

## INSTALLATION INSTRUCTIONS

# BROAN® *Elite*



HB0037

## MODEL E662

**⚠ INTENDED FOR DOMESTIC COOKING ONLY ⚠**

**READ AND SAVE THESE INSTRUCTIONS**

INSTALLER: LEAVE THIS MANUAL WITH HOMEOWNER.  
HOMEOWNER: USE AND CARE INFORMATION ON PAGE 10.

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)  
Broan-NuTone Canada Inc., 1140 Tristar Drive, Mississauga, ON L5T 1H9 (1-888-882-7626)

REGISTER YOUR PRODUCT ON LINE AT: [www.broan.com/register](http://www.broan.com/register)

V06800 rev. E

## **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 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 qualified personnel 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 guidelines 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 and other hidden utilities.
6. Ducted fans must always be vented to the outdoors.
7. Do not use this unit with any solid-state speed control device.
8. To reduce the risk of fire, use only metal ductwork.
9. This unit must be grounded.

### **TO REDUCE THE RISK OF A RANGE TOP GREASE FIRE:**

- a) Never leave surface units unattended at high settings. Boilovers cause smoking and greasy spillovers that may ignite. Heat oils slowly on low or medium settings.
- b) Always turn hood ON when cooking at high heat or when cooking flambeing foods
- c) Clean ventilating fans frequently. Grease should not be allowed to accumulate on fan or filter.
- d) Use proper pan size. Always use cookware appropriate for the size of the surface element.

## **WARNING**

### **TO REDUCE THE RISK OF INJURY TO PERSONS IN THE EVENT OF A RANGE TOP GREASE FIRE, OBSERVE THE FOLLOWING\*:**

1. SMOTHER FLAMES with a close-fitting lid, cookie sheet or metal tray, then turn off the burner. BE CAREFUL TO PREVENT BURNS. IF THE FLAMES DO NOT GO OUT IMMEDIATELY, EVACUATE AND CALL THE FIRE DEPARTMENT.
2. NEVER PICK UP A FLAMING PAN – You may be burned.
3. DO NOT USE WATER, including wet dishcloths or towels – This could cause a violent steam explosion.
4. Use an extinguisher ONLY if:
  - A. You own a Class ABC extinguisher and you know how to operate it.
  - B. The fire is small and contained in the area where it started.
  - C. The fire department has been called.
  - D. You can fight the fire with your back to an exit.

\* Based on "Kitchen Fire Safety Tips" published by NFPA.

## **CAUTION**

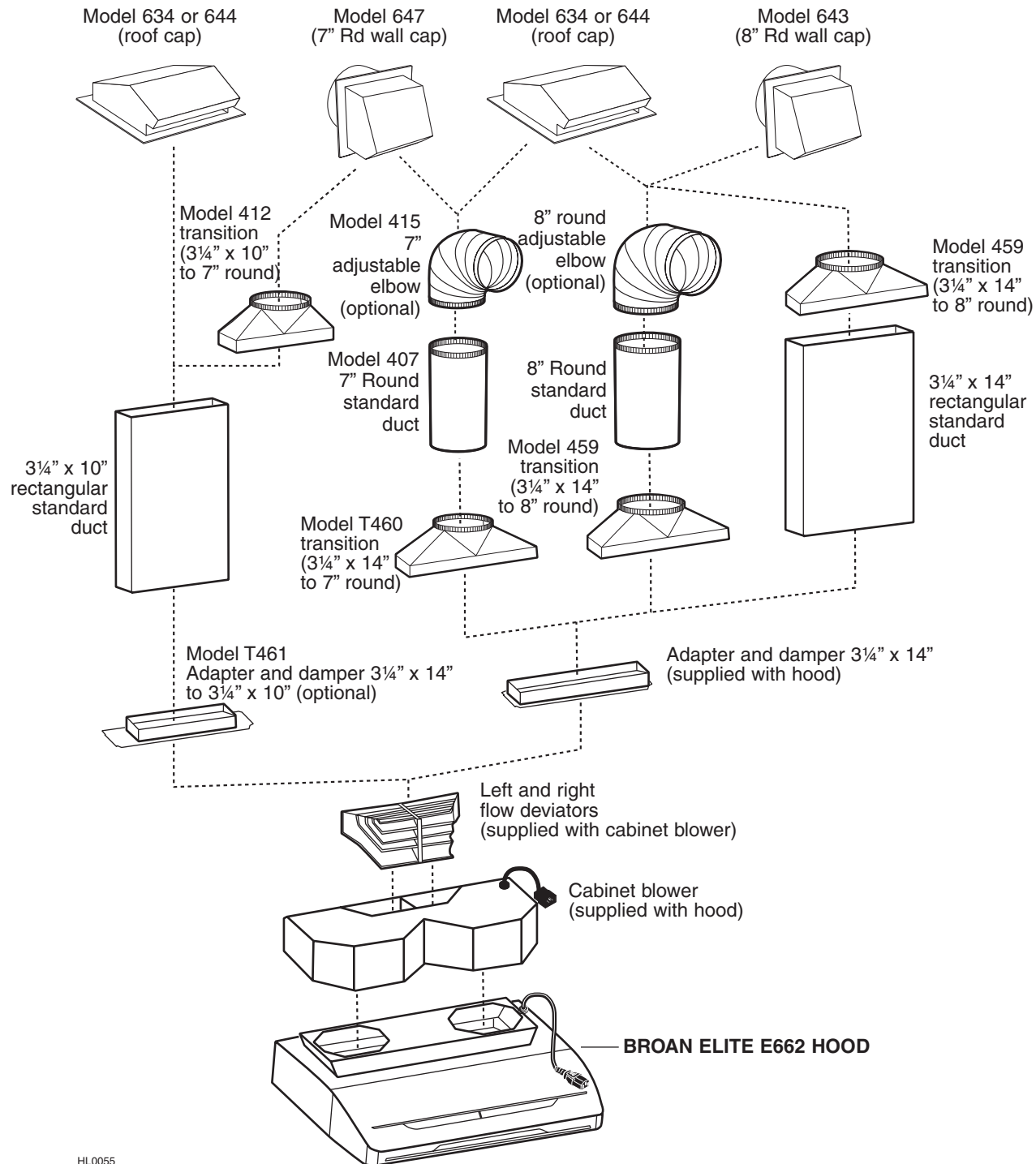
1. For general ventilating use only. Do not use to exhaust hazardous or explosive materials and vapors.
2. To avoid motor bearing damage and noisy and/or unbalanced impellers, keep drywall spray, construction dust, etc. off power unit.
3. Your hood motor has a thermal overload which will automatically shut off the motor if they becomes overheated. The motor will restart when they will cool down. If the motors continue to shut off and restart, have the hood serviced.
4. The minimum hood distance above cooktop must not be less than 24". A maximum of 30" above cooktop is highly recommended for best capture of cooking impurities.
5. Two installers are recommended because of the large size and weight of this hood.
6. To reduce the risk of fire and to properly exhaust air, be sure to duct air outside – Do not exhaust air into spaces within walls or ceiling or into attics, crawl space or garage.
7. This product is equipped with a thermostat which may start blower automatically. To reduce the risk of injury and to prevent power from being switched on accidentally, switch power off at service panel and lock or tag service panel.
8. Because of the high exhausting capacity of this hood, you should make sure enough air is entering the house to replace exhausted air by opening a window close to or in the kitchen.
9. Use with approved cord-connection kit only.
10. Please read specification label on product for further information and requirements.

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# BROAN ELITE E662 HOOD SYSTEM



HL0055

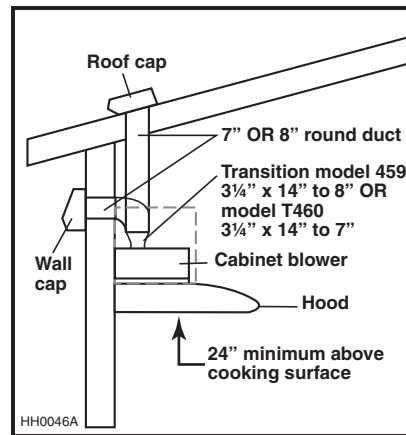
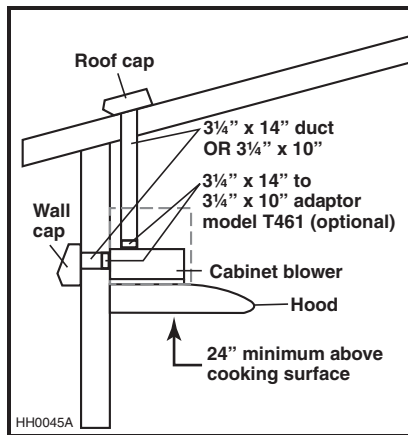
# 1. INSTALL DUCTWORK

Plan where and how the ductwork will be installed. Install proper-sized ductwork, elbows and roof or wall cap for the type of blower you are installing. Use 2" duct tape to seal duct joints.

NOTE: When performing vertical exhaust ductwork, there must be at least 14" high free inside cabinet in order to allow cabinet blower installation.

**The minimum hood distance above cooktop must not be less than 24". A maximum of 30" above cooktop is highly recommended for best capture of cooking impurities.**

Distances over 30" are at the installer and users discretion.



# 2. PREPARE THE INSTALLATION

Make sure that the following items are included:

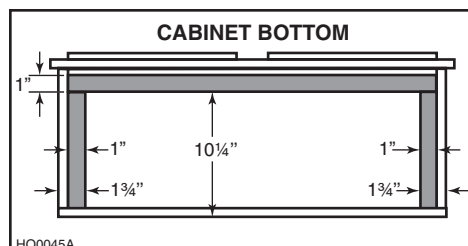
- Hood
- Accessories:
  - Filters (2 for 30" and 36" width hoods, 3 for 42" width hood)
  - Cabinet blower including left and right flow deviators (assembled to cabinet blower)
  - Electrical cable with 3-prong receptacle (inside one filler)
  - 3 1/4" x 14" adapter/damper (inside one filler)
  - Bag of parts (inside one filler) including:
    - (2) wire clamps, (5) no. 8 x 1/2" screws, (3) wire connectors, (9) no. 8 x 3/8" screws

Parts sold separately:

- Halogen lights (MR16, GU10, 120 V, 50 W)
- Transition 3 1/4" x 14" to 8" round model no. 459 (optional), transition 3 1/4" x 14" to 7" round model no. T460 (optional), adaptor/damper 3 1/4" x 14" to 3 1/4" x 10" model T461 (optional), ducts, elbows, dampers, wall and roof caps. Refer to page 1 for a complete list of venting options and model numbers.

NOTES: 1. During installation, protect countertop and/or cooktop.

2. If the bottom of the cabinet is recessed, attach three 1" width wood strip (not included). Refer to figure below for wood strips proper location.

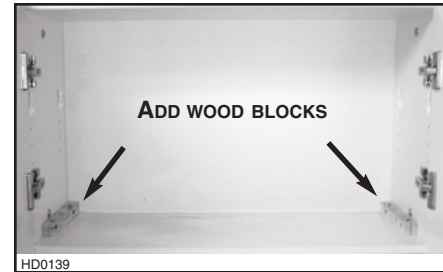


### 3. CABINET PREPARATION

#### ⚠ WARNING

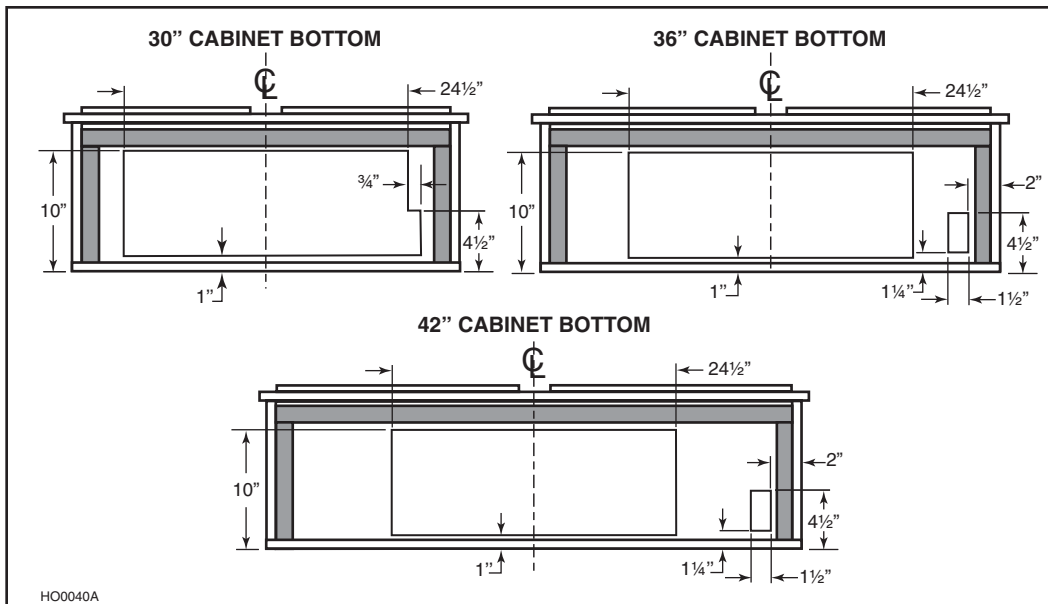
The cabinet must be sized to support the total weight of the hood. For the E662 hood model, the total weight is 41 lb (19 kg).

If the cabinet need to be reinforced, we suggest to add wood blocks the strengthen the connection between the bottom of the cabinet and its sides, as shown beside.



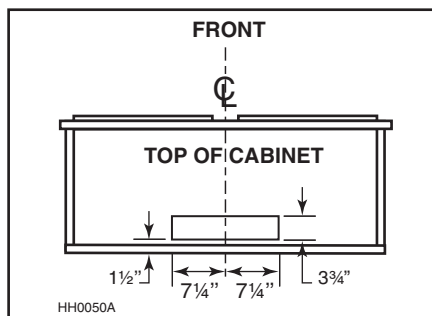
### 4. CUTTING HOLES

See figures below for cut-out dimensions in the bottom of the cabinet.

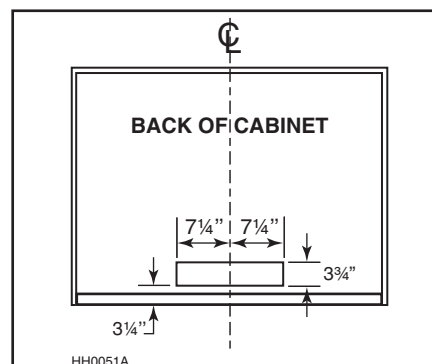


See figures below for cut-out dimensions for ducting.

#### VERTICAL DISCHARGE



#### HORIZONTAL DISCHARGE



## 5. PREPARE THE HOOD

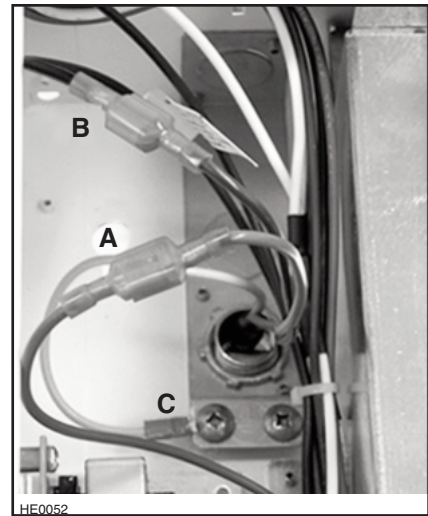
- 5.1 Remove filters from the hood. Remove (3) screws holding both side panels to the hood and set aside. Remove both side panels.



- 5.2 Punch out 2 knock-out holes for electrical connections (2 on top or one on top and one on back of the hood).

- 5.3 Attach one wire clamp on top of the hood for the provided electrical cable with 3-prong plug. Through the wire clamp, insert this electrical cable in the hood and tighten the wire clamp to secure the cable.

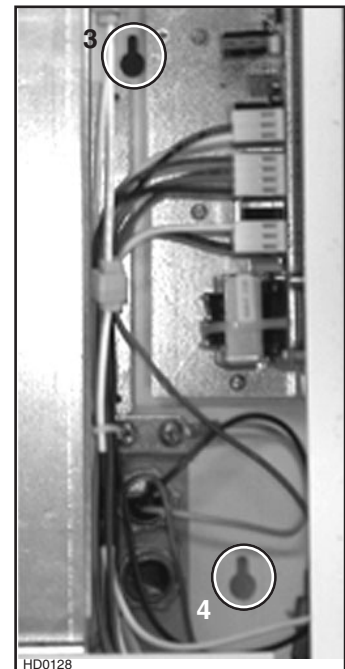
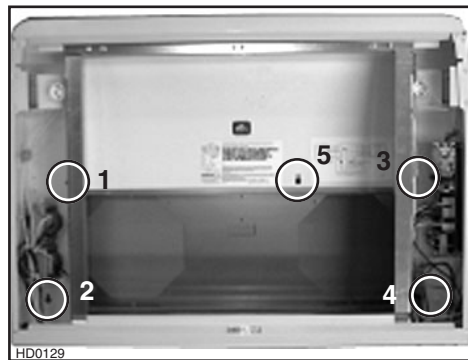
- 5.4 Connect cable wires as follow: BLUE wire with red connector to BLUE wire with red connector (A), BROWN wire with red connector to BLACK wire with red connector (B), GREEN wire under ground screw (C). **DO NOT FORGET TO CONNECT THE GROUND.**



## 6. INSTALL THE HOOD

- 6.1 Run power cable to installation location. Position the hood in its intended location. Using a pen mark the position of the screws (smaller part of the keyholes, see pictures below for the (5) keyholes locations). Remove the hood.

- 6.2 Install (4) no. 8 x 1/2" screws, leaving a 1/8" gap (do not install the no 5 screw yet).



## 6. INSTALL THE HOOD (CONT'D)

- 6.3 Attach the second wire clamp, insert the power cable in the hood and tighten the wire clamp to secure the cable. Place the hood under the cabinet and slide it in position. Run power cable from hood up through slot cut in cabinet. Tighten the (4) screws completely, then add the last screw (screw no 5) in the center keyhole.

## 7. CABINET BLOWER PREPARATION

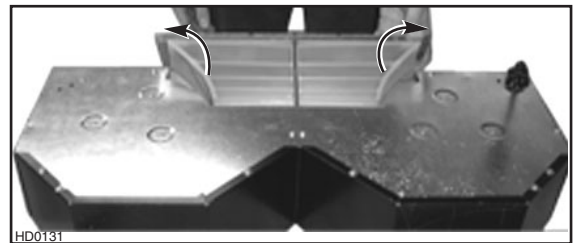
### 7.1 VERTICAL DISCHARGE ONLY

- 7.1.1 Seal the metal shutoff plate on the back of the cabinet blower using duct tape.

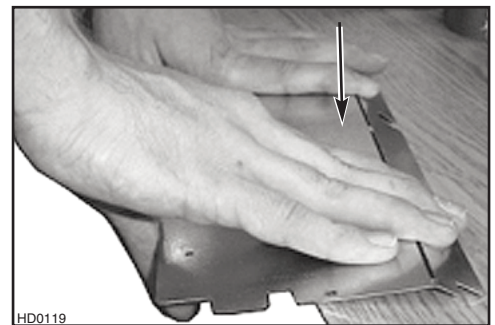


### 7.2 HORIZONTAL DISCHARGE ONLY

- 7.2.1 The cabinet blower included with the E662 model is factory set to exhaust vertically. If the horizontal discharge is chosen, remove the metal shutoff plate from back of the hood, by removing the 3 screws. Set aside screws. Discard both left and right plastic diverters assembled to the metal shut off plate.



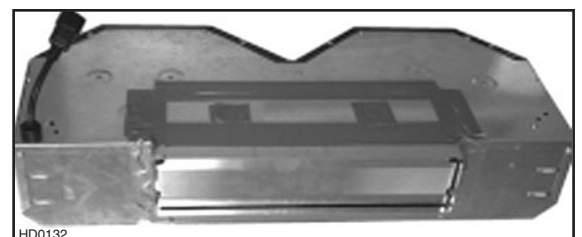
- 7.2.2 Press the metal shutoff plate on a surface to completely flatten bent flange and install on the top of the blower, using the 3 screws previously set aside plus another no. 8 x 1/2" screw (from parts bag).



- 7.2.3 Fold down the foldable flange of the adapter/damper. This flange must be at 90° from the remaining flanges. See picture beside.



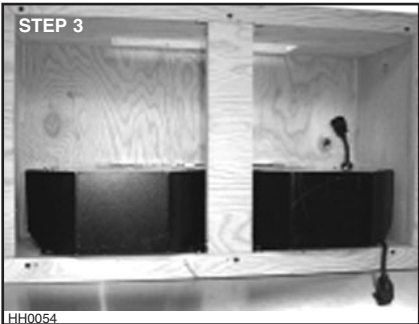
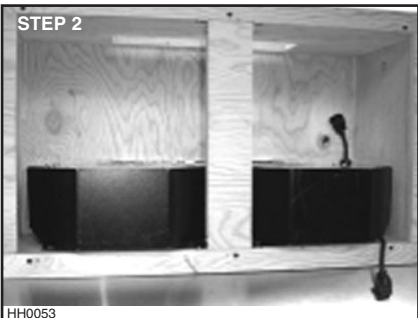
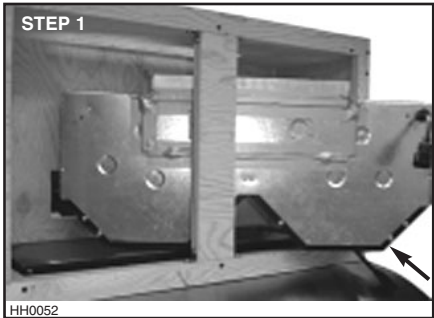
- 7.2.4 Using three (3) no. 8 x 1/2" screws provided with hood, secure the adapter to the back of the cabinet blower. Remove tape from damper flap. Seal the adapter and the metal shutoff plate to the cabinet blower using duct tape.





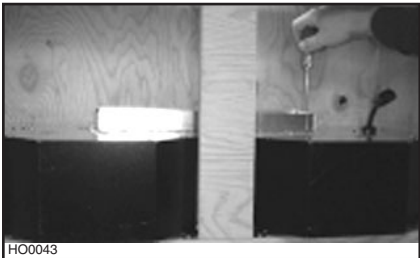
# 8. INSTALL THE BLOWER IN THE CABINET

8.1 Install the cabinet in the cabinet and rest it on the adapter plate. If a framed cabinet is used, insert the blower as show in pictures below.



## 8.2 VERTICAL DISCHARGE ONLY

8.2.1 Using four (4) no. 8 x 1/2" screws provided with hood, secure the adapter to the top of the cabinet below. Remove tape from damper flap. Seal the adapter to the cabinet below using tape.

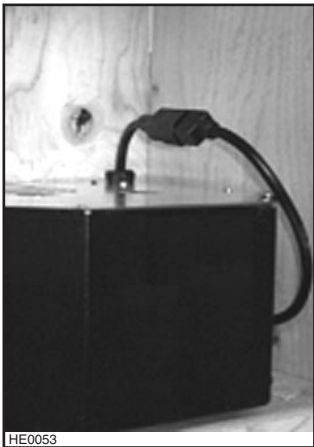


## 8.3 ALL DISCHARGE TYPES

8.3.1 From inside the hood, secure the blower to the adaptor plate of the hood using five (5) no 8 x 3/8 screws.



8.3.2 Plug the cabinet blower to the hood receptacle.



## 9. CONNECT WIRING

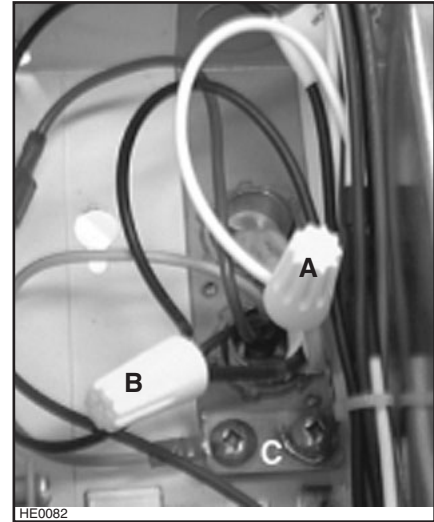
### WARNING

Risk of electrical shock. Electrical wiring must be done by qualified personnel in accordance with all applicable codes and standards. Before connecting wires, switch power off at service panel and lock service disconnecting means to prevent power from being switched on accidentally.

Connect cable into wiring box using provided wire connectors.

Connect wires as follow: WHITE to WHITE (A), BLACK TO BLACK (B), and GREEN or BARE wires under GREEN ground screws (C).

**DO NOT FORGET TO CONNECT THE GROUND.**

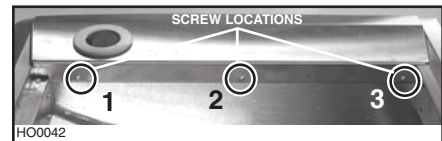


## 10. REINSTALL SIDE PANELS

Reinstall both side panels, using 3 screws per side (saved from step 5), as shown beside.

### CAUTION

Remove protective plastic film covering filters before installing them.



Reinstall filters.

## 11. LIGHT BULBS

This hood must use 120V, 50W max., type MR16, GU10 shielded halogen lamps. **(Purchase separately).**

### **WARNING**

**In order to prevent the risk of personal injury, do not install a lamp identified for use only in enclosed fixtures.**

NOTE: The rings must be removed from bottom banel before installing halogen lamps.

**11.1** Install the lamps by placing the bulb leads into their grooves in the socket and gently push upward and turn clockwise until secured.



**11.2** Install trim rings by pushing upward.



### **WARNING**

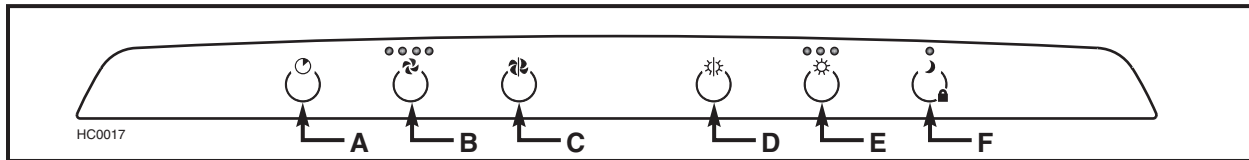
**In order to prevent the risk of personal injury, the halogen lamps must be cooled down before removing them.**

**11.3** To remove lamps, gently push upward and turn counterclockwise to disengage bulb leads from their grooves.



## 12. OPERATION

Always turn your blower on before you begin cooking to establish an air flow in the kitchen. Allow the blower run for a few minutes to clear the air after you turn off the range.



A) Blower OFF Delay touch pad  
B) ON / Blower speed touch pad  
C) OFF Blower touch pad

D) OFF lighting touch pad  
E) Halogen light touch pad  
F) Nightlight / keyboard lock touch pad

### **A. BLOWER OFF DELAY TOUCH PAD:**

When a speed is selected, touch the delay touch pad to activate the delay function. The corresponding speed indicator LED will start flashing to indicate this function is activated. Touch once for a 5-minute delay, twice for 10-minute delay, three times for 15-minute delay and four times for a 20-minute delay. The fan will continue to operate for the programmed minutes and will stop automatically. To cancel the delay function, wait 2 seconds and touch the delay touch pad once again; the blower will then work in normal mode.

NOTE: The blower speed can be increased - or decreased - during delay mode without starting another delay cycle.

### **B. ON /BLOWER SPEED CONTROL TOUCH PAD:**

Touch this touch pad to turn on the blower at the last selected speed. To change the blower speed, touch the touch pad again until the desired speed is obtained.

- NOTES:
1. Each time you touch on the speed control touch pad, the speed changes by increments of 1 (e.g.: speed 1 to speed 2, to speed 3, and then speed 4. From the fourth speed, goes down to speed 1).
  2. The last speed used is kept in memory except the fourth, the next time the blower will be turned on, it will run on speed 3.

### **HEAT SENTRY**

This hood is equipped with a Heat Sentry thermostat. This thermostat is a device that will turn on or speed up the blower if it senses excessive heat above the cooking surface.

- 1) If blower is OFF - it turns blower ON to HIGH speed.
- 2) If blower is ON at a lower speed setting – it turns the blower up to HIGH speed.

When HEAT SENTRY is activated, the first and the last speed blower LEDs are flashing alternately.

When the temperature level drops to normal, the blower will return to its original setting.

## **⚠ WARNING**

**The HEAT SENTRY can start the blower even if the hood is turned OFF. In this case, it is impossible to turn the blower OFF with blower switch. If you must stop the blower, do it from the main electrical panel.**

### **C. OFF BLOWER TOUCH PAD:**

Touch this touch pad to turn off the blower. This command also cancels the delay function (if activated).

### **D. OFF LIGHTING TOUCH PAD:**

Touch this touch pad to turn off lighting.

### **E. HALOGEN LIGHT TOUCH PAD:**

Touch this touch pad to turn on the halogen lamps. The lighting intensity changes by increments of 1 (e.g.: Touch once for low intensity, once again to get more, up to three times. From the higher intensity, touch once to go back to the lower intensity).

NOTE: The last lighting intensity used is kept in memory. The next time the halogen lamps will be turned on, they will light with the last intensity used.

### **F. NIGHTLIGHT / KEYBOARD LOCK TOUCH PAD:**

Touch this touch pad to activate the nightlight. The LED will light to indicate the nightlight is on.

When cleaning the hood, use the keyboard lock. To activate the keyboard lock, touch on this touch pad during 3 seconds; the LED will flash to indicate the keyboard lock is on. Touch on the touch pad and hold for 3 seconds again to stop the keyboard lock function.

- NOTES:
1. **When cleaning the hood, never spray cleaning agent directly on the controls; spray it on the cleaning cloth and wipe the control with it. Spraying cleaning agent directly on the control will cause unexpected keyboard activation.**
  2. When the keyboard lock is on, it stops the HEAT SENTRY.
  3. If there a temporary power failure when the keyboard lock is on, when the power will be restored, the keyboard lock will still be on.

## 13. USE AND CARE

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Grease filters and side panels.

The grease filters and the bottom panel should be cleaned frequently. Use a warm detergent solution.

Remove grease filters by pushing them towards the back of hood and rotating downward.

**When cleaning the hood, never spray cleaning agent directly on the controls; spray it on the cleaning cloth and wipe the control with it. Spraying cleaning agent directly on the control will cause unexpected keyboard activation.**

### STAINLESS STEEL CLEANING:

**Do:** - Regularly wash surfaces with clean cloth or rag soaked with warm water and mild soap or liquid dish detergent.

- Always clean in the direction of original polish lines.
- Always rinse well with clear water (2 or 3 times) after cleaning. Wipe completely dry.
- You may also use a specialized household stainless steel cleaner.

**Don't:** - Do not use any steel or stainless steel wool or any other scrapers to remove stubborn dirt.

- Do not use any harsh or abrasive cleansers.
- Do not allow dirt to accumulate.
- Do not let plaster dust or any construction residues reach the hood. During construction or renovation, cover the hood to make sure no dust sticks to stainless steel surface.

### **Avoid: when choosing a detergent**

- Any cleaners that contain **bleach** will attack stainless steel.
- Any products containing : **chloride, fluoride, iodide, bromide** will deteriorate surfaces rapidly.
- Any **combustible products** used for cleaning such as **acetone, alcohol, ether, benzol**, etc., are highly explosive and should never be used close to a range.

### PAINTED FINISH:

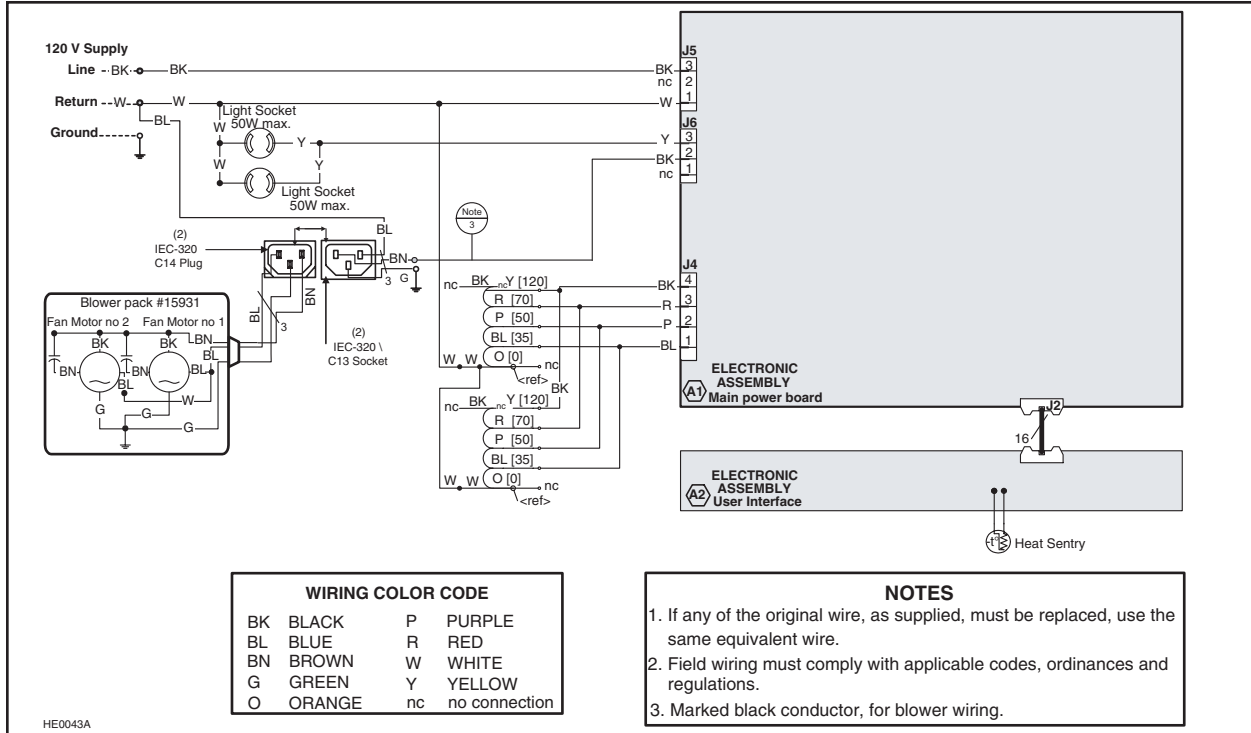
Clean with warm water and mild detergent only. If discoloration occurs, use a good enamel polish such as automotive polish. (DO NOT use rough abrasive cleaner or porcelain cleaner).

# 14. WIRING DIAGRAM



**WARNING**

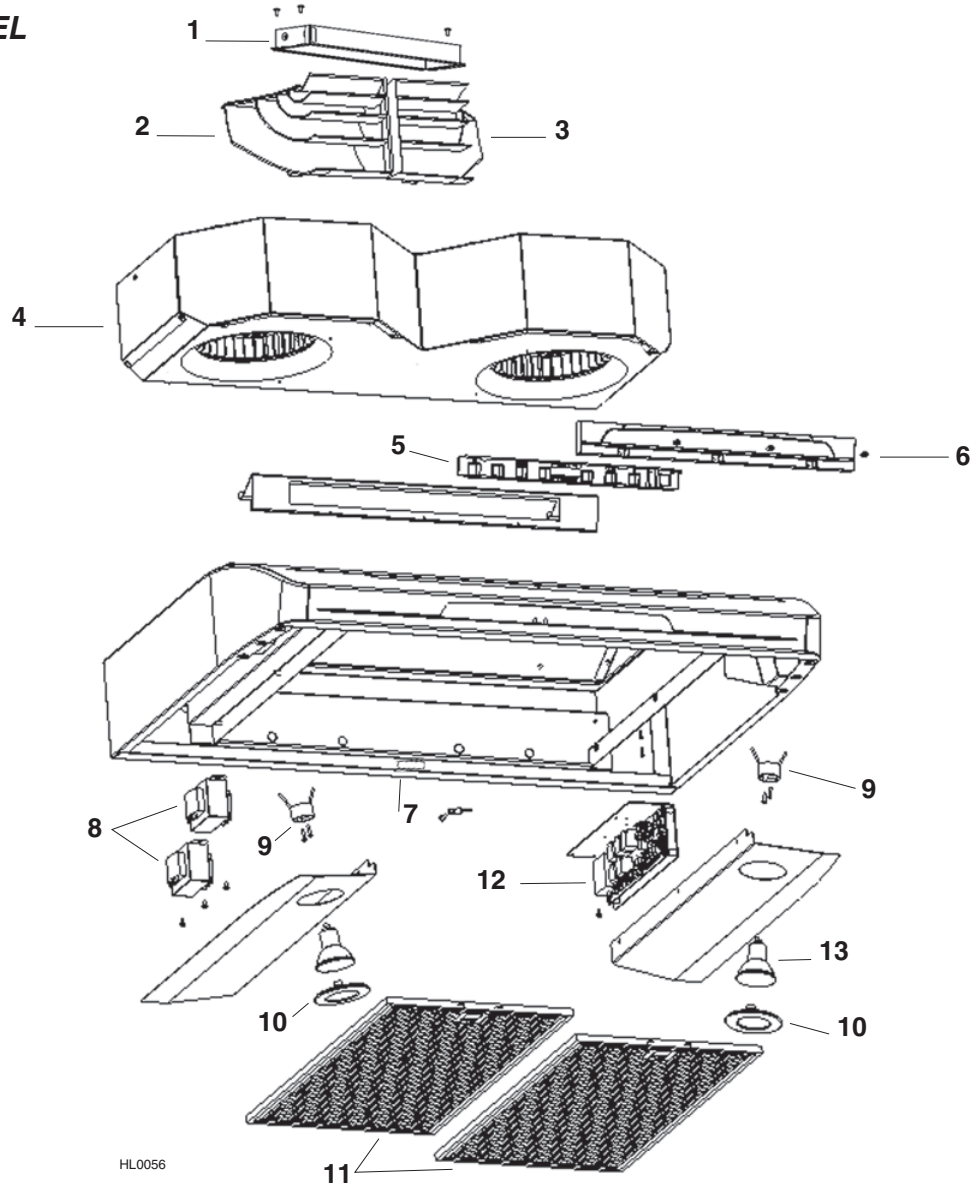
**Risk of electrical shock. Electrical wiring must be done by qualified personnel in accordance with all applicable codes and standards. Before connecting wires, switch power off at service panel and lock service disconnecting means to prevent power from being switched on accidentally.**



HE0043A

# 15. SERVICE PARTS

## E662 MODEL



HL0056

KEY no.	PART NUMBER	DESCRIPTION	WIDTHS		
			30"	36"	42"
1	V14971	ADAPTER/DAMPER	1	1	1
2	V06242	LEFT FLOW DEVIATOR	1	1	1
3	V06243	RIGHT FLOW DEVIATOR	1	1	1
4	V15931	CABINET BLOWER	1	1	1
5	V06263	CONTROL PCB	1	1	1
6	V06262	CONTROL FASCIA	1	1	1
7	V06750	BROAN ELITE LOGO	1	1	1
8	V06741	TRANSFORMER AND HARNESS KIT	1	1	1
9	V05917	LAMP SOCKET	2	2	2
10	V06268	TRIM RING	2	2	2
11	V06265	FILTERS 9.922" X 17.981"	2	-	3
	V06266	FILTERS 12.922" X 17.981"	-	2	-
12	V06733-2	CONTROL PROCESSOR UNIT	1	1	1
13	V05921	HALOGEN LAMP 50W, 120V, GU-10	2	2	2
*	V06734	LOW VOLTAGE HARNESS	1	-	-
*	V06745	LOW VOLTAGE HARNESS	-	1	-
*	V06746	LOW VOLTAGE HARNESS	-	-	1
*	V06776	BLOWER CORD	1	1	1
*	V06784	HOOD CORD	1	1	1
*	V06800	INSTALLATION MANUAL	1	1	1
*		PARTS BAG ((2) wire clamps, (3) wire connectors, ((5) no. 8 x 1/2" screws, (9) no. 8 x 3/8" screws)	1	1	1

\* Item not shown.

## 16. WARRANTY

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### WARRANTY

#### **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 OR 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 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 or provinces 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 or provinces 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 or province to another. This warranty supersedes all prior warranties.

To qualify for warranty service, you must (a) notify Broan-NuTone LLC at the addresses or telephone number stated 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)

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

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