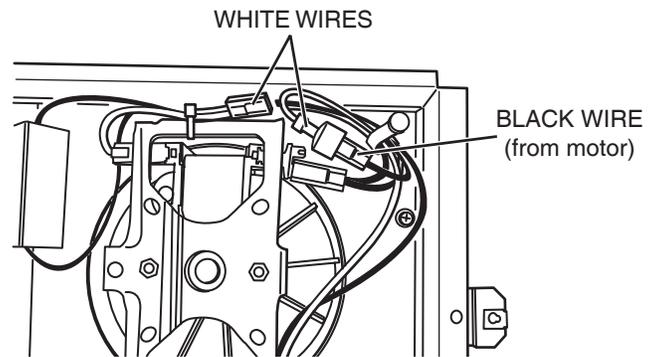
Place element end of heater assembly behind the tabs on the left side of housing. Pivot the assembly in and fasten with retaining screw from parts bag. Plug wiring harness into receptacle. Plug wiring harness into receptacle.

## 3. Provide desired control.

The heater finish assembly has no adjustable thermostat control. If a wall-mounted control has been pre-wired, nothing else need be done. If a built-in thermostat is desired, purchase and insert the Broan Model 83 Integral Thermostat at this time.

# OPTIONAL WIRING CONVERSIONS

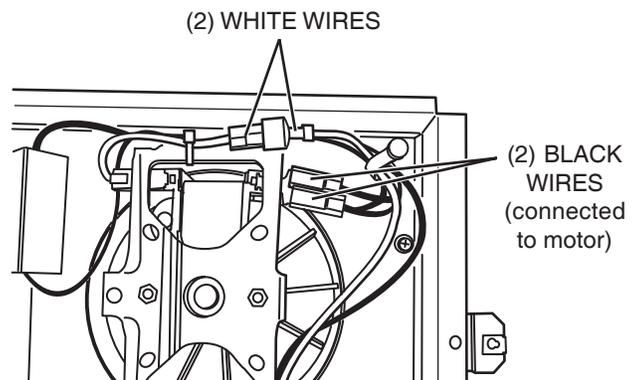
## MODEL 165F



### 240 VAC to 120 VAC Conversion.

This heater can be converted to operate on 120 VAC.

1) Disconnect black wire from white wire.

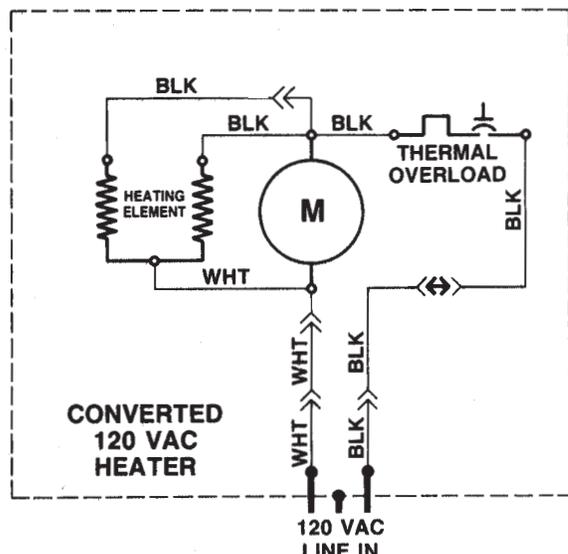
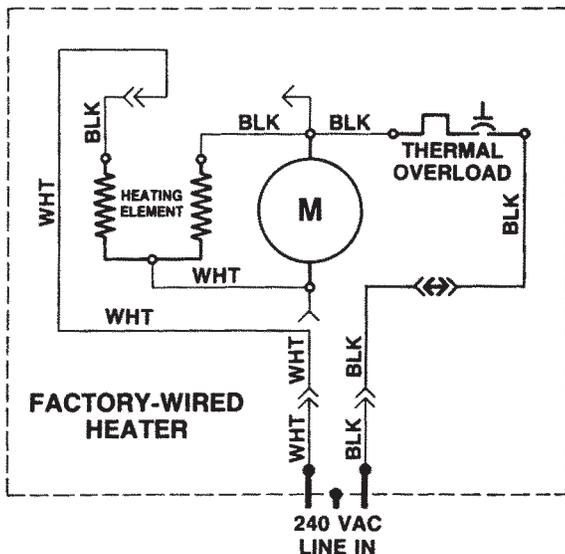


2) Connect the two (2) white wires with insulated terminals to each other.

3) Connect black wire to terminal on motor.

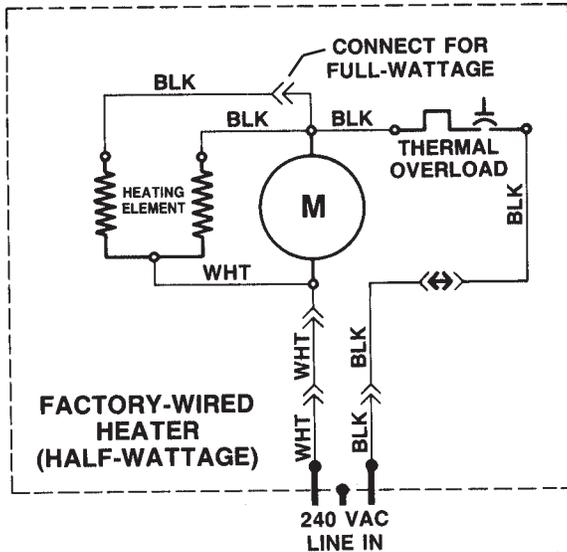
# WIRING DIAGRAM

## MODEL 165F

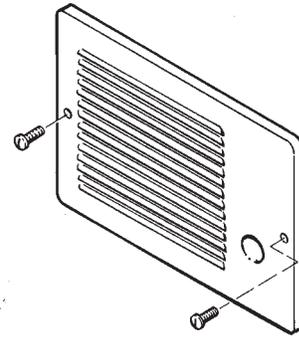


## WIRING DIAGRAM

### MODEL 167F



## COMPLETE THE INSTALLATION



### 1. Attach grille.

Fasten grille to heater with two (2) screws from parts bag.

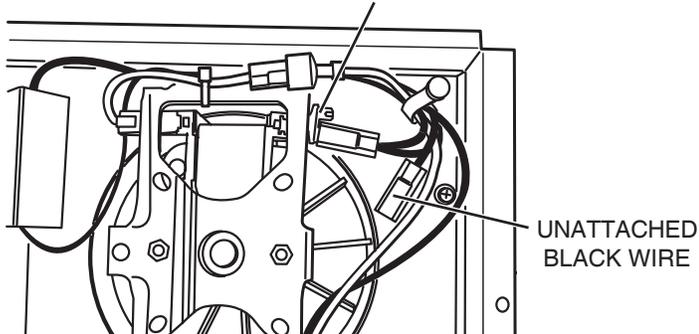
### 2. Check operation.

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.

## OPTIONAL WIRING CONVERSION

### MODEL 167F

MOTOR TERMINAL



### 1. Conversion to full wattage.

The heater will produce more heat and use more electricity if converted to full wattage.

Connect the unattached black wire with the insulated terminal to motor terminal.

## USE AND CARE

### WARNING

**DISCONNECT ELECTRIC POWER AT SERVICE ENTRANCE BEFORE CLEANING OR SERVICING UNIT.**

### THERMAL OVERLOAD PROTECTOR

If heater fails to operate when thermostat is turned to its highest setting: Turn power off at service entrance. Remove grille and press button marked "RESET".

### CLEANING

Clean the heater using the round brush tool on your vacuum cleaner. Remove large accumulations of dust, lint, etc., that might impede the flow of air through the heater. Such blockage will lower its efficiency and create a possible over-heating condition.

To clean grille, use a soft cloth which has been moistened with household window cleaner.

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

### Broan-NuTone LLC One Year Limited Warranty

Broan-NuTone LLC warrants to the original consumer purchaser of its products that such products will be free from defects in materials or workmanship for a period of one year from the date of original purchase. THERE ARE NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

During this one-year period, Broan-NuTone LLC will, at its option, repair or replace, without charge, any product or part which is found to be defective under normal use and service.

THIS WARRANTY DOES NOT EXTEND TO FLUORESCENT LAMP STARTERS AND TUBES. This warranty does not cover (a) normal maintenance and service or (b) any products or parts which have been subject to misuse, negligence, accident, improper maintenance or repair (other than by Broan-NuTone LLC), faulty installation or installation contrary to recommended installation instructions.

The duration of any implied warranty is limited to the one-year period as specified for the express warranty. Some states do not allow limitation on how long an implied warranty lasts, so the above limitation may not apply to you.

BROAN-NUTONE LLC'S OBLIGATION TO REPAIR OR REPLACE, AT BROAN-NUTONE LLC'S OPTION, SHALL BE THE PURCHASER'S SOLE AND EXCLUSIVE REMEDY UNDER THIS WARRANTY. BROAN-NUTONE LLC SHALL NOT BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES ARISING OUT OF OR IN CONNECTION WITH PRODUCT USE OR PERFORMANCE. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

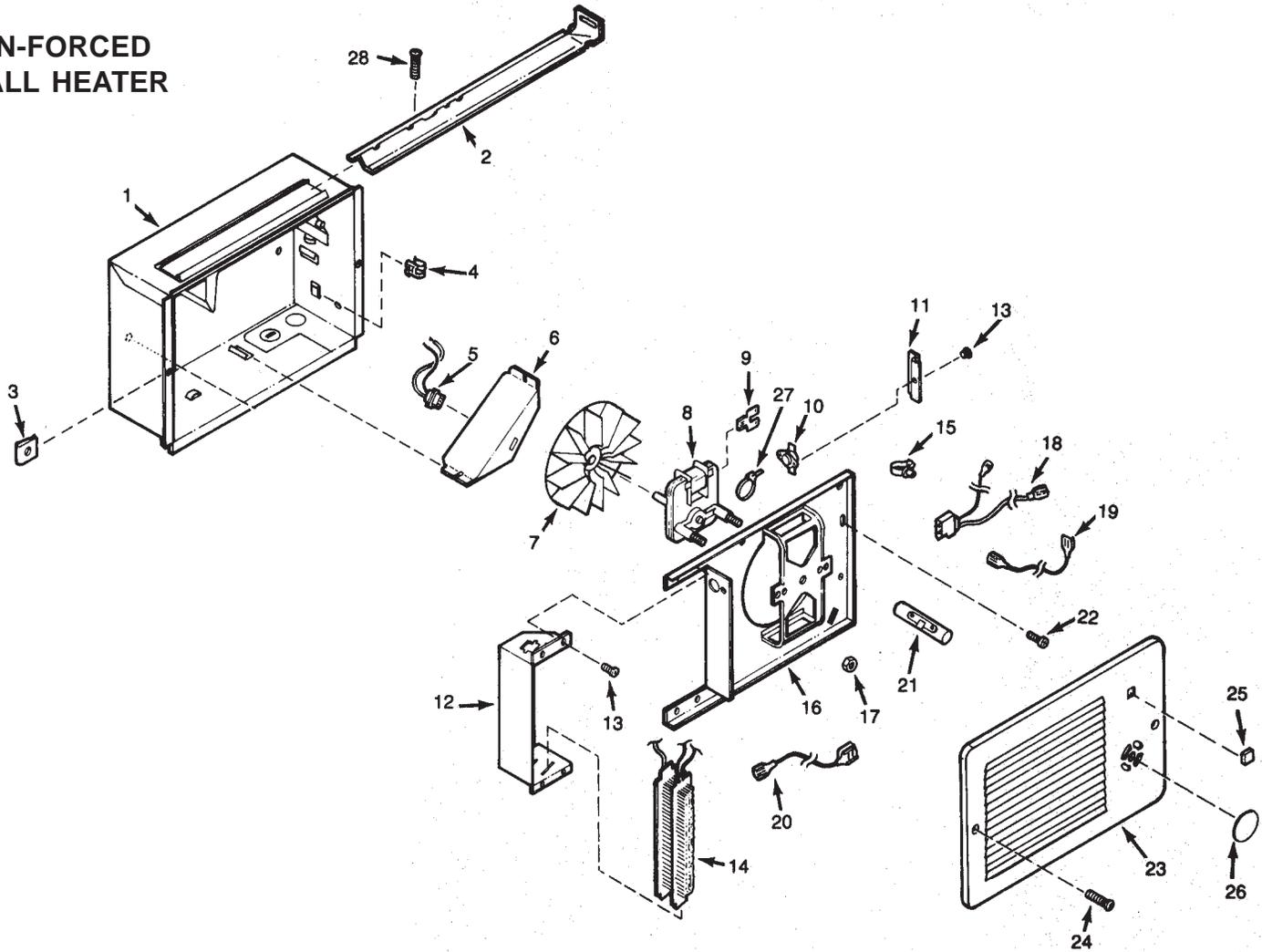
This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state. This warranty supersedes all prior warranties.

To qualify for warranty service, you must (a) notify Broan-NuTone LLC at the address or telephone number below, (b) give the model number and part identification and (c) describe the nature of any defect in the product or part. At the time of requesting warranty service, you must present evidence of the original purchase date.

Broan-NuTone LLC, 926 West State Street, Hartford, WI 53027 (1-800-637-1453)

## SERVICE PARTS

### FAN-FORCED WALL HEATER



KEY NO.	PART NUMBER	DESCRIPTION
1	97008681	Housing
2	98003036	Mounting Bracket (2 Required)
3	99260512	#8-18 Sheet Metal Nut (2 Required)
4	99390015	Grounding Clip
5	97005422	Receptacle Assembly
6	98006975	Wiring Cover
7	99020130	Blower Wheel
8	99080248	Motor (Model 165F)
	99080276	Motor (Model 167F)
9	99270735	Tab Adapter
10	99030194	Thermal Overload
11	99271091	Guard
12	98006974	Element Bracket
13	99150491	Screw, #8-18 x 3/8 Ph. Pan Head (5 Required)
14	99270757	Heating Element (Model 167F)
	99270742	Heating Element (Model 165F)
15	93270619	Wire Clamp
16	97008682	Partition Plate Assembly

KEY NO.	PART NUMBER	DESCRIPTION
17	99260428	Nut, #6-32 x 5/16 Keps (2 Required)
18	97008675	Plug Assembly
19	97008677	Thermostat Wire Assembly
20	97008678	Overload Wire Assembly
21	99270743	Terminal Jumper
22	99150533	Screw, #8-18 x 5/8 Ph. Pan Head
23	98006970	Grille
24	99150528	Grille Screw (2 Required)
25	99090681	Grille Logo
26	99090688	Cover Label
27	93270493	Wire Tie
28	99150470	Screw, #8-18 x 3/8 Ph. Truss Hd.

Always order replacement parts by part number - NOT key number.