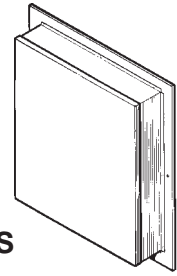




# MODELS 331H & 332H EXTERIOR MOUNTED BLOWER



FOR USE WITH RANGEMASTER HOODS AND ECLIPSE DOWNDRAFT VENTILATORS

## READ AND SAVE THESE INSTRUCTIONS

### WARNING

**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. Sufficient air is needed for proper combustion and exhausting of gases through the flue (chimney) of fuel burning equipment to prevent backdrafting. Follow the heating equipment manufacturer's guideline and safety standards such as those published by the National Fire Protection Association (NFPA), and the American Society for Heating, Refrigeration and Air Conditioning Engineers (ASHRAE), and the local code authorities.
5. When cutting or drilling into wall, or ceiling, do not damage electrical wiring or other hidden utilities.

### WARNING

6. Ducted fans must always be vented to the outdoors.
7. To reduce risk of fire, use only metal ductwork.
8. This unit must be grounded.

### CAUTION

1. For general ventilating use only. Do not use to exhaust hazardous or explosive material and vapors.
2. To avoid motor bearing damage and noisy and/or unbalanced impellers, keep drywall spray, construction dust, etc. off power unit.
3. Please read specification label on product for further information and requirements.
4. Electrical circuit, including speed control, (if used), must be rated 6 AMPS minimum for Model 332H or 3 AMPS minimum for Model 331H.

**Important when using Model 332H with the Broan Eclipse Downdraft Models 2830-A or 2836-A: Purchase a #97011927 Speed Control Kit from your Broan distributor to replace the speed control in your downdraft.**

### SPECIFICATIONS

| MODEL | VOLTS | AMPS | CFM | DUCT SIZE |
|-------|-------|------|-----|-----------|
| 331H  | 120   | 2.4  | 600 | 10" DIA.  |
| 332H  | 120   | 5.7  | 900 | 10" DIA.  |

### PLAN THE INSTALLATION

#### ALL INSTALLATIONS

1. Locate the blower so the length of the duct run and number of elbows and transitions needed are kept to a minimum.  
**Please note - when using blower with the Broan Eclipse Downdraft: The downdraft has a 3¼" x 10" discharge. Transitions are available to connect it to the 10" round inlet on this exterior-mounted blower.**
2. Where possible, blower should be centered between wall studs or roof rafters.

### PLAN THE INSTALLATION

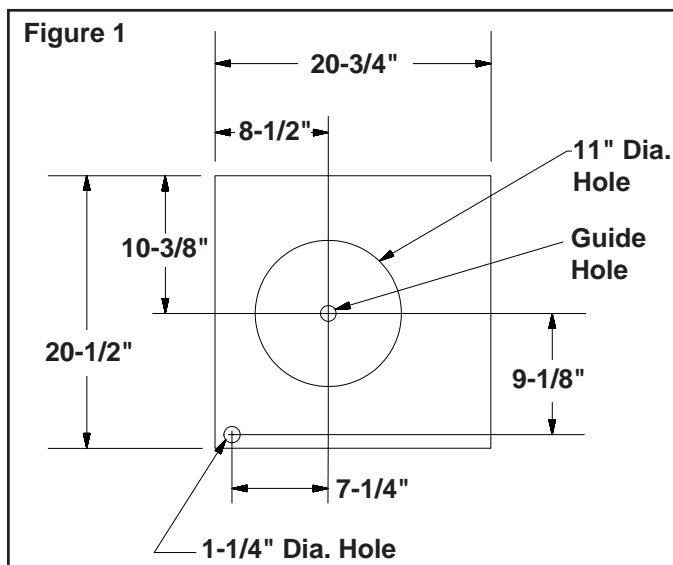
3. Avoid pipes, wires, or other ductwork that may be running through the wall.
4. Be sure that there is enough space for any transitions that may be needed between the blower and the connecting ductwork.
5. For best performance, locate transitions nearest to ventilator (i.e. downdraft).

**INSTALLER: Leave This Manual With The Homeowner  
HOMEOWNER: Use And Care Information On Page 3**

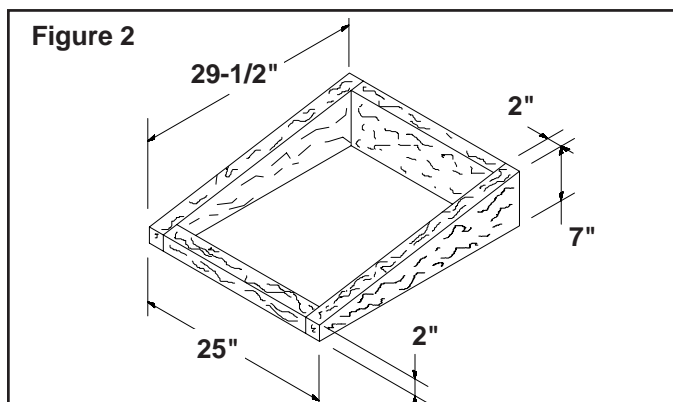
## PREPARE THE INSTALLATION LOCATION

### ROOF INSTALLATIONS

1. Locate the blower on the rear slope of the roof. Place it in a location to minimize duct run. The location should be free of obstacles (T.V. leads, electrical lines, etc.). Bear in mind, if the blower top is level with the roof peak, it will not be seen from the street. Keep this approximate location in mind as you work from within the attic.
2. Mark a point halfway between rafters.
3. Drill a guide hole through the roof at this point.



4. From the outside, use the guide hole as a starting point and mark the rectangular cutout and remove only the shingles in this area. See Figure 1.
5. Mark an 11" diameter circle centered on the guide hole and mark the center of the 1-1/4" diameter electrical wiring hole. See Figure 1.
6. Cut out the roof board(s) along the 11" diameter circle and drill a 1-1/4" hole as marked.

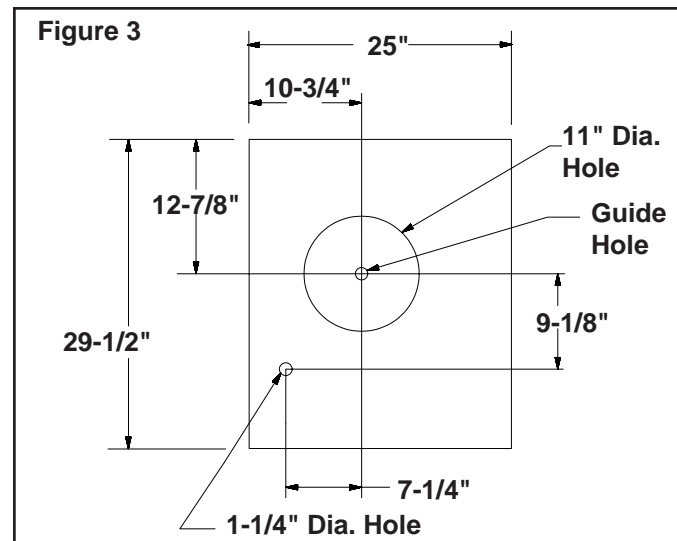


7. For flat roof installations, build a curb that will mount the blower at a minimum pitch of 2/12. See Figure 2. Discharge end of the blower should be pointed away from prevailing winds.

## PREPARE THE INSTALLATION LOCATION

### WALL INSTALLATIONS

1. Choose a position on the outside wall. Make sure that no wall studs, pipes or wires run through the opening area.
2. Drill a guide hole at the center of the opening area.



3. Mark a 25" by 29-1/2" rectangle on wall located from guide hole as shown in Figure 3.
4. Cut a rectangular hole in the siding only. Do not cut the sheathing. Nail down all siding ends.
5. Mark an 11" diameter circle centered on the guide hole and mark the center of the 1-1/4" diameter electrical wiring hole.
6. Cut the 11" diameter hole in the sheathing and drill the 1-1/4" hole as marked.

## PREPARE THE BLOWER

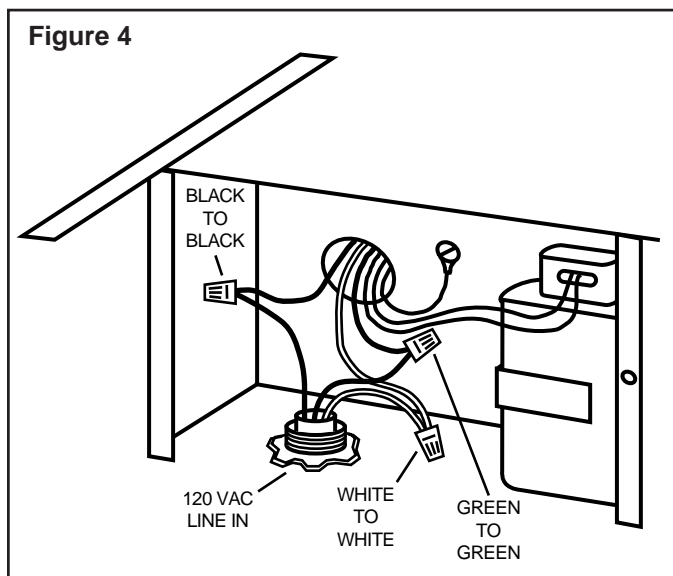
### ALL INSTALLATIONS

1. Unpack the blower assembly.
2. Remove the cover and screws.
3. Remove and discard cardboard from blower wheel.
4. Remove the wiring box cover and screws.
5. Attach an appropriate U.L. approved cable connector in the hole at the rear of the wiring box.

## INSTALL THE BLOWER

### ROOF INSTALLATIONS

1. Remove roofing nails from the upper 2/3 of the shingles around the cutout area and carefully lift the shingles to allow the back flashing sheet on the blower housing to fit under them.
2. Center the blower ring in the 11" diameter hole, making sure that the 1-1/4" diameter electrical wiring hole aligns with the hole in the wiring box.
3. Attach the blower to the roof with the six screws provided. All six holes in the back panel must be filled, or any moisture that may get inside the housing could leak into the house.
4. Using a good grade of roofing cement, seal all of the shingles around the housing and flashing sheet as well as the mounting screw heads.
5. Bring electrical wiring through the hole in the wiring box and secure it according to local codes.



6. Make the electrical connections with the proper connector for the type of wiring being used. Connect white to white, black to black, and the green or bare wire to green. See Figure 4.
7. Replace wiring box cover and screws. Do not pinch wiring under the cover.
8. Check for free movement of the damper before installing housing cover and screws.
9. Turn on power and check operation of the blower.

## INSTALL THE BLOWER

### WALL INSTALLATIONS

1. Place a large bead of caulk on the back side of the housing along the outer edge.
2. Center the blower ring in the 11" diameter hole, making sure that the 1-1/4" diameter electrical wiring hole aligns with the hole in the wiring box.
3. Attach blower to the wall with the six screws provided. All six holes in the back panel must be filled, or any moisture that may get inside the housing could leak into the house.
4. Using a good grade of caulk, seal all around the mounting screw heads.
5. Bring electrical wiring through the hole in the wiring box and secure it according to local codes.
6. Make the electrical connections with the proper connector for the type of wire being used. Connect white to white, black to black, and green or bare wire to green. See Figure 4.
7. Replace wiring box cover and screws. Do not pinch wiring under cover.
8. Check for free movement of the damper before installing housing cover and screws.
9. Turn on power and check operation of the blower.
10. Top and side flanges of the back plate may be covered with trim strips. Do not block grille opening at bottom with trim. It will adversely affect performance of the blower.

## USE AND CARE

Disconnect electrical power supply and lock out service panel before cleaning or servicing this unit.

### CLEANING

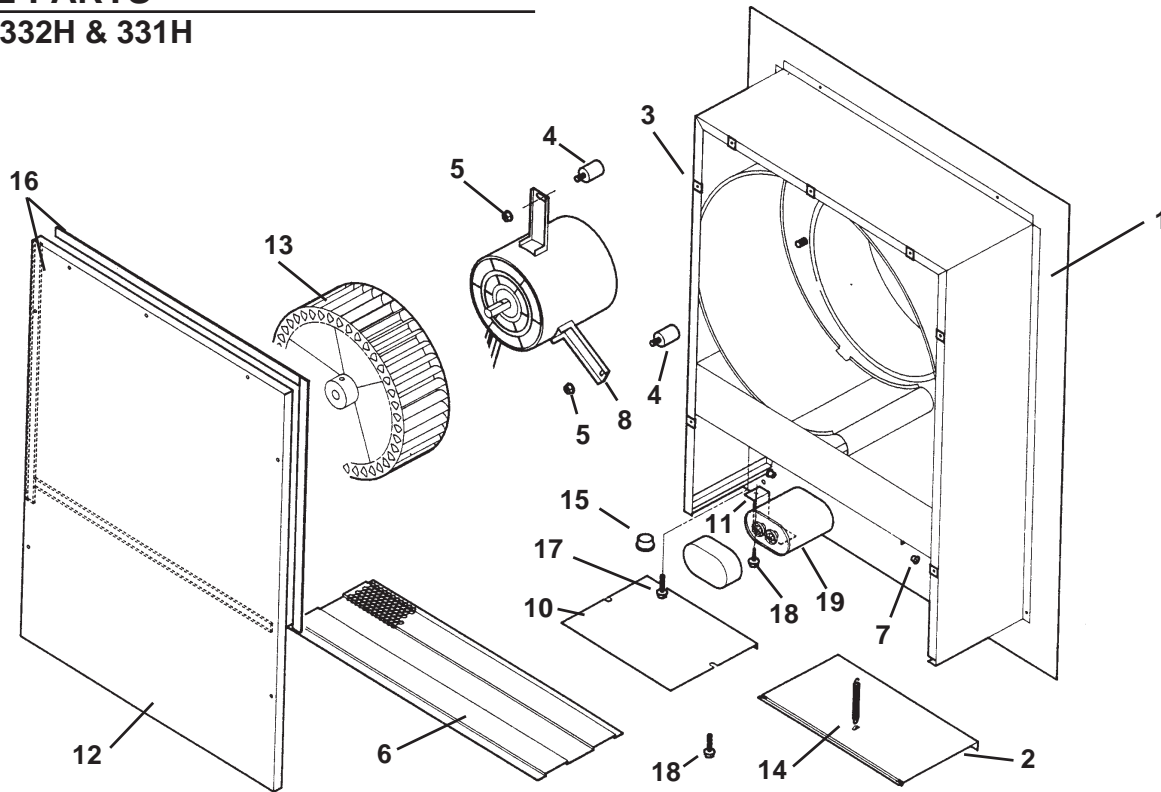
Remove cover and carefully vacuum blower and inside of housing. Be careful not to bend or otherwise damage blower wheel.

### MOTOR LUBRICATION

The motor is permanently lubricated. Do not oil or disassemble motor.

# SERVICE PARTS

## MODELS 332H & 331H



### BROAN-NUTONE ONE YEAR LIMITED WARRANTY

Broan-NuTone 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 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), 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'S OBLIGATION TO REPAIR OR REPLACE, AT BROAN-NUTONE'S OPTION, SHALL BE THE PURCHASER'S SOLE AND EXCLUSIVE REMEDY UNDER THIS WARRANTY. BROAN-NUTONE 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 at the address stated below or telephone: 1-800-637-1453, (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)

**NuTone, Inc.**, 4820 Red Bank Road, Cincinnati, OH 45227  
(1-800-543-8687)

| KEY NO. | PART NO. | DESCRIPTION                              |
|---------|----------|--|
| 1       | 97011795 | Airbox Assembly                          |
| 2       | 98008507 | Damper                                   |
| 3       | 93260454 | Sheet Metal Nut, #18-18 U-Type (7 req.)* |
| 4       | 99100484 | Isolator (3 req.)                        |
| 5       | 99260477 | Whiz Nut, 1/4" - 20 (3 req.)*            |
| 6       | 98008511 | Grille                                   |
| 7       | 99100379 | Heyco Damper (2 req.)                    |
| 8       | 99080396 | Motor W/Capacitor (Model 332)            |
|         | 99080397 | Motor W/Capacitor (Model 331)            |
| 10      | 98008509 | Wiring Box Cover                         |
| 11      | 98008588 | Capacitor Clamp                          |
| 12      | 98008510 | Airbox Cover                             |
| 13      | 99020263 | Blower Wheel (Model 332)                 |
|         | 99020264 | Blower Wheel (Model 331)                 |
| 14      | 99140145 | Damper Spring                            |
| 15      | 99400055 | Heyco                                    |
| 16      | 99100517 | Foam Seal (4 req.)                       |
| 17      | 99150471 | Hex Screw, #10 - 32 x 1/2"               |
| 18      | 99150535 | Hex Screw, #8-16 x 3/8 (2 Req.)*         |
| 19      | 99271110 | Capacitor 15 MFD                         |

\* Standard Hardware - May be purchased locally.

Always order replacement parts by Part No., not Key No.