



INSTALLATION MANUAL

HOOD

Read this installation manual thoroughly before installing the appliance and keep it handy for reference at all times.

ENGLISH

LSHD3689BD LSHD3089BD LSHD3680** LSHD3080** HCED3615S HCED3015S
HCED3615D HCED3015D



MFL70208702
Rev.08_032124

www.lg.com

Copyright © 2017-2024 LG Electronics Inc. All Rights Reserved.

2

TABLE OF CONTENTS

3 IMPORTANT SAFETY INSTRUCTIONS

- 3 READ ALL INSTRUCTIONS BEFORE USE
- 3 WARNING STATEMENTS

5 INSTALLATION

- 5 Before Installing
- 9 Planning the Installation
- 13 Installing the Hood

15 APPENDIX

- 15 Wiring Diagram

IMPORTANT SAFETY INSTRUCTIONS

READ ALL INSTRUCTIONS BEFORE USE

Safety Messages

Your safety and the safety of others are very important.

We have provided many important safety messages in this manual and on your appliance. Always read and follow all safety messages.



This is the safety alert symbol.

This symbol alerts you to potential hazards that can kill or injure you and others. All safety messages will follow the safety alert symbol and either the word WARNING or CAUTION.

These words mean:



WARNING

You may be killed or seriously injured if you do not follow instructions.



CAUTION

You may be injured or cause damage to the product if you do not follow instructions.

All safety messages will tell you what the potential hazard is, tell you how to reduce the chance of injury, and tell you what may happen if the instructions are not followed.

READ AND SAVE THESE INSTRUCTIONS

WARNING STATEMENTS



WARNING

- To reduce the risk of explosion, fire, death, electric shock, scalding or injury to persons when using this product, follow basic precautions, including the following:

Installation

- If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or death.
- Do not use an additional speed control device with this unit.
- To avoid motor bearing damage and noisy and/or unbalanced impellers, keep drywall spray, construction dust, etc. off the power unit.
- TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:
 - Installation work and electrical wiring must be done by 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 back drafting. 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 install or operate this hood if it has been damaged, dropped, has damaged electrical wires or is not working properly. If the product is damaged when received, immediately contact the dealer or builder.

4 IMPORTANT SAFETY INSTRUCTIONS

- This range hood must be installed and grounded by a qualified installer according to these installation instructions.
- Install or locate this appliance only in accordance with these installation instructions and the requirements specified by the manufacturer of the cooktop or range. Improper installation, adjustment, alteration, service or maintenance can cause serious personal injury or property damage.
- The customer should not install, repair or replace any part of the range hood unless specifically recommended in the literature accompanying it. A qualified service technician should perform all other service.
- Keep all packaging materials away from children. Plastic bags can cause suffocation.
- Do not use an extension cord or adapter plug with this appliance.
- The installer must show the customer the location of the fuse box or circuit breaker panel box so that the customer knows where and how to turn the power off.
- Before installing or servicing the range hood, switch power off at the fuse box circuit breaker and lock the electrical panel door to prevent power from being switched on accidentally. When the electrical panel cannot be locked, securely fasten a prominent warning device, such as a tag, to the electrical panel.
- Read the owner's manual completely before using the appliance. Clean the appliance only as instructed in the owner's manual. Use only the cleaners specified.
- Do not tamper with the controls.
- If the cooktop and range hood are near a window, use an appropriate window treatment. Avoid long drapes or other window coverings that could blow over the cooktop and hood, resulting in a fire hazard.
- The minimum vertical distance between the cooktop surface and the exterior part of the hood must be no less than 26" (66 cm). The required vertical distance may be longer for the range or cooktop being used. Consult the range or cooktop installation instructions for the minimum vertical distance from the appliance being used.
- TO REDUCE THE RISK OF FIRE, USE ONLY METAL DUCTWORK.

SAVE THESE INSTRUCTIONS

INSTALLATION

Before Installing

Before You Begin

IMPORTANT:

- Installer: In the interest of safety and to minimize problems, read these installation instructions completely and carefully before you begin the installation process. Leave these installation instructions with the customer.
- Customer: Keep these installation instructions for future reference and the local electrical inspector's use.

APPLIANCE DATA PLATE

- The appliance data plate contains the model and serial number information and the electrical requirements.
- It is located inside the hood behind the filters on the back side of the chassis. Remove the filters to view it.

All specifications subject to change without notice. LG assumes no liability for changes to specifications.

Product Specifications

General Specifications

All models

Fan speed	5
Filter	2 ea, Aluminum mesh filter
Total Connect Load	120 VAC, 60 Hz, 4 Amp.
Light	120 VAC, 8 W LED light strip

Weight

Model	LSHD3689BD LSHD3680** HCED3615S HCED3615D	LSHD3089BD LSHD3080** HCED3015S HCED3015D
Width	35 7/16" (90 cm)	29 15/16" (76 cm)
Weight	41.3 lb (18.7 kg)	38.6 lb (17.5kg)

Adjusting Maximum CFM Level

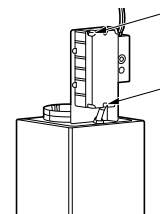
Local codes in some areas limit the maximum CFM of installed range hoods. You can adjust the maximum blower CFM of this hood to avoid the need for an expensive make-up air kit. During install, you can easily set the maximum blower speed to one of two commonly specified CFM levels. (See the chart). You may not need to adjust the CFM of the hood. Check local codes for CFM restrictions.

Model	Default Max CFM Level	Available Max CFM Levels
LSHD3689BD LSHD3089BD LSHD3680** LSHD3080** HCED3615S HCED3015S HCED3615D HCED3015D	600	290 or 390

CAUTION

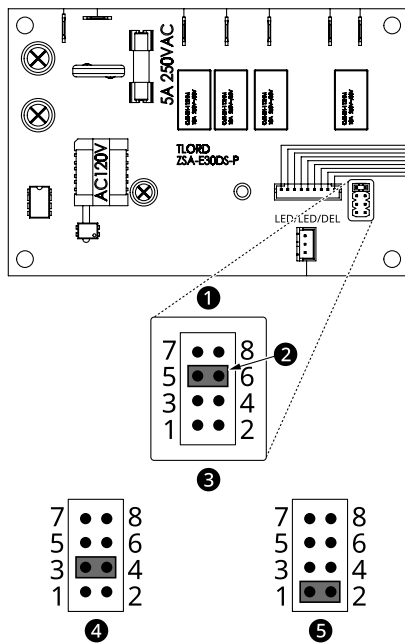
- Disconnect the hood from the main power supply prior to following the conversion instructions. Failure to do so could result in personal injury or damage to the product.
- After re-positioning the jumper and powering on the hood, the CFM cannot be changed again.

- 1 Before installing the hood, access the PC board located box on top of blower housing.
- 2 Remove 2 to 4 screws attaching PC board cover.



- 3 Change the plastic jumper position on the PC board to set your desired maximum CFM.

6 INSTALLATION



❶ Jumper Pins

❷ Plastic Jumper

❸ Jumper 5-6 or 7-8

DEFAULT POSITION

Default Max. Blower CFM

❹ Jumper 3-4

Max. Blower CFM: 390

❺ Jumper 1-2

Max. Blower CFM: 290

Checking Max CFM Level

- 1 With the hood off, press and hold the power button for three seconds. The indicator lights will light up to show the maximum CFM level of the hood.
 - 5 indicator lights: default max. CFM (600)
 - 4 indicator lights: max. 390 CFM
 - 3 indicator lights: max. 290 CFM
- 2 The number of fan speed settings depends on the max CFM setting.
 390 CFM = max. 4 speeds and 290 CFM = max. 3 speeds

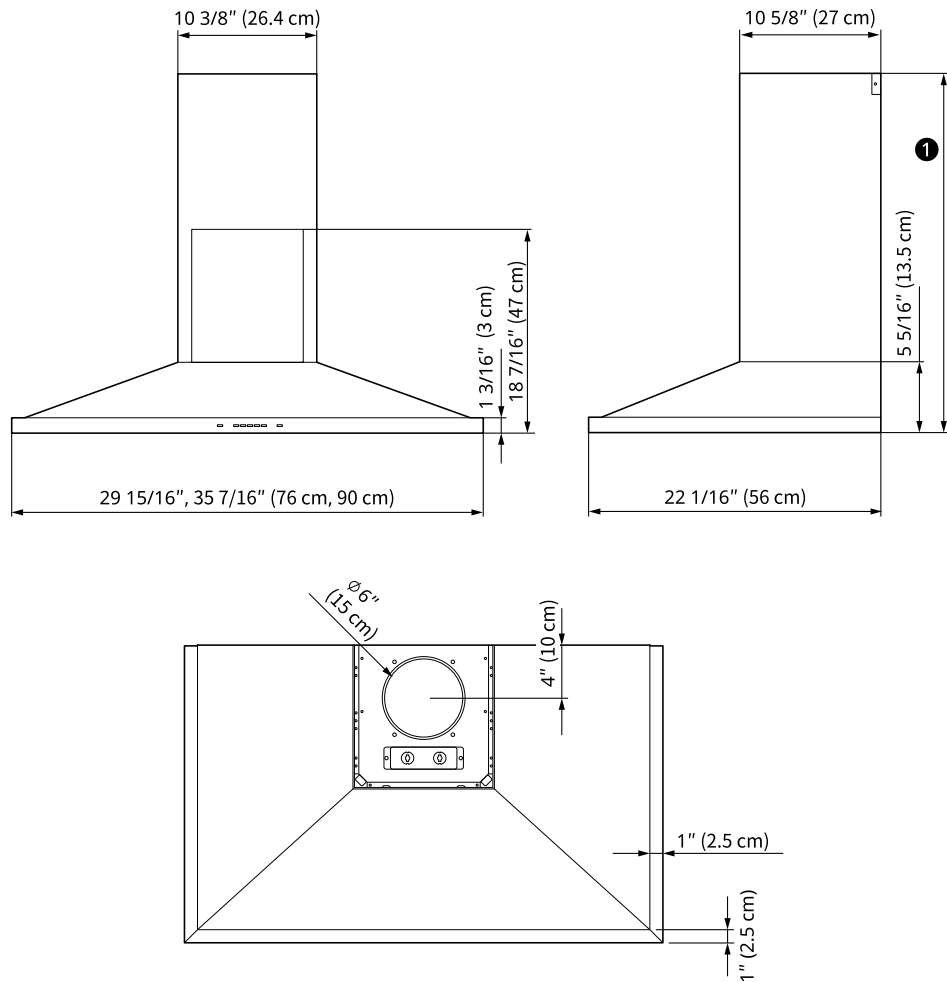
Dimensions and Clearances

Tolerances: +1/16", -0 (1.6 mm, -0), unless otherwise stated.

NOTE

- The exhaust duct(s) and electrical wiring can be connected from either the top or the back of the hood.

ENGLISH



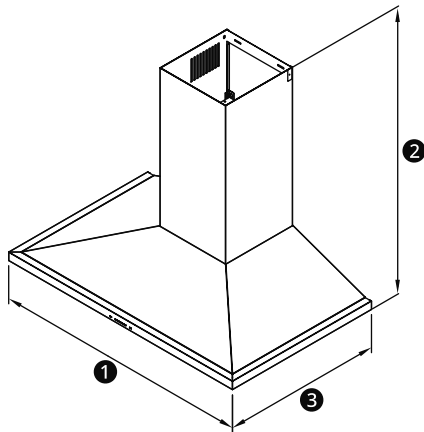
① Standard

Minimum Ducted: $26 \frac{15}{16}$ " (68.5 cm)

Maximum: $48 \frac{1}{2}$ " (123 cm)

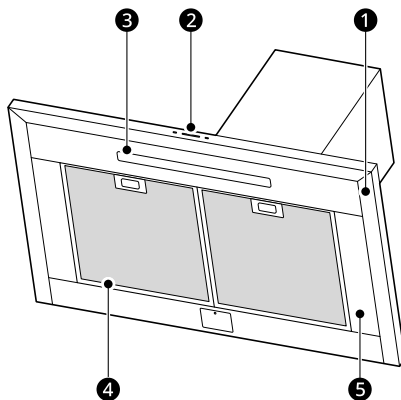
8 INSTALLATION

Overall Dimensions



	LSHD3689BD LSHD3680** HCED3615S HCED3615D	LSHD3089BD LSHD3080** HCED3015S HCED3015D
①	35 7/16" (90 cm)	29 15/16" (76 cm)
②	26 15/16" (68.5 cm)	26 15/16" (68.5 cm)
③	22 1/16" (56 cm)	22 1/16" (56 cm)

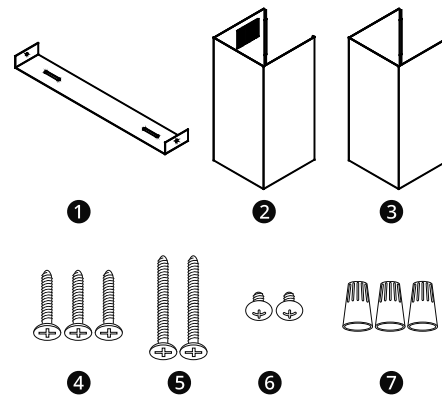
Parts



- ① Hood
- ② Control Panel
- ③ LED Strip Light
- ④ Mesh Filter
- ⑤ Side Panel (only for SKSCH3601S)

Accessories

Included Accessories



- ① Duct Cover Bracket (1 ea)
- ② Duct Cover (1 ea, Upper)
- ③ Duct Cover (1 ea, Lower)
- ④ Screw (3 ea, M6 X 1" (25 mm))
- ⑤ Screw (2 ea, M6 X 1 1/2" (38 mm))
- ⑥ Screw (2 ea, M4 X 5/16" (8 mm))
- ⑦ Wire Cap (3 ea)

⚠ WARNING

- To Reduce The Risk Of Fire, Electric Shock, And Injury To Persons, Hood Must Be Installed With Supplied Accessories That Are Marked In This Instruction To Indicate The Suitability With This Model. Other Accessories Cannot Be Substituted.

Planning the Installation

⚠ WARNING

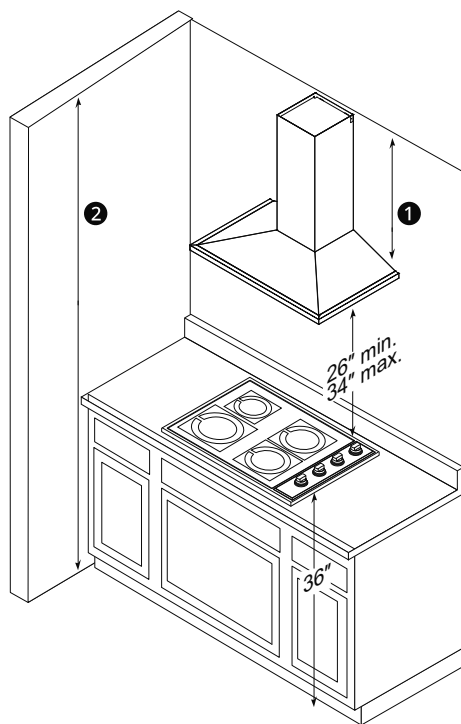
- Observe all governing codes and ordinances during planning and installation. Contact your local building department for further information. Use only duct work deemed acceptable by state, municipal and local codes.

Cabinet Layout

⚠ WARNING

- To reduce the risk of personal injury caused by reaching over a hot appliance, cabinet storage space located directly above the range should be avoided.

Standard Duct Cover



1	Hood Heights	Minimum ducted	26 15/16\" (68.5 cm)
		Maximum	48 1/2\" (123 cm)

2	Ceiling Heights	Minimum ducted	89\" (7' 5") (226 cm)
		Maximum	118\" (9' 10") (300 cm)

Ducting

A minimum of 6\" (15 cm) round duct must be used to maintain maximum airflow efficiency.

Always use rigid metal ducts only. Flexible ducts could restrict airflow by up to 50%.

Use the **Ducting Calculation Sheet** to compute the total available duct run when using elbows, transitions and caps.

ALWAYS, when possible, reduce the number of transitions and turns. If a long duct run is required, increase the duct size from 6\" (15 cm) to 7\" or 8\" (18 cm or 20 cm).

If turns or transitions are required, install as far away from the hood duct output and as far apart as possible.

Minimum mount height between range top and hood bottom should be no less than 26\" (66 cm).

Maximum mount height should be no higher than 34\" (86 cm) above the range top.

It is important to install the hood at the proper mounting height. Mounting the hood too low could result in heat damage and fire hazard. Mounting the hood too high will make it hard to reach and reduce its performance and efficiency.

If available, also refer to the range manufacturer's height clearance requirements and recommended hood mounting height above range.

⚠ CAUTION

- DAMAGE DURING SHIPPING / INSTALLATION:**
 - Please fully inspect the unit for damage before installation.
 - If the unit is damaged in shipment, return the unit to the store in which it was bought for repair or replacement.
 - If the unit is damaged by the customer, repair or replacement is the responsibility of the customer.
 - If the unit is damaged by the installer (if other than the customer), repair or replacement must be made by arrangement between customer and installer.

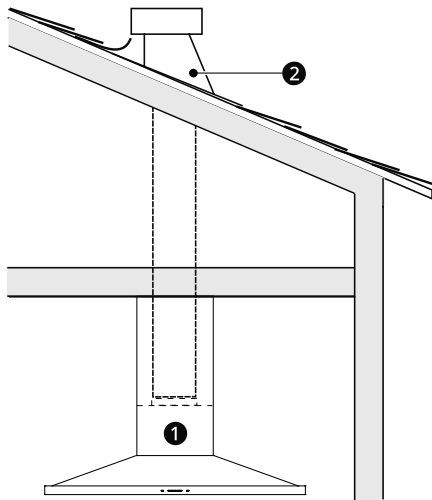
10 INSTALLATION

Ducting Options

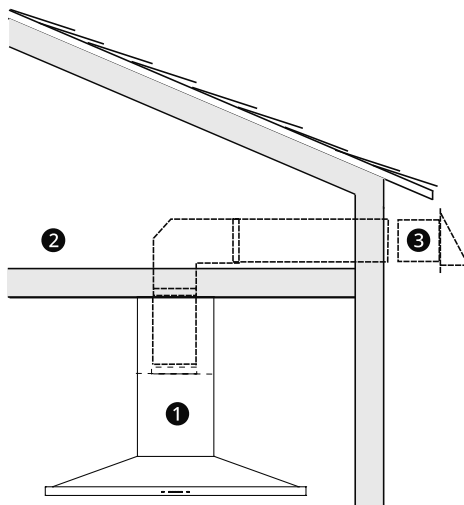
⚠ WARNING

- Fire Hazard:
 - NEVER exhaust air or terminate duct work into spaces between walls, crawl spaces, ceilings, attics or garages.
 - All exhaust must be ducted to the outside.
 - Use metal ductwork only.
 - Fasten all connections with sheet metal screws and tape all joints with certified silver tape or duct tape.

Sample Ducting Options

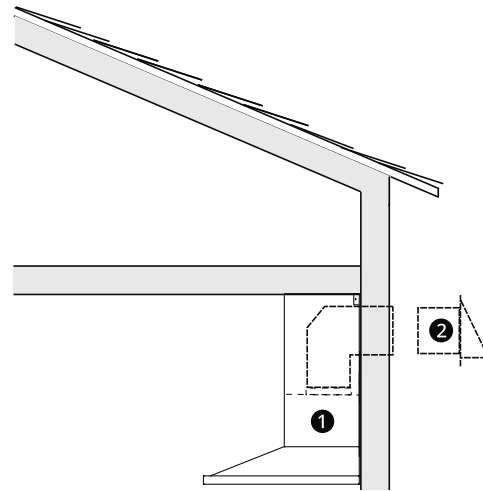


- ❶ Blower Housing
- ❷ Roof Pitch with Flashing and Cap



- ❶ Blower Housing

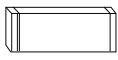
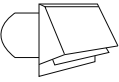
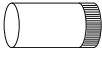
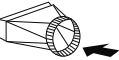
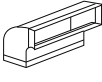
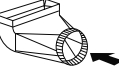
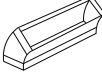
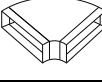
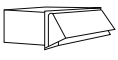
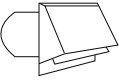
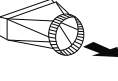
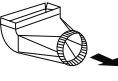
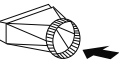
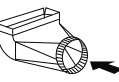
- ❷ Soffit or Crawl Space
- ❸ Side Wall Cap with Gravity Damper



- ❶ Blower Housing
- ❷ Side Wall Cap with Gravity Damper

Ducting Calculation Sheet

Maximum duct length: For satisfactory air movement, the total duct length should not exceed 100 equivalent feet.

Duct pieces		Equivalent length x number used =	Total	Duct pieces		Equivalent length x number used =	Total
	3 1/4" x 10" rect., straight	1 Ft. x () =	Ft.		6" round wall cap with damper	30 Ft. x () =	Ft.
	6" round, straight	1 Ft. x () =	Ft.		6" round, roof cap	30 Ft. x () =	Ft.
	7"-10" round, straight	1 Ft. x () =	Ft.		6" round to 3 1/4" x 10" rect. transition	1 Ft. x () =	Ft.
	3 1/4" x 10" rect. 90° elbow	15 Ft. x () =	Ft.		6" round to 3 1/4" x 10" rect. transition 90° elbow	16 Ft. x () =	Ft.
	3 1/4" x 10" rect. 45° elbow	9 Ft. x () =	Ft.		7"-10" round, 90° elbow	15 Ft. x () =	Ft.
	3 1/4" x 10" rect. 90° flat elbow	24 Ft. x () =	Ft.		7"-10" round, 45° elbow	9 Ft. x () =	Ft.
	3 1/4" x 10" rect. wall cap with damper	30 Ft. x () =	Ft.		7"-10" round wallcap with damper	30 Ft. x () =	Ft.
	3 1/4" x 10" rect. to 6" round transition	5 Ft. x () =	Ft.		7"-10" round, roof cap	30 Ft. x () =	Ft.
	3 1/4" x 10" rect. to 6" round transition 90° elbow	20 Ft. x () =	Ft.		7" round to 3 1/4" x 10" rect. transition	8 Ft. x () =	Ft.
	6" round, 90° elbow	15 Ft. x () =	Ft.		7" round to 3 1/4" x 10" rect. transition 90° elbow	23 Ft. x () =	Ft.
	6" Round, 45° elbow	9 Ft. x () =	Ft.			Subtotal column 2 =	Ft.
		Subtotal column 1 =	Ft.			Subtotal column 1 =	Ft.
						Total ductwork =	Ft.

12 INSTALLATION

Ductwork Design Tips

Wherever possible, reduce the number of transitions and turns to as few sharp angles as possible. Two staggered 45° angles are better than one 90°.

Keep turns as far away from the hood exhaust as possible, and allow as much space between bends as possible.

For best performance, use round ducts instead of rectangular, especially when elbows are required.

If multiple elbows are used, try to keep a minimum of 24" of straight duct between them.

Avoid "S" or "back to back" use of adjacent elbows.

In regions where the weather gets extremely cold, use thermal breaks, such as a short section of nonmetallic duct, to avoid indoor heat loss. Locate the break as close as possible to the outside pass-through point.

Do not use flexible metal ductwork.

Do not use ductwork that is smaller in cross-sectional area than the recommended types above.

Power Supply

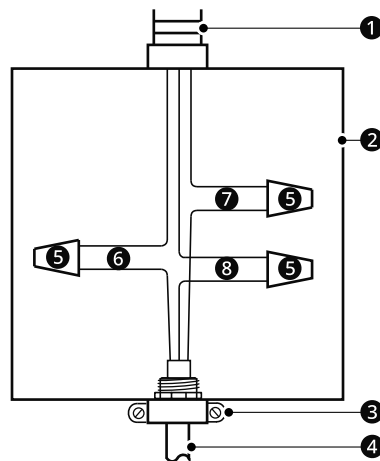
⚠ WARNING

- The information in this manual should be followed exactly. Failure to do so could result in fire or electrical shock, causing property damage, personal injury or death.
- All electrical work must be performed by a qualified electrician or person with similar technical knowledge and background.
- For personal safety, remove the house fuse or open circuit breaker before beginning installation. Do not use an extension cord or adapter plug with this appliance.
- Follow national electrical codes or prevailing local codes and ordinances.

Electrical Supply

This appliance requires a 120 V 60 Hz electrical supply, and must be connected to an individual, properly grounded branch circuit, protected by a 15 or 20 ampere circuit breaker or time delay fuse. Wiring must be 2 wire with ground. Please also refer to the electrical diagram label on the product.

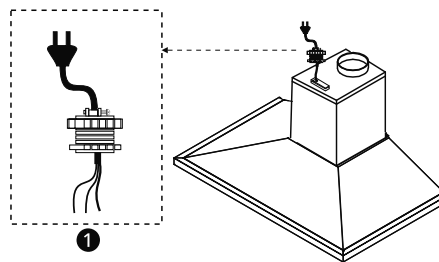
3-Wire Connection to Junction Box



- ① To House Circuit Breaker Panel or Fuse Box
- ② Junction Box
- ③ UL/CSA approved NEMA strain relief
- ④ To range hood
- ⑤ Wire Cap
- ⑥ Green
- ⑦ White
- ⑧ Black

Cable Lock

A cable locking connector ① (not supplied) might also be required by local codes. Check the local requirements and codes, and purchase and install the appropriate connector if necessary.



Verify the Package Contents

Unpack the parts box and verify that all parts and accessories have been included. If any item is missing or damaged, contact the dealer immediately. Do not install a damaged or incomplete appliance.

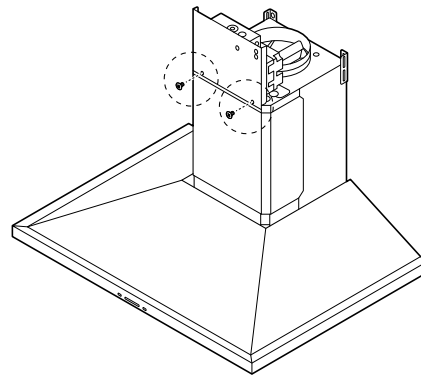
Make sure you have everything necessary for proper installation before proceeding.

Installing the Hood

Mounting the Range Hood

⚠ WARNING

- Do not install the range hood unless the electrical service provided meets the range hood specifications.
- Observe all governing codes and ordinances during installation. Contact your local building department for further information.
- A qualified technician must complete the installation of this built-in appliance. More than one person is required to raise the hood into place. The owner is responsible to make sure the hood is properly installed.



ENGLISH

Mounting Under a Kitchen Cabinet

⚠ CAUTION

- At least two installers are required because of the weight and size of the hood.

- 1 Measure from the range top to the desired hood bottom and mark line A. (26" (66 cm) minimum from range top)
- 2 Plumb and mark the center line ❶.
- 3 Mark the hood height line B. (18 7/16" (47 cm) from line A)
- 4 Mark mounting spread from center line. (8 7/8" (22.5 cm) on line B)
- 5 Unscrew the assembled two M4 X 5/16" (8mm) screws, insert the bracket, and reassemble as shown in the picture below.

- 6 Fasten two M6 X 1 1/2" (38 mm) screws into studs on line B but do not tighten all the way.

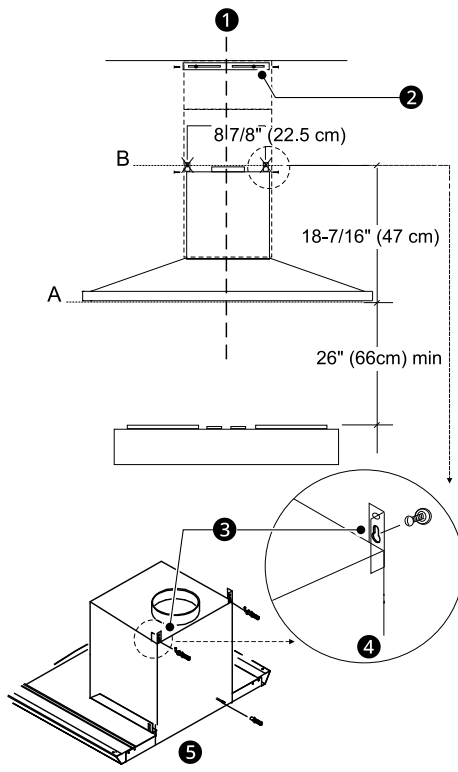
NOTE

- You may need to add wood blocking behind the drywall if no studs are present. Wall anchors may also be used but check local codes for compliance. Failure to use suitable wall anchors and screws to hold the weight of the hood could result in personal injury or damage to the cooking surface or counter.

- 7 Remove the two aluminum mesh filters.
- 8 Hang the hood onto the mounting screws and hand tighten each screw ❷. Secure one M6 X 1" (25 mm) screw through the inside of the hood into the wall for extra support ❸.
- 9 Center and attach the duct cover bracket to the wall just below the ceiling or soffit using two M6 X 1" (25 mm) screws.
- 10 Install the electrical and ductwork. Seal the ductwork with aluminum duct tape.
- 11 Power up the hood and check for leaks around the duct tape.
- 12 Place the lower duct cover onto the hood and extend the upper duct cover upwards and secure it to the duct cover bracket ❹ using

14 INSTALLATION

two M4 X 5/16" (8 mm) screws. Reinstall the mesh filters.



③ Brackets are pre-installed

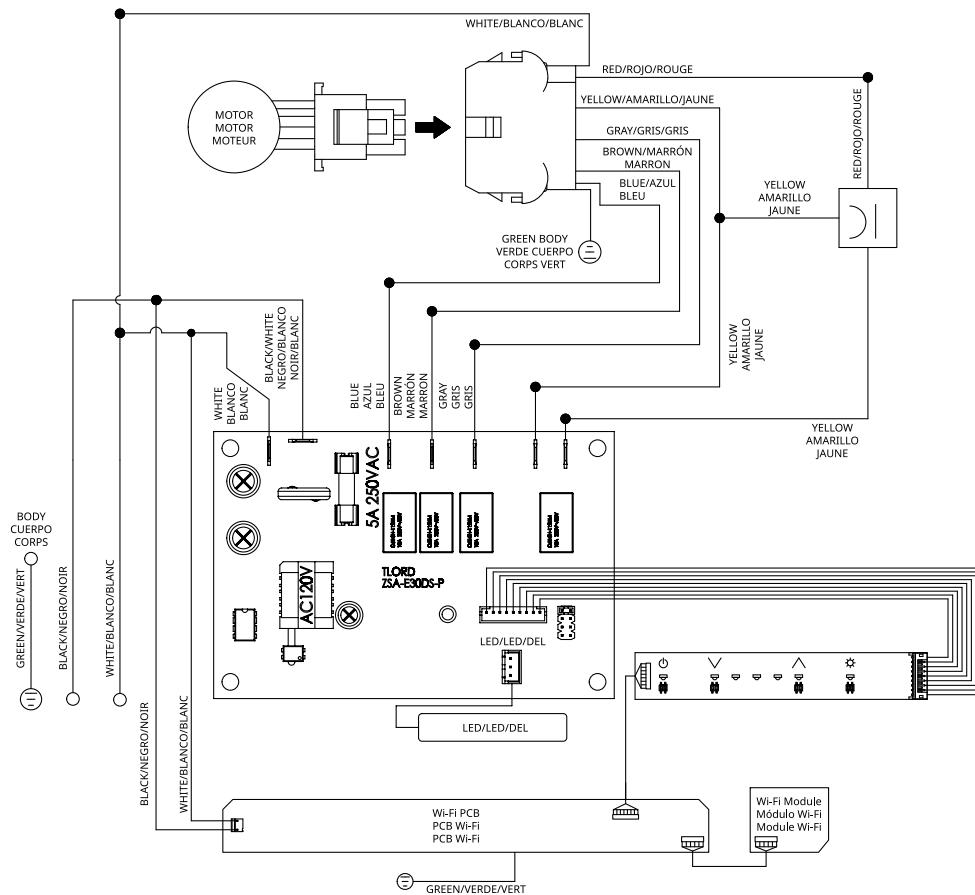
APPENDIX

Wiring Diagram

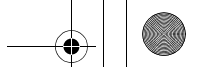
Wiring Diagram

ENGLISH

Models	Volts	HZ	MAX Amps
LSHD3689BD, LSHD3089BD LSHD3680**, LSHD3080** HCED3615S, HCED3015S HCED3615D, HCED3015D	120	60	4



REMARKS: CONDENSER 12.5 + 12.5µF 250 VAC FIT AC 120 V 60 Hz
OBSERVACIONES: CONDENSADOR 12.5 + 12.5µF 250 VCA AJUSTE CA 120 V 60 Hz
NOTES : CONDENSATEUR 12.5 + 12.5µF 250 VAC FIT AC 120 V 60 Hz



16 Memo

