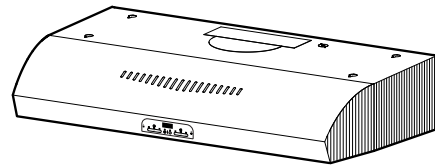# BROAN®

EVOLUTION™ 3

Register your product online at: www.broan.com

READ AND SAVE THESE INSTRUCTIONS

⚠️ **FOR DOMESTIC COOKING ONLY** ⚠️

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.
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. This product may have sharp edges. Be careful to avoid cuts and abrasions during installation and cleaning.
6. When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.
7. Ducted fans must always be vented to the outdoors.
8. Use only metal ductwork.
9. Do not use this fan with any solid-state speed control device.
10. As an alternative, this product may be installed with the UL-approved cord kit designated for the product, following instructions packed with the cord kit.
11. 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 flambéing food (i.e. Crêpes Suzette, Cherries Jubilee, Peppercorn Beef Flambé).
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.

WARNING 🔥 ⚡

2. NEVER PICK UP A FLAMING PAN — You may be burned or spread the fire.
3. DO NOT USE WATER, including wet dishcloths or towels - a 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 Firesafety Tips" published by NFPA.

CAUTION ⚠️

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 impeller, keep drywall spray, construction dust, etc., off power unit.
4. Do not use over cooking equipment greater than 60,000 BTU/hr. as the blower motor will shut down intermittently.
5. 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.
6. The top of the hood MUST NOT BE LESS than 24" and at a maximum of 30" above cooktop for best capture of cooking impurities.
7. This hood is not intended to be used as a shelf.
8. Please read specification label on product for further information and requirements.

| NOTE | If hood is to be installed non-ducted:

Purchase a set of (2) non-ducted filters for 30" wide hoods (Model BPPF30) & 36" wide hoods (Model BPPF36) or a set of (3) non-ducted filters for 42" wide hoods (Model BPPF42) from your local distributor or retailer and attach them to the aluminum mesh filters.
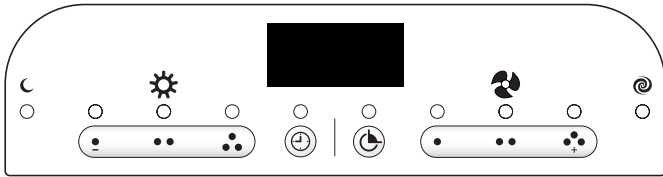
Installer: Leave this manual with the homeowner.

Homeowner: Cleaning, Maintenance and Operating instructions on pages 2-4.

OPERATION

Always turn the hood ON before cooking in order to establish an air flow in the kitchen. After turning off the range, let the hood run for a few minutes to clear the air.

Operate the hood as follows:

NOTE

The ⦂ and ⦂⦂ buttons are used to adjust and toggle the menu and timer settings.

☼ LIGHT (3-Push-button switches 4-light settings)

⦂ Turns the light on the low setting and activates a green indicator above the button. Pressing the ⦂ button a second time activates the night time setting and illuminates the ☾ indicator.

•• Turns the light on the medium setting and activates a green indicator above the button.

⦂• Turns the light on the high setting and activates a green indicator above the button.

Pressing and holding the same light button again will turn the lights off.

When the night time setting is active, pressing and holding the low light setting button ⦂ will turn the night time setting off.

FAN (3-Push-button switches 4-fan speeds)

● Turns the fan on the low speed and activates a green indicator above the button.

●● Turns the fan on the medium speed and activates a green indicator above the button.

•⁺• Turns the fan on the high speed and activates a green indicator above the button. Pressing the •⁺• button a second time activates the boost fan speed and illuminates the ◉ indicator.

Pressing and holding the same fan button again will turn the fan off.

When the boost speed is active, pressing and holding the high speed button will turn the boost speed off.

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 of cooking impurities, regardless of the hood design.

⟳ 10-MINUTE DELAY OFF

When your hood fan is on (any speed) press the ⟳ button to activate the delay off feature. When activated, the hood fan will automatically turn off after 10-minutes has elapsed. The delay feature is active when the following appear on the LED screen: A green indicator illuminated above the delay ⟳ button, a numeric countdown "10-0", and a clockwise rotating LED. The delay button can be pressed once again, to stop the delay countdown. Pressing the ⟳ button again will resume the delay countdown. Pressing and holding the button will turn off the feature.

⏰ TIMER

Press the ⏰ button to activate the timer setting feature. Use the ⦂ and •⁺• buttons to reduce or advance the timer setting to the desired duration. When the desired timer setting is reached, allow 3 seconds without pressing any additional button or press the ⏰ button once again. The timer will then activate, and the countdown will be displayed on the LED screen along with an green indicator above the ⏰ button. After the timer has reached "0:00", an audible beep will be heard. The beep will continue until the timer button ⏰ is pressed once again. The timer countdown can be stopped at any time by pressing the ⏰ once again. Pressing the ⏰ button again will resume the timer countdown. Pressing and holding the ⏰ button will turn off the feature. Note that when both the timer and delay off features are active together, the timer function will be illuminated on the LED display, and the delay off countdown will be active, but not displayed.

FEATURE MENU

Your hood offers many settings that can be accessed and adjusted by scrolling through the feature menu. Your hood fan must be off to be able to activate and access the feature menu. Pressing the ⟳ button when the hood fan is off will activate the feature menu. Pressing the ⟳ button again when the feature menu is active will scroll through the various features that can be adjusted/set. When the feature menu is active, if a button is not pressed within 10 seconds or after scrolling through all menu settings, the feature menu will automatically be exited, and all selected settings will be saved. A green indicator above the ⟳ icon will illuminate when the feature menu is active. The following features can be adjusted sequentially:

CLOCK SETTING

Press the ⏱ button once, the "hours" will begin blinking in the LED screen. Use the ● and ●●● buttons to set the appropriate hours for the clock. A small indicator will illuminate in the left corner of the LED screen to designate "pm". After the hours are set, press the ⏱ button to advance the menu to the minute selection. The minutes will begin blinking in the LED screen. Use the ● and ●●● buttons to set the minutes. Press the ⏱ button again to advance the menu to select "display" settings.

DISPLAY *(default from factory - display ON)*

The LED screen will display the display feature -d-. Use the ● or ●●● button to toggle the LED screen on (d on) or off (doFF). When the display off (doFF) feature is selected, the LED display clock illumination is disabled. Press the ⏱ button again to advance the menu to select the "Sleep" setting.

SLEEP MODE *(default from factory - OFF)*

The LED screen will display the "Sleep" feature -S- . Use the ● or ●●● button to toggle the Sleep feature on (S on) or off (S off). When the Sleep on (S on) feature is selected, the LED screen and fan/light LED indicators are disabled. The ambient light sensor, delay-off and timer features will also be disabled. All controls for the fan and light operation, including Heat Sentry, are still active. Press the ⏱ button again to advance the feature menu to select the "Ambient Light Sensor" setting. Note: To access the feature menu when the Sleep Mode is active, press and hold the ⏱ button for 2 seconds.

AMBIENT LIGHT SENSOR *(default from factory - OFF)*

There are two level settings for the ambient light sensor. When either of the two settings is active, the light sensor will detect a low level of light in your kitchen, and will automatically turn the task lights on the hood to the night time setting. The other light settings are still functional. If selected when the ambient light sensor is active, they will temporarily override the ambient light sensor until they are turned off. The level 1(Aon1) ambient light sensor setting will require your kitchen to be more dark than the level 2 (Aon2) setting before activating the night time setting. The LED screen will display the ambient light sensor function -A-. Use the ● or ●●● button to select the light sensor setting Aon1, Aon2, or AoFF. The Off (AoFF) setting deactivates the automatic ambient light sensor feature so the night time light operation is manual.

Note that the feature menu can be exited any time by not pressing any button(s) for 10 seconds or by scrolling through the entire feature menu.

HEAT SENTRY SYSTEM

This range hood is equipped with an advanced Heat Sentry system that monitors excessive temperature and automatically adjusts 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 off**, (**CANADIAN VERSION DOES NOT HAVE THIS FUNCTION)** the Heat Sentry system will automatically turn the fan on to its highest speed when the temperature is above normal. When the Heat Sentry system is on, the light above the high speed fan button will flash on and off. After the temperature has lowered to normal, the fan speed will be reduced until the temperature has stabilized, then the fan will turn off.

FUSES

RANGE HOOD CONTROL BOARD
MAIN FUSE
LIGHT FUSE
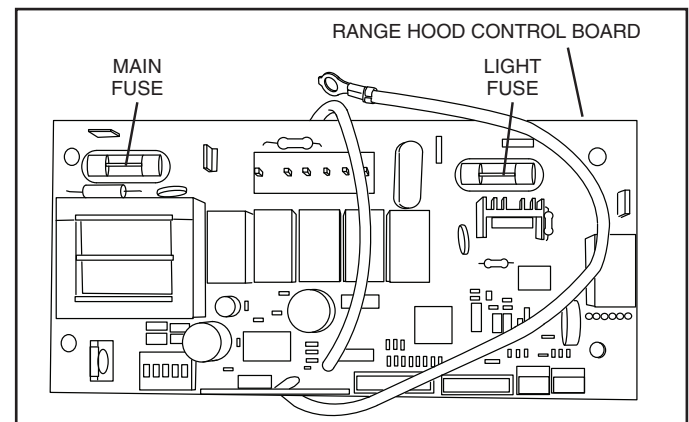
The **Range Hood Control Board** contains a **Main Fuse** and a **Light Fuse** to protect the controls from power surges. If a fuse has opened (blown), the green fan setting or light setting indicators will not operate properly when the fan or light buttons are pressed, and the fan and lights will not turn on.

New fuses can be purchased at your local electronic supply store. Use 8A, 120V, 5 mm diameter, 20 mm long, fast-acting, cartridge-type fuses.
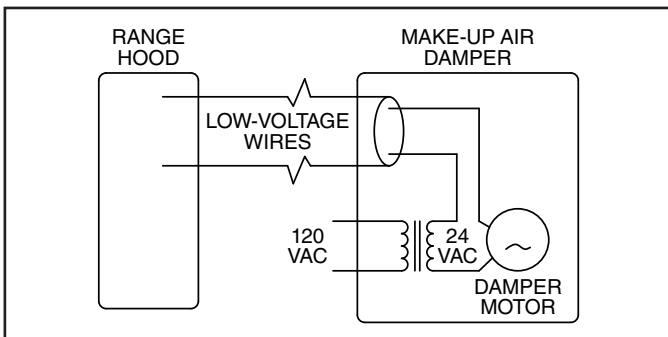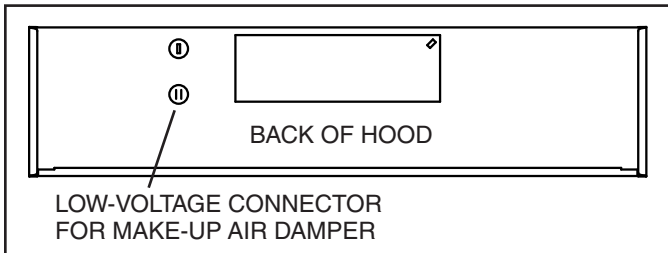
To replace a fuse (by qualified person(s):
1. Disconnect power at service entrance.
2. Remove filters and bottom pan.
3. Remove and inspect fuse. If it is not open (blown), additional diagnostics are needed.

MAKE-UP AIR DAMPER

The hood is compatible with Broan Make-Up Air Damper Model MD6T or Model MD8T (optional). Purchase separately.

Make the connection to the Make-Up Air Damper with low voltage wiring, as shown. See Make-Up Air Damper instructions for additional information.

BACK OF HOOD

LOW-VOLTAGE CONNECTOR FOR MAKE-UP AIR DAMPER

RANGE HOOD — MAKE-UP AIR DAMPER

LOW-VOLTAGE WIRES

120 VAC — 24 VAC

DAMPER MOTOR

REMOTE CONTROL

The hood is compatible with Broan RF Remote Control Model BCR1 (optional). Purchase separately.

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 impeller should also be replaced.

Grease Filter

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

Clean all-metal filters in the dishwasher using a non-phosphate detergent. Discoloration of the filters 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.

See Step 9 on page 6 for removal and installation instructions.

Non-ducted Recirculation Filters

The non-ducted recirculation filter should be changed every 6 months. Replace more often if your cooking style generates extra grease, such as frying and wok cooking. 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. See Step 15 on page 7, for removal and installation instructions.

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.
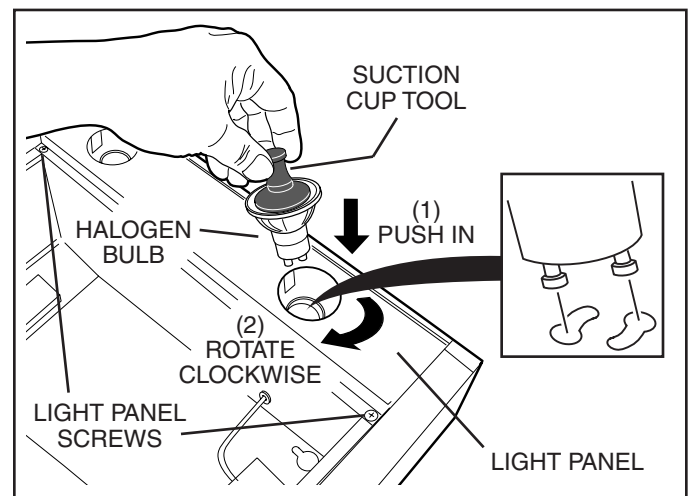• You may also use a specialized household stainless steel cleaner.

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.

LIGHT BULB REPLACEMENT

SUCTION CUP TOOL

HALOGEN BULB

(1) PUSH IN

(2) ROTATE CLOCKWISE

LIGHT PANEL SCREWS

LIGHT PANEL

⚠ **CAUTION: Bulbs may be hot. Always allow bulbs to cool down before removing them.**

This hood uses (4) **Halogen Bulbs** (included with hood). Use 120 V, 50W, shielded halogen bulbs - MR16 with GU10 base.

NOTE: **Suction Cup Tool** (included with hood) can be used to install and remove light bulbs.

Align pins on bulb with large diameter opening on socket, then push bulb in towards hood and rotate clockwise until firmly seated.

The position of the bulb socket (depth) is adjustable and may require adjustment when:

    a) certain brands of bulbs are difficult to install.
    b) the bulb protrudes too far below the light panel.
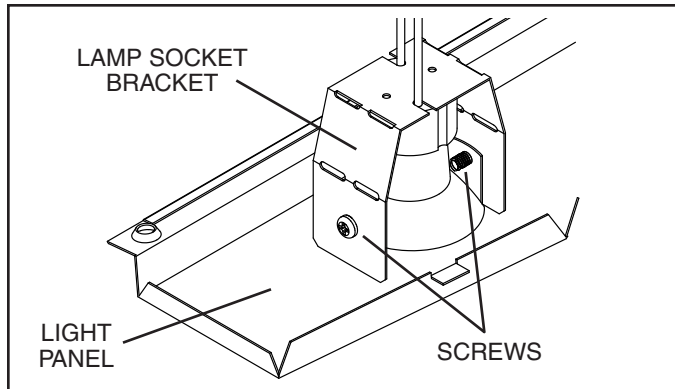
To change the depth of bulb sockets:
- Remove bottom pan (See Step 10).
- Remove 2 **Light Panel Screws** and **Light Panel**. Set screws aside.
- Loosen 2 **Screws** holding **Lamp Socket Bracket** to **Light Panel**.
- Adjust socket/bracket to desired depth.
- Re-tighten screws securely.
- Re-attach light panel and bottom pan.

INSTALL THE DUCTWORK (Ducted Hoods Only)
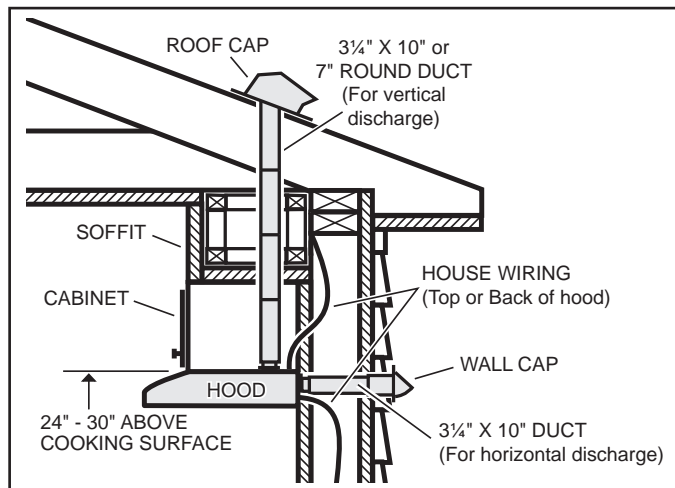
1. Determine whether hood will discharge vertically (3¼" x 10" or 7" Round), or horizontally (3¼" x 10" only).

2. Decide where the ductwork will run between the hood and the outside.

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. Larger ductwork may be required for best performance with longer duct runs.

4. Install wall cap or roof cap. Connect metal ductwork to cap and work back towards the hood location. Use duct tape to seal the joints between ductwork sections.

PREPARE HOOD LOCATION

5. 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.
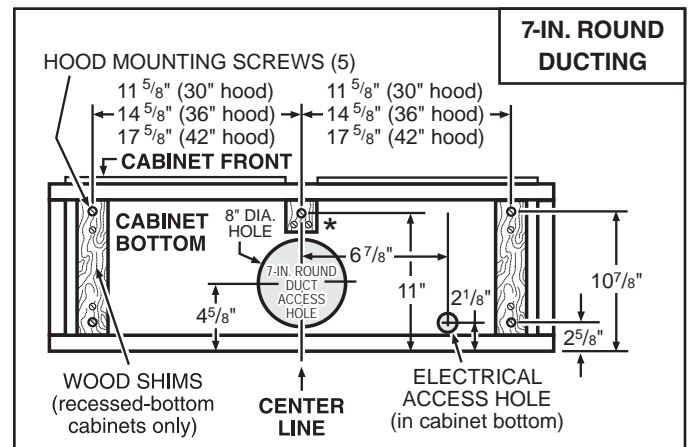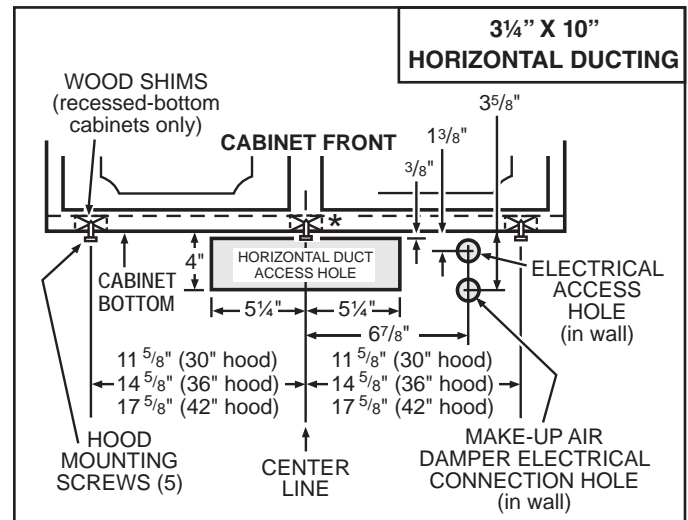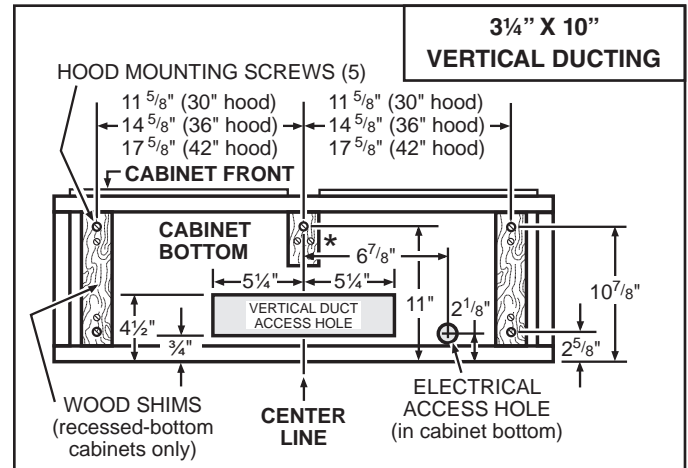
* Note the extra wood shim and mounting screw near the cabinet front, on the cabinet center line.

BROAN®

QP3 SERIES

Page 6

MEASURE THE INSTALLATION

ROOF CAP

3¼" X 10" or 7" ROUND DUCT (For vertical discharge)

SOFFIT

CABINET

HOUSE WIRING (Top or Back of hood)

WALL CAP

HOOD

24" - 30" ABOVE COOKING SURFACE
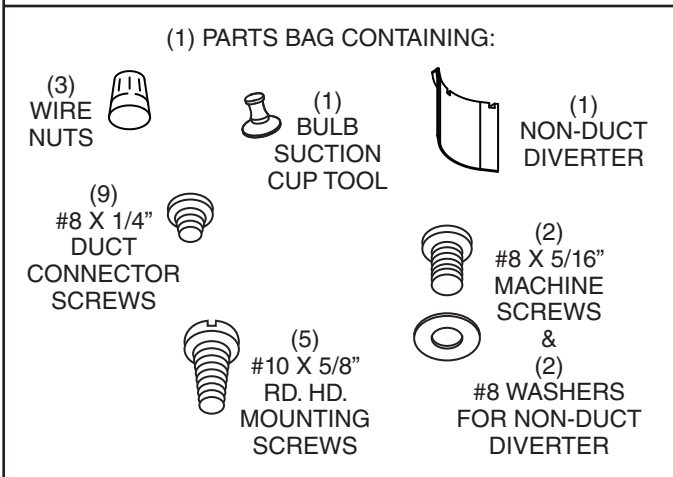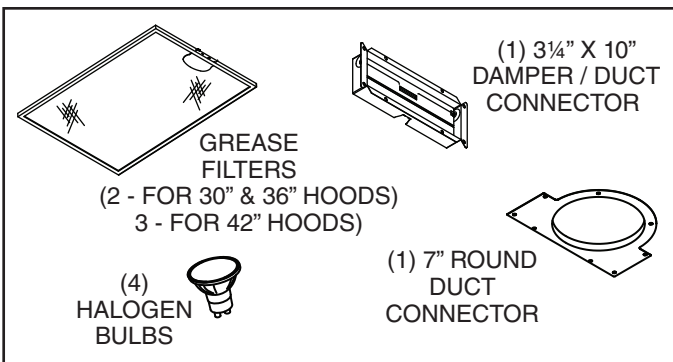
3¼" X 10" DUCT (For horizontal discharge)
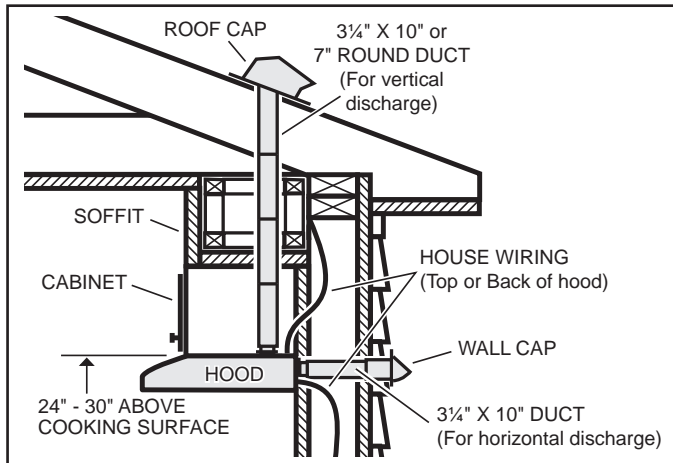
6   The minimum hood distance above cooking surface MUST NOT BE LESS than 24" (to top of hood).

A maximum of 30" (to top of hood) above cooking surface is highly recommended for best capture of cooking impurities.

Distances over 30" are at the installer's and user's discretion; providing that the cabinet height permits.

CONTENTS

INCLUDED WITH THE HOOD:

GREASE FILTERS
(2 - FOR 30" & 36" HOODS)
3 - FOR 42" HOODS)

(1) 3¼" X 10" DAMPER / DUCT CONNECTOR

(1) 7" ROUND DUCT CONNECTOR

(4) HALOGEN BULBS

(1) PARTS BAG CONTAINING:

(3) WIRE NUTS

(1) BULB SUCTION CUP TOOL

(1) NON-DUCT DIVERTER

(9) #8 X 1/4" DUCT CONNECTOR SCREWS

(2) #8 X 5/16" MACHINE SCREWS &

(5) #10 X 5/8" RD. HD. MOUNTING SCREWS

(2) #8 WASHERS FOR NON-DUCT DIVERTER

PREPARE THE HOOD

7   Remove parts bag from inside the hardware box included with the hood.

8   Remove all protective polyfilm from the hood (stainless steel hoods only).

(1) PULL DOWN

(2) LIFT OUT
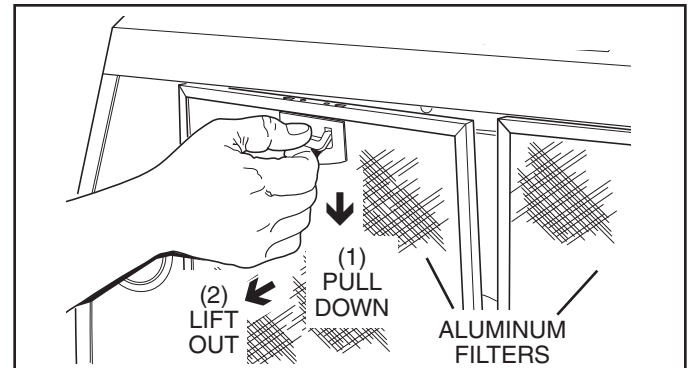
ALUMINUM FILTERS

9   Remove the **Aluminum Filters** from the hood.
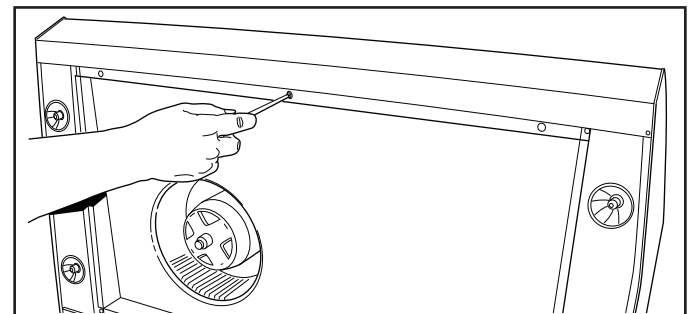
10   Remove 6 **Screws** holding **Bottom Pan** to hood. Set bottom pan and screws aside.
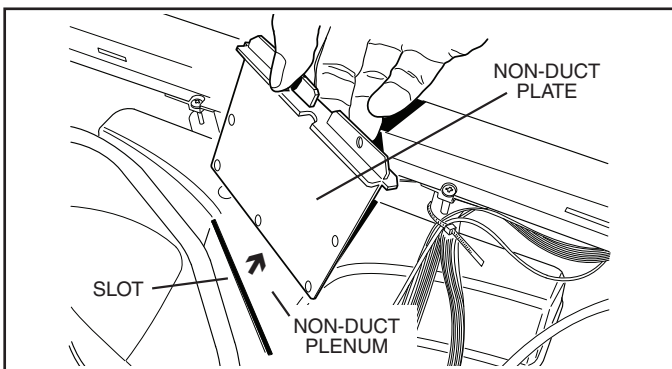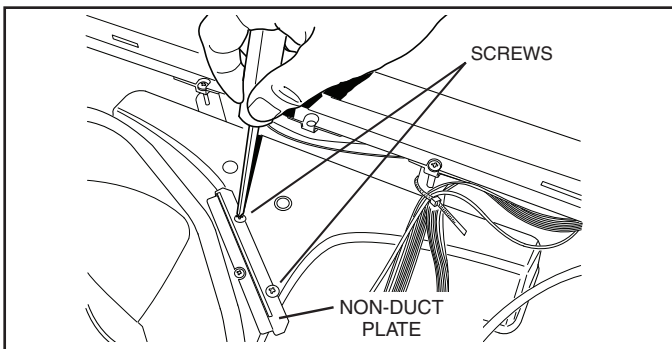

DAMPER / DUCT CONNECTOR
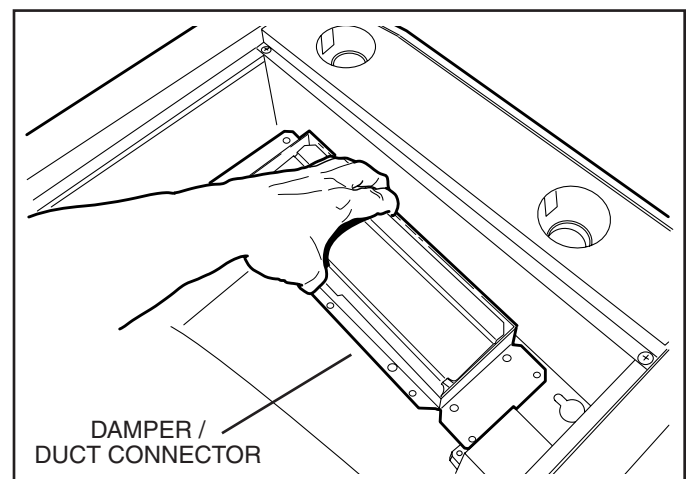
11   Remove 2 **Screws** holding **Damper / Duct Connector** to hood. Remove damper/duct connector from inside the hood.
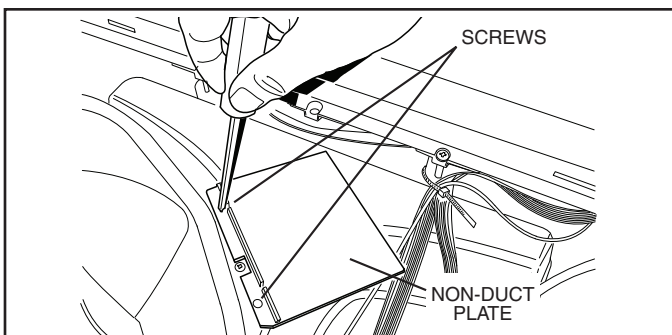
FOR DUCTED INSTALLATIONS - Skip to Step 16.
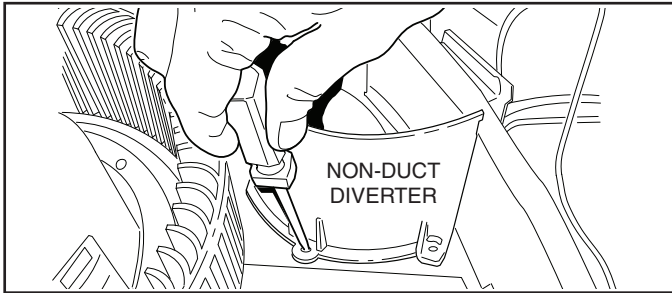
12 **NON-DUCTED INSTALLATION ONLY:**
From parts bag: Attach **Non-Duct Diverter** to **Air Box** with 2 **Screws** and 2 **Washers**.
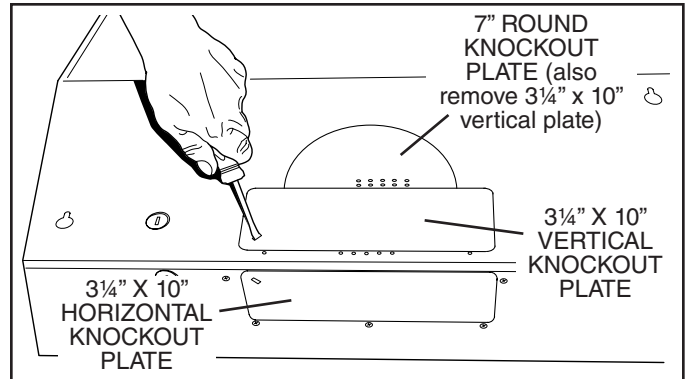

SCREWS

NON-DUCT PLATE

NON-DUCT PLATE

SLOT

NON-DUCT PLENUM

13 **NON-DUCTED INSTALLATION ONLY:**
Remove 2 **Screws** holding **Non-Duct Plate** to **Non-Duct Plenum** and remove plate.

SCREWS

NON-DUCT PLATE

14 **NON-DUCTED INSTALLATION ONLY:**
Insert short end of **Non-Duct Plate** into Non-Duct Plenum **Slot**. Attach with 2 **Screws** removed in Step 13.

15 **NON-DUCTED INSTALLATION ONLY:**
Purchase a set of (2) non-ducted filters for 30" wide hoods (Model BPPF30) & 36" wide hoods (Model BPPF36) or a set of (3) non-ducted filters for 42" wide hoods (Model BPPF42) from your local distributor or retailer. Attach the non-ducted filters to the aluminum mesh filters following instructions packed with the non-ducted filters.

FOR NON-DUCTED INSTALLATIONS - Skip to "INSTALL THE HOOD".

7" ROUND KNOCKOUT PLATE (also remove 3¼" x 10" vertical plate)

3¼" X 10" VERTICAL KNOCKOUT PLATE

3¼" X 10" HORIZONTAL KNOCKOUT PLATE

16 **DUCTED INSTALLATION ONLY:**
Remove 3¼" x 10 vertical, 3¼" x 10" horizontal, or 7-inch round **knockout plate(s)** as appropriate for your ducting method.

3¼" X 10" DAMPER / DUCT CONNECTOR

TOP/BACK EDGE OF HOOD

DAMPER FLAP PIVOT
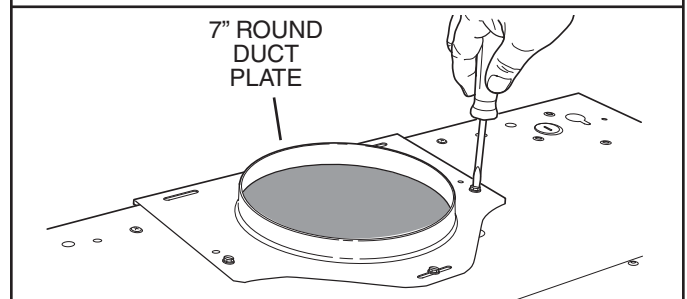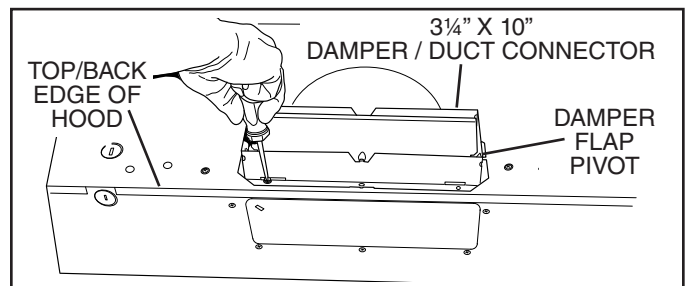
7" ROUND DUCT PLATE

17 **DUCTED INSTALLATION ONLY:**
Attach **3¼" x 10" Damper/Duct Connector** (if using 3¼" x 10" duct) or **7" Round Duct Plate** (if using 7-inch round duct) over the knockout opening.

Notes:

To accomodate off-center ductwork, the 3¼" x 10" damper/duct connector can be installed up to ½" on either side of the hood center and the 7" round duct plate can be installed up to ½" on either side of the hood center.

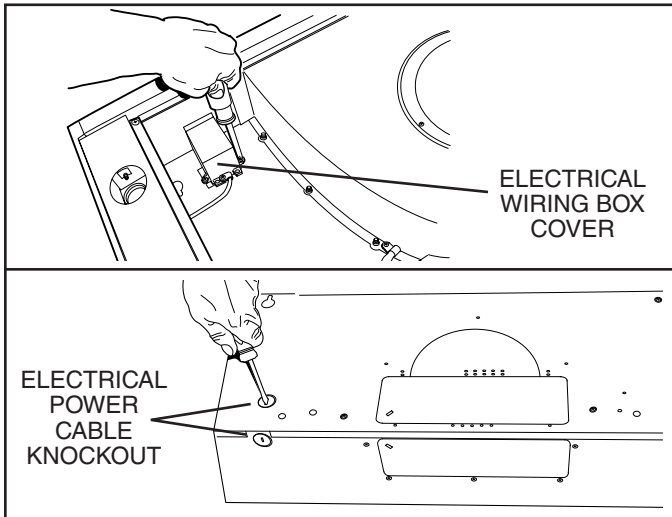Install the 3¼" x 10" Damper/Duct Connector with the **Damper Flap Pivot** nearest the **Top/Back Edge of Hood**.

INSTALL THE HOOD

WARNING
To reduce the risk of electrical shock, switch power off at service panel. Lock or tag service panel to prevent power from being switched on accidentally.
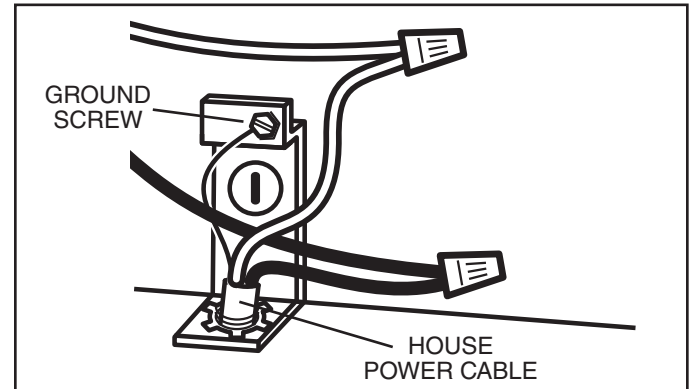
ELECTRICAL WIRING BOX COVER

ELECTRICAL POWER CABLE KNOCKOUT

18   Remove **Electrical Wiring Box Cover** from inside of hood and appropriate **Electrical Power Cable Knockout** from top or back of hood.
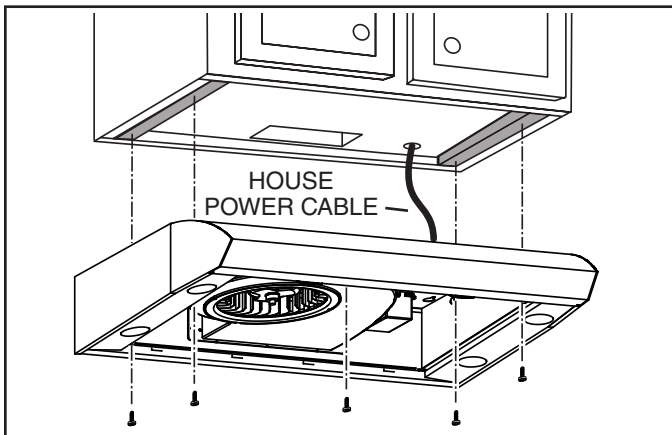
HOUSE POWER CABLE

19   Run **House Power Cable** between service panel and hood location. Attach power cable to hood using appropriate clamp.

20   Hang hood from (4) mounting screws driven part-way into cabinet locations (shown in illustrations under "PREPARE HOOD LOCATION"). Mounting screws are included in parts bag. Slide hood back towards wall until mounting screw heads are engaged in narrow end of keyhole slots in top of hood. Tighten screws securely. Add 5th mounting screw in center hole in hood and tighten securely.

21   **DUCTED INSTALLATION ONLY:**
Connect ductwork to hood and use duct tape to make joints secure and air-tight. Make sure the damper / duct connector enters the ductwork and that the damper opens and closes freely.

CONNECT THE WIRING

GROUND SCREW

HOUSE POWER CABLE

22   Connect **House Power Cable** to range hood wiring - BLACK to BLACK, WHITE to WHITE, and GREEN or BARE WIRE to **Ground Screw**. Replace electrical wiring box cover.

23   Re-attach **Bottom Pan** with 6 **Screws** removed in Step 10.

24   **DUCTED INSTALLATION ONLY:**
Re-install aluminum filters removed in Step 9.

NON-DUCTED INSTALLATION ONLY:
Install aluminum filters and non-ducted filters - purchased and assembled in Step 15.

SERVICE PARTS
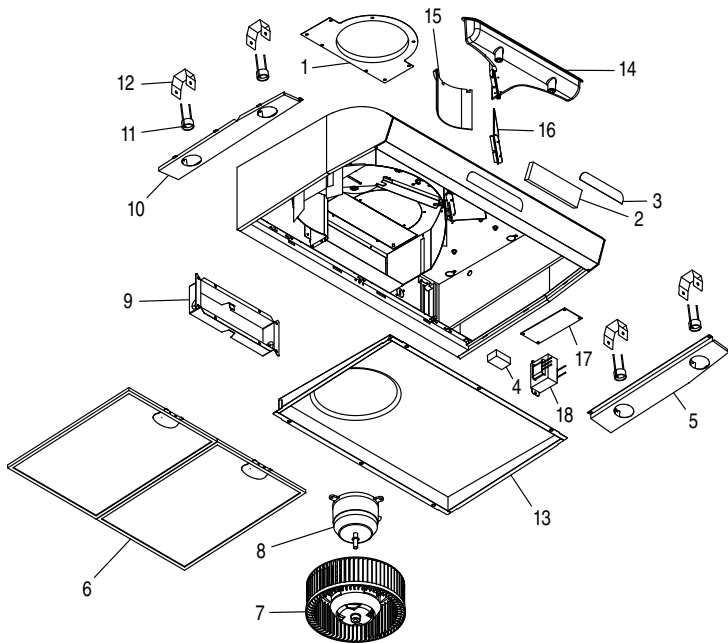
KEY NO.	PART NO.	DESCRIPTION
1	97017727	7" Round Duct Plate (includes mounting hardware)
2	97018256	User Interface Assembly White (includes interface, nameplate, mounting hardware)
	97018257	User Interface Assembly Black (includes interface, nameplate, mounting hardware)
3	99528258	Nameplate, White
	99528259	Nameplate, Black
4	97018251	Capacitor Kit (includes wire nuts, mounting screw)
5	97018225	Light Panel RH White (includes mounting hardware)
	97018226	Light Panel RH Black (includes mounting hardware)
	97018227	Light Panel RH Stainless (includes mounting hardware)
6	97018205	Filter Kit for 30" (2 per bag)
	97018206	Filter Kit for 36" (2 per bag)
	97018207	Filter Kit for 42" (3 per bag)
7	97018220	Blower Wheel (includes mounting nut)
8	97018720	Motor Kit (includes motor, isolators, mounting hardware)
9	97017728	Damper / Duct Connector (includes mounting hardware)
10	97018229	Light Panel LH White (includes mounting hardware)
	97018230	Light Panel LH Black (includes mounting hardware)
	97018231	Light Panel LH Stainless (includes mounting hardware)
11	97017731	Lamp Socket (includes lamp socket, wire nuts, mounting screws)
12	97018233	Lamp Socket Bracket
13	97018239	Bottom Pan 30" (includes mounting hardware)
	97018240	Bottom Pan 36" (includes mounting hardware)
	97018241	Bottom Pan 42" (includes mounting hardware)
14	97018242	Non-duct Plenum (includes gasket & mounting hardware)
15	97018243	Non-duct Diverter (includes mounting hardware)
16	97018244	Non-duct Plate (includes mounting hardware)
17	97018260	Circuit Board (U.S. models)
	97018662	Circuit Board (Canadian models)
18	97018262	Transformer (includes mounting hardware)
Not Shown	97018224	Parts Bag
Not Shown	99010353	Non-Duct Filter Kit for 30" (2 charcoal filters and 8 filter clips)
	99010354	Non-Duct Filter Kit for 36" (2 charcoal filters and 8 filter clips)
	99010360	Non-Duct Filter Kit for 42" (3 charcoal filters and 12 filter clips)
Not Shown	99526707	Suction Cup Tool
Not Shown	97018252	Heat Sensor
Not Shown	97018253	Fuse
Not Shown	97018261	Ribbon Cable Kit (contains 3)
Not Shown	V05921	50W Halogen GU10 Bulb

Order replacement parts by PART NO. - not by KEY NO.

WARRANTY