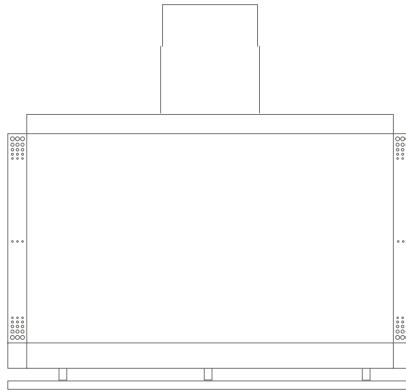


Use, Care, and Installation Guide

Shade

CSH -E36SX
CSH -E42SX
CSH -E48SX



Model number: _____
Serial number: _____
Date of Purchase: _____
Sales Dealer: _____

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INSTALLATION

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Important safety Notice

WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT USE THIS FAN WITH ANY SOLID-STATE SPEED 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 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 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 A 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 cooking flambeing food (i.e. Crepes Suzette, Cherries Jubilee, Peppercorn Beef Flambe)
- 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.

WARNING

TO REDUCE THE RISK OF INJURY TO PERSONS IN THE EVENT OF A RANGE TOP GREASE 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.
 5. Based on "Kitchen Fire Safety Tips" published by NFPA.

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 proper 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.

WARNING

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

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 or ceilings or into attics, crawl spaces or garages.

CAUTION

To Reduce the Risk of Fire and Electric Shock, Install This Range Hood Only with Remote Blower Models CBE-1000 Rated Maximum 6.2 amp, 120 Vac 60Hz or Integral Blowers Manufactured by Zephyr Ventilation, Models CB1-600.

MODEL: CSH-ExxSX

- 1 - Hood Body
- 2 - Baffle Filters (1 - 36" model)
- 4 - GU-10, 120V, 50W Halogen Bulbs
- 1 - Hood Door
- 2 - Telescopic Duct Covers
- 1 - Ceiling Mounting Bracket

1 - HARDWARE PACKET

- 7 - 2" wood screws
- 7 - anchors
- 7 - 1/2" washers
- 4 - screws (Dimension 5 x 15mm)
- 4 - adhesive fastener (to hold cable tie)
- 4 - cable tie


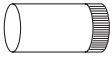
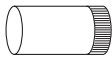
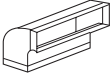
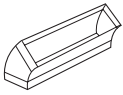
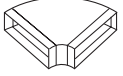
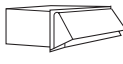
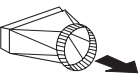
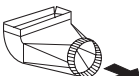


1 - HARDWARE PACKET, EXTERNAL BLOWER KIT

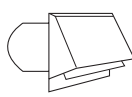

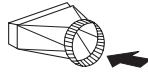
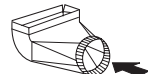
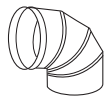

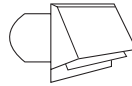

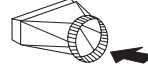
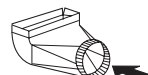
- 1 - 8" collar
- 1 - external blower connection box
- 10 - 1/2" self tapping screws
- 6 - 4mm internal diameter washer
- 1 - wiring for the connection to external blower

NO DUCTING IS PROVIDED
EXTERNAL AND INTERNAL BLOWER SOLD SEPARATELY

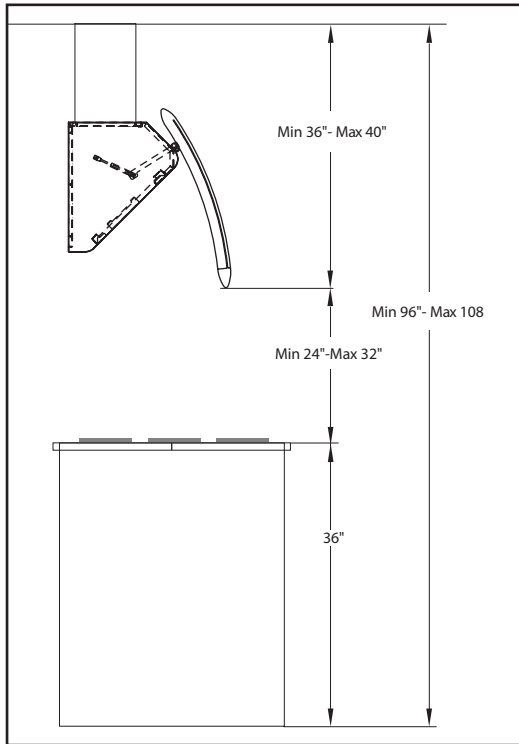
Make sure to remove the protective film off of the hood before installation in order to make removal of the film easier. Be careful not to scratch the stainless steel while installing.

Installation - Ductwork 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. |
|  | 7" 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 | 15 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" Round wall cap with damper | 30 Ft. x () = | Ft. |
|  | 6" 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" Round, 90° elbow | 15 Ft. x () = | Ft. |
|  | 7" Round, 45° elbow | 9 Ft. x () = | Ft. |
|  | 7" Round wall cap with damper | 30 Ft. x () = | Ft. |
|  | 7" 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 | 15 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.



Minimum mount height between range top to hood bottom should be no less than 24".

Maximum mount height should be no higher than 32".

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 its 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.

*Minimum ceiling height of 96". Hood mounted at 24" above cooking surface.

*Maximum ceiling height of 108". Hood mounted at 32" above cooking surface.

*measured from bottom of door to top of cooking surface.

Minimum Duct Size:

Round - 6" minimum at 600 cfm

Round - 10" to 8" minimum at 1000 cfm

Rect angular - 3 1/4" x 10" minimum only if using internal blower at 600 cfm. Using rectangular ductwork will require a transition adapter (not provided, but readily available at most hardware stores).

DUCTING

A minimum of 6" round or 3-1/4 x 10" rectangular duct work must be used to maintain maximum airflow efficiency with the 600cfm internal blower. A minimum of 10" to 8" round must be used with the 1000 cfm external blower.

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

Use calculation worksheet to compute total duct work.

ALWAYS, when possible, reduce the number or transitions and turns. If a reducer is used, install a long reducer instead of a pancake reducer. Reduce duct size as far away from opening as possible.

If turns or transitions are required: Install as far away from opening and as far apart, between 2, as possible.

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.

Installation - Ducting

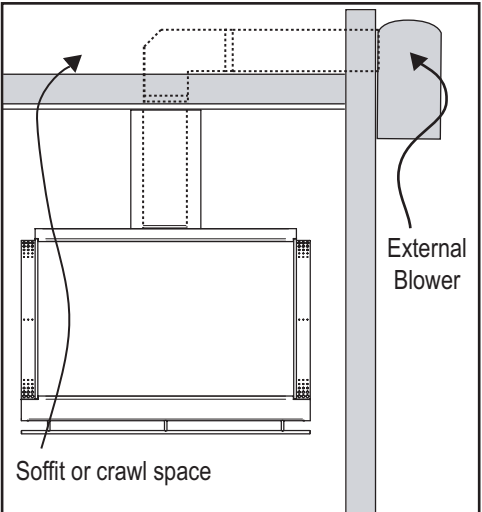
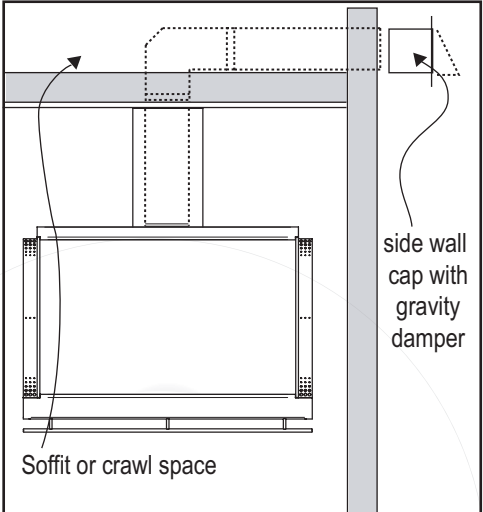
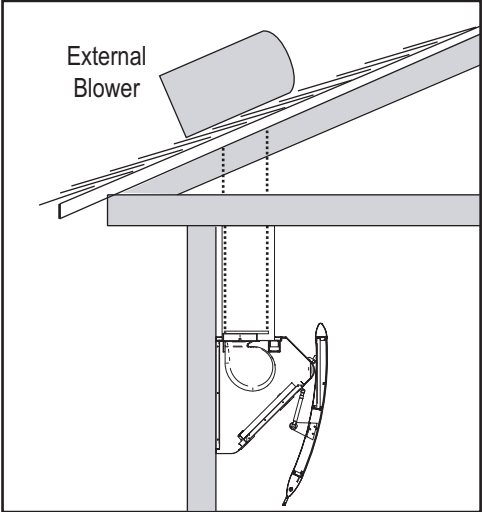
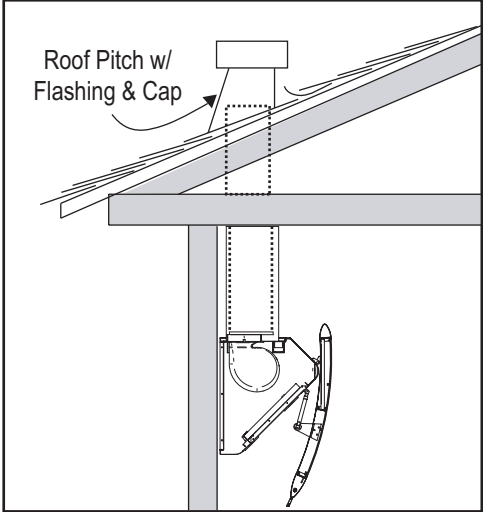
WARNING FIRE HAZARD

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.

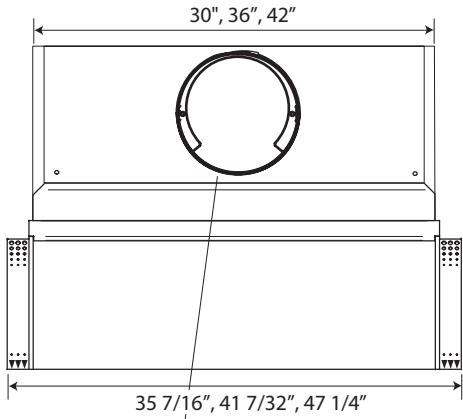
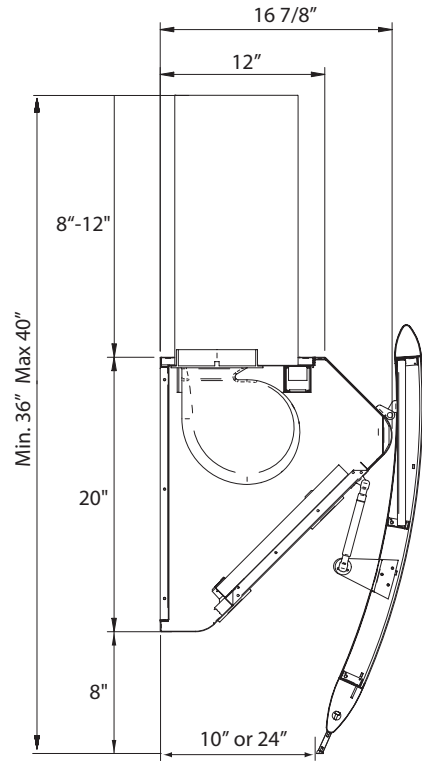
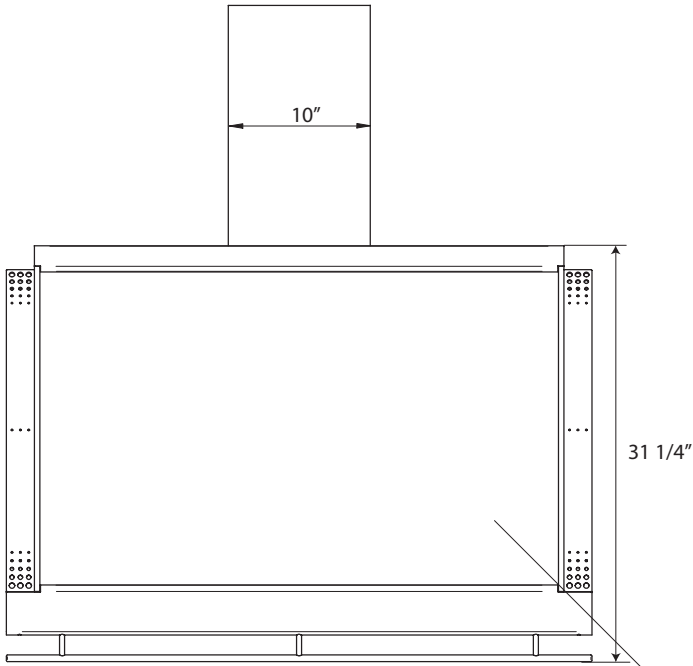
Use single wall rigid Metal ductwork only.

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

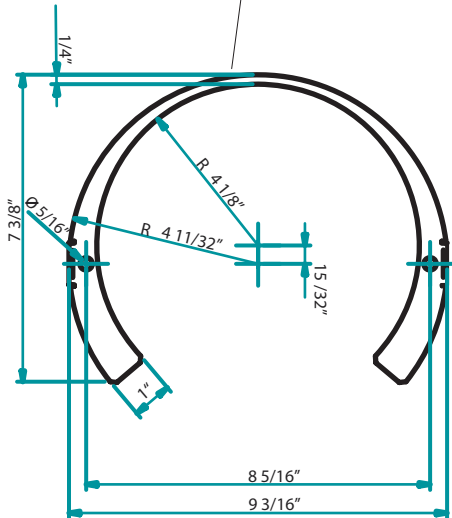
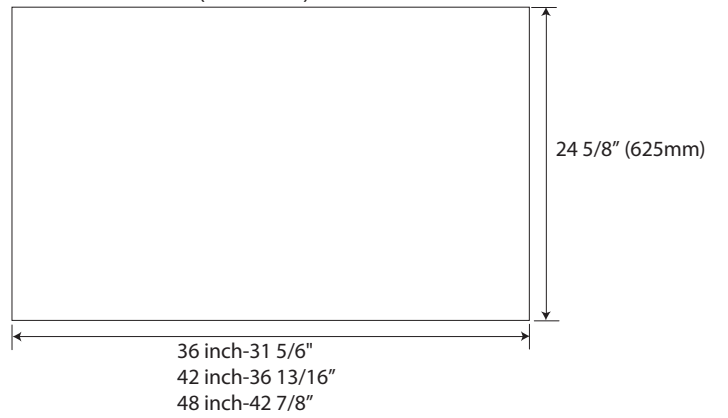
Some Ducting Options:



Installation - Specifications



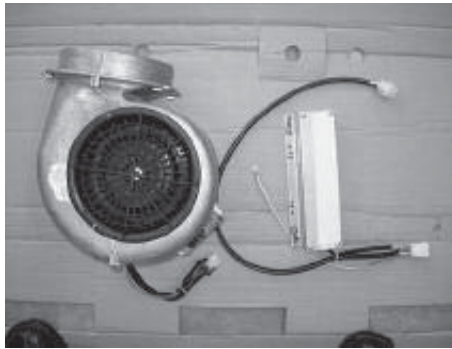
DOOR INSERT PANEL
1/8" (3.175 mm) thickness



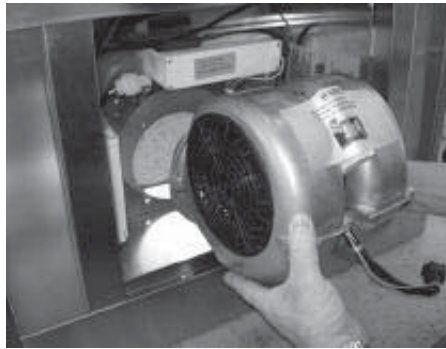
Installation - Internal Blower

ATTENTION

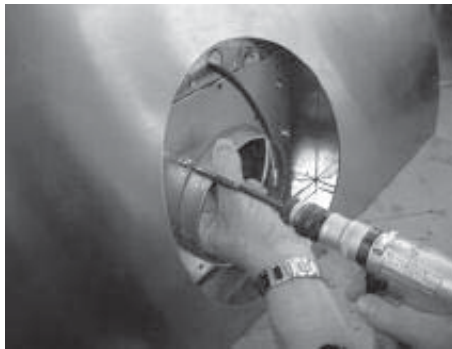
The following are instructions for installing internal blower model CBI-600. For instructions on preparing for external blower model CBE-1000 please turn to page "10". Before installing, verify that motor spins freely.



The internal blower kit consists of the blower and capacitor box with wiring.



1. Position blower as shown.



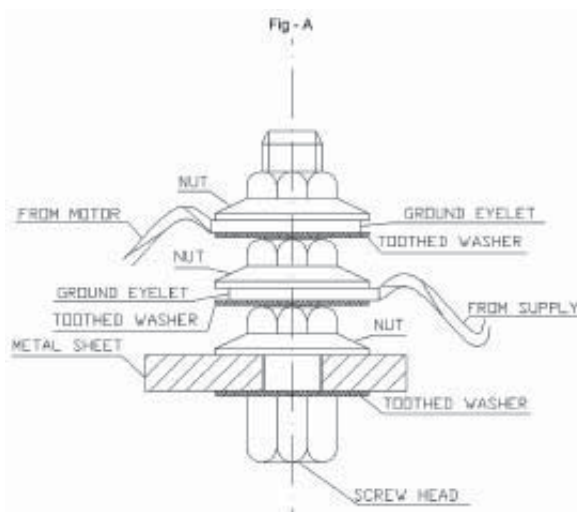
2. Attach blower to flange as shown using the provided 1/2" 5x15mm screws with washers.



3. Position capacitor box as shown.



4. Secure capacitor box to hood using the provided 1/2" self tapping screws.





5. Remove existing grounding screw and attach grounding wire from capacitor box.



6. Re-attach grounding screw to finish installation of capacitor box. Refer to Fig-A on previous page.



7. Attach short capacitor connector to blower connector.



8. Attach long capacitor connector to control board connector.



9. Use plastic tie to hold wiring together.



10. Remove wood block
Final view of internal blower install.

Continue to page "12" for hood installation instructions.

Installation - Preparing External Blower

ATTENTION

The following are instructions on preparing your hood for installation with external blower model CBE-1000. For instructions on installing internal blower model CBI-600 please turn to page "8".

NOTE: Please refer to the CBE-1000 manual for external blower mounting instructions.



The external blower kit consists of an 8" collar, and external blower wiring box. The external blower is purchased separately.



1. Remove screws from internal flange.



2. Remove internal flange from hood.



3. Position 8" collar as shown.



4. Attach 8" collar to hood as shown using provided 1/2" self tapping screws.



5. Attach external blower wiring box to top of hood using provided 1/2" self tapping screws.



6. Position cover onto external blower wiring box.



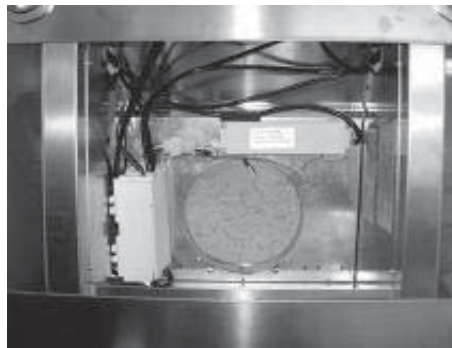
7. Secure cover to box with provided screw.



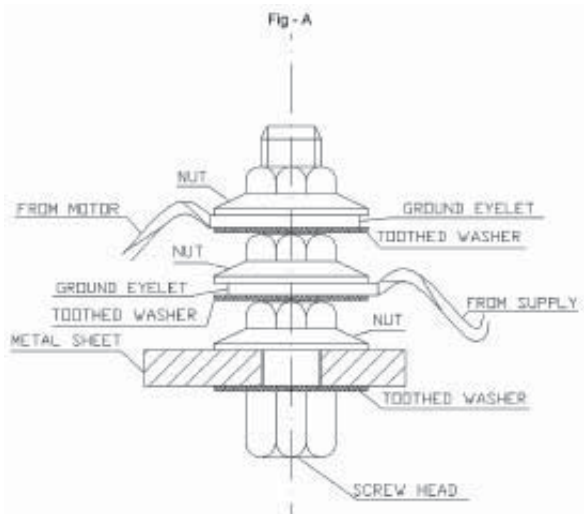
8. Attach connector from external blower wiring box to control board box connector inside hood.



9. Attach grounding wire from external blower wiring box to grounding screw of the junction box. Refer on Fig-A in diagram below .

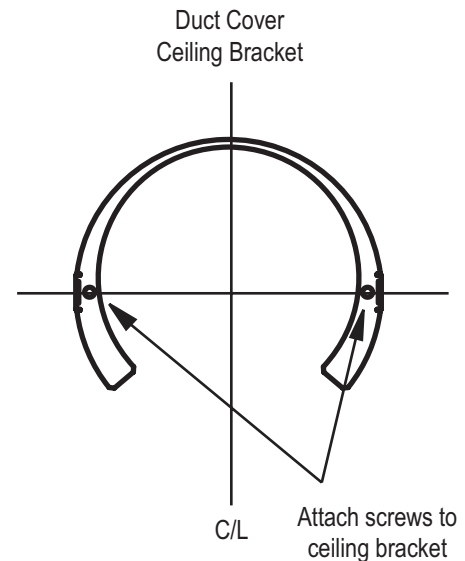
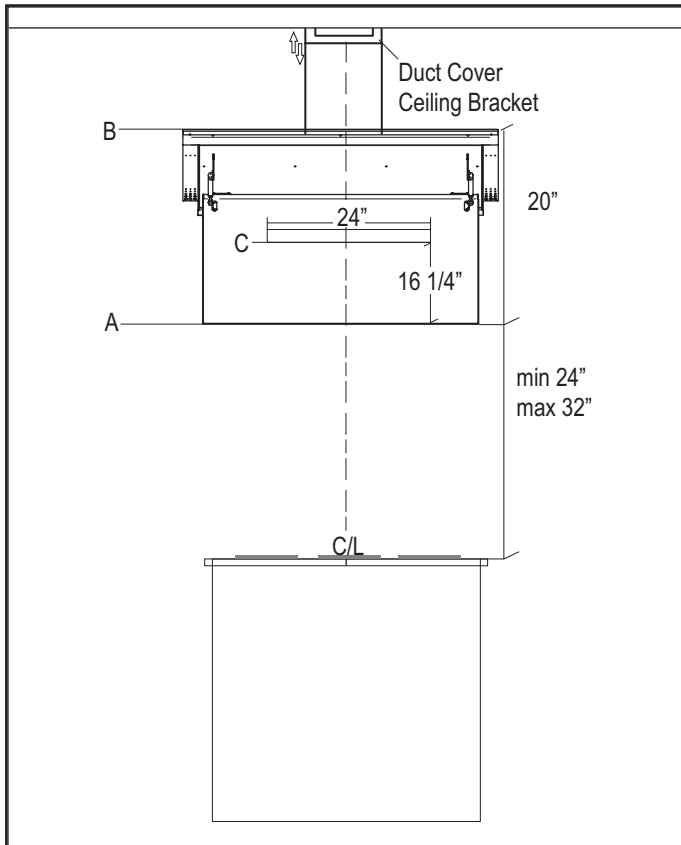


10. Final view of external blower preparation



Continue to page "12" for hood installation instructions.
For external blower installation please refer to the manual included with the external blower.

Installation - Preparing Hood



1. Measure from cooking surface to hood bottom, level and mark line A.
2. Plum and mark center line.
3. Mark mounting height line B (20" from line A). This is the top of the hood.
4. Measure up, 16 1/4" from line A and mark mounting spread from C/L. Line C (24").
5. Follow center line up to the ceiling, measure and mark 5 3/4" away from the wall. Make sure the spot you mark is still on the center line. This is where the duct cover ceiling bracket will mount.
6. Place duct cover ceiling bracket onto ceiling and mark the (2) holes where screws will be attached. If attaching bracket to drywall only, drill and insert the provided anchors into the marked holes. Cut out inside diameter of the ceiling bracket to fit the 6" or 8" round duct work through. Attach bracket to ceiling with (2) screws provided.
7. Prepare duct work and electrical.

All Electrical work must be performed by a qualified electrician or person with similar technical know and background.

For personal safety, remove house fuse or open circuit breaker before beginning installation.

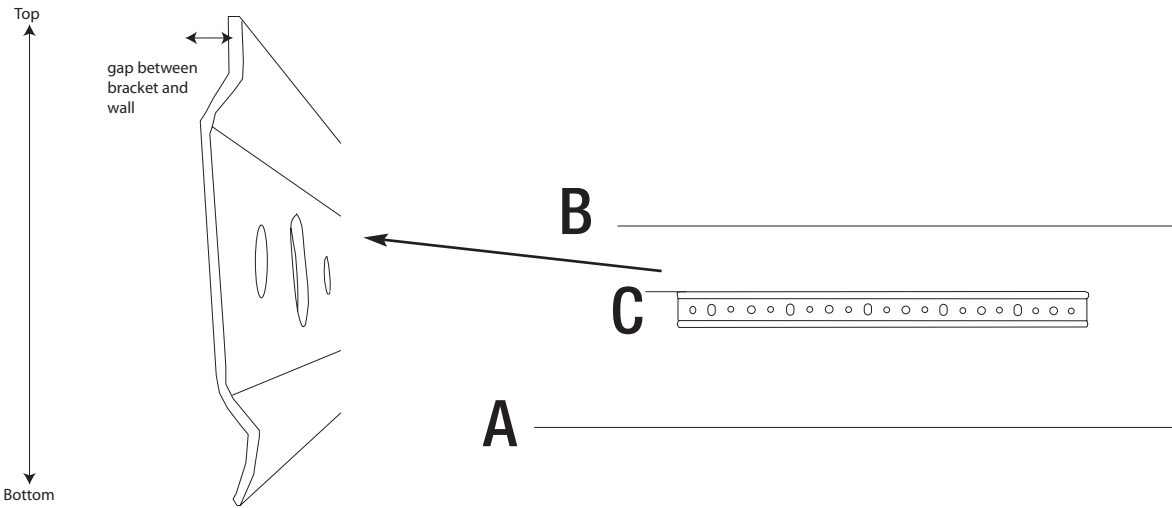
Do not use extension cords or adapter plug with this appliance.

Follow National Electrical Codes or prevailing local codes and ordinances.

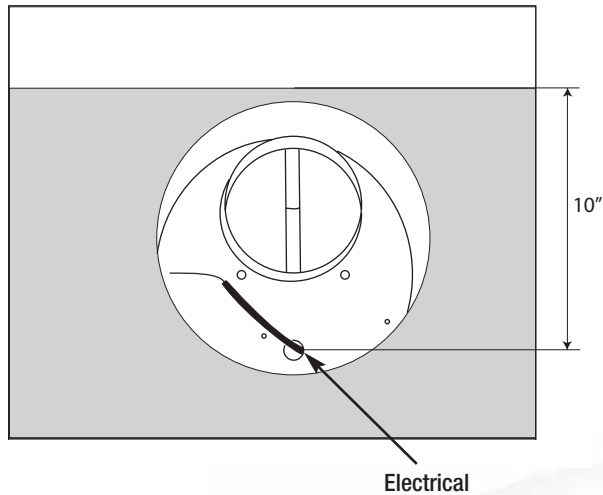
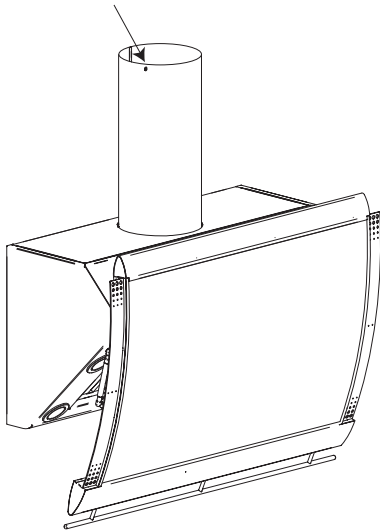
Electrical Supply:

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 refer to Electrical Diagram labeled on product.

ELECTRICAL - WARNING

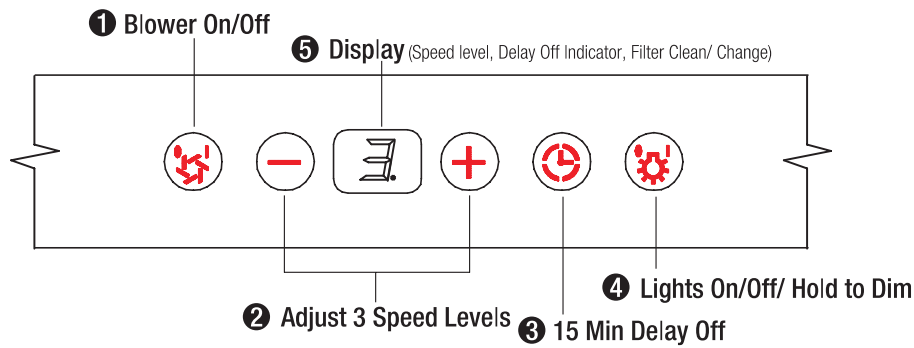


Attach screws to both sides of the duct covers and secure to ceiling bracket.



1. Place wall bracket on line C. Position top of wall bracket so it is even with the 24" mounting spread. Make sure bracket is attached to wall as shown in the diagram. The top of the wall bracket should have a gap between it and the wall. The bottom should be flush against the wall. Use (3) 2" wood screws to attach bracket to wall. Use anchors if not mounting to studs.
2. Lift hood onto wall bracket, there is a lip on the back of the hood which will rest on the wall bracket. Secure in place by *screwing (2) screws with washers through hood into the wall. There are two holes at the bottom inside the hood in which to do this.
3. Place telescopic duct covers on top of hood and extend top duct cover to the ceiling bracket. Attach duct cover to ceiling bracket with the provided screws.
4. Run duct work down to top of motor. Attach electrical wiring from ceiling to wiring on top of motor housing. (slide duct cover up towards ceiling to gain access to the motor housing)



* **Note:** If installing onto drywall only with no wall studs present, attach EZ anchors (not provided) into the wall. Please see page 14 for external blower installation instructions.





1. Blower On/Off

By pressing , the blower is switched On and Off.

2. Speed Selection

The 3 speed levels are selected by pressing  to decrease and  to increase speed level. The display indicates level selected.

3. Delay Off

This is used for programmed shut down of blower and lights 15 minutes after the function is activated. Press  once, a dot flashes in the lower right hand side of display  indicating the function is on. The hood will completely shut down in 15 minutes.

4. Lights On/Off/Dim

Switch lights On and Off by pressing key  once. To dim lights, press  again.


5. Advance Display Functions

Filters Clean Reminder (Baffle):


After every 30 hours of use, the display will start flashing an  reminding you to clean the baffle filters from residue and possible clogs.

The standard Baffle Filters are required to be cleaned frequently and as recommended in order to maintain blower efficiency. If improperly maintained, residue from cooking will sift through filters and cause damage to hood blowers and other sensitive components; and possibly clog duct work and create a fire hazard.

Filter Clean Reminder (Standard Baffle Filters fitted):

A set of baffle filters are fitted by the factory. These Baffle Filters are intended to filter out residue from cooking. They need not be replaced on a regular basis but are required to be kept clean. The Filter Clean Reminder function in the microprocessor will automatically indicate by a  flashing when the metal filters need to be cleaned after every 30 hrs. of use. Filters can be cleaned by hand with non-abrasive soap or in a dishwasher.

Filter Clean Reminder:




When  flashes on display, the baffle filters installed are required to be cleaned. This will occur after every 30 hours of use.

| Clean Filters |

display <A> flashes



Re-setting Function:

Reset the Filter Clean Reminder timer when filters are cleaned and re-installed (with hood off). Press and hold  for approx. 5 seconds, the display will appear; hold for approximately 5 seconds until  on display disappears  The Filter Clean Reminder function is now re-set and a new 30 hours elapse cycle is initiated.

| To Reset |

hold 5 secs.

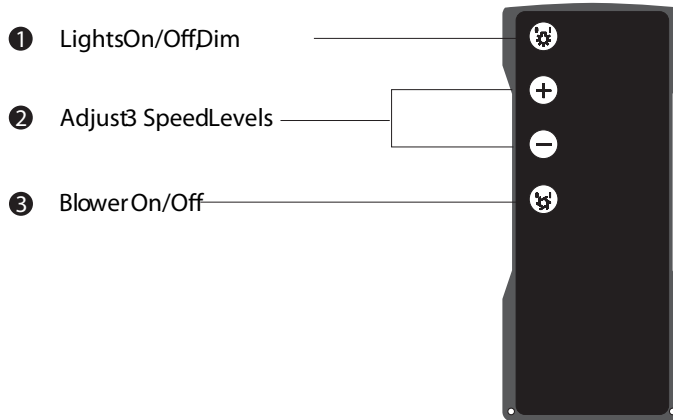


display from <C> to < >



Infrared Receiver / Transmitter:

By aiming the infrared transmitter (located at the top of the remote control) to the infrared receiver (located on the bottom of the range hood) you can control the following features remotely:



- 1 Lights On/Off/ Dim**
 Switch lights On and Off by pressing key To dim lights, press again.
- 2 Speed Selection**
 The 3 speed levels are selected by pressing decrease and to increase speed level. The display indicates level selected.
- 3 Blower On/Off**
 By pressing , the blower is switched On and Off. When the blower is switched on, the blower starts up on speed level 2.

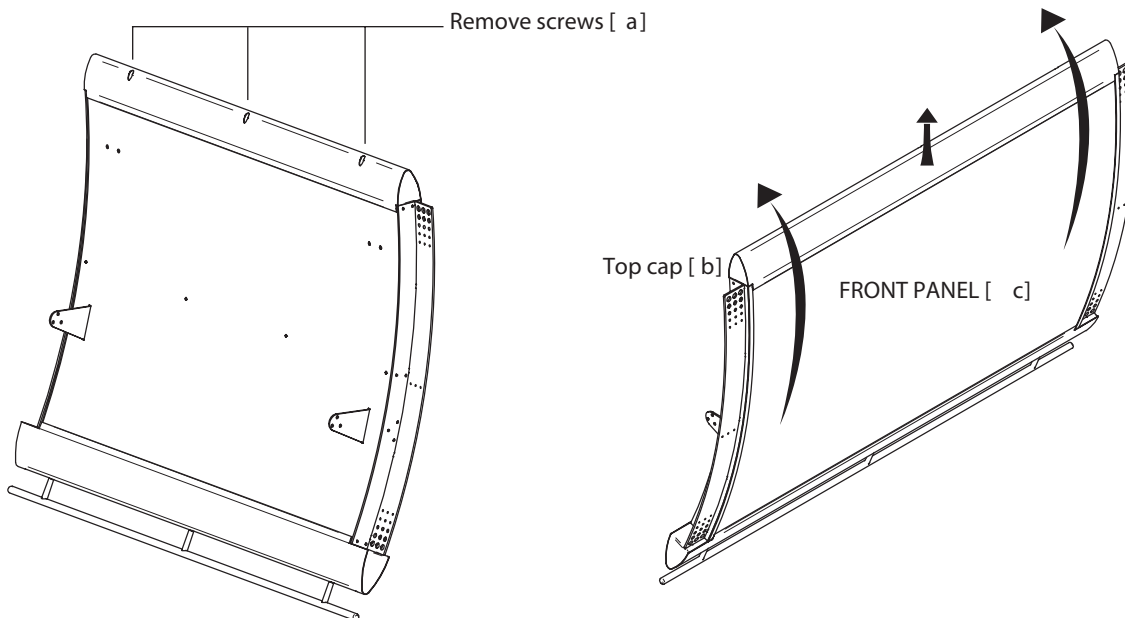
Insert Panel Dimensions:

The original stainless steel insert panel may be replaced with any 1/8" fired rated piece of material. The panel dimensions for each model are as follows;

| | Width | Height | Thickness |
|-----------|-----------|---------|-----------|
| CSH-E48SX | 42 7/8" | 24 5/8" | 1/8" |
| CSH-E42SX | 36 13/16" | 24 5/8" | 1/8" |
| CSH-E36SX | 31 5/16" | 24 5/8" | 1/8" |

Removing and Installing Insert Panel:

1. Using a Phillips head screwdriver, remove (3) screws [a] from the top cap.
2. Remove top cap [b] and slide front insert panel [c] up to remove from door.
3. Insert new panel the same way it was removed.
4. Replace top cap and attach with screws removed from step 1.



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, you may 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.

Baffle Filters

The Metal Filters fitted 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.

Filters should be cleaned after every 30 hours of use. Use the Filter Clean Reminder function on the controls to determine when filters require cleaning.

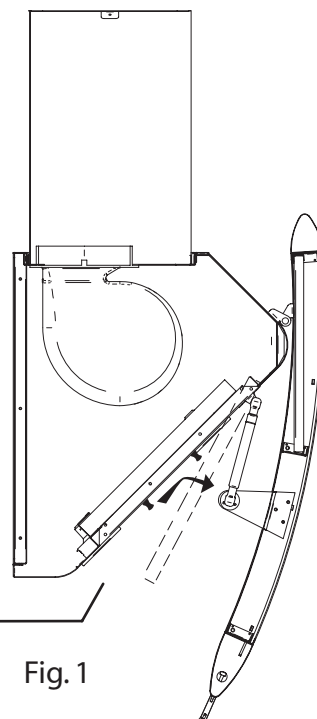
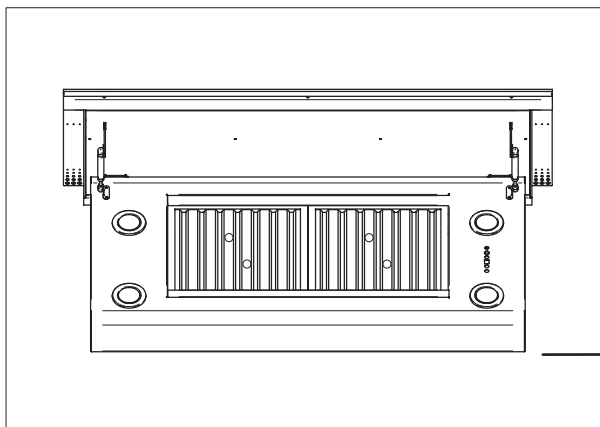
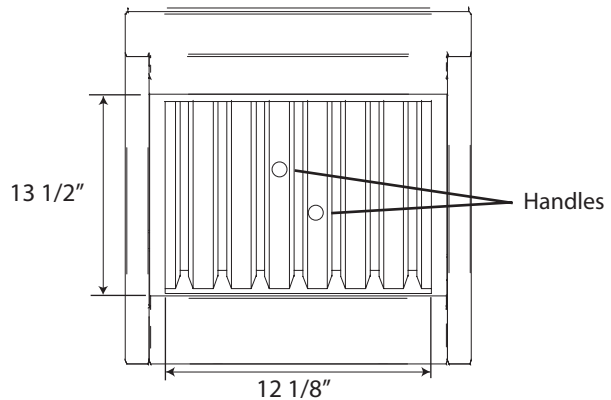
Remove filter by holding handles, sliding up and pulling out. (Fig. 1).

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

Dry filters and re-install before using hood.

Replacing Baffle Filters

Should filters wear out due to age and prolonged use, contact Zephyr to purchase replacements.



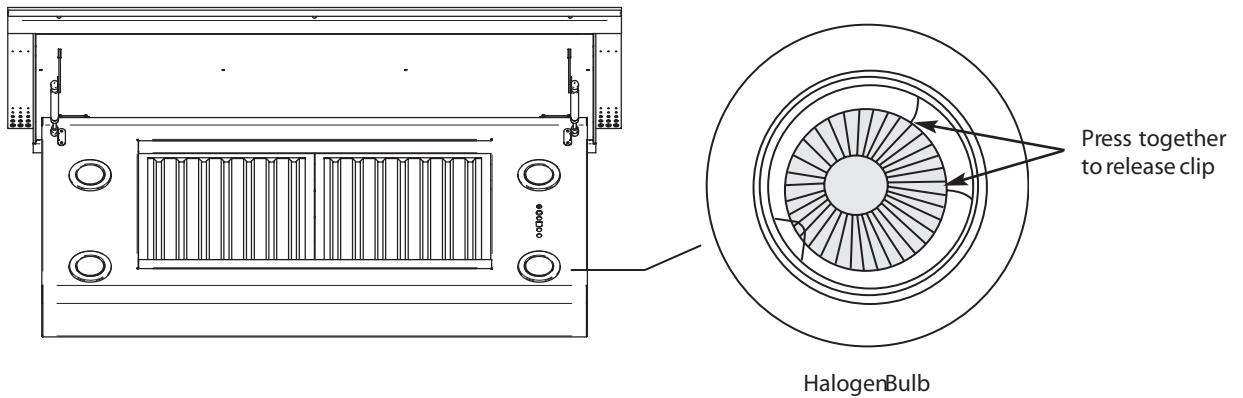
Replacing Light Bulbs:

CAUTION: Light bulbs become extremely hot when turned on. DO NOT touch bulbs until switched off and cooled. Touching hot bulbs may cause serious burns.

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

Remove bulb by pressing both ends of the metal retaining clip together, the light socket will now protrude from the hood allowing you to remove the bulb. (Be careful when releasing retain clip as it is under pressure to hold it in place)

Replacement halogen bulbs are available at most stores which sell light bulbs. Purchase type GU-10, 120 V, 50 W.



Trouble Shooting

| 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. On the switch board, Black/White wire or White wire is disconnected. | 4. Make sure the Black/White wire or White wire connects properly. |
| | 5. The switch board or control board is defective. | 5. Change the switch board or control board. |
| Light works, but motor is not turning. | 1. The motor is defective, possible 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. |
| The unit is vibrating. | 1. The motor is not secure in place. | 1. Tighten the motor in place. |
| | 2. Damaged blower wheel/makes noise. | 2. Change the motor. |
| | 3. The hood is not secured in place. | 3. Check the installation of the hood. |
| 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 24" and 32" 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. Blocking 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. |
| Filter is vibrating. | 1. Baffle filter is loose. | 1. Remove filter and reinstall it or change the baffle filter. |
| After hood has been installed for a period of time, it stopped working. | 1. Control board needs to be reset. | 1. Turn circuit breaker which controls the hood off for at least 15 minutes. Turn it back on and this should fix the problem. |
| | 1. Defective control board. | 1. Replace control board. |

| Part Description | Part# |
|-------------------------------|----------|
| Halogen Bulb GU-10, 120V, 50W | Z0B-0020 |

| Accessory Description | Part# |
|---------------------------|----------|
| Internal Blower, 600 cfm | CBI-600 |
| External Blower, 1000 cfm | CBE-1000 |
| Duct Cover Extension Kit | Z1C-00SH |