



# BROAN - SAHALE SERIES - RANGE HOODS INSTALLATION GUIDE

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## RANGE HOOD

Series: BKDB1, BKDEG1, BKSA1 and BKSH1

### INSTALLATION, USE AND CARE MANUAL

English - See page 2

## HOTTE DE CUISINIÈRE

Series: BKDB1, BKDEG1, BKSA1 et BKSH1

### MANUEL D'INSTALLATION, D'UTILISATION ET D'ENTRETIEN

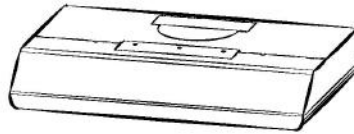
Français - Voir en page 31

## CAMPANA DE COCINA

Series: BKDB1, BKDEG1, BKSA1 y BKSH1

### MANUAL DE INSTALACIÓN, USO Y CUIDADO

Español - Véase la página 60



Serial number:  99045609-002H

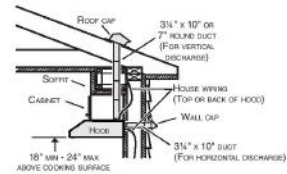


For ADA compliance installation guidelines, please type the model number into our website.

### Recommended Tools and Accessories for Installation

- Measuring tape
- Phillips screwdriver no. 2
- Flat blade screwdriver (to open knockout holes)
- Drill, 1/8" drill bit and 1 1/2" hole saw (to mark holes for ducting and cut electrical access hole)
- 7/84" drill bit (to drill holes for EZ1 brackets mounting screws, not for BKSA1 Series)
- Wood shims (2) and wood screws (4) (required for standard installation to framed cabinet)
- Saw (to cut holes for ducted application)
- 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)
- BP870 Damper (needed if 7" n. round duct is used)

### Install Ductwork (Ducted Installations Only)



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

- 1] Determine whether hood will discharge vertically (3 1/4" x 10" or 7" round), or horizontally (3 1/4" x 10" only).
- 2] Decide where the ductwork will run between the hood and the outdoors.
- 3] The ducting from this fan to the outside of the building has a strong effect on the air flow, noise and energy use of the fan. Use the shortest, straightest duct routing possible for best performance, and avoid installing the fan with smaller ducts than recommended. Insulation around the ducts can reduce energy loss and inhibit mold growth. Fans installed with existing ducts may not achieve their rated airflow. Refer to the table on next page to help you plan the most efficient installation.
- 4] Install wall cap or roof cap (sold separately); ensure there is no leak in house insulation. 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.

INSTALLATION MANUAL  
8



### Maximum Duct Lengths Recommended to Achieve 80% Exhaust Efficiency

3 1/4" x 10" HORIZONTAL MAXIMUM DUCT LENGTH	3 1/4" x 10" VERTICAL MAXIMUM DUCT LENGTH	7" ROUND MAXIMUM DUCT LENGTH	ROOF OR WALL CAP WITH DAMPER	ELBOW(S)* (90° AND/OR 45°)
68 ft.	51 ft.	57 ft.	1	0
60 ft.	42 ft.	42 ft.	1	1
51 ft.	33 ft.	28 ft.	1	2

\* Standard elbows with 1" internal radius.  
NOTE: 6" round ducting is possible but may reduce exhaust efficiency.

### 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:

BKDB1 Series	BKDEG1 Series
<ul style="list-style-type: none"> <li>(2) Grease Filter</li> <li>(1) 2 1/2" x 12" Square Damper**</li> <li>(1) 7" Round Duct Connector</li> </ul>	<ul style="list-style-type: none"> <li>(2) Grease Filter</li> <li>(1) 2 1/2" x 12" Square Damper**</li> <li>(1) 7" Round Duct Connector</li> </ul>
<p>EZ1 Components</p> <ul style="list-style-type: none"> <li>(1) Template for ducts (printed both sides)</li> <li>(2) Installation Brackets*** for framed cabinet</li> <li>(2) Installation Brackets*** for unframed cabinet</li> </ul>	<p>EZ1 Components</p> <ul style="list-style-type: none"> <li>(1) Template for ducts (printed both sides)</li> <li>(2) Installation Brackets*** for framed cabinet</li> <li>(2) Installation Brackets*** for unframed cabinet</li> </ul>
<p>** Part EZ1 Brackets interchangeable or sold</p> <ul style="list-style-type: none"> <li>(1) Panel Seal*** Coversheet</li> <li>(6) No. 8 x 5/8" RD. HD. Wood Screws</li> <li>(6) No. 8 x 1/2" Countersink Wood Screws</li> </ul>	<p>** Part EZ1 Brackets interchangeable or sold</p> <ul style="list-style-type: none"> <li>(1) Panel Seal*** Coversheet</li> <li>(6) No. 8 x 5/8" RD. HD. Wood Screws</li> <li>(6) No. 8 x 1/2" Countersink Wood Screws</li> </ul>

INSTALLATION MANUAL  
9

INSTALLATION MANUAL  
10

BKSH1 Series	BKSA1 Series
<ul style="list-style-type: none"> <li>(2) Grease Filter</li> <li>(2) Shallow Hulsion Blue (SMB, SMD)</li> <li>(1) 7" Round Duct Connector</li> </ul>	<ul style="list-style-type: none"> <li>(1) Grease Filter</li> <li>(2) Shallow Hulsion Blue (SMB, SMD)</li> </ul>
<p>EZ1 Components</p> <ul style="list-style-type: none"> <li>(1) Template for ducts (printed both sides)</li> <li>(2) Installation Brackets*** for framed cabinet</li> <li>(2) Installation Brackets*** for unframed cabinet</li> </ul>	<p>EZ1 Components</p> <ul style="list-style-type: none"> <li>(1) Template for ducts (printed both sides)</li> <li>(2) Installation Brackets*** for framed cabinet</li> <li>(2) Installation Brackets*** for unframed cabinet</li> </ul>
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#2 Chootoo Road, South Aranguez, San Juan, Trinidad





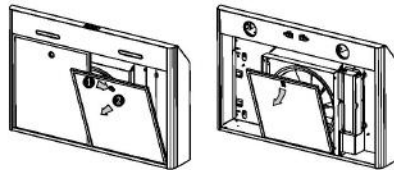
# BROAN - SAHALE SERIES - RANGE HOODS INSTALLATION GUIDE



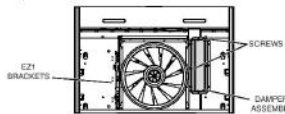
## Prepare the Hood

**NOTE:** Since this manual covers many range hood models, some details in the following illustrations may slightly differ from your unit.

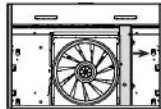
- 1] If present, remove all protective polyfilm from the hood and/or parts.
- 2] Using the finger cap or tabs, remove the grease filters from the hood by pushing down **●** and tilting filter out **●**.



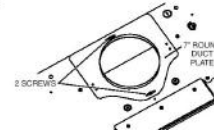
- 3] Remove the EZ1 brackets from inside the hood by cutting off the tie wrap (no EZ1 brackets in BKSA1 Series). Remove both screws holding damper assembly to hood. Remove parts bag (captured behind the damper assembly). Remove damper assembly from inside the hood and keep the screws for further use.



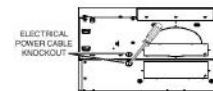
- 4] Remove the wiring cover (shaded part on illustration below) by sliding it out from the hood and set it aside. Remove the light bulbs (under the wiring cover, BKSA1 and BKSH1 Series only).



- 5] Remove 7" Round Duct Plate from top/back of hood (see illustration below). Keep the screws for further use.

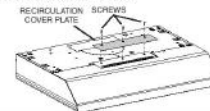


- 6] Remove Electrical Power Cable Knockout from top (vertical exhaust) or back (horizontal exhaust) of hood. Install an appropriate strain relief, 1/2" diameter (not included).



### 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.



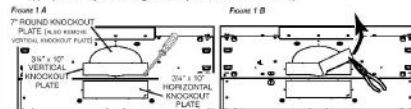
INSTALLATION MANUAL  
11

INSTALLATION MANUAL  
12

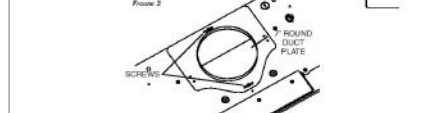
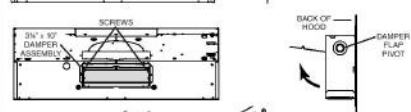
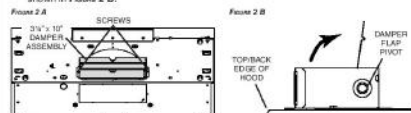


## DUCTED INSTALLATION ONLY

- 8] Remove 3/4" x 10" vertical, 3/4" x 10" horizontal, or 7-inch round knockout plate as appropriate for your ducting method (see Figures 1 A and 1 B).



- 9] Attach 3/4" x 10" Damper Assembly on top OR back of hood (if using 3/4" x 10" duct, shaded part in Figure 2 A below) or 7" Round Duct Plate (if using 7-inch round duct, Figure 3) over the knockout opening. When installed, the 3/4" x 10" damper assembly must open as shown in Figure 2 B.

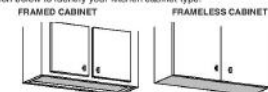


**NOTE:** To accommodate off-center ductwork, the 7" round duct plate can be installed up to 1/2" on either side of the hood center.

**TIP:** Insert a small length of duct over the 3/4" 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

**NOTE:** Before starting installation, read all the steps of these instructions. Use the illustration below to identify your kitchen cabinet type.

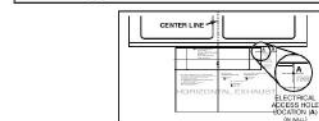
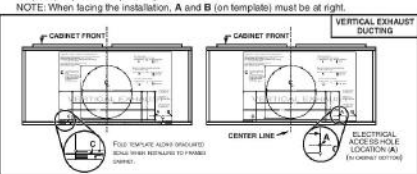


This manual covers 2 kinds of installation: the standard (without EZ1 brackets) and the EZ1 one-person installation system (using included template and brackets). Please note that the EZ1 one-person installation system is not available for the BKSA1 Series. For the standard installation, go to page 19.

### EZ1 one-person installation system

EZ1 installation is designed for use with kitchen cabinets that have the same width designation as the range hood width. If the cabinet is greater than 1/2" wider than the range hood width, please use the standard installation method.

- 1] Use the proper template for vertical OR horizontal discharge (included) for placement of ductwork and electrical outlet in cabinet or wall. For a non-ducted installation, DO NOT cut a duct access hole, only cut the hole for electrical wiring. If replacing a hood and plan to use the existing duct and electrical, steps 2 to 5 may not be necessary. If so, skip to step 6.
- 2] Measure and mark the hood center line on cabinet bottom.
- 3] Align the center line on template with the hood center line marked on the bottom of the cabinet, placing the edge (where indicated) of the template against back wall. When using with framed cabinet for vertical exhaust installation, fold over rear edge of template equal to the depth of the cabinet frame at the wall (use graduations on template, C locations on template). Tape the template in place.



INSTALLATION MANUAL  
13

INSTALLATION MANUAL  
14



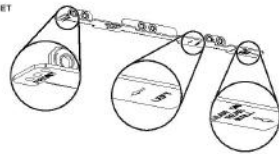


# BROAN - SAHALE SERIES - RANGE HOODS INSTALLATION GUIDE

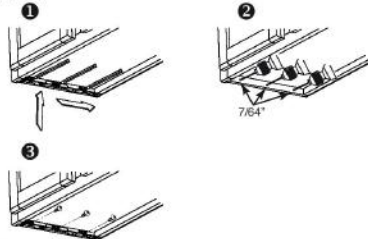
**BROAN** **BROAN**

- 4] Drill a 1/8" dia. pilot hole for house wiring, at **A** location on template.
- 5] Use a sharp pencil or 1/8" drill bit to mark the locations for the appropriate duct access holes (16 locations for 7" round duct, or 4 corner locations for rectangular duct). Remove the template.
- 6] Draw the border for the exhaust ducting by linking its marks (16 for round duct and 4 for rectangular duct), then cut the opening in the cabinet bottom (vertical exhaust) or in the wall (horizontal exhaust). Drill the house wiring hole by using a 1 1/2" hole saw centered with the pilot hole previously made in 4.
- 7] Install the proper installation brackets according to the type of cabinet (framed or frameless). See below.

**FRAMED CABINET**

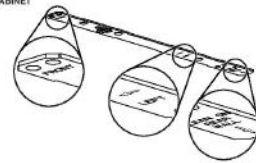


Refer to the marking on the brackets to determine the correct installation side and orientation.

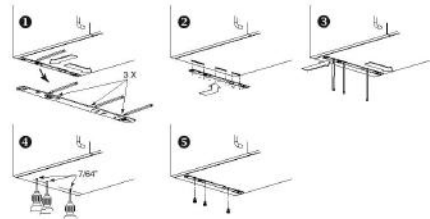


- 1] Mate the corresponding bracket to the cabinet side frame, while placing rear end of bracket against the wall. Use a pencil to mark 3 holes (there are 6 holes but only 3 are necessary).
- 2] Remove the bracket. Using a 7/64" drill bit, drill 3 holes where marked.
- 3] Assemble the bracket to the side frame using a Phillips screwdriver and 3 provided no. 8 x 5/8" wood screws. Repeat for the other side frame.

**FRAMELESS CABINET**



Refer to the marking on brackets to determine the correct installation side and orientation.



- 1] Align the corresponding bracket to the cabinet side, while placing rear end of bracket against the wall. Draw a line on the outer edge of the bracket (as shown).
- 2] Slide the bracket towards the center of cabinet and align the outside edge of the bracket with the marked line, keeping the rear end edge leaning on the wall.
- 3] Use a pencil to mark 3 holes.
- 4] Remove the bracket. Using a 7/64" drill bit, drill 3 holes where marked.
- 5] Assemble the bracket to the cabinet bottom using a Phillips screwdriver and 3 provided countersunk wood screws. Repeat for the other cabinet side.

INSTALLATION MANUAL  
**15**

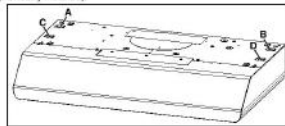
INSTALLATION MANUAL  
**16**

**BROAN** **BROAN**

**Install the Hood (EZ1 Bracket)**

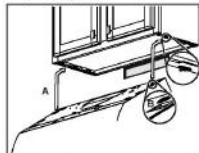
**NOTE:** The following procedure applies to both framed or frameless cabinet installations.

- 1] Run house power cable between service panel and hood location.
- 2] There are 2 pairs of recessed holes on each side of the top of the hood (on rear: **A** and **B**, on front: **C** and **D** on illustration below); these holes allow the range hood to hang on the brackets (previously installed).



**HORIZONTAL EXHAUST INSTALLATION ONLY**

- 3] Temporarily hang the hood on the brackets using its 2 recessed **REAR HOLES (A and B)**. While holding the hood, run the house power cable into the hood through the strain relief previously installed in step 6 on page 12.



- 4] Unhook the rear holes from the brackets and hang the hood using its 2 recessed **FRONT HOLES (C and D)**. While holding the hood, attach the power cable to the hood using the strain relief.

**VERTICAL EXHAUST INSTALLATION AND NON-DUCTED INSTALLATION ONLY**

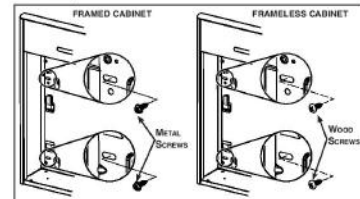
- 5] Hang the hood on the brackets using the 2 recessed **FRONT HOLES (C and D)**. While holding the hood, run the house power cable into the hood through the strain relief previously installed in step 6 on page 12. Attach power cable to the hood.

**DUCTED INSTALLATION ONLY**

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

**NOTE:** See final installation steps on next page.

- 7] For framed cabinet, secure the hood to the EZ1 brackets using 4 no. 8-18 x 1 1/2" metal screws (included in parts bag). Insert 2 screws per side, in the slots (as shown in insets on illustration below).
- 8] For frameless cabinet, secure the hood to the cabinet using 4 no. 8 x 5/8" round head wood screws (included in parts bag). Insert 2 screws per side, in the slots (as shown in insets on illustration below).



INSTALLATION MANUAL  
**17**

INSTALLATION MANUAL  
**18**



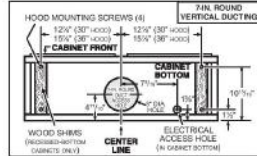
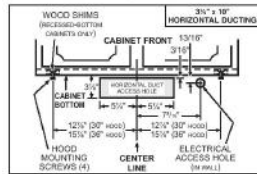
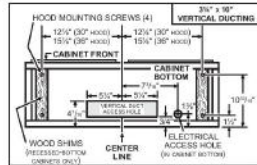


# BROAN - SAHALE SERIES - RANGE HOODS INSTALLATION GUIDE



## Standard Installation (without EZ1 brackets)

- 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 (Standard Installation)

- 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 12.
- 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.

INSTALLATION MANUAL  
19

INSTALLATION MANUAL  
20

