## **USER INSTRUCTIONS**

# MODEL: Pyramid 400 CFM 30" Mechanical Controls

## IMPORTANT SAFETY INSTRUCTIONS

Carefully read the following important information regarding installation safety and maintenance.

Keep these instructions for future reference.



## $oldsymbol{A}$ IMPORTANT SAFETY NOTICE $oldsymbol{A}$



#### READ AND SAVE THESE INSTRUCTIONS

#### READ ALL INSTRUCTIONS BEFORE INSTALLING AND OPERATING THIS APPLIANCE

- The installation in this manual is intended for qualified installers, service technicians or persons with similar qualified background. Installation and electrical wiring must be done by qualified professionals and in accordance with all applicable codes and standards, including fire-rated construction.
- Range hood may have very sharp edges; please wear protective gloves if it is necessary to remove any parts for installing, cleaning or servicing.
- Activating any switch ON before completing installation may cause ignition or an explosion.
- Due to the size and weight of this range hood, two people installation is recommended.

#### To reduce the risk of fire, electric shock, or injury to persons:

- For general ventilating use only. DO NOT use to exhaust hazardous or explosive materials and vapors.
- WARNING: to Reduce The Risk Of Fire Or Electric Shock, Do Not Use This Fan With Any Solid-State Speed Control Device
- The combustion air flow needed for safe operation of fuel-burning equipment may be affected by this unit's operation. 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 of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE), and other local code authorities.
- Before servicing or cleaning unit, unplug and disconnect the hood from the power supply.
- Clean grease laden surfaces frequently. To optimize performance and to disperse air properly, make sure to vent air outside. <u>DO NOT</u> vent exhaust into spaces between walls, crawl spaces, ceiling, attics or garages.
- Ducted fans MUST always be vented to the outdoors.
- This unit MUST be grounded and use only metal ductwork.
- Sufficient air is needed for proper combustion and exhausting of gases through the duct to prevent back drafting.
- When cutting or drilling into wall or ceiling, be careful not to damage electrical wiring or other hidden utilities.
- All electrical wiring must be properly installed, insulated and grounded.
- Old duct work should be cleaned or replaced if necessary to avoid the possibility of a grease fire.
- Check all joints on duct work to ensure proper connection and all joints should be properly
- Use this unit only in the manner intended by the manufacturer. If you have questions, contact the vendor.



# $oldsymbol{A}$ IMPORTANT SAFETY NOTICE $oldsymbol{A}$



#### **READ AND SAVE THESE INSTRUCTIONS** READ ALL INSTRUCTIONS BEFORE INSTALLING AND OPERATING THIS APPLIANCE

#### WARNING: TO REDUCE 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 trun hood ON when cooking at high heat or when flambeing food (i.e. Crepes Suzette, Cherries Jubilee, Peppercorn Beef Flambé).
- c) Clean ventilating fans frequently. Grease should not be allowed to accumulate on fan or filter. Before servicing or cleaning unit, unplug and disconnect the hood from the power supply.
- d) Use proper pan size. Always use cookware appropriate for the size of the surface element.

#### WARNING: TO REDUCE RISK OF INJURY TO PERSONS IN THE EVENT OF A RANGE TOP GREASE FIRE, OBSERVE THE FOLLOWING<sup>a</sup>:

- 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 A, B, C extinguisher, and you already know how to operate it.
  - 2) The fire is small and contained in the area where it is started.
  - 3) The fire department is being called.
  - 4) You can fight the fire with your back to an exit.

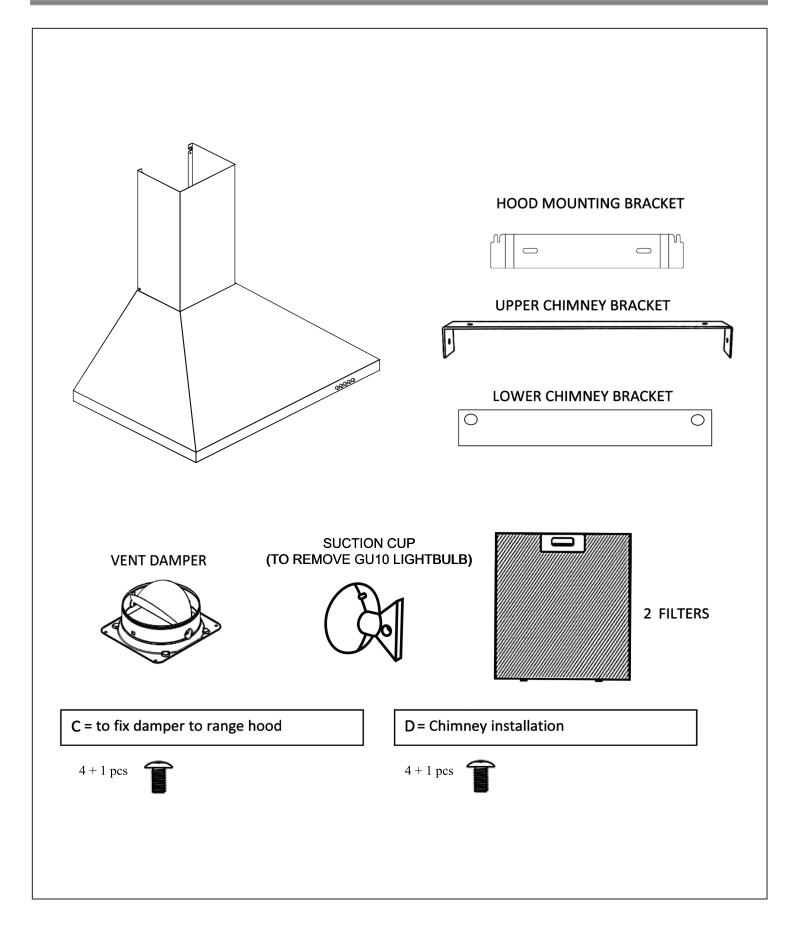
<sup>a</sup>Based on "Kitchen Firesafety Tips" published by NFPA.

## To reduce the risk of injury to persons in the event of a gas leaks:

- Extinguish any open flame.
- DO NOT turn on the lights or any type of appliance.
- Open all doors and windows to disperse the gas. If you still smell gas, call the gas company and fire department.

Your safety and the safety of others is very important. We have provided many important safety messages in this manual and on your appliance. Always read and obey all safety messages. All safety messages will tell you what the potential hazard is, tell you how to reduce the chance of injury, and tell you what can happen if the instructions are not followed.

## **PARTS SUPPLIED:**



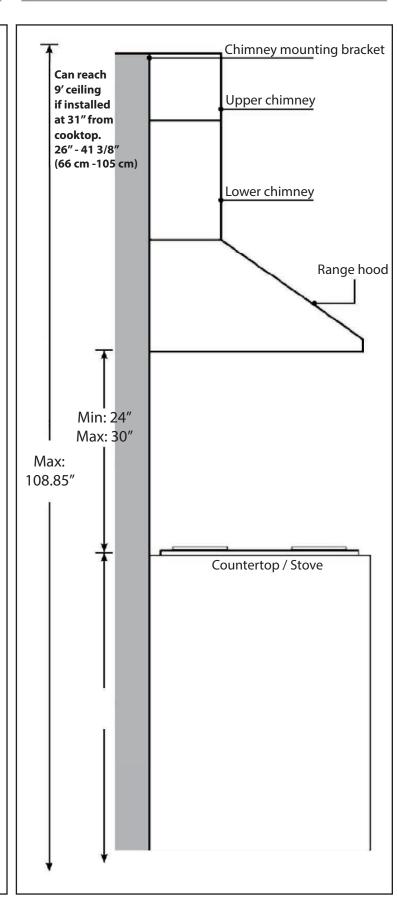
#### **VENTING REQUIREMENTS:**

- Vent system must terminate to the outside (Roof or side wall).
- DO NOT terminate the vent system in an attic or other enclosed area.
- DO NOT use 4" (10.2 cm) laundry-type wall caps.
- Use metal/aluminum vent only. Rigid metal/aluminum vent is recommended.
- DO NOT use plastic vent.
- Always keep the duct clean to ensure proper airflow
- Calculate the following figures before installation:
  - 1. Distance from the floor to the ceiling
  - 2. Distance between the floor to the countertop/stove
  - 3. Distance between the cooking surface to the range hood (recommend 24" to 30") minimum of 30" is required for gas cook top
  - 4. Height of hood and duct cover

#### For the most efficient & quiet operation:

- A distance of 24" to 30" is recommended between stove top and the bottom of range hood. 30" minimum is required for gas stove tops.
- It is recommended that the range hood be vented vertically through the roof through 6" (15.3 cm) or bigger round metal/aluminum vent work.
- The size of the vent should be uniform.
- Use no more than three 90° elbows.
- Make sure there is a minimum of 24" (61 cm) of straight vent between the elbows if more than one elbow is used.
- DO NOT install two elbows together.
- The length of vent system and number of elbows should be kept to a minimum to provide efficient performance.
- The vent system must have a damper. If roof or wall cap has a damper, DO NOT use damper (if supplied) on top of the range hood.
- Use silver tape or duct tape to seal all joints in the vent system.
- Use caulking to seal exterior wall or roof opening around the cap.

#### **HEIGHT & CLEARANCE:**



#### **IMPORTANT:**

- A minimum of 6" round or 3-1/4 x 10" rectangular duct (purchased separately) must be used to maintain maximum airflow efficiency.
- Always use rigid type metal/aluminum ducts if available to maximize airflow when connecting to provided duct.
- Please use Duct Run Calculation below to compute total available duct run when using elbows, transitions and caps.
- ALWAYS, when possible, reduce the number or transitions and turns. If long duct run is required, increase duct size from 6" to 7" or 8". If a reducer is used, install a long reducer instead of a pancake reducer. Reducing duct size will restrict airflow and decrease airflow, thus 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 two (2), as possible.
- Minimum mount height between stove top to hood bottom should be no less than 24-inch for electric cook tops and minimum of 30-inch for gas stove tops and no higher than 30-inch for electric cook tops.
- 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 may be hard to reach and will lose its performance and efficiency.
- If available, also refer to stove top manufacturer's height clearance requirements and recommended hood mounting height above range.

#### **CALCULATING VENT SYSTEM LENGTH:**

To calculate the length of the system you need, deduct the equivalent feet for each vent piece used in the system from the recommended maximum duct run.

#### **Duct Run Calculation example:**

One roof cap, two 90° elbows, and one 45° elbow use

0ft + 9ft + 9ft + 5ft = 23ft used. Deduct 23ft from 30ft, 7ft maximum available for straight duct run.

Duct Run Calculation:				
Recommended maximum run				
6" or 3-1/4 x 10" duct	30 ft			
Vent piece deduction				
Each 90° elbow used	9 ft			
Each 45° elbow used	5 ft			
Each 6" to 3-1/4x 10" transition used	7 ft			
Side wall cap with damper	0 ft			

#### **VENTING METHODS:**

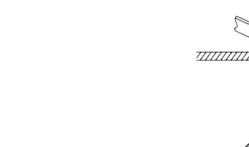
- This range hood is factory set for venting through the roof or wall.
- Vent work can terminate either through the roof or wall. To vent through a wall, a 90° elbow is needed.

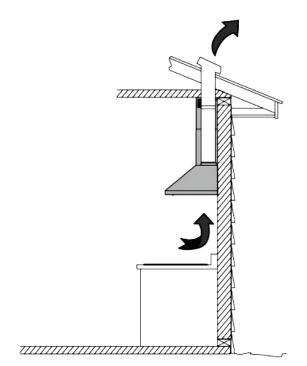
#### IMPORTANT:

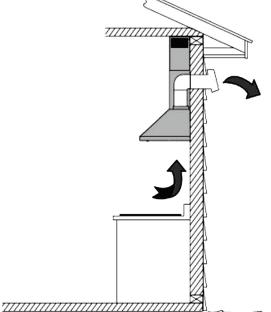


- NEVER exhaust air or terminate duct work into spaces between walls, crawl spaces, ceiling, attics or garages. All exhaust must be ducted to the outside.
- WARNING TO REDUCE RISK OF FIRE, USE METAL/ALUMINUM DUCT WORK ONLY
- Fasten all connections with sheet metal screws and tape all joints with certified aluminum or foil tape. Please check the building codes in your city to learn which tape product is recommended
- Use caulking to seal exterior wall or roof opening around the cap.

#### TOP VENTING ROUGH EXHAUST







TOP VENTING WALL EXHAUST

#### **ELECTRICAL REQUIREMENTS:**

#### IMPORTANT:



Observe all governing codes and ordinances.

#### It is the customer's responsibility to contact a qualified electrical installer.

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

A 120-Volt, 60 Hz, AC-only, fused electrical supply is required on a separate 15-amp circuit, fused on both sides of the line.

DO NOT ground to a gas pipe.

Check with a qualified electrician if you are not sure that the range hood is properly grounded. DO NOT have a fuse in the neutral or ground circuit.

**IMPORTANT:** Save this Installation Guide for electrical inspector's use.

The range hood must be connected with copper wire/plug only.

The range hood should be connected directly to the fused disconnect (or circuit breaker) box through flexible armored or non-metallic sheathed copper cable. UL/CSA listed strain relief must be provided at each end of the power supply cable.

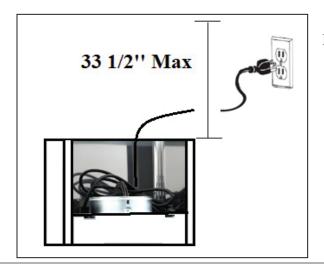
Use only with range hood cord-connection kits that have been investigated and found acceptable for use with this model.

#### GROUNDING INSTRUCTIONS

This appliance must be grounded. In the event of an electrical short-circuit, grounding reduces the risk of electric shock by providing an escape wire for the electric current. This appliance is equipped with a cord having a grounding wire with a grounding plug. The plug must be plugged into an outlet that is properly installed and grounded.

**WARNING** - Improper grounding can result in a risk of electric shock.

Consult a qualified electrician if the grounding instructions are not completely understood, or if doubt exists as to whether the appliance is properly grounded. DO NOT use an extension cord. If the power supply cord is too short, have a qualified electrician install an outlet near the appliance.



Place the outlet at a maximum distance of 33 1/2" from where the cord exits on the hood

#### **PREPARATIONS:**

#### **Advanced Preparations:**

- Be familiar with the controls of the range hood by reading through *Range Hood Operations*, Page 12.
- Place the range hood on a flat, stable surface. Connect the range hood to a designated standard outlet (120-Volt, 60Hz, AC only) and turn on the range hood. Verify all operations of the range hood by referring to *Range Hood Operations*.
- Place all supplied parts and required hardware on a flat, stable surface and verify the existence of all supplied parts listed on Page 4.

#### **Preparations:**

#### NOTE: To avoid damage to your hood, prevent debris from entering the vent opening.

- Determine and mark the center line on the ceiling or wall where the range hood will be installed. Make sure there is proper clearance within the ceiling or wall for exhaust vent.
- Due to the weight and size of this unit, please make sure that the support system or framework being used is stable and secure in the ceiling or wall.
- Put a thick, protective covering over counter top, cook top or range to protect from damage or dirt. Remove any hazardous objects around the area when installing.



If moving the cooking range is necessary to install the hood, turn OFF the power on an electric range at the main electrical box. SHUT OFF THE GAS BEFORE MOVING A GAS RANGE

#### **INSTALLATION:**

#### **Installations (refer to Page 4 for parts):**

NOTE: Use threaded drywall anchors only when mounting the hood on sheet rock. Mounting the hood on wall studs or lumbars is highly recommended.



#### **Step 1: Measuring**

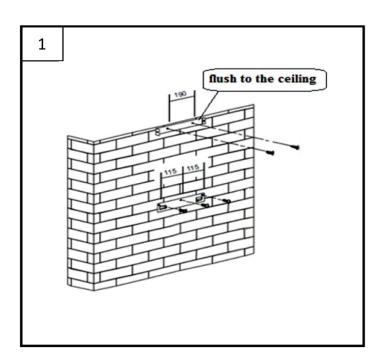
- Measure the distance between stove top and the bottom of range hood. A distance of 24" to 30" is recommended with a minimum of 30" for gas stove tops.
- To reach 9 ft ceiling make sure hood is installed at 31" from cooking surface
- If you require longer chimney flue to reach your ceiling please contact vendor.

#### **Step 2: Installing the hood mounting bracket**

- The range hood will be installed on top of this bracket. (See Figure # 1)
- Using references in Height & Clearance on Page 5 and Measurements and Diagrams on Page 15, Drill 3 holes that will be used to fix the lower mounting bracket.

#### **Step 3: Installing the upper chimney bracket**

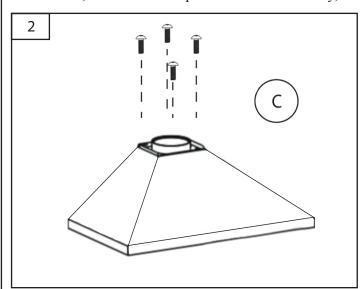
- Drill 2 holes according to the size of the upper mounting bracket. The upper mounting bracket should be positioned flush with the top of the outside chimney (See Figure 1)
- Screw upper and hood mounting brackets in tightly.

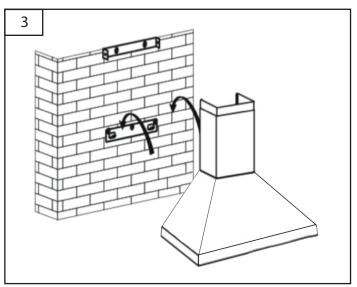


#### **INSTALLATION CONTINUE:**

#### **Step 4: Venting**

• Fix the damper on the top vent of hood with 4 screws (requires screw C). If ventilation system is equipped with an external air duct with a different diameter, apply a reduction fitting. However, for maximum performance and safety, a 6" round ducting is recommended. (See Figure # 2)



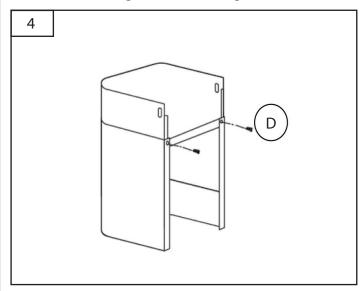


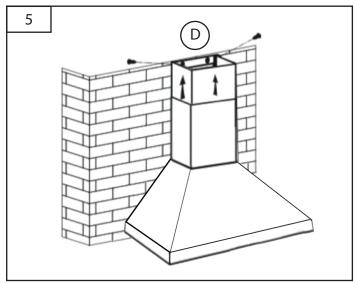
#### **Step 5: Mounting the hood on the wall**

- Hang the range hood on the hooks of the lower mounting bracket. (See Figure # 3)
- Screw the range hood to the wall.

#### **A** CAUTION - Make certain the range hood is secure before releasing!

- Remove the protective coating from the inner chimney. Carefully slide the inner chimney down into the outer chimney.
- Use 2 screws (requires screw D) to fix the two chimneys together with the lower chimney bracket, make sure inside chimney is moving freely. (See Figure # 4)
- Screw the inner chimney to the upper mounting bracket (requires screw D). (See Figure # 5)
- Connect the duct to the damper / duct connector and seal with duct tape.
- Connect the range hood to a designated standard outlet (120-Volt, 60 Hz, AC only).

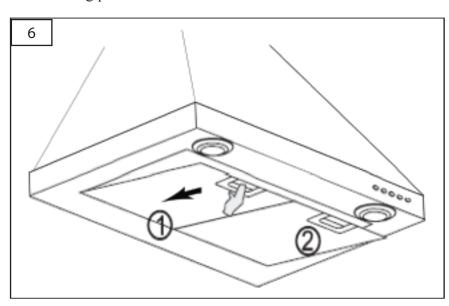




#### **INSTALLATION CONTINUE:**

#### **Step 6: Installing filters**

- To install filters for the following four steps (See Figure # 6):
  - Angle the filter into slots at the back of the hood.
  - Push the button on handle of the filter.
  - Release the handle once the filter fits into a resting position.
  - Repeat to install all filters.



#### **Step 7: Test hood**

- Turn power On in control panel.
- Check all lights and fan operations.
- Make sure to leave this Installation Manual for the homeowner.

#### **CONTROL PANEL OPERATION:**



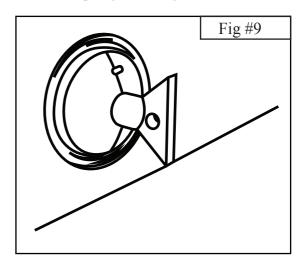
- Lights:
  - o Press the light button to turn halogen lights on and off.
- Power settings:
  - o Press the button once and the motor starts to operate at Low speed.
  - Press the Subutton again and the motor will reach Medium speed.
  - o Press the sutton once more and the motor will reach High speed.
  - o Press the button to turn the fan off.

#### **REPLACING THE BULBS:**

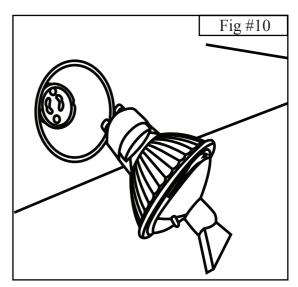
#### Replacing the light bulbs:

This range hood uses halogen bulbs: 35W 120V Type MR16 GU10.

- 1. Make sure the electrical power to the range hood is turned off. Please note that the light bulbs may be hot. Allow enough time to let the light bulbs cool off before attempting to change them.
- 2. Attach the black rubber suction piece, included with your range hood, to the outside glass part of the bulb. Press the bulb inwards. DO NOT push too hard as bulb "legs" may break off. (See Fig #9)



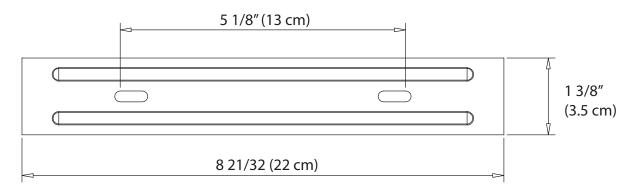
- 3. Turn the bulb counter-clockwise as you continue to press inward. Release your pressure on the lamp when it won't turn any farther. Gently pull the bulb straight out of the socket. You may need to wiggle it gently to get the cylindrical "feet" aligned correctly with the larger openings in the socket. (See Fig #10)
- 4. Discard the old bulb. Line the prongs on the new bulb up with the wide openings on the socket. Press inward on the edges of the new lamp with your thumbs and twist the lamp clockwise as far as it will go.



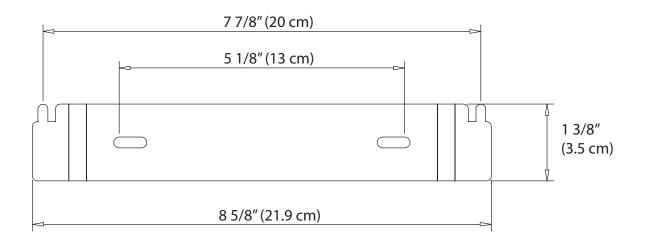
5. Turn the electricity and range hood on and test for operation.

## **MOUNTING BRACKETS:**

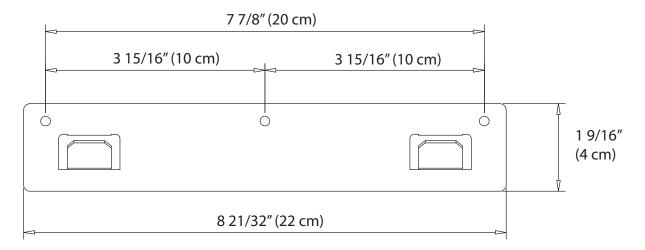
## **Upper Chimney Bracket**



## **Lower Chimney Bracket**

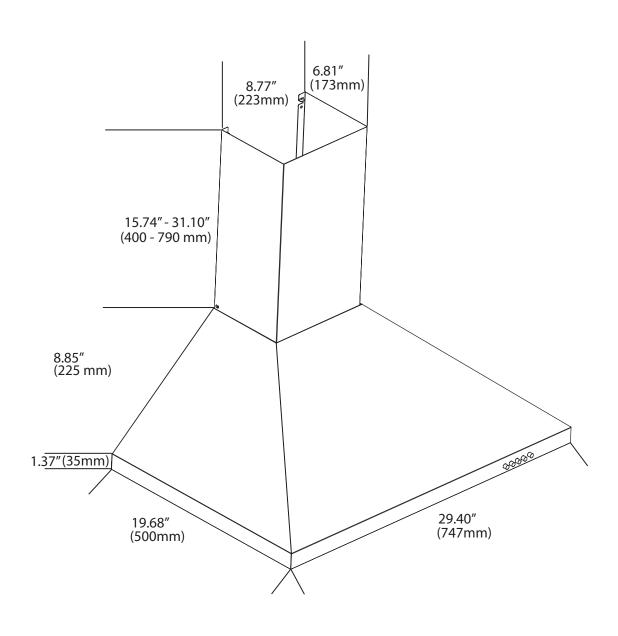


## **Mounting Bracket Hook**



#### **MEASUREMENTS AND DIAGRAMS:**

The range hood can reach a 9' ceiling if installed at 31" from cooktop. Height of range hood: 26" - 41 3/8" (66 cm -105 cm)



#### **TROUBLE SHOOTING:**



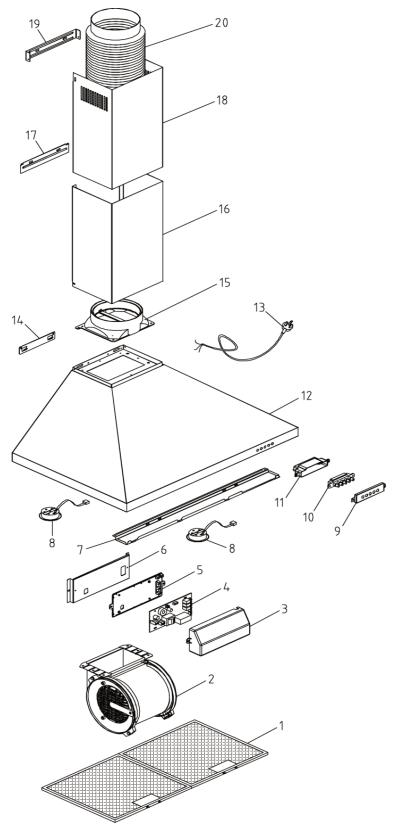
- 1) If the range hood or halogen light does not Check if the range hood has been plugged in, operate after installation: make sure that all power has been turned back ON, fused not blown and all electrical wiring are properly connected. 2) The range hood vibrates when the blower is on: The range hood might not have been secured properly on to the ceiling or wall. 3) The blower or fan seems weak: Check that the duct sized used is at least 6" or 3-1/4 x 10". Range hood WILL NOT function efficiently with insufficient duct size. For example: 7" duct over 6" hole and loosely secured. Check if duct is clogged or if damper unit (half-circular flange) is not installed correctly or opening properly. A tight mesh on a side wall cap unit might also cause restriction to the air flow. The lights work but the fan is not spinning at The fan might be jammed or scraping the all, is stuck or is rattling: bottom due to shipping damage. Please contact us immediately.
- 5) The hood is not venting out properly:
- Reduce the number of elbows and length of duct work. Check if all joints are properly connected, sealed, and taped.

stove top.

Make sure the distance between the stove top and the bottom of the hood is within 24" and 30" in distance; with minimum 30" for gas

## **RANGE HOOD ASSEMBLY:**

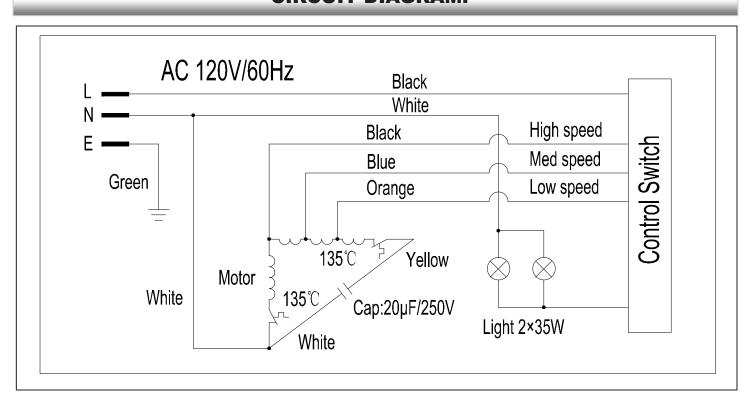
No.	Description		
20	Air pipe		
19	Bracket of inner chimney		
18	Inner chimney		
17	Bracket of outer chimney		
16	Outer chimney		
15	Plastic wind block		
14	Hook plate		
13	Power cord		
12	Body assembly (including shell,lamp plate,top plate,wrap angle,bracket of lamp plate)		
11	Mechanical switch box		
10	Mechanical switch		
9	Bracket of mechanical switch box		
8	8 GU10 halogen lamps		
7	Front panel		
6	6 Bracket of electrical box		
5	5 Electrical box base		
4	PCB of mechanical switch		
3	Electrical box cover		
2	Blower assembly		
1	Aluminum filters		



## **SPECIFICATIONS:**

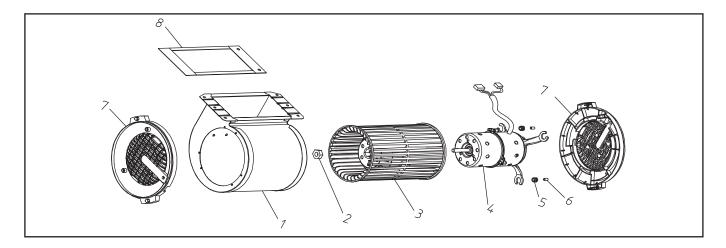
Body design	Stainless steel			
Power rating	120V / 60Hz (USA & Canada standard) CUL Certified			
Total input power	300W (230W + 2 x 35W)			
Motor input power	230W			
Total Ampere	$2.6A (2.0A + 2 \times 0.3A)$			
Levels of speed control	of speed control 3 levels			
Interference Protection	Radio frequency interference protected			
Noise Level	52db, 60db, 58db			
Number of Motor	Single motor			
Fan Type	Single squirrel cage			
Control Type	Type Mechanical button control panel			
Filtration Type	ation Type 2 x Aluminum filters			
Illumination	2 x 35W maximum MR16 GU10			
Venting Size	Top, 6" Round			

## **CIRCUIT DIAGRAM:**



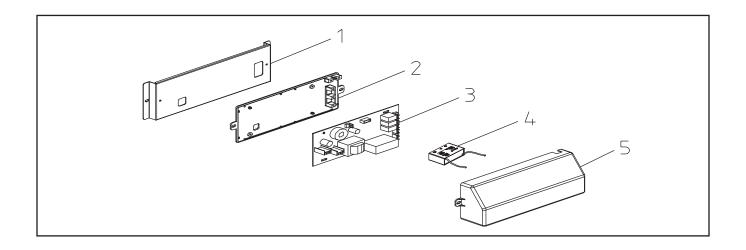
## **BLOWER ASSEMBLY:**

No.	Description	No.	Description
1	Blower	6	Aluminum Cover
2	Wind Wheel Nut	7	Plastic Wind Net
3	Wind Wheel	8	Sealing Gasket
4	Motor		
5	Incabloc Rubber		



## **ELECTRICAL ASSEMBLY:**

No.	Description	No.	Description
1	Electrical box bracket		
2	Electrical box base		
3	PCB		
4	Capacitor		
5	Electrical box cover		



#### **USE AND CARE INFORMATION:**

#### **Operations:**

- Read and understand all instructions and warnings in this manual before operating the appliance. Save these instructions for future reference.
- Always leave safety grills and filters in place. Without these components, operating fans could catch on to hair, fingers and loose clothing.
- NEVER dispose cigarette ashes, ignitable substances, or any foreign objects into fans.
- NEVER leave cooking unattended. When frying, oil in the pan can easily overheat and catch fire. The risk of self combustion is higher when the oil has been used several times.
- NEVER cook on "open" flames under the range hood. Check deep-fryers during use; superheated oil may be flammable.

#### Cleaning:

- The saturation of greasy residue in the fan and filters may cause increased inflammability. Keep unit clean and free of grease and residue build-up at all times to prevent possible fires.
- Filters must be cleaned periodically and free from accumulation of cooking residue (see Cleaning Instructions below). Old and worn filters must be replaced immediately.
- DO NOT operate fans when filters are removed. Never disassemble parts to clean without proper instructions. Disassembly is recommended to be performed by qualified personnel only. Read and understand all instructions and warnings in this manual before proceeding.

#### SAFETY WARNING: Never put your hand into area housing the fan while the fan is operating!

For optimal operation, clean range hood and all baffle/spacer/filter/grease tray/oil container regularly. Regular care will help preserve the appearance of the range hood.

#### **Cleaning Exterior Surfaces:**

- Clean periodically with hot soapy water and clean cotton cloth. DO NOT use corrosive or abrasive detergent (e.g. Comet Power Scrub®, EZ-Off® oven cleaner), or steel wool/scoring pads, which will scratch and damage the stainless steel surface. For heavier soil use liquid degrease such as "Formula 409®" or "Fantastic®" brand cleaner
- If hood looks splotchy (stainless steel hood), use a stainless steel cleaner to clean the surface of the hood. Avoid getting cleaning solution onto or into the control panel. Follow directions of the stainless steel cleaner. **CAUTION: DO NOT leave on too long as this may cause damage to hood finish.** Use soft towel to wipe off the cleaning solution, gently rub off any stubborn spots. Use dry soft towel to dry the hood.
- After cleaning, you may use non abrasive stainless steel polish such as 3M® or ZEP®, to polish and buff out the stainless luster and grain. Always scrub lightly, with clean cotton cloth, and with the grain.
- DO NOT allow deposits to accumulate or remain on the hood.
- DO NOT use ordinary steel wool or steel brushes. Small bits of steel may adhere to the surface and cause rusting.
- DO NOT allow salt solutions, disinfectants, bleaches, or cleaning compounds to remain in contact with stainless steel for extended periods. Many of these compounds contain chemicals, which may be harmful. Rinse with water after exposure to these compounds and wipe dry with a clean cloth.

#### **Cleaning Filters:**

**IMPORTANT:** Drain oil from baffles, spacers, filters, oil tunnels, oil containers before oil and residue overflow!

- Remove all baffles, spacers, filters, grease tray, and oil containers and discard oil and residue.
- Wash with warm soapy water. NOTE: Stainless steel baffles, spacers and oil tunnel are top rack dishwasher safe.
- Dry thoroughly before replacing and follow directions for installation in reverse.
- Filters should be cleaned after every 30 hours of use.
- Should filters wear out due to age and prolonged use, replace with a new filter.