

# QS3 SERIES RANGE HOOD



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Patent No.: US D450, 829 S

# READ AND SAVE THESE INSTRUCTIONS



# FOR DOMESTIC COOKING ONLY



## **WARNING**





# CAUTION



#### 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 of 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. To reduce the risk of fire or electric shock, do not use this range hood with an additional speed control device.
- 7. Ducted fans must always be vented to the outdoors.
- 8. To reduce the risk of fire, use only metal ductwork.
- 9. Use with approved cord-connection kit only.
- 10. This unit must be grounded.

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

- 1. 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.
- 2. Always turn hood ON when cooking at high heat or when cooking flaming foods.
- 3. Clean ventilating fans frequently. Grease should not be allowed to accumulate on fan or filter.
- 4. Use proper pan size. Always use cookware appropriate for the size of the surface element.

#### 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 violent steam explosion will result.
- 4. Use an extinguisher ONLY if:
  - A. You know you have a Class ABC extinguisher and you already know how to operate it.
  - B. The fire is small and contained in the area where it started.
  - C. The fire department is being called.
  - D. You can fight the fire with your back to an exit.
  - \* Based on "Kitchen Fire Safety Tips" published by NFPA.

- 1. For indoor use only.
- 2. For general ventilating use only. Do not use to exhaust hazardous or explosive materials and vapors.
- 3. To avoid motor bearing damage and noisy and/or unbalanced impellers, keep drywall spray, construction dust, etc. off power
- 4. For best capture of cooking impurities, your range hood should be mounted so that the top of the hood is 24-30" above the cooking surface.
- 5. Please read specification label on product for further information and requirements.

## Installer: Leave this manual with the homeowner.

## **Homeowner: Operating and** Cleaning information on page 6.

If hood is to be installed Non-Ducted:

Purchase a set of (2) non-ducted filters from your local distributor or retailer and attach them to the aluminum mesh filters.

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This manual is divided into sections as follows:

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Run ductwork from roof or wall cap, and electrical wiring from service panel - to installation location

#### "PREPARE THE HOOD"

Get your hood ready for installation

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Make electrical wiring connections to hood

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Keep your hood in top working condition

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Part numbers and exploded view of hood components

#### "WARRANTY"

One-year limited warranty and how to contact us

Register your product online at: www.broan.ca/register

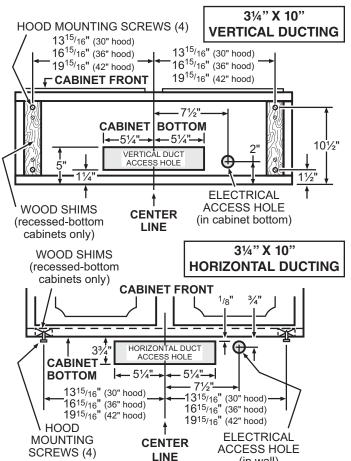
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## PREPARE HOOD LOCATION

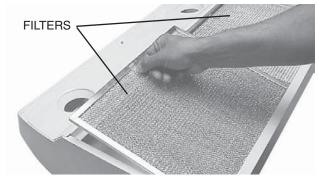
# ROOF CAP 31/4" X 10" (For vertical discharge) SOFFIT HOUSE WIRING (Top or Back of hood) WALL CAP 24" - 30" ABOVE COOKING SURFACE (For horizontal discharge)

- Determine whether hood will discharge vertically (3½" x 10"), or horizontally (3½" x 10" only). For vertical or horizontal discharge, run ductwork between the hood location and a roof cap or wall cap. For best results, use a minimum number of transitons and elbows.
- Use diagrams, below, for proper placement of ductwork and electrical cutout in cabinet or wall. For a non-ducted installation, DO NOT cut a duct access hole.

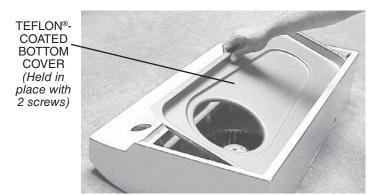


# Run house wiring between service panel and hood location.

## PREPARE THE HOOD

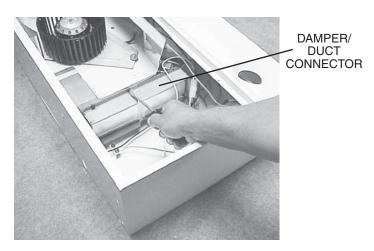


Remove tape holding in place. Pull down on filter tabs or finger holes and lift filters out. Set filters aside.



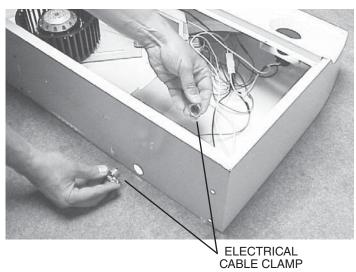
Remove <u>Teflon®-coated bottom cover from hood.</u> Set cover and mounting screws aside.

Teflon<sup>®</sup> is a registered trademark of DuPont.



Remove <u>Damper/Duct Connector</u> from inside the hood. Set connector aside - with mounting screws and parts bag.

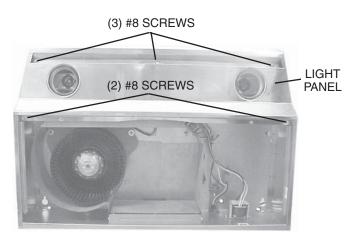
## PREPARE THE HOOD



Remove either top or back wiring knockout and install approved.

Ducted Installation - Skip to Step 11.

The following Steps (5 thru 10) are for NON-DUCTED INSTALLATION ONLY.



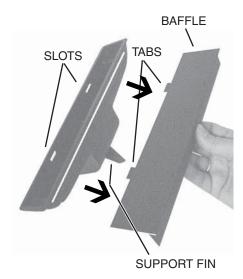
Remove Light Panel - held in place with (3) #8 screws and (2) #8 screws. Disconnect light assembly wire harness (white connector).

Remove Air Chute - held in place with one (1) screw.

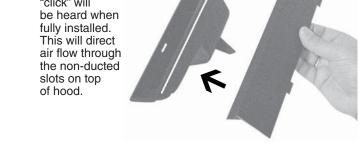
> NOTE: Be careful not to disconnect any wires.



Remove **Baffle** from air chute. Tabs will disengage from <u>Slots</u>.



Rotate baffle. Reinsert baffle into air chute (as shown) so that baffle fits all the way into into air chute. An audible "click" will be heard when fully installed. This will direct air flow through the non-ducted slots on top of hood.

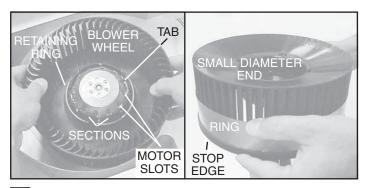


Re-install air chute and screw, re-connect wire harness, and replace light panel.

NOTE: Be careful not to trap wires between Support Fin and light panel.



## PREPARE THE HOOD

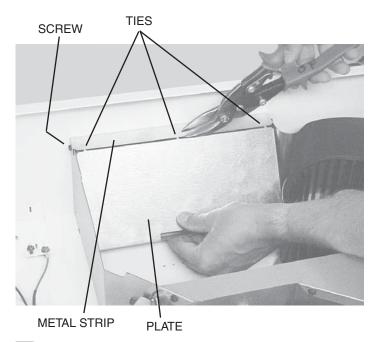


Non-Ducted Installations Only: Require a **Performance Ring** to be attached to the blower wheel.

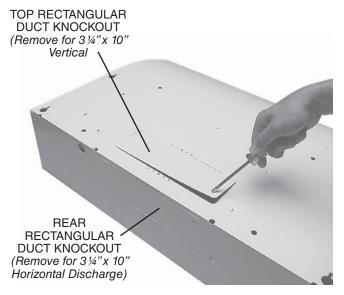
#### To install ring:

- Remove the <u>Blower Wheel</u> by rocking it side to side and applying a slight force to pull wheel from motor. Remove <u>Retaining Ring</u> if necessary.
- Slide the ring onto the <u>Small Diameter End</u> of the wheel and down to the <u>Stop Edge</u> of the wheel.
- Reassemble wheel to motor. Make sure <u>Tab</u> on wheel fits into one of the <u>Motor Slots</u>.
- 4. Push wheel down until it is locked in place.
- Check that wheel is properly positioned as shown. Press <u>Sections</u> into place if necessary. Make sure wheel turns freely.

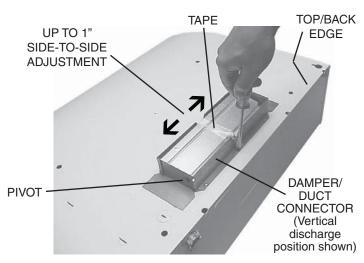
## PREPARE THE HOOD



Horizontal Discharge Only: Remove the <u>Plate</u> in front of the horizontal discharge knockout. Cut the <u>Ties</u>, lift plate out, and discard plate. DO NOT REMOVE the <u>Metal Strip</u> held in place with two <u>Screws</u>.



Remove appropriate **<u>Duct Knockout(s)</u>** from top or back of hood.



3¼" x 10" Ducted Discharge Only: Remove <u>Tape</u> from damper flap and attach <u>Damper/Duct Connector</u> over knockout opening with screws removed in Step 4 under "PREPARE THE HOOD." Make sure damper <u>Pivot</u> is nearest to <u>Top/Back Edge</u> of hood.

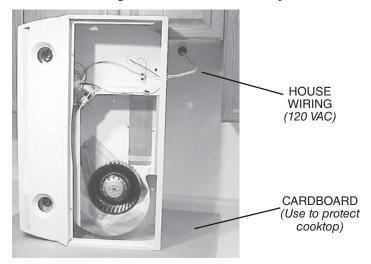
NOTE

Damper/Duct Connector can be installed up to 1-inch on either side of hood center - to accomodate off-center ductwork. In extreme off-center installations, one end of the duct connector may need to be trimmed to clear the electrical cable clamp.

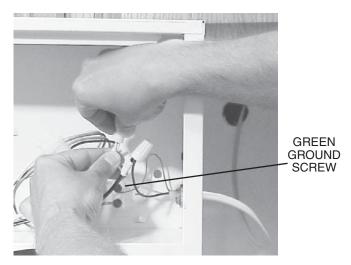
## **CONNECT WIRING**



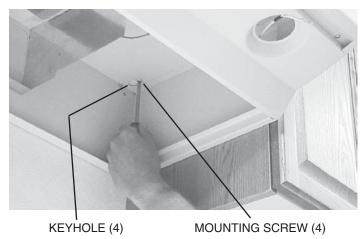
WARNING: To reduce the risk of electric shock, make sure power is switched off at the service panel. Lock or tag service panel to prevent power from being switched on accidentally.



Connect (120 VAC) to hood. Use a piece of to protect the cooktop, if necessary.



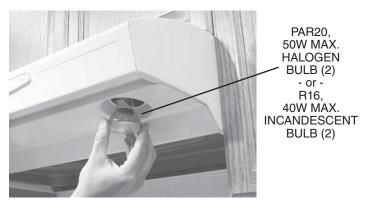
Connect house black to hood black wire, house white to hood white wire, and house ground under <u>Green Ground Screw</u>. Securely tighten cable clamp onto house wiring.



- Hang hood from (4) <u>Mounting Screws</u>. Slide hood towards wall until mounting screws are engaged in narrow end of (4) <u>Keyholes</u>. Tighten mounting screws securely. A long screwdriver works best.
- 2 Replace bottom cover.



Connect ductwork to hood. Use **<u>Duct Tape</u>** to make joints secure and air tight.



Install (2) PAR20, 50 W Maximum <u>Halogen Bulbs</u> or (2) R16, 40 W Maximum <u>Incandescent Bulbs</u>. Purchase bulbs separately.



CAUTION: Bulbs may be hot! Refer to bulb packaging for further information.

Replace filters, turn on power at service panel, and test for proper operation.



## NON-DUCTED FILTERS

If hood is to be installed Non-Ducted:

Purchase a set of (2) Non-Ducted Filters from your local distributor or retailer and attach them to the aluminum mesh filters.

NOTE: For models that are installed in the non-ducted mode, the most effective operation is achieved at speeds 1 and 2. These speeds provide the most efficient and quiet operation during cooking, while maximizing the benefits of the recirculating filtration system.

#### OPERATION



Fan: 4 push button switches. Push any button to select one of the four fan speeds. Press another button to change fan speed. Push the same button to turn fan off. A light above each fan button indicates the fan speed.

Lights: Press "on/off" button and lights will come on at their previous light level. Press button again to turn lights off. To increase light level, press the "+" button. To reduce light level, press the "-" button. There are 3 light levels to select.

Delay Off: While fan is running, press the "delay" button to allow the fan to run for 10 minutes and then turn itself off.

Filter Change Indicator: The light above "filter" will come on when it is time to clean your grease filters or check your non-ducted filters. After replacing the cleaned, or new filters, press the "filter" button to turn off the indicator light.

Heat Sentry System: Your range hood is equipped with an advanced Heat Sentry system.

The advanced Heat Sentry system monitors temperature and automatically adjust the fan to the appropriate setting.

- 1) If the fan is on, the Heat Sentry system will increase the fan setting when the temperature is elevated. If the temperature continues to rise, the Heat Sentry system will continue to increase the fan setting until the temperature is stabilized or reduced. The flashing light above the fan button shows the Heat Sentry system fan setting. Once the temperature has reduced, the Heat Sentry system will change the fan to the original setting.
- 2) If the fan is on or off, the Heat Sentry system will automatically turn the fan on at its highest speed when the temperature is above normal. When the Heat Sentry system is on, the light above the fan button B (Boost) will flash on and off. After the temperature has lowered to normal, the fan will change to the setting prior to the Heat Sentry turning on.

**Fuse:** The hood control contains a fuse to protect it from power surges. If the fuse has opened (blown), the green fan-level indicators will operate properly when the fan buttons/switches are pressed - but the fan and lights will not turn on.

The fuse is a 5 x 20 mm, 10 Amp, Fast-Acting, 125V (min.). Common manufacturer and part numbers are: Littlefuse, 217010; Bussmann, GMA10A; Wickmann, 1942100. Radio Shack, Digikey (1-800-344-4539), and most electronic supply stores have them in stock.

To replace the fuse:

- 1. Disconnect power at service entrance.
- 2. Remove filters, bottom panel, light wire harness, and air chute.
- 3. Remove and inspect fuse. If it is not open (blown), additional diagnostics need to be done.

- 4. Install new fuse.
- 5. Re-assemble air chute, light wire harness, bottom panel, and
- 6. Turn on power and check hood/control operation.

NOTE: This hood utilizes an offset blower design to achieve greater performance and lower sound levels. As a result, you may notice that cooking impurities are more attracted to one side or appear to be pulled-in faster than they appear on the opposite side. This is completely normal. The hood has been designed and tested to provide good capture of cooking impurities and odors under all normal cooking conditions regardless of the cooking location on the cooktop. Please note that cooking on the rear burners will always result in the best capture results, regardless of the hood design.

## **CLEANING**



WARNING: To reduce the risk of electric shock, disconnect from power supply before cleaning.

Aluminum mesh filters: Clean frequently using hot water and a mild detergent. Filters are dishwasher safe.

Charcoal filters: Clean filter surfaces frequently with a damp cloth and a mild detergent. DO NOT immerse filters in water or put in dishwasher. The special "Clean Sense" feature indicates when the filter is to be replaced. The dotted lines on the indicator strip will change to solid wide lines when it is time to change the filter. The "Clean Sense" feature works best when facing toward the cooking surface.

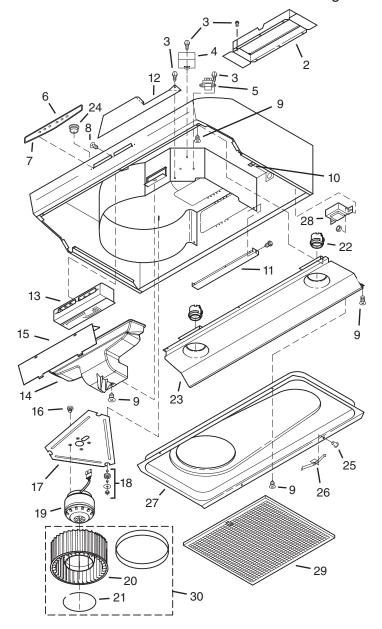
To clean hood: Remove filters. Use a damp cloth and a mild detergent to wipe all grease-laden surfaces. Do not use abrasive cloth, steel wool pads, or scouring powder on the Teflon®-coated bottom cover or on any painted surface. Use care when cleaning blower wheel - it must not become bent or misaligned. DO NOT ALLOW WATER TO ENTER MOTOR. Make sure all surfaces are completely dry before re-installing filters and restoring power.

Motor is permanently lubricated. Do not oil or disassemble motor. Teflon° is a registered trademark of DuPont.



# **SERVICE PARTS**

KEY NO	PART NO.	DESCRIPTION
2	R740013	Damper/Duct Connector (includes hardware)
3	R602017	Screw, #8-18 x ¼ Hex* (2 in package)
4	R334126	Motor Capacitor (includes wire nuts & hardware)
5	R501031	Isolation Transformer
6	R627505 R627506	Nameplate, White Nameplate, Almond
	R627507	Nameplate, Black
	R627529	Nameplate, Biscuit
7	R169011	Control Panel, White
	R169012	(includes Key No. 6 & hardware) Control Panel, Almond
	R169013	(includes Key No. 6 & hardware) Control Panel, Black (includes Key No. 6 & hardware)
	R169014	Control Panel, Biscuit (includes Key No. 6 & hardware)
8	R601535	Screw for Plastic, #6 x ½ Flat Hd. (3 in package)
9	R602534	Screw, #8-18 x 3/8 (2 in package)
10	R602533	Ground Screw
11 12	R680505 R680507	Scroll Cover, Outlet (includes hardware) Scroll Cover, Front (includes hardware)
13	R111653	Control Assembly
		(includes Key Nos. 6, 7 & hardware)
14	R401647	Air Chute Assembly (includes Key No. 15 & hardware)
15	R401646	Baffle
16   17	R601536 R651973	Screw, Metric M4 x 6mm (4 in package) Motor Plate (Includes Key No. 18)
18	R169009	Motor Plate (includes key No. 16)  Motor Plate Mounting Kit (3 of each part)
19	R520133	Motor (includes Key No. 16)
20	R531068	Blower Wheel (Includes Key No. 21)
21	R607215	Retaining Ring
22	R111630	Lamp Socket Assembly
23	R7201731 R7201751	Light Panel, 30 in. White Light Panel, 36 in. White
	R7201771	Light Panel, 42 in. White
	R7201732	Light Panel, 30 in. Almond
	R7201752	Light Panel, 36 in. Almond
	R7201772 R7201734	Light Panel, 42 in. Almond Light Panel, 30 in. Black
	R7201754	Light Panel, 36 in. Black
	R7201774	Light Panel, 42 in. Black
	R7201735	Light Panel, 30 in. Biscuit
	R7201755	Light Panel, 36 in. Biscuit
	R7201775 R720174	Light Panel, 42 in. Biscuit Light Panel, 30 in. Stainless
	R720176	Light Panel, 36 in. Stainless
	R720178	Light Panel, 42 in. Stainless
24	R607660	Hole Plug (1 req.)
25 26	R169016	Pop Rivet, .125D (3 req.) Filter Spring Kit
27	R680516	Bottom Cover, 30 in.
	,	(includes Key Nos. 9, 25, & 26)
	R680524	Bottom Cover, 36 in.
		(includes Key Nos. 9, 25, & 26)
		Bottom Cover, 42 in. (includes Key Nos. 9, 25, & 26)
28	R501035	Autotransformer (includes hardware)
29	99010305	Aluminum Mesh Filter, 30 in. (2 in package)
	99010306	Aluminum Mesh Filter, 36 in. (2 in package)
	99010307	Aluminum Mesh Filter, 42 in. (2 in package)
30	R730111	Non-Ducted Blower Wheel Assembly (includes Key Nos. 20 & 21)
**	99010308	Non-ducted Filter Kit, 30 in.
**	99010309	Non-ducted Filter Kit, 36 in.
**	99010310	Non-ducted Filter Kit, 42 in.
**	R111628	Wire Harness
^^	R564074	Control Fuse, 10-Amp



Order replacement parts by PART NO. - not by KEY NO.
\* Standard hardware - may be purchased locally.
\*\* Not illustrated - purchase separately.





### WARRANTY

#### **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 an 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 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 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 Hartford, Wisconsin www.broan.com 800-558-1711 Broan-NuTone Canada Mississauga, Ontario www.broan.ca 877-896-1119