

# INSTALLATION INSTRUCTIONS

36" and 48" Wall Hood ZVW1360, ZVW1480 With QuietBoost™ Blower

MONOGRAM.COM

#### **BEFORE YOU BEGIN**

Read these instructions completely and carefully.

- IMPORTANT Save these instructions for local inspector's use.
- IMPORTANT Observe all governing codes and ordinances.
- Note to Installer Be sure to leave these instructions with the Consumer.
- Note to Consumer Keep these instructions for future reference.
- Skill level Installation of this vent hood requires basic mechanical and electrical skills.
- Completion time Approximately 1 to 3 hours
- Proper installation is the responsibility of the installer.
- Product failure due to improper installation is not covered under the Warranty.

**ACAUTION** Due to the weight and size of these vent hoods and to reduce the risk of personal injury or damage to the product, TWO PEOPLE ARE REQUIRED FOR PROPER INSTALLATION.

## FOR YOUR SAFETY

**A**WARNING Before beginning the installation, 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 a tag, to the service panel.

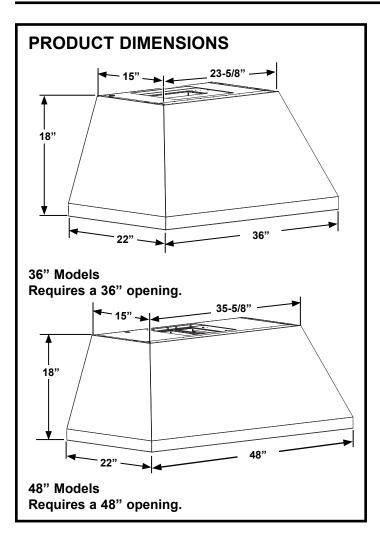
#### AWARNING TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK OR INJURY TO PERSONS, **OBSERVE THE FOLLOWING:**

- 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 quidelines and safety standards such as those published by the National Fire Protection Association (NFPA), the American Society for Heating, Refrigeration and Air Conditioning Engineers (ASHRAE) and the local code authorities.
- C. When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.
- D. Ducted fans must always be vented to the outdoors.
- E. Turn off breaker to adjacent rooms while working.

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

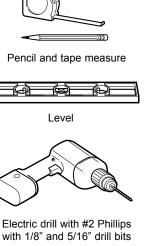
AWARNING Disconnect all electrical power at the main circuit breaker or fuse box before installing.

# READ AND SAVE THESE INSTRUCTIONS



31-2000734 Rev. 3

#### **TOOLS AND MATERIALS REQUIRED** (NOT SUPPLIED)





UL listed wire nuts



10" round duct



Safety glasses



Phillips screwdriver with at least 6" shank



Wire cutter/stripper



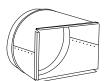
Aluminized duct tape



Strain relief for junction box, 1" diameter knockout



Needed for back venting only





8"x12" to 12" round duct transition

## **REMOVE THE PACKAGING**

edges.

Wear gloves to protect against sharp

- Remove the hood body.
- Remove the hardware bag, literature package and other boxed parts.
- Remove and properly discard the protective plastic wrapping and other packaging materials.

## PLAN THE INSTALLATION

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

#### PARTS SUPPLIED FOR INSTALLATION

- 1 Hardware Package
- 1 Literature Package
- 1 Installation Template

#### PARTS NEEDED FOR INSTALLATION

- 1 Strain Relief
- 1 Wall or Roof Cap
- All Metal Ductwork

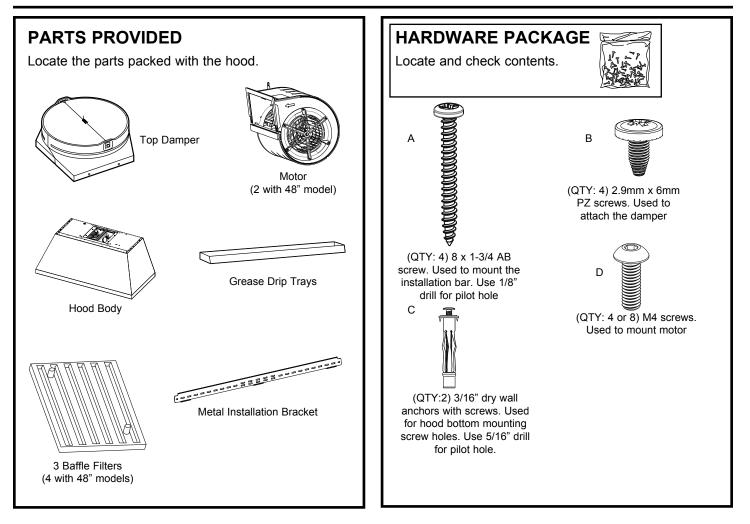
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#### PERSONAL INJURY HAZARD

Because of the weight and size of the rangehood canopy. It is recommended that 2 people are used to install the range hood. Failure to properly lift rangehood could result in damage to the product or personal injury.

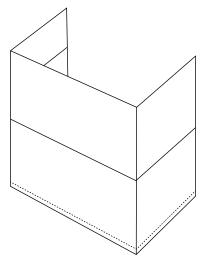
NOTE: Before making any cuts or holes for installation, determine which venting method will be used and carefully calculate all measurements.

## **Installation Preparation**



#### DUCT COVER REQUIREMENTS

Duct cover kits must be purchased separately. We recommend that the vent hood and duct cover (if used) be on site before final framing and wall finishing. This will help to accurately locate studs, ductwork and electrical service.



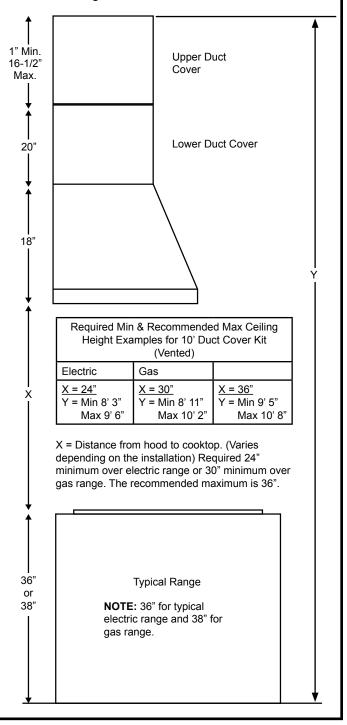
- Duct cover accessory comes with a lower and upper duct cover and installation hardware.
- The installation hardware includes mounting brackets to secure duct covers to the wall.
- The lower duct cover alone can be used and must be secured with the duct cover bracket.
- See table below for duct cover kit part numbers based on model.

Model	Duct Cover #	Max Ceiling Installation		
	ZX8D13SPSS	8' 4"		
36" Model	ZX10D13SPSS	10' 8"		
	ZX12D13SPSS	12' 8"		
	ZX8D14SPSS	8' 4"		
48" Model	ZX10D14SPSS	10' 8"		
	ZX12D14SPSS	12' 8"		

• See the next page for duct cover installation height information.

### INSTALLATION DIMENSIONS

The hood duct covers can be adjusted for different ceiling heights depending on the distance between the bottom of the hood and the cooktop (distance X). See Installation Height Table.



# **Installation Preparation**

#### **INSTALLATION HEIGHT TABLE**

		I3SPSS D14SPSS		ZX10D13SPSS OR ZX10D14SPSS				ZX12D13SPSS OR ZX12D14SPSS	
	Ceiling Duct C	Cover up to 8 ft.			Duct Cover up I0 ft.			Duct Cover up 12 ft.	
Ceiling Height (ft./in.)	Installation Over Gas Range	Installation Over Electric Range	Ceiling Height (ft./in.)	Installation Over Gas Range	Installation Over Electric Range	Ceiling Height (ft./in.)	Installation Over Gas Range	Installation Over Electri Range	
7' 0"		24	8' 3"	-	24	9' 4"	-	24	
7' 1"	1	24-25	8' 4"		24-25	9' 5"		24-25	
7' 2"	1	24-26	8' 5"		24-26	9' 6"		24-26	
7' 3"		25-27	8' 6"		24-27	9' 7"		24-27	
7' 4"	1	26-28	8' 7"		24-28	9' 8"		24-28	
7' 5"	1	27-29	8' 8"		24-29	9' 9"		24-29	
7' 6"	1	28-30	8' 9"		24-30	9' 10"		24-30	
7' 7"	]	29-31	8' 10"		24-31	9' 11"		24-31	
7' 8"	30	30-32	8' 11"	30	24-32	10' 0"	30	24-32	
7' 9"	30-31	31-33	9' 0"	30-31	24-33	10' 1"	30-31	24-33	
7' 10"	30-32	32-34	9' 1"	30-32	24-34	10' 2"	30-32	24-34	
7' 11"	31-33	33-35	9' 2"	30-33	24-35	10' 3"	30-33	24-35	
8' 0"	32-34	34-36	9' 3"	30-34		10' 4"	30-34		
8' 1"	33-35	35-36	9' 4"	30-35	24-36	10' 5"	30-35	]	
8' 2"	34-36	36	9' 5"		24-30	10' 6"			
8' 3"	35-36		9' 6"			10' 7"			
8' 4"	36		9' 7"		25-36	10' 8"			
			9' 8"		26-36	10' 9"			
			9' 9"	30-36	27-36	10' 10"			
			9' 10"	50-50	28-36	10' 11"		24-36	
			9' 11"		29-36	11' 0"			
			10' 0"		30-36	11' 1"			
			10' 1"		31-36	11' 2"			
			10' 2"		32-36 33-36	11' 3"			
			10' 3"	31-36		11' 4"	30-36		
			10' 4"	32-36	34-36	11' 5"			
			10' 5"	33-36	35-36	11' 6"			
			10' 6"	34-36	36	11' 7"		25-36	
			10' 7"	35-36	]	11' 8"		26-36	
			10' 8"	36		11' 9"		27-36	
						11' 10"		28-36	
						11' 11"		29-36	
						12' 0"		30-36	
						12' 1"		31-36	
						12' 2"		32-36	
						12' 3"	31-36	33-36	
						12' 4"	32-36	34-36	
						12' 5"	33-36	35-36	
						12' 6"	34-36	36	
						12' 7"	35-36	]	
						12' 8"	36		

#### ADVANCE PLANNING

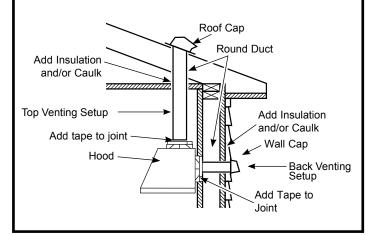
#### **Duct Install Planning**

- This hood is designed to be vented vertically through the ceiling with a 10" round duct or, horizontally through a wall with an 8"x12" duct transition and 12" round duct.
- Use metal ductwork only.
- Plan the route for venting exhaust to the outdoors. To maximize the ventilation performance of the vent system:
  - 1. Minimize the duct run length and number of transitions and elbows.
  - 2. Maintain a constant duct size.
  - 3. Seal all joints with duct tape to prevent any leaks.

NOTE: Flexible vent is not recommended. Flexible vent creates back pressure and air turbulence that greatly reduces performance.

- Maximum equivalent duct length for 100 CFM: 150 foot for vent hoods.
- Install a wall cap or roof cap with damper at the exterior opening. Purchase the wall or roof cap and any transition and length of duct needed in advance.
- When applicable, install any makeup (replacement) air system in accordance with local building code requirements. 10" round duct universal make up air kit can be purchased locally.

# Vent system can terminate either through the roof or the wall.



#### POWER SUPPLY

IMPORTANT – (Please read carefully)

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FOR PERSONAL SAFETY, THIS APPLIANCE MUST BE PROPERLY GROUNDED.

Remove 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**

These vent hoods must be supplied with 120V, 60Hz, and connected to a properly grounded branch circuit, and protected by a 15 or 20 amp circuit breaker or time delay fuse.

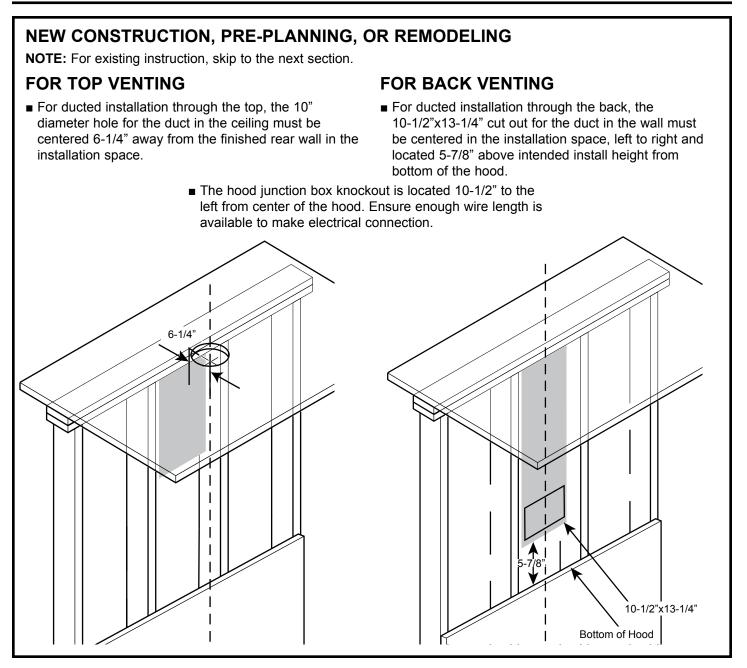
- Wiring must be 2 wire with ground.
- If the electrical supply does not meet the above requirements, call a licensed electrician before proceeding.
- Route house wiring as close to the installation location as possible in the ceiling or wall.
- Connect the wiring to the house wiring in accordance with local codes.

#### **Grounding instructions**

The grounding conductor must be connected to a ground metal, permanent wiring system, or an equipment-grounding terminal or lead on the hood.

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The improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or service representative if you are in doubt whether the appliance is properly grounded.



## DETERMINE HOOD, DUCTWORK AND WIRING LOCATIONS

- This hood can be installed onto the wall or underneath the soffit.
- For installing the hood to soffit, refer to page 12 for alternate mounting method.
- A wall mounting template is included with the product for ease of installation. Follow the instructions below if the template is not being used.
- Measure desired distance from the bottom of the hood to the cooking surface, 24" minimum over electric range or 30" minimum over gas range and 36" recommended maximum.
- Use a level to draw the cooktop centerline location.
- Measure 16-3/4" up from the horizontal line indicating the bottom of the hood. Draw another horizontal line to indicate the bottom of the installation bar.
- Use a level to draw the cooktop or range centeline location.

#### For Ceiling Ducting:

- If venting out the ceiling, extend the centerline forward on the ceiling to the back wall.
  - Measure 6-1/4" from back wall to mark center point.
  - Cut 10" dia. duct hole from center point on the ceiling.

#### Venting Through a Soffit:

• Follow the same procedure for ceiling ducting to cut the hole through the top of the soffit.

#### House Wiring Location:

• The junction box is located inside the hood body on the left side. See Illustrations for hood knockout locations.

House wiring may enter the junction box from the rear or the top of the hood on the left side.

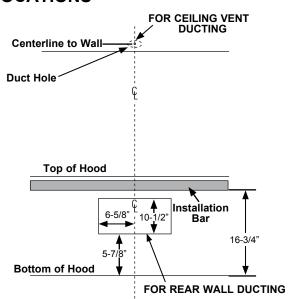
#### To route house wiring through the ceiling or soffit:

• Cut a hole approximately 1-1/4" dia. forward on the ceiling 10-1/4" to the left of the centerline.

#### To route house wiring through the wall:

**NOTE:** For back venting, the house wiring must be routed through the rear knockout so it is hidden.

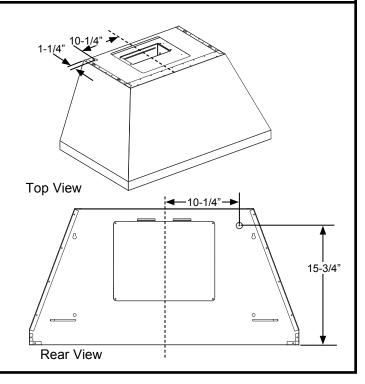
- Measure 15-3/4" from the bottom of the hood and mark location
- Cut a hole approximately 1-1/4" dia. at the marked location at a distance 10-1/4" to the left of the centerline based on table below.
- Remove top or rear knockout depending on your installation.



#### For Ducting Through Rear Wall:

**NOTE:** Check to make sure back damper will not interfere with studs, electrical or plumbing before making cut out.

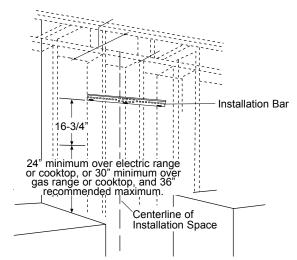
- Back damper accessory UXBDA812 must be purchased separately for venting through the rear wall.
- Measure 5-7/8" up along the centerline from the horizontal line indicating bottom of the hood.
- Make an 10-1/2"x13-1/4" cut out centered left to right along the centerline.



## **1** INSTALL HOOD SUPPORT

**IMPORTANT:** Framing must be capable of supporting 100 lbs for 36" models and 150 lbs for 48" models.

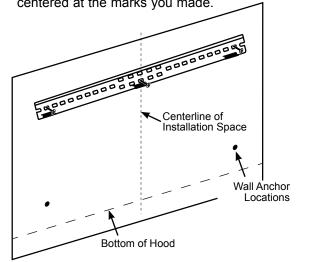
- Locate a minimum of 2 vertical studs for the installation bar by tapping drywall with a hammer or use a stud finder.
- Level the installation bar and center left to right above the marked line. Hold bar against the wall.



• Drill 1/8" pilot holes at the 2 vertical stud locations through holes in the installation bracket. Secure the installation bar with supplied screws (A) as shown above.

#### **Drill Bottom Mounting Hole Locations:**

- Hang hood on installation bar to mark anchor locations. Mark hole locations through the back of the hood. **NOTE**: If installing to the soffit or cabinet, push hood flush to the soffit or cabinet before marking screw hole locations.
- Remove the hood and drill 5/16" clearance holes centered at the marks you made.



## **1** INSTALL HOOD SUPPORT (Cont.)

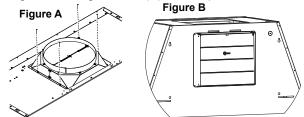
- Install wall anchors (C) by tapping the anchors with a hammer to seat the teeth of the flanges into the wall. This keeps anchor from rotating.
- Drive the anchor screws until the barrels crimp against the inside of the wall.
- Remove the screws from the wall anchors before installing the hood.

## **2** INSTALL DAMPER

**IMPORTANT:** Remove shipping tape from damper and check that damper moves freely.

#### Install Top Damper:

- The motor mounting plate comes pre-installed in the hood for top venting.
- Install the top damper to the hood body as shown in Figure A using screws (B) from top of hood.



#### Install Back Damper:

- In case of back venting through the wall, back damper accessory UXBDA812 must be purchased separately.
- Remove the square knockout panel on hood body for back venting.
- Install the back damper to the hood body as shown in Figure B using screws provided with the accessory.
- Uninstall the motor mounting plate from top venting position. Save the screws.
- Install the metal plate provided with the accessory to cover the opening for top damper.
- Remove the two screw knockout holes on the motor mounting plate as shown in Figure C.
- Install the motor mounting plate so that arrow is pointing upwards and on right side.
- Slide plate into the metal brackets and push in until scree metal clips at the bottom engage.
- Fasten the plate through the two screw hole knockouts as shown in Figure C. Use the two screws you saved.

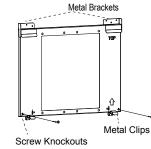
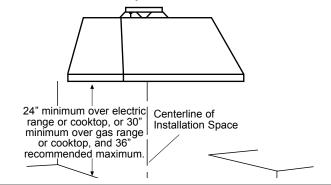


Figure C(Single motor will look different)

1" = 2.5 cm; 1' = 0.3 m

## **3** INSTALL HOOD ONTO WALL

- Pull house wiring through knockout at the back or top of the hood.
- Lift the hood and place over the hooks on the installation bar. Allow the hood to slide down into position.
- Check to be sure the hood is level and centered.
- Tighten wall anchor screws (C) to finish hood body installation to the wall.
- Remove cover from junction box inside the hood.



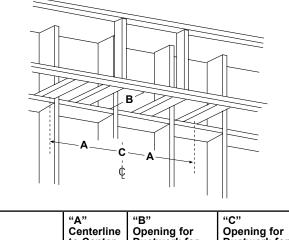
#### 4 (Alternate Mounting Method) INSTALL HOOD TO SOFFIT

# SKIP THIS STEP IF USING WALL MOUNTING METHOD

**IMPORTANT**: Soffit framing must be capable of supporting 100 lbs for 36" models and 150 lbs for 48"models.

When necessary the hood may be installed so that it is supported by the soffit.

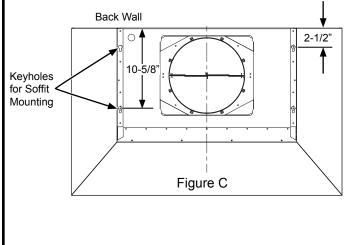
- The soffit should be constructed with 2"x4"s.
- Use a level to draw the cooktop or range center line.
- Continue the centerline forward on the bottom of the soffit.
- Install horizontal wood supports between the 2"x4", at distance A to the left and right, as per the table below.



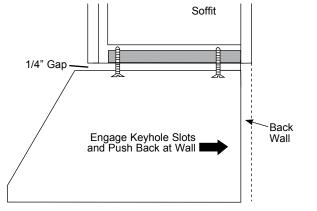
	"A" Centerline to Center Stud	"B" Opening for Ductwork for top venting	"C" Opening for Ductwork for back venting	
36" Models	11-3/8"	10-5/8"x11-1/4"	10-1/2"x13-1/4"	
48" Models	17-3/8"	10-5/6 X11-1/4		

## 4 (Alternate Mounting Method) INSTALL HOOD TO SOFFIT (Cont.)

- Drill two 1/8" pilot holes at a distance of 10-5/8" from the back wall in the horizontal wood supports. This is the vertical distance between mounting keyholes and back wall as shown in Figure C.
- Drill two more 1/8" pilot holes at a distance of 2-1/2" from the back wall in the horizontal wood supports. This is the vertical distance between mounting screw holes and back wall as shown in Figure C.
- For top venting, allow minimum opening (Dim. B) to accommodate damper in soffit.
- For back venting, allow minimum opening (Dim. C) to accommodate damper in back wall

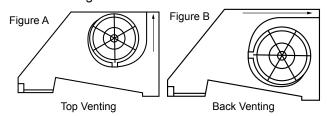


- Drive mounting screws (A) into the studs until they protrude 1/4". This 1/4" gap will provide clearance to engage the keyhold slots in the top of the hood.
- The hood must also be secured to the back wall. Follow instruction on page 11, "**Drill Bottom Mounting Hole Locations**" for installation to the back wall.
- Follow instructions on page 10 "House Wiring Locations" for wiring setup.
- Lift hood onto mounting screws. Slide back against the rear wall.
- Pull house wiring through the knockout at the rear or top of the hood.
- Tighten mounting screws (E).
- Once the hood is secured to the soffit, drive screws (C) to secure the hood to the back wall.

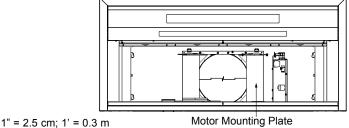


## **5** INSTALL MOTOR

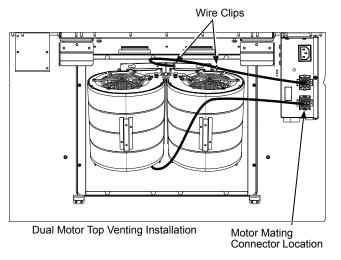
 Align the motor exhaust with the top damper as shown in the Figure A for top venting. In case of back venting, rotate the motor 90° to align with the back damper as shown in Figure B.



II) Secure the motor to motor mounting plate using screws (D).



- III) Plug the motor connector into the mating connector on top of the control housing.
- IV) Repeat steps I through III for dual motor models.
- V) For dual motor models, secure the right side motor wire to wire clips as shown in image below.

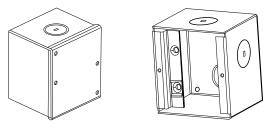


## **6** CONNECT ELECTRICAL

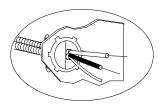
Verify that power is turned off at the source.

AWARNING If house wiring is not 2-wire with a ground wire, a ground must be provided by the installer. When house wiring is aluminum, be sure to use UL approved anti-oxidant compound and aluminum-to-copper connectors.

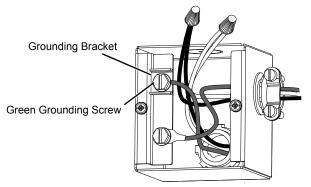
• Remove junction box cover.



• Pull the house wiring through the knockout at the top or back of the hood and secure with the strain relief.



- Use UL listed wire nuts to connect incoming white to white, and black to black wires.
- Loosen the green grounding screw (with grounding bracket) in the junction box. Loop solid copper house wire clockwise around the green grounding screw and above the bracket. Firmly tighten the screw over the loop.



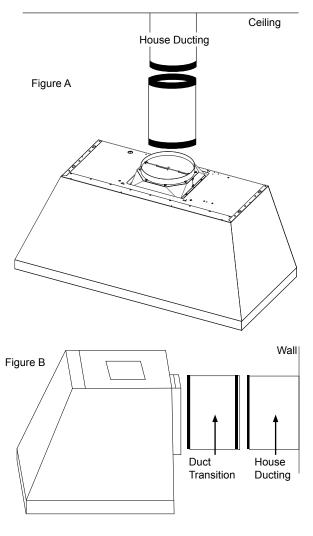
• Replace junction box cover and ensure wires are not pinched.

**NOTE:** For corded installation:

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

## **7** CONNECT DUCTWORK

- Connect the house ducting to the top damper as shown in Figure A.
- For back venting, connect the transition piece to the back damper and the house ducting to the transition as shown in Figure B.
- Seal all connections with duct tape.



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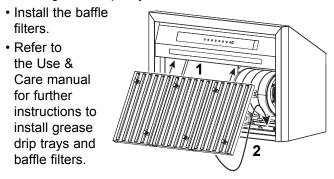
The transition to ductwork connection. Doing so will prevent proper damper operations. Seal connection with tape only.

## **8** INSTALL DUCT COVERS

- Refer to section "Duct Cover Requirements" on page 6 for duct cover accessory part numbers.
- Follow instructions included with the duct cover accessory to install duct covers.

## 9 INSTALL GREASE TRAYS AND FILTERS

- Remove protective film.
- Place grease drip trays into slots.



#### MAKE UP AIR TECHNOLOGY

#### This operation must be performed by a qualified technician or installer.

**Note to Installers and Inspectors:** This product comes equipped with a simple installation feature that limits maximum CFM levels in order to comply with certain local codes or regulations. This installation method may not be necessary for all installations, please refer to your local codes for further guidelines.

#### This makeup air feature applies to single motor models only.

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Hood must be disconnected from main power prior performing the conversion instructions listed below. Failure to do so could result in personal injury or damage to the product.

#### To modify unit (if needed for local codes):

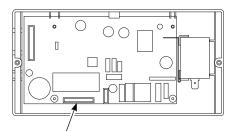
#### 390CFM

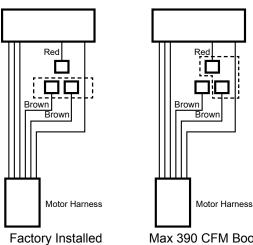
By design, the maximum blower speed is greater than 400 CFM. For local codes requiring reduced CFM, modify the wiring as described below:

- 1. Remove the Baffle filters.
- 2. Disconnect all the harnesses from the top of control box on right side of motor
- 3. Loosen the screws on top of control box and slide out to remove it from the hood
- 4. Uninstall the control box cover
- 5. For a maximum of 390 CFM Unit can operate with 4 speeds (Low, Medium, High, Boost).
  - i. Disconnect connectors of the **BROWN** wire.
  - ii. Remove the cap attached to the connector of the **RED** wire.
  - iii. Connect the mating connector of the **BROWN** wire and the **RED** wire.
  - iv. Attach the cap to the open **BROWN** wire connector.
- 6. Reinstall control box cover and secure control box to the bracket in the hood using the two screws
- 7. Connect all harnesses on top of the control box
- 8. Reinstall filters.

**Note to Inspectors:** To verify this product installation, check motor wiring connections as described above.

1" = 2.5 cm; 1' = 0.3 m





Wiring Setup

Motor Harness Connector

NOTE: While performing installations described in this book, safety glasses or goggles should be worn.

NOTE: Product improvement is a continuing endeavor at Monogram. Therefore, materials, appearance and specifications are subject to change without notice.

