# Bosch ventilation installation manual DPH36652UC - DPH30652UC



### APPROVED FOR RESIDENTIAL APPLIANCES FOR RESIDENTIAL USE ONLY READ AND SAVE THESE INSTRUCTIONS

PLEASE READ ENTIRE INSTRUCTIONS BEFORE PROCEEDING. INSTALLATION MUST COMPLY WITH ALL LOCAL CODES. IMPORTANT: Save these Instructions for the Local Electrical Inspector's use. INSTALLER: Please leave these Instructions with this unit for the owner. OWNER: Please retain these instructions for future reference. Safety Warning: Turn off power circuit at service panel and lock out panel, before wiring this appliance. Requirement: 120 V AC, 60 Hz. 15 or 20 A Branch Circuit

# ▲ IMPORTANT SAFETY INSTRUCTIONS

Read All Instructions Before Using the Appliance. READ AND SAVE THESE INSTRUCTIONS



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

- A. Use this unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer.
- B. Before servicing or cleaning the unit, switch power off at service panel and lock service panel 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.
- C. Installation Work and Electrical Wiring Must Be Done By Qualified Person(s) In Accordance With All Applicable Codes & Standards, Including Fire-rated Construction.
- D. Sufficient air is needed for proper combustion and exhausting of gases through the flue (chimney) of fuel burning equipment to prevent back- drafting. Follow the heating equipment manufacturers guideline and safety standards such as those published by the National Fire Protection Association (NFPA), the American Society for Heating, Refrigeration and Air Conditioning Engineers (ASHRAE), and the local code authorities.
- E. When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.
- F. Ducted systems must always be vented to the outdoors.

#### CAUTION

FOR GENERAL VENTILATING USE ONLY. <u>DO</u> <u>NOT</u> USE TO EXHAUST HAZARDOUS OR EXPLOSIVE MATERIALS OR VAPORS.

#### CAUTION

To reduce risk of fire and to properly exhaust air, be sure to duct air outside - do not vent exhaust air into spaces within walls, ceilings, attics, crawl spaces, or garages.

#### WARNING

TO REDUCE THE RISK OF FIRE, USE ONLY METAL DUCT WORK.

Install this hood in accordance with all requirements specified.

#### WARNING

To Reduce The Risk Of Fire Or Electric Shock, Do Not Use This Hood With Any External Solid State Speed Control Device.

#### OPERATION

a. Always leave safety grills and filters in place. Without these components, operating blowers could catch onto hair, fingers and loose clothing.

The manufacturer declines all responsibility in the event of failure to observe the instructions given here for installation, maintenance and suitable use of the product. The manufacturer further declines all responsibility for injury due to negligence and the warranty of the unit automatically expires due to improper maintenance.

This unit is manufactured for indoor use only. Do not use this unit outdoors.

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### Electrical requirements IMPORTANT

Observe all governing codes and ordinances.

It is the customer's responsibility: To contact a qualified electrical installer. To assure that the electrical installation is adequate and in conformance with National Electrical Code, ANSI/NFPA 70 — latest edition\*, or CSA Standards C22.1-94, Canadian Electrical Code, Part 1 and C22.2 No.0-M91 - latest edition\*\* and all local codes and ordinances.

If codes permit and a separate ground wire is used, it is recommended that a qualified electrician determine that the ground path is adequate.

Do not ground to a gas pipe.

Check with a qualified electrician if you are not sure range hood is properly grounded.

Do not have a fuse in the neutral or ground circuit.

#### **IMPORTANT**

Save Installation Instructions for electrical inspector's use.

The range hood must be connected with copper wire only.

The range hood should be connected directly to the fused disconnect (or circuit breaker) box through metal electrical conduit.

Wire sizes must conform to the requirements of the National Electrical Code ANSI/NFPA 70 — latest edition\*, or CSA Standards C22.1-94, Canadian Electrical Code Part 1 and C22.2 No. 0-M91 - latest edition\*\* and all local codes and ordinances.

A U.L.- or C.S.A.-listed conduit connector must be provided at each end of the power supply conduit (at the range hood and at the junction box).

Copies of the standards listed may be obtained from:

\* National Fire Protection Association Batterymarch Park Quincy, Massachusetts 02269

\*\* CSA International 8501 East Pleasant Valley Road Cleveland, Ohio 44131-5575

#### Parts Included with your Hood

- Hood Canopy Assembly with blower, grease filters and lamps already installed
- Care & Use /Installation Instructions
- Transition
- Fittings bag with:
  - 4 Washers
  - 6 Drywall anchors
  - 2 Hooks with regulating screws
  - 6 Screws 5X35
  - 4 screws for transition

#### **Optional accessory**

Duct covers Ductless recirculation kit

# Parts Not Included with your Hood

- Duct Tape
- 1/2" Conduit
- Wire Nuts
- Round or Rectangular Duct.
- Round back draft damper
- Wiring clamp

#### **Tools required**

Flat blade and Phillips screwdrivers Pencil and tape measure Metal snips (in some applications) Electric drill Saw (saber or keyhole) Pliers Level Caulking Flashlight Wire stripper Safety glasses Gloves Step ladder

# **INSTALLING THE HOOD**

• For the most efficient air flow exhaust, use a straight run or as few elbows as possible.

**CAUTION:** Vent unit to outside of building, only.

 One people is necessary for installation.
 On avarage 2 hours are necessary to complete installation (without considering cut to be done on wall and or on cabinet, installation of ducts, conduit and electrical connections to the mains).
 installation steps:

12 installation steps are required for both installation methods Wall mount installation steps or in alternative Cabinet installation

- The hood is fitted with Screws and Drywall Anchors suitable for most surfaces, consult a Qualified Installer, check if they perfectly fit with your cabinet/wall.
- Do not use flex ducting.

- COLD WEATHER installations should have an additional backdraft damper installed to minimize backward cold air flow and a nonmetallic thermal break to minimize conduction of outside temperatures as part of the ductwork. The damper should be on the cold air side of the thermal break. The break should be as close as possible to where the ducting enters the heated portion of the house.
- Make up air: Local building codes may require the use of Make-Up Air Systems when using Ducted Ventilation Systems greater than specified CFM of air movement. The specified CFM varies from locale to locale. Consult your HVAC professional for specific requirements in your area.

#### Typical installation

The height from the countertop to the bottom of the hood is 24" to 30". These hoods are not recommended to be used over indoor grills.

#### 1. Choose vent options

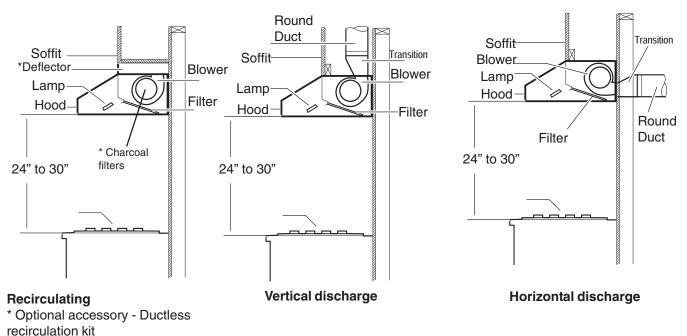
The hood is designed ready to be used for vertical discharge as shown below. **Note:** see also Fig. 1-3-5 for Cabinet preparation.

If desired, the hood can be converted for horizontal discharge as shown below. **Note:** see also Fig. 2-3-5 for Cabinet and rear wall preparation.

#### DUCTING

Provide a Round Duct having a diameter of 8" see Figure 2 and Figure 3 for location on cabinet bottom.

Install a 1/2" conduit from the service panel long enough to reach the hood once it is installed. Power supply must be rated for 120 V AC, 60 Hz. 15 or 20 A.



## Examples of possible ducting

DUCT PIECES	SIZE	EQUIVALENT LENGTH	QUANTITY USED	TOTAL EQUIVALENT LENGTH	DUCT PIECES	SIZE	EQUIVALENT LENGTH	QUANTITY USED	TOTAL EQUIVALENT LENGTH
	6" 7" 8" 10"	.2' 0.95' 0.7' 0.6'			3-1/4"X 10" CENTER REVERSE ELBOW LEFT	N/A	15'		
3-1/4" : <b>STRAI</b> 3-1/4" : <b>STRAI</b> 3-1/4" : <b>STRAI</b>	× 10" GHT × 14"	l' 0.7'			3-1/4"X 10" CENTER REVERSE ELBOW RIGHT	N/A	25'		
90° ELBOW ROUND	6" 7" 8"	2' 8' 6'			3-1/4"X 10" RIGHT REVERSE ELBOW	N/A	25'		
45° ELBOW ROUND	6" 7" 8"	5' 4'			3-1/4"X 10" LEFT REVERSE ELBOW	N/A	15'		
3-1/4"X10" 90° ELBOW	o N/A	3' 5'			ROUND WALL CAP Model #WC8 Model #WC10	6" 7" 8" 10"	2'		
3-1/4"X10" 45° ELBOW	N/A	15'			ROUND ROOF CAP	6" 7" 8"	2'		
3-1/4"X10" FLAT ELBOW	N/A	20'			3-1/4"x10" Model #		20'		
ROUND TO 3-1/4"X10"	6'' 7''	r r			10" -6" 3-1/4" 3-1/4" to Re		Ľ		
3-1/4"X10" TO ROUND	6" 7"	5' 3'			3-1/4'	'x10''   Cap	2'		
ROUND TO 3-1/4"X10" 90° ELBOW 3-1/4"X10" TO ROUND	6"	10'			7" In-Lin Backdrat Damper		5'		
	7'' 6''	8' 10'			3-1/4"x10 Roof Jack	•	5'		
90° ELBOW	7"	5'			& Shutter, Model # RJ3		OTAL (of both	columns)=	
								,	

#### TABLE I. VENTILATOR PERFORMANCE CALCULATION

#### **TABLE 2. DUCTWORK INSTALLATION GUIDELINES**

For safety reasons, ducting should vent directly outdoors (not into an attic, underneath the house, into the garage or into any enclosed space).

Keep duct runs as short and straight as possible.

Duct fittings (elbows and transitions) reduce air flow efficiency.

Back to back elbows and "S" turns give very poor delivery and are not recommended.

A short straight length of duct at the inlet of the remote blower gives the best delivery.

Transition to duct from the integral blower or remote duct transition as close to the downdraft as is pos-sible. In order of preference, use

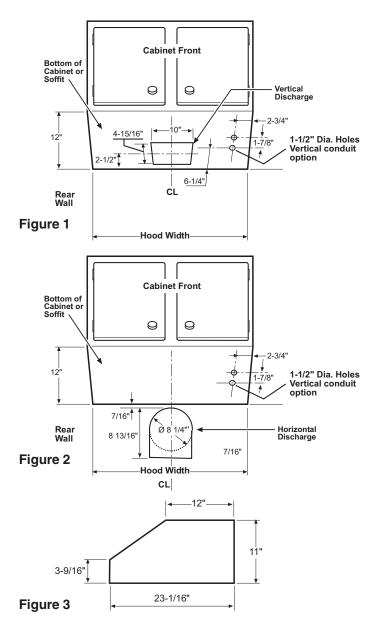
1st. 10" round duct 2nd. 8" round duct 3rd. 3-1/4" x 14" duct 4th. 7" round duct 5th. 3-1/4" x 10" duct

6th. 6" round duct

The use of flexible metal round duct should only be used when no other duct fitting exists. Limit use to short lengths and do not crush when making corners.

#### After having choosen the vent option:

1. Prepare duct and conduit cut outs, see Fig.1,2,3 as needed.



2. Discharge Direction: The hood is shipped ready for vertical discharge.

#### 

Before installing <u>remove the</u> knock-out plate that close the air outlet on the top if is desired to use the range hood for vertical discharge OR the rear outlet if is desired to use the range hood for horizontal discharge. (see also Figure 5).

#### NOTICE

Once the Knock out plate has been removed, this cannot be reinstalled anymore close the air outlet (see also Figure 5).

To change to horizontal discharge, do the following (see also Figure 4):

- a. Remove knock-out plate on the rear side of the hood (see also Figure 5)
- b. Remove and keep the 4 screws (2 per side) that fix blower on top of the hood and release it from keyholes.
- c. Rotate the blower 90° and check that pins on side blower fixing brackets fit into the pre-installing holes .
- d. Fix the blower on the rear side with the same 4 screws (see step b).
- Assembly of the 8" Transition: The transition supplied with the hood mounts to the top or rear of the hood. Note- Cabinet installation with vertical discharge ONLY: do not install transition until hood has been fixed on cabinet.
  - a. Place the transition piece over the hood exhaust and secure with 4 screws provided (Figure 5).
  - b. Duct tape connection between transition and hood.

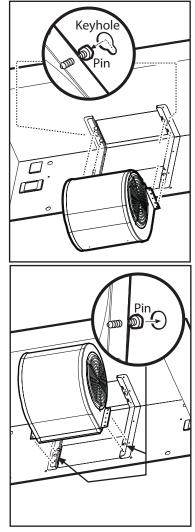
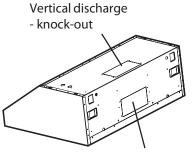


Figure 4



Horizontal discharge - knock-out

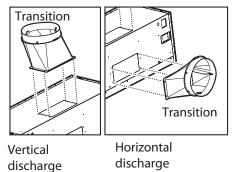


Figure 5

#### Wall Mount Installation

### Note: see below if cabinet installation is preferred

- 4. After the hood installation height has been determined draw a horizontal line at a distance above the cooktop equal to the desired hood installation height plus 7-1/2". See also Figure 6a.
- Find the centerline of the cooktop. Draw a vertical line along this centerline up to the horizontal line drawn in step 1 and draw a vertical line right and left at a distance of 12-5/8" to determine the mounting location of the mounting hooks shipped with the hood.
- 6. Fit two mounting hooks on the wall to hang the hood through the provided slots (2 wall anchors+2 hooks + 2 screws 5x35).
- Run 8" Duct , long enough to reach the transition once the hood has been installed plus 1 1/2" inch to connect ductwork. Fix Duct to transition with screws and seal with tape.
- 8. Remove 1 of 2 knockouts and install 1/2" conduit connector in j-box.
- **9.** Hang the hood and adjust its position through the screws on the hooks.
- **10.** Fix the hood to 4 additional point,2 on upper side, 2 on lower side (use 4 wall anchors + 4 washers + 4 screws 5x35.
- 11. Vertical discharge

#### **Cabinet Installation:**

### Note: see above if wall mount installation is preferred

#### Note: distances on Table 3.

- 4. Find the centerline of the cabinet bottom. Draw a line along this centerline from rear to front of the cabinet.
- Draw two lines, one at a K distance from the wall, the other one at a Z distance from the previous line.
  Mark 4 points, two along each line at a distance of half W from the center line, to determine the screw locations.
- Fit 4 screws on cabinet bottom do not tighten completely but leave a space of about 1/2" from cabinet bottom surface and head screws.
- Run 8" Duct , long enough to reach the transition once the hood has been installed plus 1 1/2" inch for connect ductwork.
- 8. Remove 1 of 2 knockouts and install 1/2" conduit connector in j-box.
- Hang the hood on screws through side slots provided on hood top. Tighten the four screws.
   Note: If possible fix the hood on the wall at 4 additional point (2 on upper side, 2 on lower side).
- **10.** From the inside of the cabinet attach the transition on upper outlet (vertical discharge see also "Assembly of the 8" Transition" on previous pages)

HOOD WIDTH	DIM. "W"	DIM. "K"	DIM. "Z"
30"	29 - 1/8"	2 - 1/2"	7 - 1/16"
36"	35 - 1/16"	2 - 1/2"	7 - 1/16"

Table 3



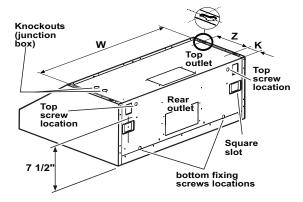
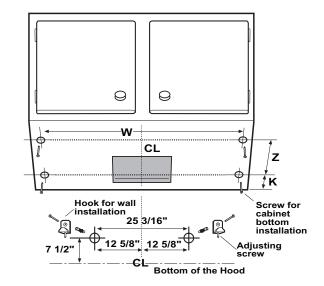


Figure 6a



#### Figure 6b

Fix Duct to transition and seal with tape.

#### For both installation method:

12.Wiring the HOOD:



WARNING Electrical Shock Hazard Turn off power at the service panel before wiring this unit. 120 VAC, 15 or 20 Amp circuit required.

ELECTRICAL GROUNDING INSTRUCTIONS THIS APPLIANCE IS FITTED WITH AN ELECTRICAL JUNCTION BOX WITH 3 WIRES, ONE OF WHICH (GREEN/YELLOW) SERVES TO GROUND THE APPLIANCE. TO PROTECT YOU AGAINST ELECTRIC SHOCK, THE GREEN AND YELLOW WIRE MUST BE CONNECTED TO THE GROUNDING WIRE IN YOUR

HOME ELECTRICAL SYSTEM, AND IT MUST UNDER NO CIRCUMSTANCES BE CUT OR REMOVED.

Failure to do so can result in death or electrical shock.

- Remove the j-box cover as shown in Figure 7.
- If not already done, install 1/2" conduit connector in j-box.
- Run black, white, and green wires (#14 AWG) according to the National Electrical Code or CSA Standards and local codes and ordinances.
- Connect black, white, and green wires from power supply to black, white, and green/ yellow wires in j-box respectively.
- Close j-box cover.

#### Final installation steps

13. Install grease filters as described in the Care & Use section of this manual.Turn power on at service panel.Check operation of the hood.

