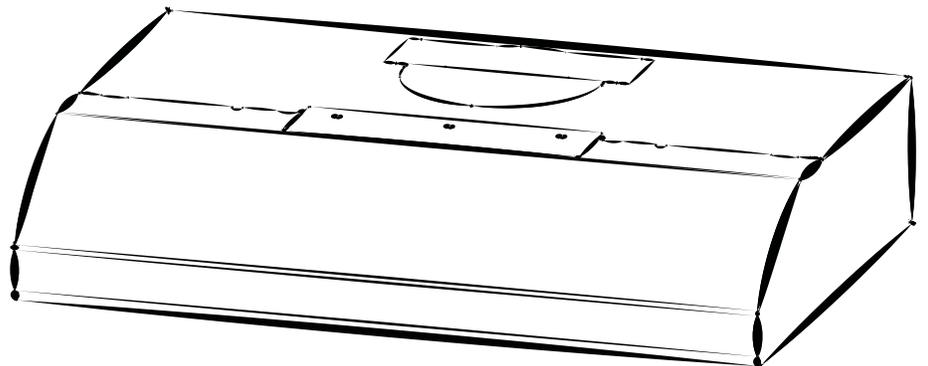


NUTONE

RANGE HOOD

Series: AHSA1

INSTALLATION, USE
AND CARE MANUAL



Serial number:

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READ AND SAVE THESE INSTRUCTIONS

⚠ Intended for domestic cooking only ⚠

INSTALLER: LEAVE THIS MANUAL WITH HOMEOWNER.

Register your range hood online at www.nutone.com

⚠ WARNING



TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:

- 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.
- 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.
- 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.
- 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.
- When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.
- Ducted fans must always be vented to the outdoors.
- Do not use this unit with any additional solid-state speed control device.
- To reduce the risk of fire, use only metal ductwork.
- This unit must be grounded.
- As an alternative, this product may be installed with the UL-approved cord kit designated for this product, following instructions packed with the cord kit.
- When applicable local regulations comprise more restrictive installation and/or certification requirements, the aforementioned requirements prevail on those of this document and the installer agrees to conform to these at his own expense.

WARNING



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 flambing food (i.e.: Crêpes Suzette, Cherries Jubilee, Peppercorn Beef Flambé).
- c) Clean ventilating fan frequently. Grease should not be allowed to accumulate on fan, filters or in exhaust ducts.
- d) 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 — 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

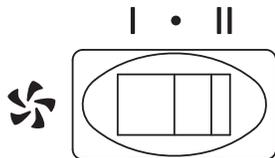
- For indoor use only.
- For general ventilating use only. Do not use to exhaust hazardous or explosive materials and vapors.
- To avoid motor bearing damage and noisy and/or unbalanced fan blade, keep drywall spray, construction dust, etc. off range hood.
- Your hood motor has a thermal overload which will automatically shut off the motor if it becomes overheated. The motor will restart when it cools down. If the motor continues to shut off and restart, have the hood serviced.
- For best capture of cooking fumes, the bottom of the hood MUST NOT BE LESS than 18" and at a maximum of 24" above the cooking surface.
- Always follows the cooking equipment manufacturer's requirements regarding the ventilation needs.
- 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.
- When installing, servicing or cleaning the unit, it is recommended to wear safety glasses and gloves.
- Please read specification label on product for further information and requirements.

Operation

Always turn your hood on before you begin cooking to establish an air flow in the kitchen.

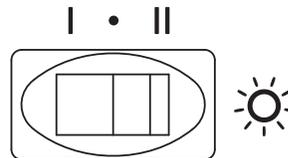
Let the blower run for a few minutes to clear the air after you turn off the range. This will help keep the whole kitchen cleaner and fresher.

Operate the hood as follows:



FAN SWITCH

- I Turns fan on to LOW speed.
- Turns fan OFF.
- II Turns fan on to HIGH speed.



LIGHT SWITCH

- I Turns light on to LOW intensity.
- Turns light OFF.
- II Turns light on to HIGH intensity.

Cleaning and Maintenance

Proper maintenance of the Range Hood will assure proper performance of the unit.

MOTOR

The motor is permanently lubricated and never needs oiling. If the motor bearings make excessive or unusual noise, replace the motor with the exact service motor. The fan blade should also be replaced.

GREASE FILTER

The grease filter should be cleaned frequently. Use a warm dishwashing detergent solution. Grease filter is dishwasher safe.

Clean all-metal filter in the dishwasher using a non-phosphate detergent. Discoloration of the filter may occur if using phosphate detergents, or as a result of local water conditions - but this will not affect filter performance. This discoloration is not covered by the warranty. To minimize or prevent discoloration, hand wash filters using a mild detergent.

NON-DUCTED RECIRCULATION FILTER

The non-ducted recirculation filter should be changed every 3 to 6 months. Replace more often if your cooking style generates extra grease, such as frying and wok cooking. Refer to installation instructions included with non-ducted recirculation filter.

FAN BLADE

The fan blade should be cleaned frequently. Use a clean cloth soaked with warm detergent solution.

STAINLESS STEEL CLEANING

Do:

- Regularly wash 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 dry completely.
- You may also use a specialized household stainless steel cleaner.

Don't:

- Use any steel or stainless steel wool or any other scrapers to remove stubborn dirt.
- Use any harsh or abrasive cleansers.
- Allow dirt to accumulate.
- Let plaster dust or any other construction residues reach the hood. During construction/renovation, cover the range hood to make sure no dust sticks to the 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 CLEANING:

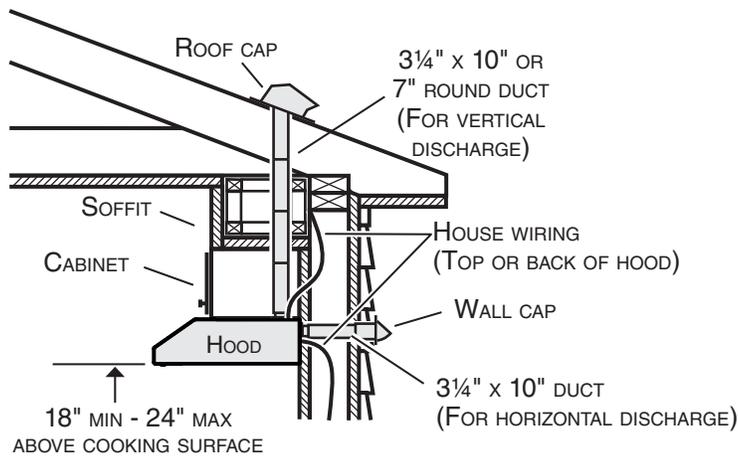
Clean with warm water and mild detergent only. If discoloration occurs, use a finish polish such as automotive polish. (DO NOT use rough abrasive cleaner or porcelain cleaner.)

For ADA compliance installation guidelines, please visit www.broan-nutone.com

Recommended Tools and Accessories for Installation

- Measuring tape
- Phillips screwdriver no. 2
- Flat blade screwdriver (to open knockout holes)
- Drill and 1½" hole saw (to cut electrical access hole)
- Saw (to cut holes for ducted application)
- Wood shims (2) and wood screws (4) (required for installation to framed cabinet)
- Sheet metal shears (ducted installation only, for duct adjustment)
- Pliers (ducted installation only, for duct adjustment)
- Metal foil duct tape (for ducted applications)
- Scissors (to cut metal foil duct tape)
- Pencil
- Wire stripper
- Strain relief, 1/2" diameter (to secure house wiring cable to the hood)

Install Ductwork (Ducted Installations Only)



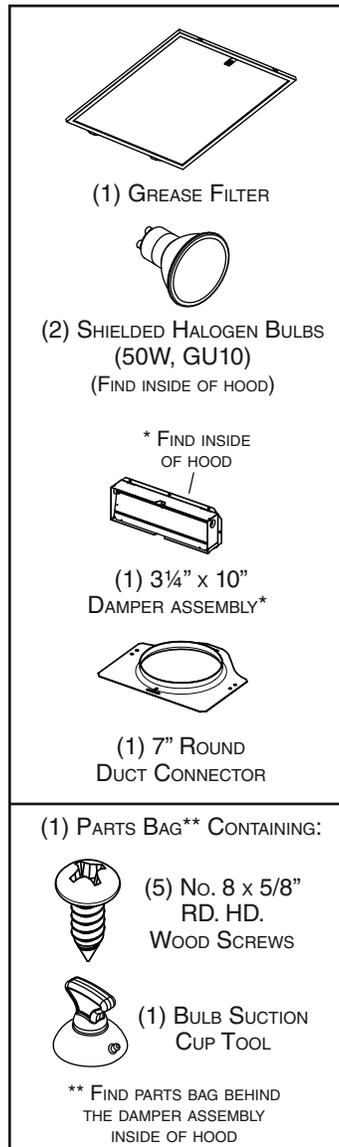
NOTE: Distances over 24" are at the installer and user discretion.

- 1] Determine whether hood will discharge vertically (3¼" x 10" or 7" round), or horizontally (3¼" x 10" only).
- 2] Decide where the ductwork will run between the hood and the outdoors.
- 3] Choose a straight, short duct run to allow the hood to perform most efficiently. Long duct runs, elbows and transitions will reduce the performance of the hood. Use as few of them as possible. When possible, use at least 2 foot straight runs before any turns. Larger ductwork may be required for best performance with longer duct runs.
- 4] Install wall cap or roof cap (sold separately). Connect metal ductwork to cap and work back towards the hood location. Use 2" metal foil duct tape to seal the joints between ductwork sections.

Contents

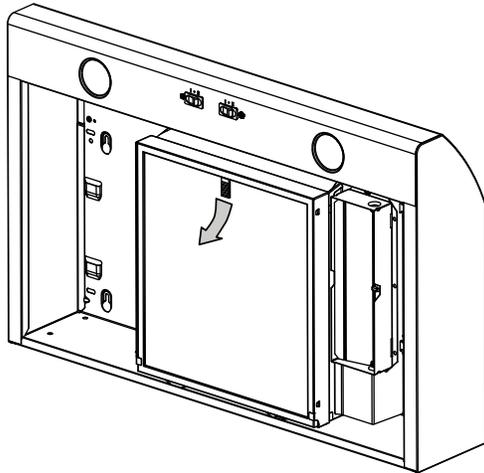
Before proceeding to the installation, check the contents of the box. If items are missing or damaged, contact the manufacturer.

Make sure that the following items are included:

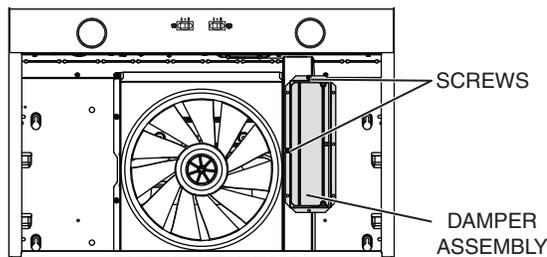


Prepare the Hood

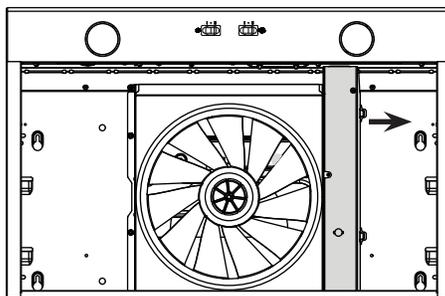
- 1] If present, remove all protective polyfilm from the hood and/or parts.
- 2] Using the tab, remove the grease filter from the hood by pushing it down and tilting filter out.



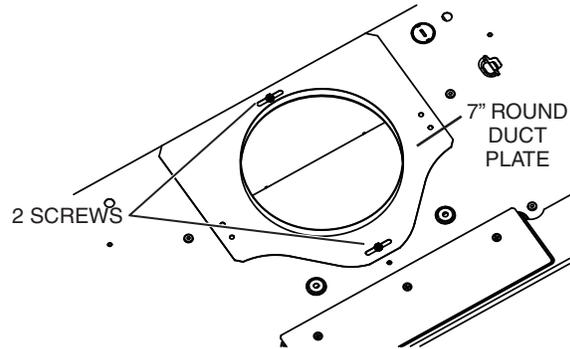
- 3] Remove both screws holding damper assembly to hood. Remove parts bag included with the hood (captured behind the damper assembly). Remove damper assembly from inside the hood and keep the screws for further use.



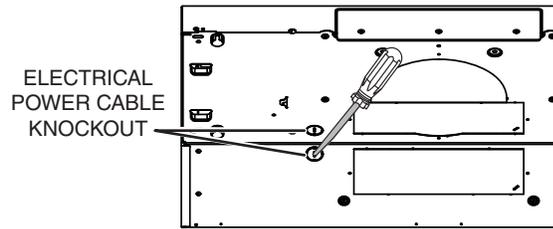
- 4] Remove the wiring cover (shaded part on illustration below) by sliding it out from the hood and set it aside.



- 5] Remove 7" Round Duct Plate from top/back of hood (see illustration below).

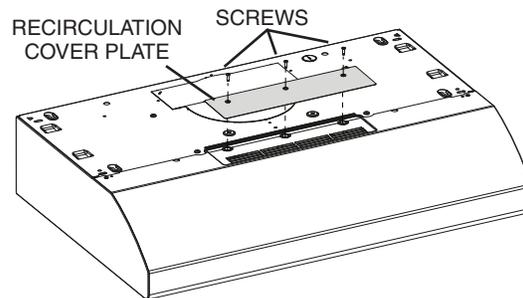


- 6] Remove Electrical Power Cable Knockout from top (vertical exhaust) or back (horizontal exhaust) of hood. Install an appropriate strain relief, 1/2" diameter (not included).



NON-DUCTED INSTALLATION ONLY

- 7] Remove 3 screws retaining the recirculation cover plate (shaded part in illustration below) to the hood. Discard this plate with its screws.



DUCTED INSTALLATION ONLY

- 8] Remove 3¼" x 10" vertical, 3¼" x 10" horizontal, or 7-inch round knockout plate as appropriate for your ducting method (see **FIGURES 1 A** and **1 B**).

FIGURE 1 A

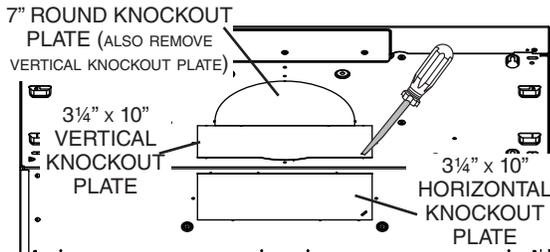
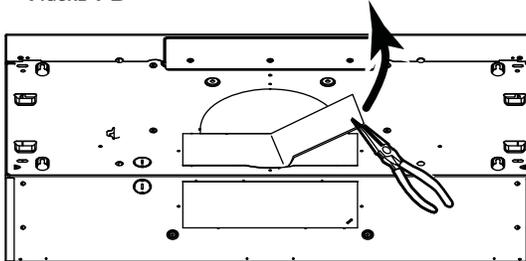


FIGURE 1 B



- 9] Attach 3¼" x 10" Damper Assembly on top OR back of hood (if using 3¼" x 10" duct; shaded part in **FIGURE 2 A** below) or 7" Round Duct Plate (if using 7-inch round duct, see **FIGURE 3**) over the knockout opening. When installed, the 3¼" x 10" damper assembly must open as shown in **FIGURE 2 B**.

FIGURE 2 A

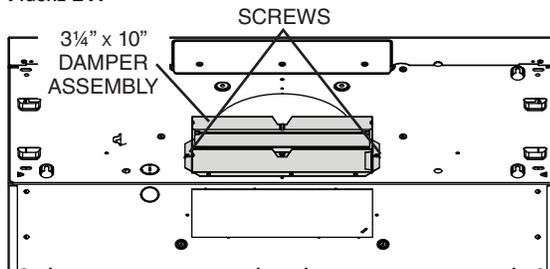


FIGURE 2 B

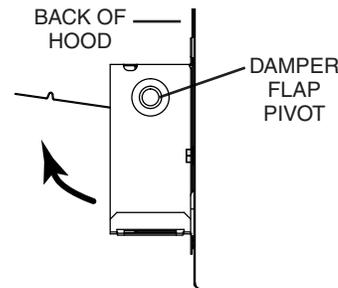
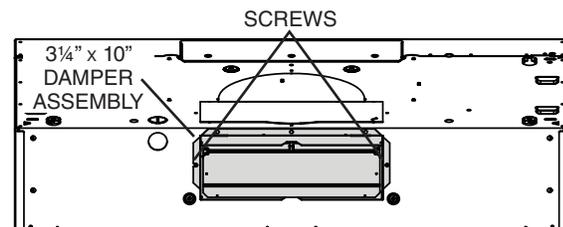
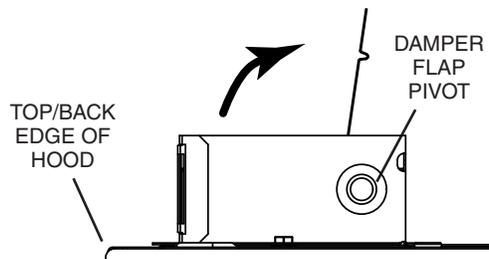
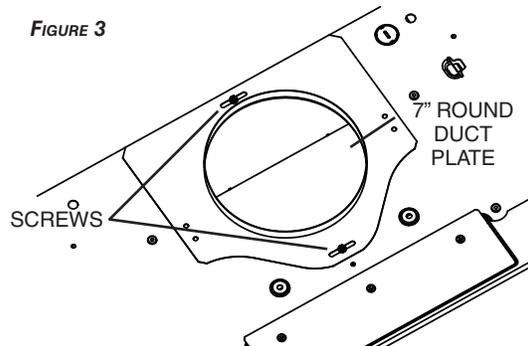


FIGURE 3

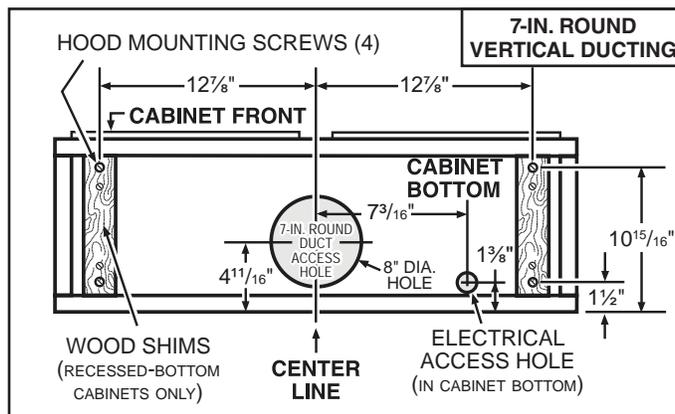
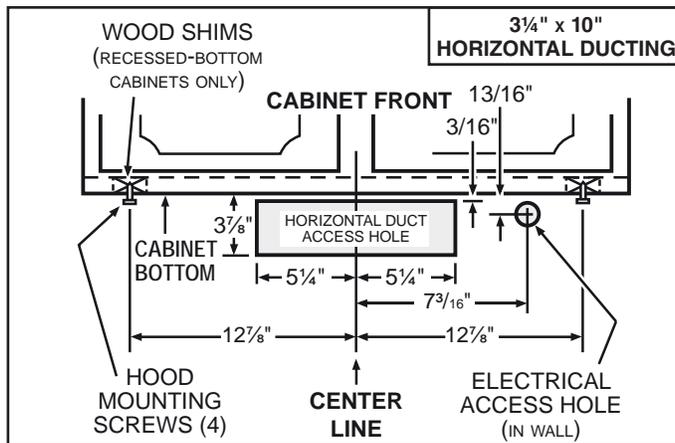
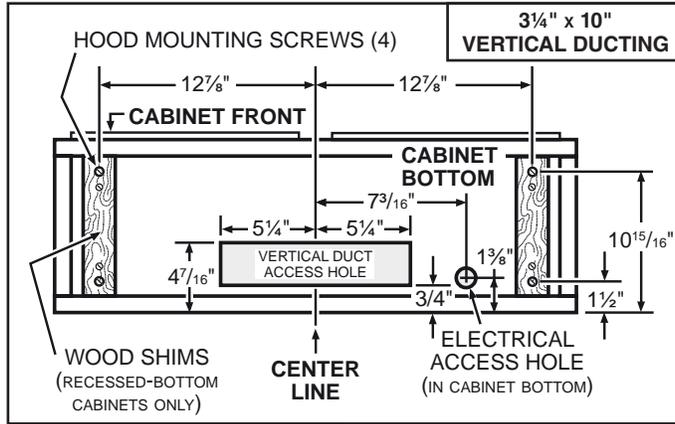


NOTE: To accommodate off-center ductwork, the 7" round duct plate can be installed up to 1/2" on either side of the hood center.

TIP: Insert a small length of duct over the 3¼" x 10" damper assembly (for rectangular ducting) or 7" round (for round ducting) and seal the joint using aluminum foil duct tape to ease connection with the house ductwork.

Prepare the Hood Location

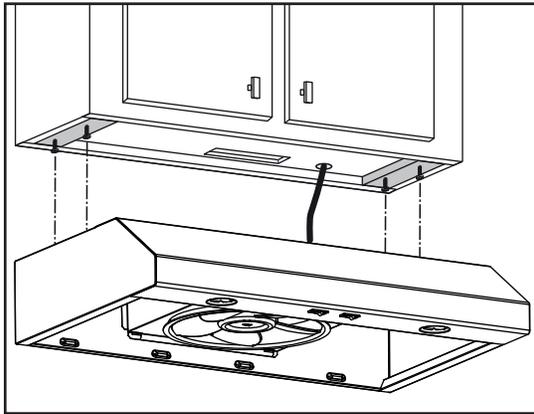
- 1] Use the proper diagram below for placement of ductwork and electrical cutout in cabinet or wall. For a non-ducted installation, DO NOT cut a duct access hole, only cut the hole for electrical wiring.



- 2] Install part-way four (4) ROUND HEAD no. 8 x 5/8" mounting screws into shims/cabinet, according to the proper diagram above. (Mounting screws are included in parts bag, but wood shims and shim mounting screws are not included.)

Install the Hood

- 1] Run house power cable between service panel and hood location. Run the house power cable into the hood through the strain relief previously installed in step 6 on page 10.
- 2] Hang hood from (4) mounting screws previously installed. Slide hood back towards wall until mounting screw heads are engaged in narrow end of keyhole slots in top of hood. Tighten screws securely. Attach power cable to the hood using the strain relief.



DUCTED INSTALLATION ONLY

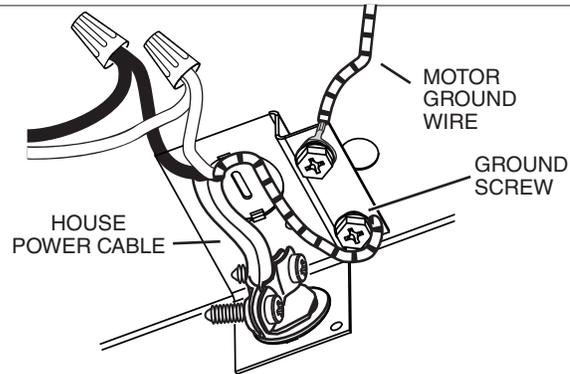
- 3] Connect ductwork to hood and use metal foil duct tape to make joints secure and air-tight. Make sure the damper assembly (or round duct plate) enters the ductwork and that the damper opens and closes freely.

Connect the Wiring

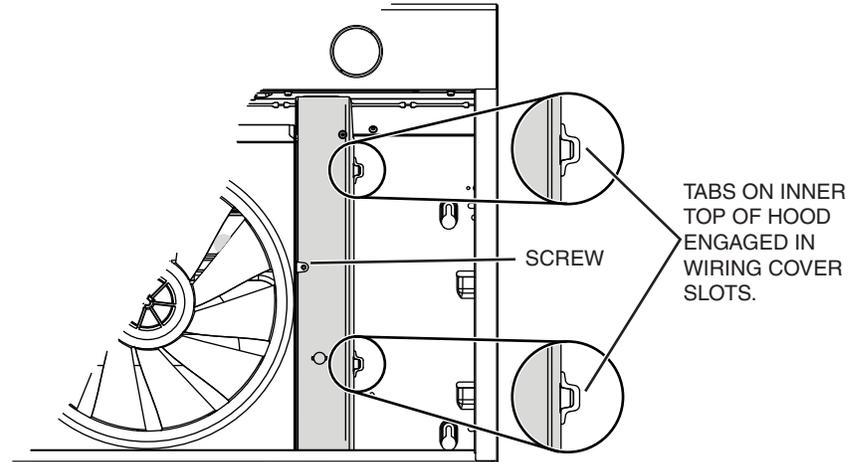
WARNING



Risk of electric 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.



- 1] Connect House Power Cable to range hood wiring: BLACK to BLACK, WHITE to WHITE and GREEN or bare wire under GREEN ground screw.



- 2] Reinstall wiring cover and attach it to the hood using its retaining screw.

CAUTION

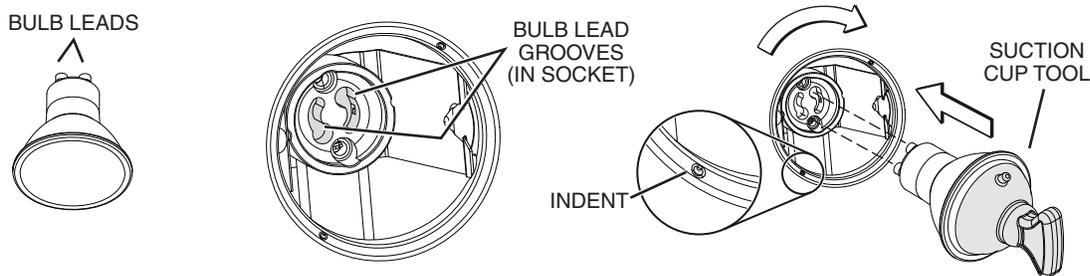
Ensure both tabs on inner top of hood are engaged in their corresponding slots in wiring cover. Also, take care not to pinch wires while reinstalling wiring cover.

Light Bulbs

This range hood requires two shielded halogen bulbs (120 V, 50 W max., MR16 or PAR16 with GU10 base), included.

! WARNING

Do not touch lamps during or soon after operation. Burns may occur. In order to prevent the risk of personal injury, only install shielded halogen lamps. Also, never install a cool beam, a dichroic lamp, a lamp not suitable for use in recessed luminaires or identified for use in enclosed fixtures.



- 1] Align the bulb leads with the small indentations located on the border of the lamp location on hood (see inset above), then install the bulbs by placing the bulb leads into their grooves in the socket.
- 2] Gently push upwards and turn clockwise until secure.

NOTE: The Suction Cup Tool (included with hood) can be used to install and remove light bulbs. Press suction cup tool on bulb and rotate counterclockwise to remove bulb or clockwise to install bulb.

! CAUTION

Most GU10 LED replacement bulbs commonly found in the market are not designed for use in a cooking environment and might not perform as advertised. Their usage with this product is not recommended.

Install the Filter

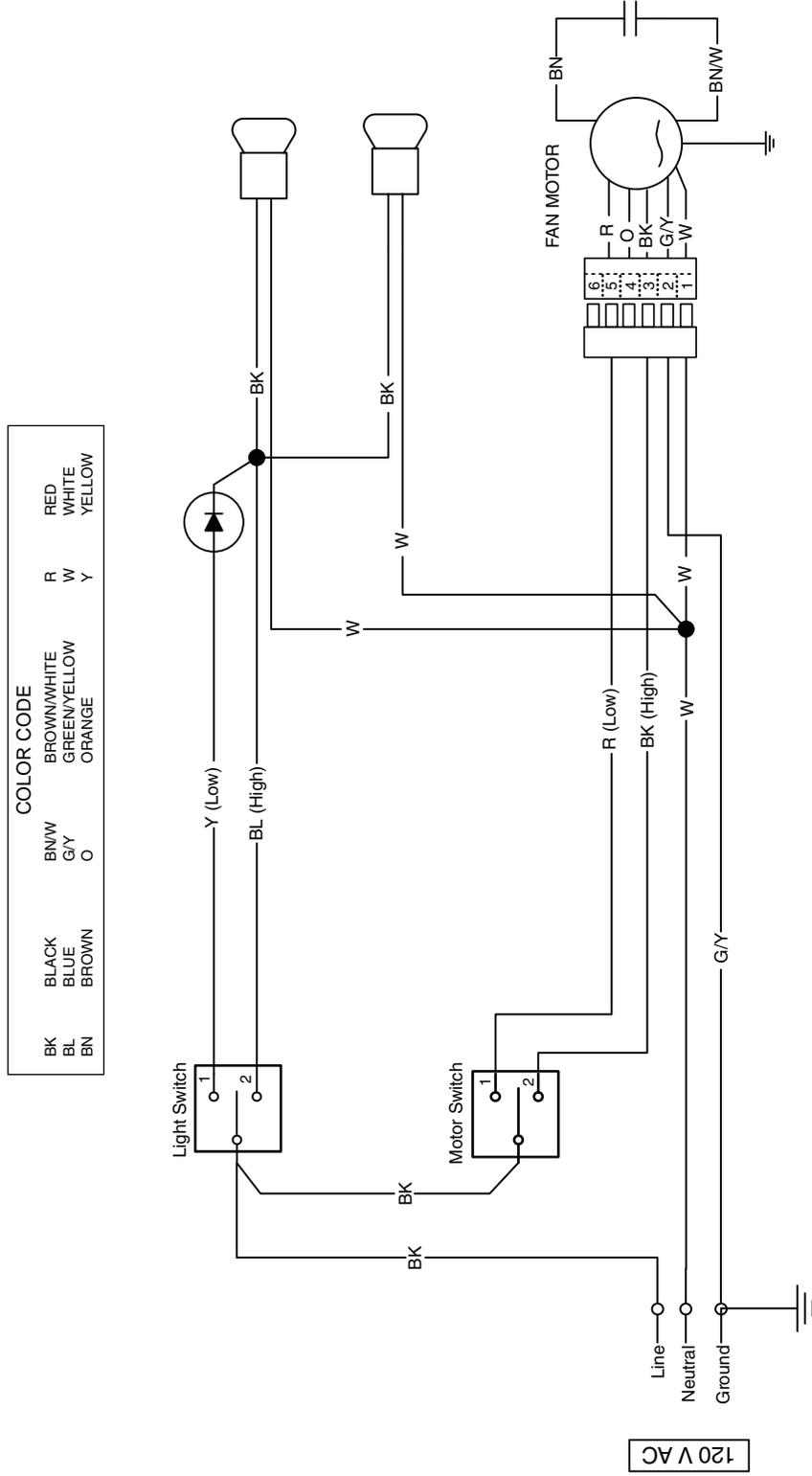
Ducted Installation Only:

Re-install grease filter removed in step 2 on page 9 under "Prepare the Hood."

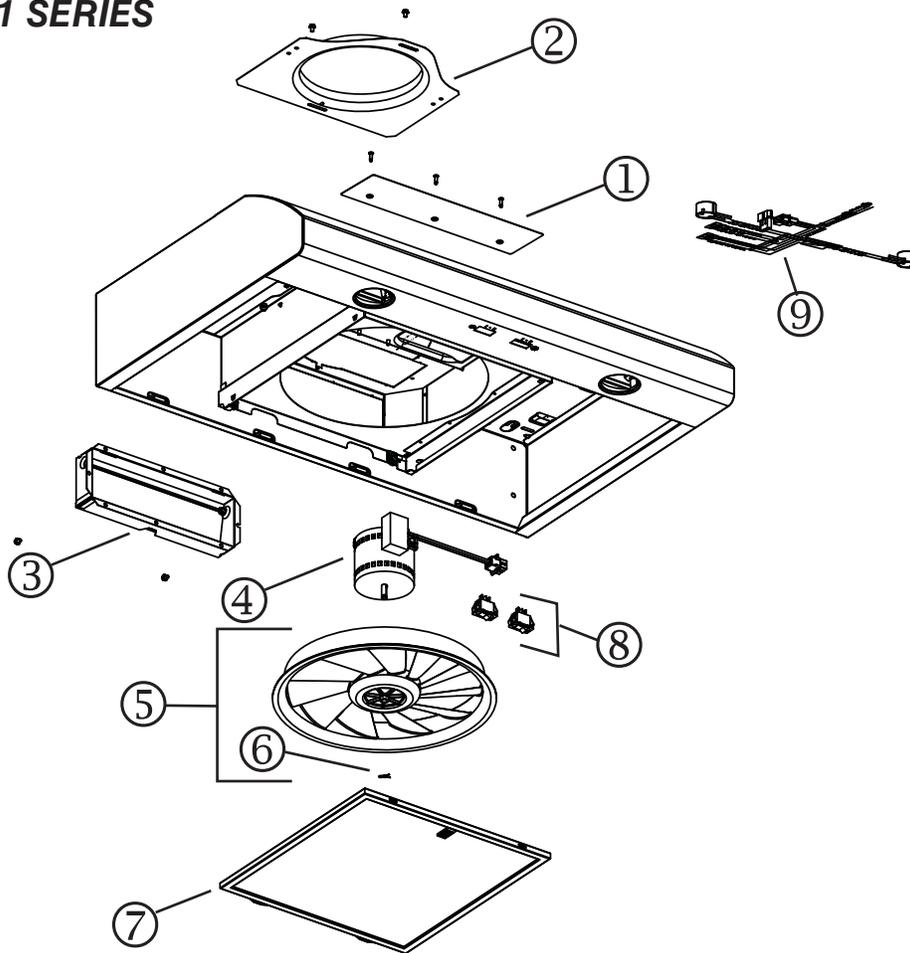
Non-ducted Installation Only:

Purchase one non-ducted filter from your local distributor or retailer (see product specification label inside of hood for filter type and part number). Attach the non-ducted filter following instructions packed with the non-ducted filter.

16 INSTALLATION MANUAL WIRING DIAGRAM



AHSA1 SERIES



KEY NO.	PART NO.	DESCRIPTION	QUANTITY		
			30" WHITE	30" STAINLESS	30" BLACK
1	S97020029	RECIRCULATION COVER PLATE, BLACK (INCLUDING SCREWS)			1
	S97020030	RECIRCULATION COVER PLATE, WHITE (INCLUDING SCREWS)	1		
	S97020031	RECIRCULATION COVER PLATE, STAINLESS STEEL (INCLUDING SCREWS)		1	
2	SR680508	7" ROUND DUCT PLATE (INCLUDING SCREWS)	1	1	1
3	S97020534	3¼" x 10" DAMPER ASSEMBLY (INCLUDING SCREWS)	1	1	1
4	S97020408	BLOWER MOTOR (INCLUDING 4 SCREWS AND 1 CAPACITOR)	1	1	1
5	S97020407	FANPELLER (INCLUDING ITEM 6)	1	1	1
6	SR99420635	CLIP FOR FANPELLER	1	1	1
7	S99010436	GREASE FILTER - OPEN MESH - TYPE A0 (1 PC.)	1	1	1
8	S99030355	ROCKER SWITCH, WHITE (SET OF 2)	1		
	S99030356	ROCKER SWITCH, BLACK (SET OF 2)			1
	S99030367	ROCKER SWITCH, GREY (SET OF 2)		1	
9	S97020448	WIRE HARNESS	1	1	1
*	S98011637	WIRING COVER	1	1	1
*	S97018623	PARTS BAG INCLUDING: 5 ROUND HEAD NO. 8 x 5/8" WOOD SCREWS, 1 SUCTION CUP TOOL	1	1	1
*	S97020464	NON-DUCTED FILTER - TYPE XA (1PC.) (NON-DUCTED INSTALLATION ONLY)	1	1	1
*	SV05921	SHIELDED HALOGEN BULB 50 W, GU10	2	2	2
*	S99527587	NON-DUCTED FILTER CLIP KIT - INCLUDES 4 CLIPS	1	1	1

* ITEM NOT SHOWN.

REPLACEMENT PARTS AND REPAIRS

In order to ensure your unit remains in good working condition, you must use Broan-NuTone LLC genuine replacement parts only. Broan-NuTone LLC genuine replacement parts are specially designed for each unit and are manufactured to comply with all the applicable certification standards and maintain a high standard of safety. Any third party replacement part used may cause serious damage and drastically reduce the performance level of your unit, which will result in premature failing. Broan-NuTone LLC recommends to contact a certified service depot for all replacement parts and repairs.

Limited Warranty

Warranty Period and Exclusions: Broan-NuTone LLC (the "Company") warrants to the original consumer purchaser of its product ("you") that the product (the "Product") will be free from material defects in the Product or its workmanship for a period of one (1) year from the date of original purchase (or such longer period as may be required by applicable law). The limited warranty period for any replacement parts provided by the Company and for any Products repaired or replaced under this limited warranty shall be the remainder of the original warranty period (or such longer period as may be required by applicable law).

This warranty does not cover fluorescent lamp starters, tubes, halogen and incandescent bulbs, fuses, filters, ducts, roof caps, wall caps and other accessories for ducting that may be purchased separately and installed with the Product. This warranty also does not cover (a) normal maintenance and service, (b) normal wear and tear, (c) any Products or parts which have been subject to misuse, abuse, abnormal usage, negligence, accident, improper or insufficient maintenance, storage or repair (other than repair by the Company), (d) damage caused by faulty installation, or installation or use contrary to recommendations or instructions, (e) any Product that has been moved from its original point of installation, (f) damage caused by environmental or natural elements, (g) damage in transit, (h) natural wear of finish, (i) Products in commercial or nonresidential use, or (j) damage caused by fire, flood or other act of God or (k) Products with altered, defaced or removed serial numbers. This warranty covers only Products sold to original consumers in the United States by the Company or its U.S. distributors authorized by the Company.

This warranty supersedes all prior warranties and, subject to applicable law, is not transferable from the original consumer purchaser.

No Other Warranties: This Limited Warranty contains the Company's sole obligation and your sole remedy for defective products. The foregoing warranties are exclusive and in lieu of any other warranties and conditions, express or implied. **THE COMPANY DISCLAIMS AND EXCLUDES ALL OTHER EXPRESS WARRANTIES AND CONDITIONS, AND DISCLAIMS AND EXCLUDES ALL WARRANTIES AND CONDITIONS IMPLIED BY LAW, INCLUDING WITHOUT LIMITATION THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.** To the extent that applicable law prohibits the exclusion of implied warranties or conditions, the duration of any applicable implied warranty or condition is limited to the period specified for the express warranty above. Some jurisdictions do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. Any oral or written description of the Product is for the sole purpose of identifying it and shall not be construed as an express warranty.

Whenever possible, each provision of this Limited Warranty shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision is held to be prohibited or invalid, such provision shall be ineffective only to the extent of such prohibition or invalidity, without invalidating the remainder of such provision or the other remaining provisions of the Limited Warranty.

Remedy: During the applicable limited warranty period, the Company will, at its option, provide replacement parts for, or repair or replace, without charge, any Product or part thereof, to the extent the Company finds it to be covered by and in breach of this limited warranty under normal use and service. The Company will ship the repaired or replaced Product or replacement parts to you at no charge. You are responsible for all costs for removal, reinstallation and shipping, insurance or other freight charges incurred in the shipment of the Product or part to the Company. If you must send the Product or part to the Company, as instructed by the Company, you must properly pack the Product or part—the Company is not responsible for damage in transit. The Company reserves the right to utilize reconditioned, refurbished, repaired or remanufactured Products or parts in the warranty repair or replacement process. Such Products and parts will be comparable in function and performance to an original Product or part and warranted for the remainder of the original warranty period (or such longer period as may be required by applicable law).

Company reserves the right, in its sole discretion, to refund the money actually paid by you for the Product in lieu of repair or replacement. If the Product or component is no longer available, replacement may be made with a similar product of equal or greater value, at Company's sole discretion. This is your sole and exclusive remedy for breach of this limited warranty.

Exclusion of Damages: **THE COMPANY'S OBLIGATION TO PROVIDE REPLACEMENT PARTS, OR REPAIR, REPLACE OR REFUND, AT THE COMPANY'S OPTION, SHALL BE YOUR SOLE AND EXCLUSIVE REMEDY UNDER THIS LIMITED WARRANTY AND THE COMPANY'S SOLE AND EXCLUSIVE OBLIGATION. THE COMPANY SHALL NOT BE LIABLE FOR INCIDENTAL, INDIRECT, CONSEQUENTIAL OR SPECIAL DAMAGES ARISING OUT OF OR IN CONNECTION WITH THE PRODUCT, ITS USE OR PERFORMANCE.** Incidental damages include but are not limited to such damages as loss of time and loss of use. Consequential damages include but are not limited to the cost of repairing or replacing other property which was damaged if the Product does not work properly.

THE COMPANY SHALL NOT BE LIABLE TO YOU, OR TO ANYONE CLAIMING UNDER YOU, FOR ANY OTHER OBLIGATIONS OR LIABILITIES, INCLUDING, BUT NOT LIMITED TO, OBLIGATIONS OR LIABILITIES ARISING OUT OF BREACH OF CONTRACT OR WARRANTY, NEGLIGENCE OR OTHER TORT OR ANY THEORY OF STRICT LIABILITY, WITH RESPECT TO THE PRODUCT OR THE COMPANY'S ACTS OR OMISSIONS OR OTHERWISE.

Some jurisdictions 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 jurisdiction to jurisdiction. The disclaimers, exclusions, and limitations of liability under this warranty will not apply to the extent prohibited by applicable law.

This warranty covers only replacement or repair of defective Products or parts thereof at the Company's main facility and does not include the cost of field service travel and living expenses.

Any assistance the Company provides to or procures for you outside the terms, limitations or exclusions of this limited warranty will not constitute a waiver of such terms, limitations or exclusions, nor will such assistance extend or revive the warranty.

The Company will not reimburse you for any expenses incurred by you in repairing or replacing any defective Product, except for those incurred with the Company's prior written permission.

How to Obtain Warranty Service: To qualify for warranty service, you must (a) notify the Company at the address or telephone number stated below within seven (7) days of discovering the covered defect, (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. If you cannot provide a copy of the original written limited warranty, then the terms of the Company's most current written limited warranty for your particular product will control. The most current limited written warranties for the Company's products can be found at www.nutone.com.

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