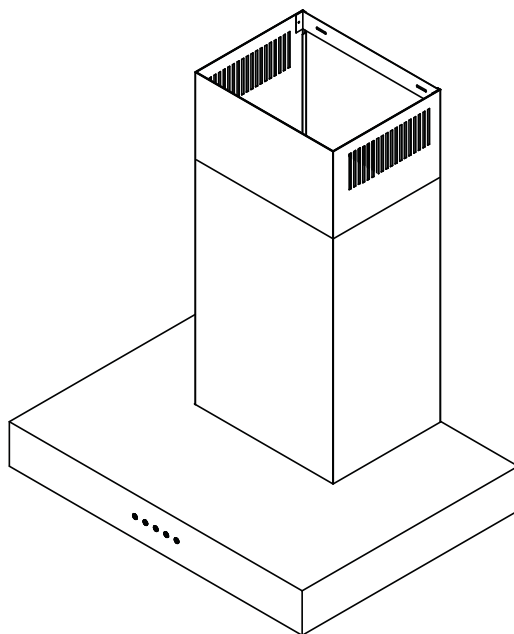


Use, Care, and Installation Guide

Roma Wall

- ZRO-E30BS
- ZRO-M90BS
- ZRO-E30BS290
- ZRO-M90BS290



Model number: _____
Serial Number: _____



SAFETY NOTICE 2-3

LIST OF MATERIALS 4

INSTALLATION

 Ducting Calculation Sheet..... 5

 Mounting Height & Clearance..... 6

 Ducting Options 7

 Hood Specifications 8

 Mounting the Hood..... 9

 Ductless Recirculating 10

FEATURES & CONTROLS

 Electronic LED Controls..... 11

MAINTENANCE

 Hood and Filter Cleaning..... 12

 Light Bulbs 13

TROUBLESHOOTING..... 14

WIRING DIAGRAMS 15

LIST OF PARTS AND ACCESSORIES 16

Important Safety Notice

WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT USE THIS FAN WITH ANY SOLID-STATE CONTROL DEVICE.

WARNING

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 unit, switch power off at service panel and lock panel 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.

CAUTION

For general ventilating use only. Do not use to exhaust hazardous or explosive materials and vapors. Take care when using cleaning agents or detergents. Suitable for use in household cooking area.

WARNING

TO REDUCE THE RISK OF RANGE TOP GREASE FIRE:

- a. Never leave surface units unattended at high settings. Boilovers cause smoking and greasy spillovers that may ignite. Heat oils slowly on low or medium settings.
- b. Always turn hood ON when cooking at high heat or when flaming food
- c. Clean ventilating fans frequently. Grease should not be allowed to accumulate on fan or filter.
- d. Use proper pan size. Always use cookware appropriate for the size of the surface element.
- e. Keep fan, filters and grease laden surfaces clean.
- f. Use high setting on hood only when necessary.
- g. Don't leave hood unattended when cooking.
- h. Always use cookware and utensils appropriate for the type of and amount of food being prepared.

WARNING

TO REDUCE THE RISK OF INJURY TO PERSONS IN THE EVENT OF A RANGE TOP FIRE, OBSERVE THE FOLLOWING:

- a. 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.
- b. NEVER PICK UP A FLAMING PAN – You may be burned.
- c. DO NOT USE WATER, including wet dishcloths or towels – a violent steam explosion will result.
- d. Use an extinguisher ONLY if:
 - 1. You know you have a Class ABC extinguisher, and you already know how to operate it.
 - 2. The fire is small and contained in the area where it started.
 - 3. The fire department is being called.
 - 4. You can fight the fire with your back to an exit

WARNING

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

- a. Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards. Including fire-rated construction.
- b. Sufficient air is needed for power combustion and exhausting of gases through the flue (chimney) of fuel burning equipment to prevent back-drafting. 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 for Heating, Refrigeration and Air Conditioning Engineers (ASHRAE) and the local code authorities.
- c. When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.
- d. Ducted fans must always vent to the outdoors.
- e. NEVER place a switch where it can be reached from a tub or shower.
- f. Make sure the power is off before installing, wiring or maintenancing.

WARNING

TO REDUCE THE RISK OF FIRE, USE ONLY METAL DUCTWORK.

CAUTION

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

Not for use over an outdoor grill.

OPERATION

Always leave safety grilles 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.

***NOTE: Please check www.zephyronline.com for revisions before doing any custom work.**

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 the range hood is properly grounded.

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

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

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

This appliance requires a 120V 60Hz electrical supply and 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 Electrical Diagram on product.

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

ZRO-E30BS, ZRO-M90BS - 426 Watts, 3.5 Amps

ZRO-E30BS290, ZRO-M90BS290 - 171 Watts, 1.5 Amps

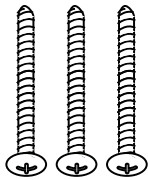
MODELS: ZRO

PARTS SUPPLIED

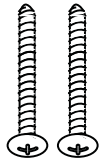
- 1 - Hood with internal blower
- 1 - Duct cover wall bracket
- 1 - Duct cover assembly (top and bottom)
- 1 - Hardware package
- 1 - 6" round backdraft damper (pre-installed)
- 2 - 50W GU-10 halogen light bulbs
- 2 - Aluminum mesh filters

HARDWARE PACKAGE CONTENTS

(3) M4 x 1-1/2"



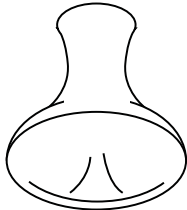
(2) M4 x 1"



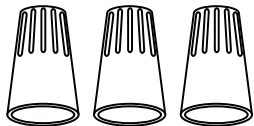
(4) M3.5 x 8



(1) Suction Cup



(3) Wire Nuts



PARTS NOT SUPPLIED

- Ducting, conduit and all installation tools
- Cable connector (if required by local codes)
- Extension duct cover accessory - Z1C-00RO
- Recirculating kit accessory - ZRC-00RO

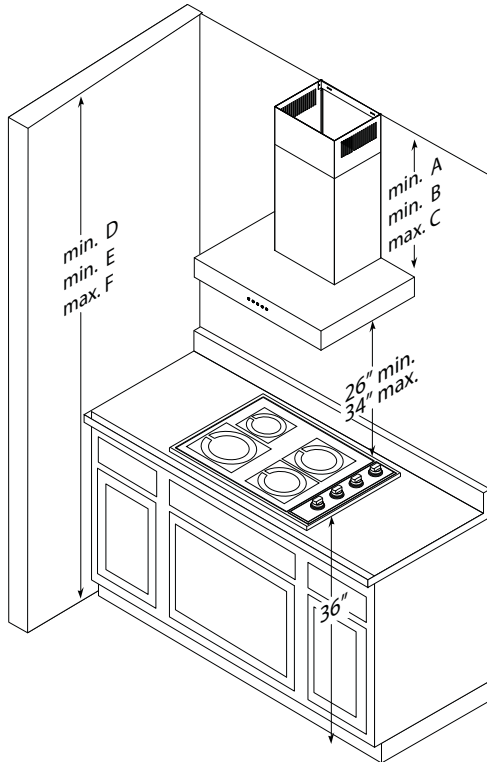
Installation – Ducting Calculation Sheet

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

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

Maximum Duct Length: For satisfactory air movement, the total duct length of a 3 1/4" x 10" rectangular 6" or 7" diameter round duct should not exceed 100 equivalent feet.

Installation – Mounting Height & Clearance



Hood Heights	Standard Duct Cover	Extension Duct Cover
minimum ducted (A)	27"	42"
minimum recirculating (B)	31"	46"
maximum (C)	50"	80"
Ceiling Heights		
minimum ducted (D)	89" (7' 5")	104" (8' 8")
minimum recirculating (E)	93" (7' 9")	108" (9')
maximum (F)	120" (10')	150" (12' 6")

DUCTING

A minimum of 6" round duct must be used to maintain maximum air flow efficiency.

Always use rigid type metal ducts only. Flexible ducts could restrict air flow by up to 50%.

Use calculation worksheet to compute total duct work (Page 5).

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

If turns or transitions are required: Install as far away from duct opening and as far apart between the two transitions as possible.

Minimum mount height between range top to hood bottom should be no less than 26".

Maximum mount height should be no higher than 34".

It is important to install the hood at the proper mounting height. Hoods mounted too low could result in heat damage and fire hazard; while hoods mounted too high will be hard to reach and will lose performance and efficiency.

If available, also refer to range manufacturer's height clearance requirements and recommended hood mounting height above range. Always check your local codes for any differences.

Duct cover extension kit available for ceiling heights up to 12 feet. Turn to page 16 for part number and ordering information.

DAMAGE-SHIPMENT / INSTALLATION:

- Please fully inspect 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.

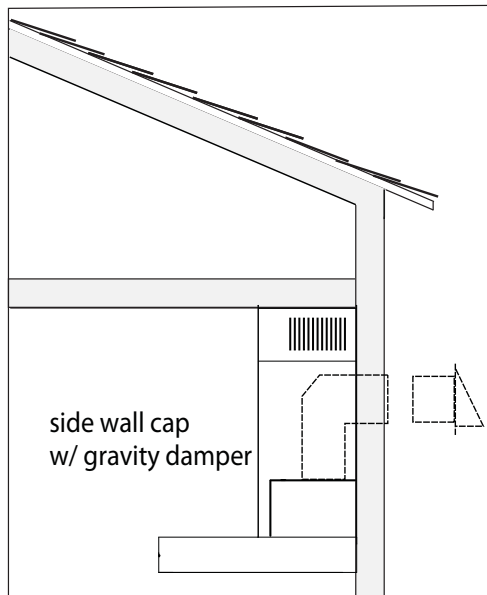
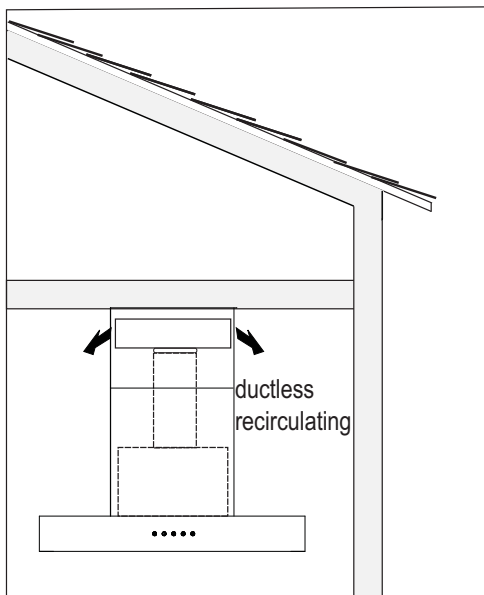
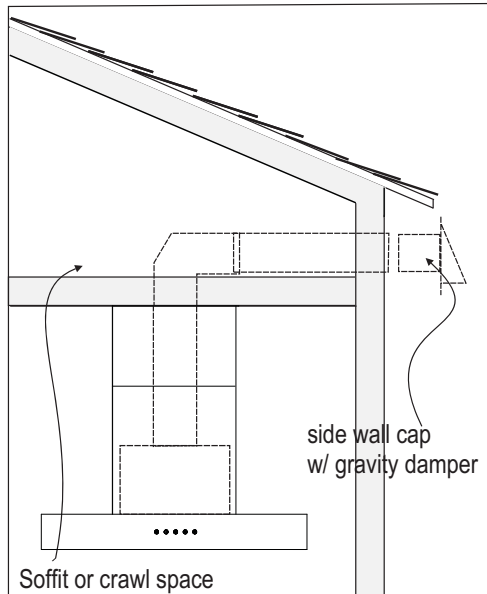
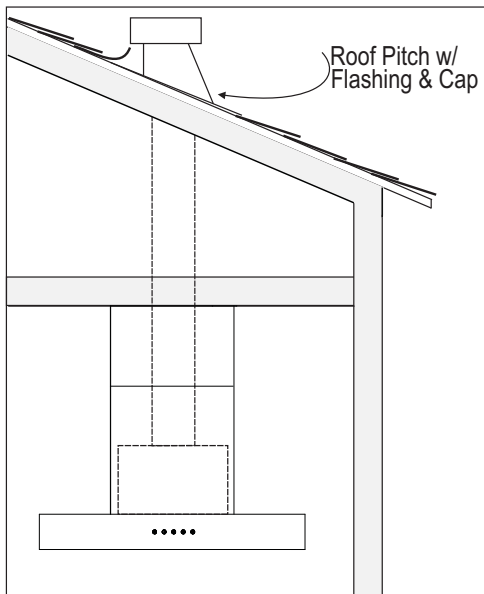
WARNING FIRE HAZARD

NEVER exhaust air or terminate duct work into spaces between walls, crawl spaces, ceiling, attics or garages. All exhaust must be ducted to the outside, unless using the recirculating option.

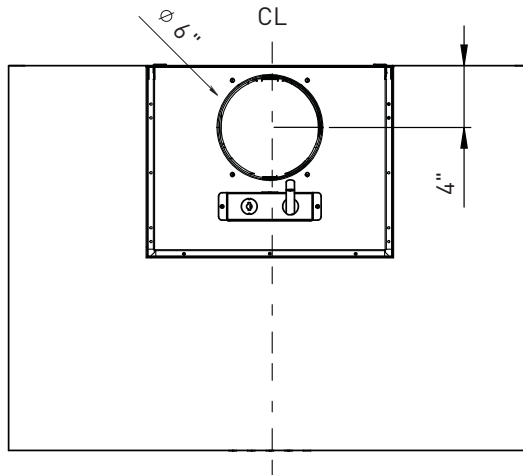
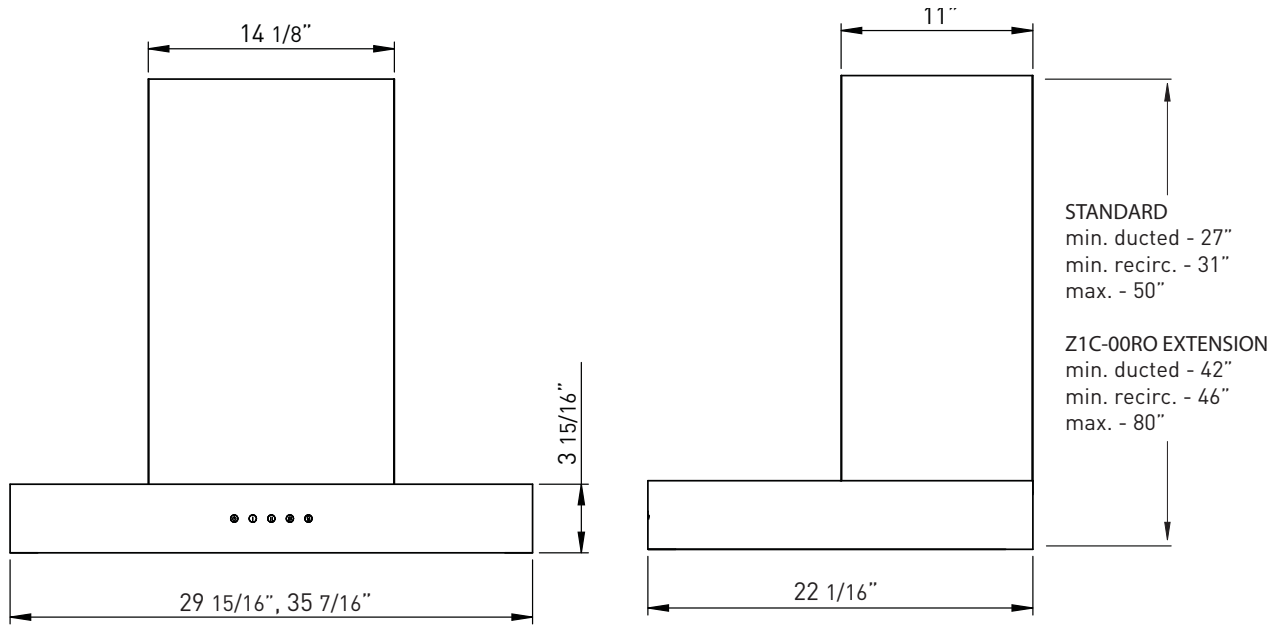
Use single wall rigid metal ductwork only.

Fasten all connections with sheet metal screws and tape all joints w/ certified Silver Tape or Duct Tape.

Some Ducting Options



Installation – Hood Specification



⚠ CAUTION: At least two installers are required due to the weight and size of the hood.

1. Measure from range top to hood bottom and mark line A. (26" minimum from range top) .
2. Plum and mark center line.
3. Mark hood height line B. (12-3/16" from line A)
4. Mark mounting spread from C/L. (12-5/8" on line B)
5. Fasten (2) M4 x 1-1/2" screws into studs on line B but do not tighten all the way. **Note: Wood blocking may need to be added behind the drywall if no studs are present. Wall anchors may also be used but check local codes before using wall anchors.**
6. Remove the (2) aluminum mesh filters.
7. Hang hood onto the mounting screws and hand tighten each screw. (Fig A)
8. Center and attach duct cover mounting bracket to wall just below the ceiling or soffit using (2) M4 x 1" screws.
9. Install electrical and duct work. Seal duct work with aluminum duct tape.
10. Power up hood and check for leaks around duct tape.
11. Place telescopic duct covers onto hood and extend inner (top) duct cover upwards and secure to duct cover bracket using (2) M3.5 x 8 screws. Reinstall mesh filters.

* If using hood in recirculating mode you must secure the air diverter plate onto wall before installing duct work and duct covers. You will also need to install charcoal filters and brackets. Turn to page 10 for more details.

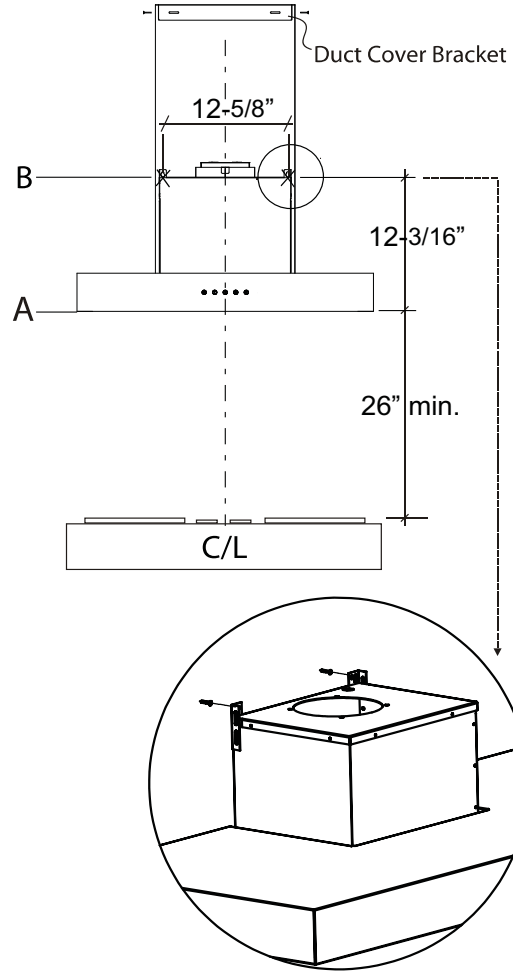
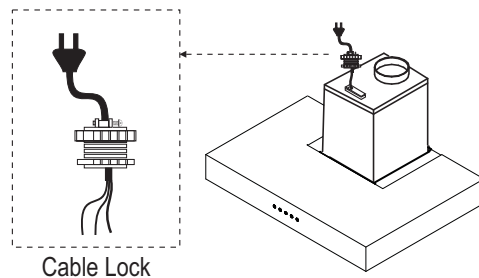


FIG. A

⚠ WARNING: Electrical wiring must be done by a qualified person(s) in accordance with all applicable codes and standards. This range hood must be properly grounded. Turn off electrical power at service entrance before wiring.

Cable Lock

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



Ductless recirculation is intended for applications where an exhaust duct work is not possible to be installed. When converted, the hood functions as a recirculating hood rather than an exhaust hood. Fumes and exhaust from cooking are drawn and filtered by a set of optional charcoal filters. The air is then purified and re-circulated back within the home.

We recommend to ALWAYS exhaust air outside of the home by employing existing or installing new duct work, if possible. The hood is most effective and efficient as an exhaust hood. Only when the exhaust option is not possible should you recourse to converting the hood into a recirculating hood.

When converted to be a recirculating hood, a set of charcoal filters are required on top of its standard Metal Filter set. Order according to its part number below. The standard mesh filters are intended to capture residue from cooking and the optional charcoal filters help to purify fumes exhausted from cooking for recirculation.

RECIRCULATING KIT (REQUIRED IF NO DUCTING IS USED)

Kit includes charcoal filters and air diverter plate.

Hood Models	Part No.	Filters & Brackets in pkg.
ZRO	ZRC-00RO	2

1. Purchase recirculating kit per the part number above
2. Secure air diverter plate to wall below duct cover bracket. Run 6" ducting from top of hood and secure to air diverter plate. (FIG. B)
3. Remove aluminum mesh filters from hood. Secure charcoal filter brackets to the hood body behind each mesh filters using the screws included in the recirculating kit. Clip charcoal filters onto each charcoal filter bracket. (FIG. B)
4. Re-Install mesh filters. **For more details refer to manual included with recirculating kit.**
5. Charcoal filters must be replaced after every 120 hours of use (or approximately every 3 to 4 months based on an average of 1 - 2 hrs. of daily cooking time).

Charcoal Filter Replacements

Hood Model	Part No.	Qty to Order
ZRO	Z0F-C002	2

DO NOT WASH CHARCOAL FILTERS. Charcoal filters may need to be changed more often depending on cooking habits.

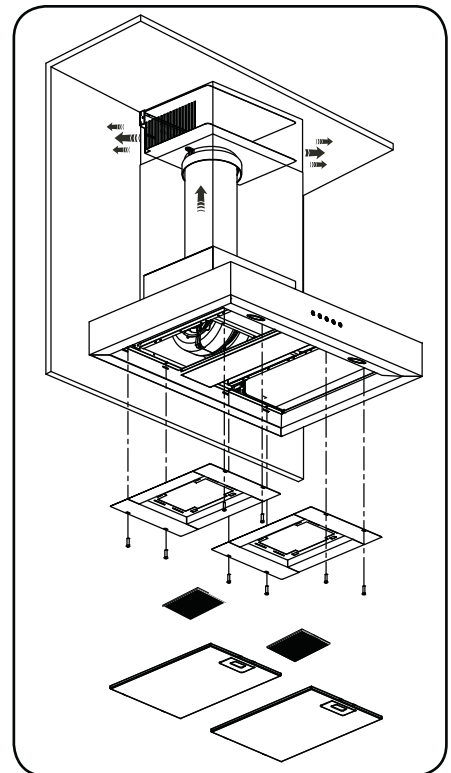
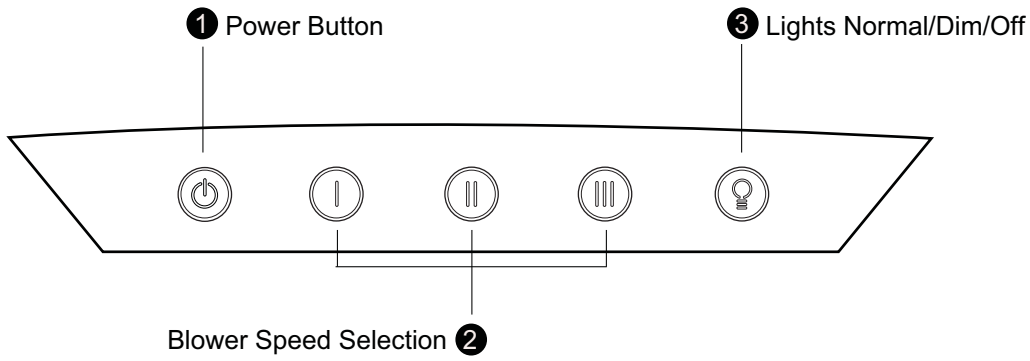


FIG. B



1 Power Button

Press to switch blower on and off. If lights are on they will also switch off when this button is pressed.

These controls feature a memory function that will remember the last setting before being powered off. *For example:* If blower is on Speed 2 and lights are on normal and the Power Button is pressed, the entire hood will power down. If Power Button is pressed again the blower will switch back on to Speed 2 and lights on normal.

2 Blower Speed Selection

Press one of these buttons to select blower speeds 1, 2, and 3. While blower is on a blue LED back-light will illuminate the applicable Speed Selection button and Power On/Off button.

3 Lights Normal/Dim/Off

Press to cycle through light levels Normal, Dim, and Off. While lights are on a blue LED back-light will illuminate the button.

SURFACE MAINTENANCE:

Clean periodically with hot soapy water and clean cotton cloth. Do not use corrosive or abrasive detergent or steel wool/scouring pads which will scratch and damage surface.

For heavier soil use liquid degreaser.

After cleaning it is recommended that you use non-abrasive stainless steel polish/cleaners, to polish and buff out the stainless luster and grain. Always scrub lightly, with clean cotton cloth, and with the grain.

Do not use any product containing chlorine bleach. Do not use “orange” cleaners.

Aluminum Mesh Filters

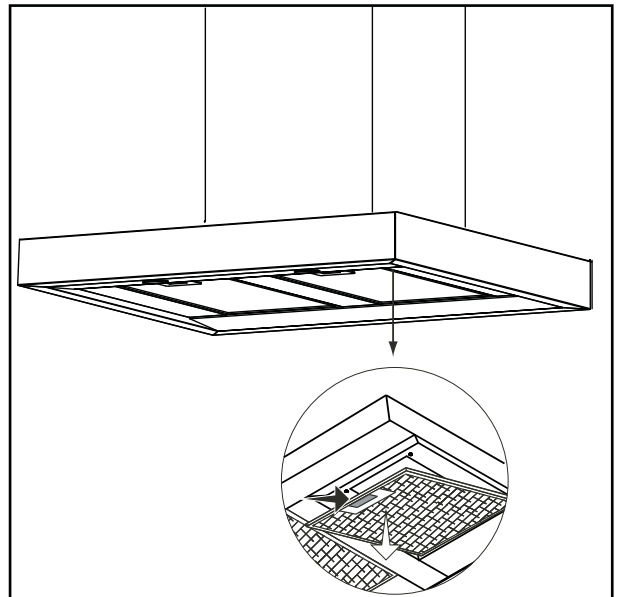
The aluminum mesh filters installed by the factory are intended to filter out residue and grease from cooking. They need not be replaced on a regular basis but are required to be kept clean.

Remove and clean by hand or in dishwasher on low heat. Spray degreasing detergent and leave to soak if heavily soiled.

Dry filters and re-install before using hood.

Removing Aluminum Mesh Filters

1. Push in on spring loaded handle
2. Pull down on filter handle to remove filter



REPLACING LIGHT BULBS

CAUTION: Light bulb becomes extremely hot when turned on.

DO NOT touch bulb until switched off and cooled. Touching hot bulbs could cause serious burns.

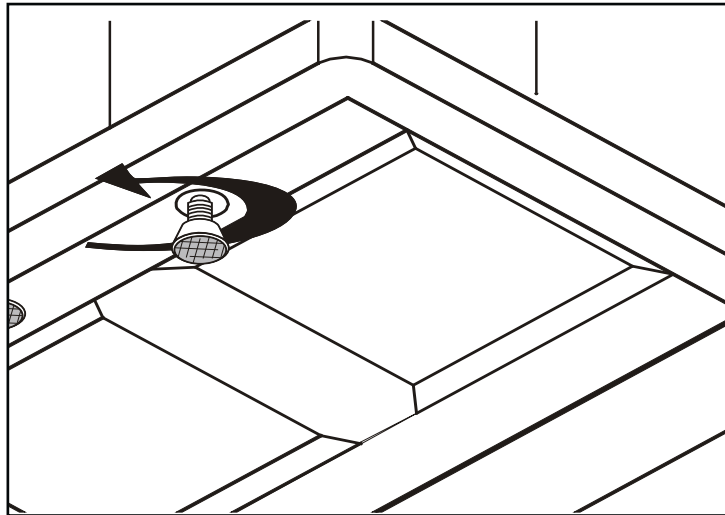
Make sure all power is turned off and bulbs are not hot.

Remove by turning bulb counter clockwise. Note: Bulb does not unscrew; it turns 60 degrees, stops and falls out.

If bulbs are difficult to turn due to prolonged use, firmly attach the included glass suction cup or use a rubber/ latex glove grip and turn the bulb counter clockwise.

Replacement bulbs are available at specialty lighting stores. Purchase type GU-10 50W halogen.

For part numbers please turn to page 16 of the manual.



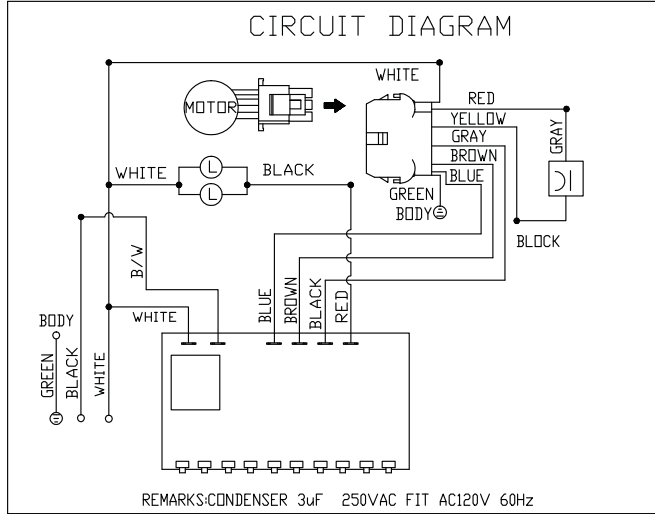
Troubleshooting

TROUBLESHOOTING PROCEDURES FOR ZRO

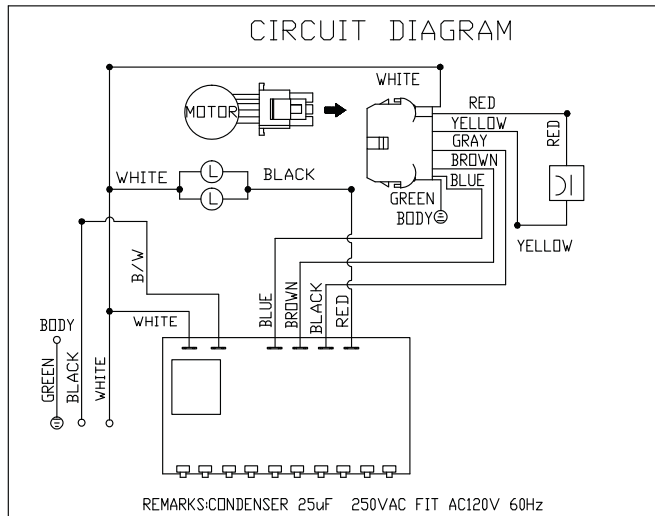
Issue	Cause	What to do
After installation, the unit doesn't work.	1. The power source is not turned ON.	1. Make sure the circuit breaker and the unit's power is ON.
	2. The power line and the cable locking connector is not connecting properly.	2. Check the power connection with the unit is connected properly.
	3. The switch board and control board wirings are disconnected.	3. Make sure the wirings between the switch board and control board are connected properly.
	4. The switch board or control board is defective.	4. Change the switch board or control board.
Light works, but motor is not turning.	1. The motor is defective, possibly seized.	1. Change the motor.
	2. The thermally protected system detects if the motor is too hot to operate and shuts the motor down.	2. The motor will function properly after the thermally protected system cool down.
	3. Damaged capacitor.	3. Change the capacitor.
	4. The switch board or control board is defective.	4. Change defective part.
The unit is vibrating.	1. The motor is not secured in place.	1. Tighten the motor in place.
	2. Damaged blower wheel.	2. Replace the blower.
	3. The hood is not secured in place.	3. Check the installation of the hood.
	4. The switch board or control board is defective.	4. Change defective part.
The motor is working, but the lights are not.	1. Defective halogen bulb.	1. Change the halogen bulb.
	2. The light bulb is loose.	2. Tighten the light bulb.
The hood is not venting out properly.	1. The hood might be hanging too high from the cook top.	1. Adjust the distance between the cook top and the bottom of the hood within 28" and 36" range.
	2. The wind from the opened windows or opened doors in the surrounding area are affecting the ventilation of the hood.	2. Close all the windows and doors to eliminate the outside wind flow.
	3. Blockage in the duct opening or ductwork.	3. Remove all the blocking from the duct work or duct opening.
	4. The direction of duct opening is against the wind.	4. Adjust the duct opening direction.
	5. Using the wrong size of ducting.	5. Change the ducting to at least 6" or higher for the internal blower and 8" or higher for the external blower.
Mesh Filter is vibrating.	1. Mesh filter is loose.	1. Change the mesh filter.



182766 ZRO-E30BS290
Model: ZRO-M90BS290
Voltage 120V 60Hz 1.5A
Power consumption
Total: 171W
Lamp: Max.50Wx2
Fan: 71W
DATE:
THERMALLY PROTECTED



182766 ZRO-E30BS
Model: ZRO-M90BS
Voltage 120V 60Hz 3.5A
Power consumption
Total: 426W
Lamp: Max.50Wx2
Fan: 326W
DATE:
THERMALLY PROTECTED



List of Materials

DESCRIPTION	PART#
Replacement Parts	
Light Bulb GU-10 50W (each)	Z0B-0020S
Aluminum Mesh Filter (each)	50200018
Optional Accessories	
Recirculating Kit	ZRC-00RO
Replacement Charcoal Filter (each)	Z0F-C002
Extension Duct Cover	Z1C-00RO

Order replacement parts from our website or by calling us 1.888.880.8368