INSTALLATION INSTRUCTIONS FOR DOWNDRAFT VENT

Table of Contents

COOKTOP SAFETY	1
INSTALLATION REQUIREMENTS	
Tools and Parts	3
Location Requirements	3
Electrical Requirements	4
Venting Requirements	8
External Venting Dimensional Planning	9
INSTALLATION INSTRUCTIONS	11
Mounting Bracket Installation	
Install Foam Strips	11
Recirculation (Non-ducted) Installation	11
Install Cooktop, Downdraft and Blower Motor Assembly	12
Complete Installation	13
WIRE DIAGRAM	14

COOKTOP SAFETY

Your safety and the safety of others are very important.

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



This is the safety alert symbol.

This symbol alerts you to potential hazards that can kill or hurt you and others.

All safety messages will follow the safety alert symbol and either the word "DANGER" or "WARNING." These words mean:

A DANGER

AWARNING

You can be killed or seriously injured if you don't immediately follow instructions.

You can be killed or seriously injured if you don't follow instructions.

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

IMPORTANT: Save for local electrical inspector's use.

IMPORTANT SAFETY INSTRUCTIONS

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

- Use this unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer.
- Before servicing or cleaning the 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 a tag, to the service panel.
- Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction.
- Do not operate any fan with a damaged cord or plug. Discard fan or return to an authorized service facility for examination and/or repair.
- Sufficient air is needed for proper combustion and exhausting of gases through the flue (chimney) of fuel burning equipment to prevent backdrafting. Follow the heating equipment manufacturer's guideline 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.
- When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.
- Ducted fans must always be vented outdoors.

CAUTION: For general ventilating use only. Do not use to exhaust hazardous or explosive materials and vapors.

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, attics or into crawl spaces, or garages.

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

WARNING: TO REDUCE THE RISK OF A RANGE TOP GREASE FIRE:

- 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.
- Always turn hood ON when cooking at high heat or when flambeing food (i.e. Crepes Suzette, Cherries Jubilee, Peppercorn Beef Flambé).
- Clean ventilating fans frequently. Grease should not be allowed to accumulate on fan or filter.
- 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.
- NEVER PICK UP A FLAMING PAN you may be burned.
- DO NOT USE WATER, including wet dishcloths or towels a violent steam explosion will result.
- Use an extinguisher ONLY if:
 - You know you have a class ABC extinguisher, and you already know how to operate it.
 - The fire is small and contained in the area where it started.
 - The fire department is being called.
 - You can fight the fire with your back to an exit.

^aBased on "Kitchen Fire Safety Tips" published by NFPA.

 WARNING: To reduce the risk of fire or electrical shock, do not use this fan with any solid-state speed control device.

READ AND SAVE THESE INSTRUCTIONS

INSTALLATION REQUIREMENTS

Tools and Parts

Gather the required tools and parts before starting installation. Read and follow the instructions provided with any tools listed here.

Tools Needed

- Tape measure
- Marker or pencil
- Phillips screwdriver
 Pliers
- Flat-blade screwdriver
- Level
- Drill

- Jigsaw
- Caulking
- Aluminum duct tape

Parts Supplied

Check that all parts are included.

- Blower housing assembly with electronic box and intake assembly
- (4) Mounting brackets (front and rear mounting brackets) with screws
- Grease filter
- (2) Blower hold down brackets to secure blower to cabinet
- Round duct 2-piece telescoping (blower assembly)
- Foam strip
- (4) Sheet metal screws to secure transition to downdraft intake and one transition

Parts Needed

For vented installations:

- 6" (15.2 cm) round metal ducting
- Jenn-Air[®] wall cap:
- Jenn-Air[®] 6" (15.2 cm) round wall cap with damper
- (8) Round or pan head wood and sheet metal screws
 See the "Assistance or Service" section in your Use and Care manual to order.

For non-vented installations:

- Recirculation Kit part number W10807915 (See the "Assistance or Service" section in your Use and Care manual to order.)
 - a. Recirculation duct housing
 - b. (4) Mounting screws
 - c. (2) Charcoal filters
 - d. Recirculation housing cover
 - e. (2) Mounting screws cover
 - f. Duct extension
 - g. (4) Mounting screws duct extension

For non-vented installations side recirculation only:

- 1-6" (15.2 cm) round 90 degree elbow and 1-6" (15.2 cm) round to 3¼" x 10" (8.3 cm x 25.4 cm) transition and 1- 3¼" x 10" (8.3 cm x 25.4 cm) elbow.
- Plywood Pedestal to raise blower mounting. See instruction detail for non-vented installation.

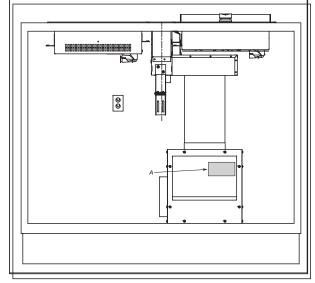
Check local codes. Check existing electrical supply. See the "Electrical Requirements" section.

It is recommended that all electrical connections be made by a licensed, qualified electrical installer.

Location Requirements

IMPORTANT: Observe all governing codes and ordinances. When installing the downdraft, use the minimum dimensions given.

- Use the countertop opening dimensions that are given with these Installation Instructions. Given dimensions are minimum clearances and provide 0" (0 cm) clearance.
- The model/serial/rating label is located on the front face of the electrical junction box cover.



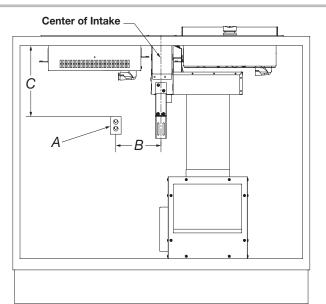
A. Model/serial/rating label location

- Grounded electrical supply is required. See the "Electrical Requirements" section.
- If cabinet has drawers, drawers will need to be removed and drawer fronts installed on front of cabinet.

NOTE: The exhaust system is for outside venting. For non-vented (recirculating) installation, see "For non-vented (recirculating) installations only" in the "Connect Vent System" section. Recirculating Kit part number W10807915 is available from your dealer or an authorized parts distributor.

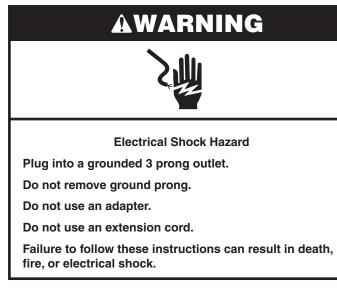
IMPORTANT: An undercounter built-in oven cannot be installed under this product.

Electrical Connection Locations



- A. 3 prong grounding type outlet with correct polarity
- B. 12" (30.5 cm) from centerline of downdraft intake
- C. 18" (45.7) minimum





IMPORTANT: The downdraft vent must be electrically grounded in accordance with local codes and ordinances, or in the absence of local codes, with the National Electrical Code, ANSI/ NFPA 70 or Canadian Electrical Code, CSA C22.1.

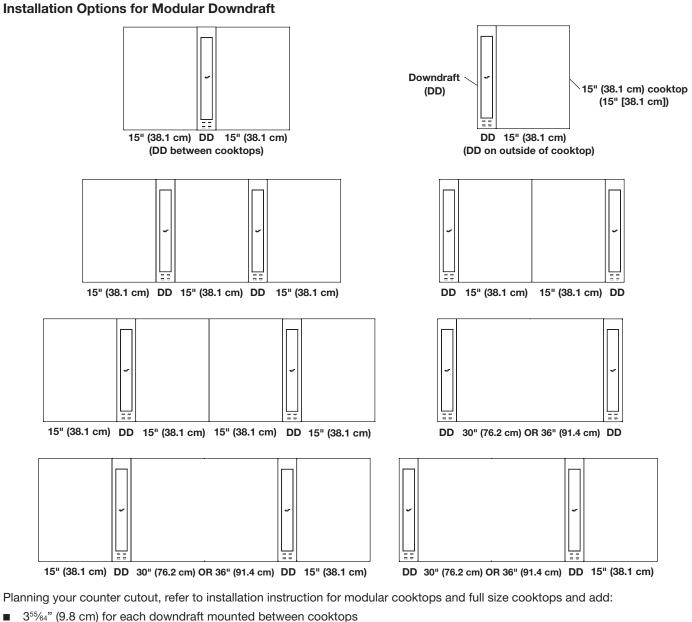
This downdraft is equipped with an electronic touch pad system that will not operate if plugged into an outlet that is not properly polarized. If codes permit and a separate ground wire is used, it is recommended that a qualified electrical installer determine that the ground path is adequate.

A copy of the above code standards can be obtained from:

National Fire Protection Association 1 Batterymarch Park Quincy, MA 02169-7471 CSA International 8501 East Pleasant Valley Road Cleveland, OH 44131-5575

- A 120-volt, 60 Hz., AC-only, 15-amp fused, electrical circuit is required. A time-delay fuse or circuit breaker is also recommended. It is recommended that a separate circuit serving only this downdraft vent be provided.
- Electronic touch pad systems operate within wide voltage limits, but proper grounding and polarity are necessary. Check that the outlet provides 120-volt power and is correctly grounded and polarized.
- The wiring diagram is provided with this downdraft vent. See the "Wiring Diagram" section.
- Downdraft must have a dedicated electrical receptacle and power supply.

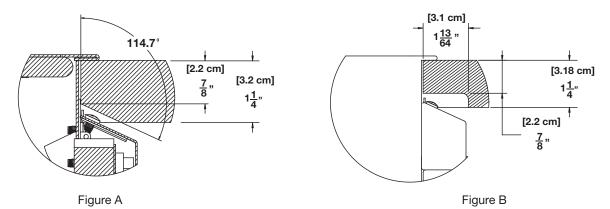
Planning Your Cabinet Cutout



- 3⁵¹/₆₄" (9.6 cm) for each downdraft mounted on outside of cooktops

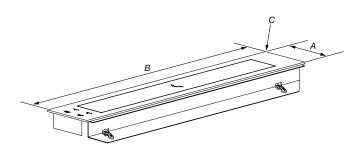
The downdraft can be mounted between cooktops or on the sides of them.

If mounted on the side, this requires relief cuts (back cutting) on the countertop.



NOTE: When downdraft is mounted on outside of cooktop on right hand side, against the countertop, the countertop must be cut as shown in Figure A or Figure B. The shaded areas of the figures represent the countertop.

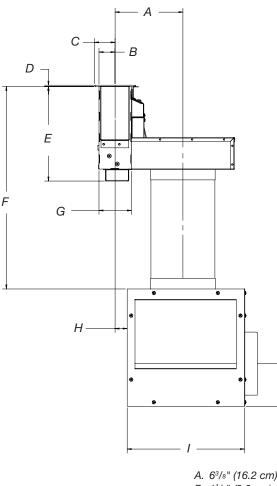
Vent



A. 3⁷/s" (9.8 cm) B. 21" (53.3 cm) C. ⁷/s4" (2.9 mm) radius (4-corner radius)

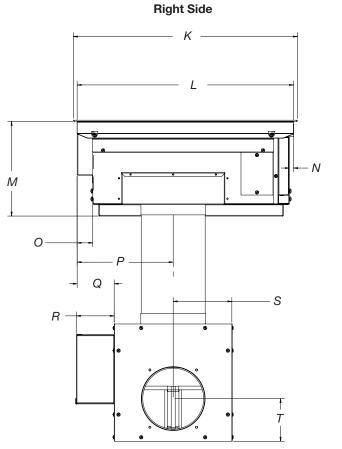
Blower Housing Assembly





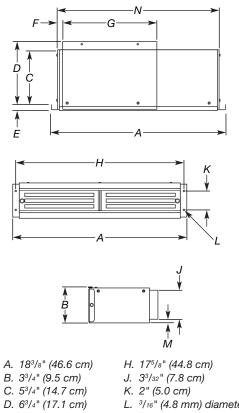
A. 6³/8" (16.2 cm)
B. 1¹/2" (3.8 cm)
C. 1¹⁵/16" (4.9 cm)
D. Ø¹/8" (3 mm)
E. 8⁷/8" (22.5 cm)
F. 19" (48.3 cm)
G. 3¹/32" (7.7 cm)
H. 1¹/8" (2.9 cm)
I. 11" (27.9 cm)
J. 4" (10.2 cm)

J



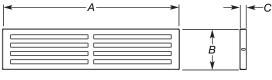
K. 21" (53.3 cm) L. 20⁵/16" (51.6 cm) M. 8⁷/8" (22.5 cm) N ¹³/32" (1.0 cm) O. 1¹⁵/32" (3.7 cm) P. 9" (22.9 cm) Q. 3¹⁵/32" (8.8 cm) R. 3¹⁷/32" (9.0 cm) S. 5¹/2" (14.0 cm) T. 4" (10.2 cm)

Recirculation Assembly (Accessory)



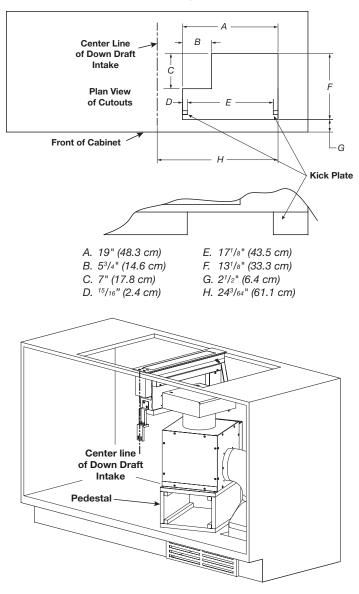
E. 9/16" (14 mm) F. ⁹/₁₆" (14 mm) G. 9⁷/8" (25.0 cm) L. 3/16" (4.8 mm) diameter (4) M. 5/16" (7.9 mm) N. 17" (43.2 cm)

Recirculation Cover (Part of Recirculation Kit)

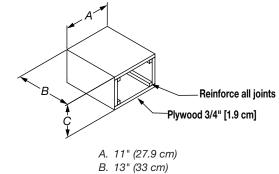


A. 18¹/₂" (47.0 cm) B. 3³¹/₃₂" (10.1 cm) C. ¹¹/₁₆" (1.7 cm)

Internal (Non Ducted) Venting



Pedestal



Venting Requirements

IMPORTANT: This appliance must be exhausted outdoors unless you are using the Recirculation Accessory Kit. See the "Venting Methods" section and the "Accessories" section in your Use and Care manual to order.

- Do not terminate the vent system in an attic or other enclosed area.
- Vent system must terminate to the outside.
- Use only a 3¼" x 10" (8.3 cm x 25.4 cm) rectangular metal vent or 6" (15.2 cm) round metal vent. Rigid metal vent is recommended. Do not use plastic or metal foil vent.
- Before making cutouts, make sure there is proper clearance within the wall or floor for the exhaust vent.
- Do not cut a joist or stud unless absolutely necessary. If a joist or stud must be cut, then a supporting frame must be constructed.
- The size of the vent should be uniform.
- The vent system must have a damper.
- Use vent clamps and metal duct tape to seal all joints in the vent system.
- Use caulking to seal exterior wall or roof opening around the cap.

Determine which venting method is best for your application.

For Best Performance:

Use 26-gauge minimum galvanized or 25-gauge minimum aluminum metal vent. Poor quality pipe fittings can reduce airflow. For external venting, flexible metal vent is not recommended.

NOTE: Local codes may require a heavier gauge material.

- Metal duct may be reduced to 30-gauge galvanized steel or 26-gauge aluminized steel if allowed by local codes. This reduction is based on information in the International Residential Codes Section M1601.1 (2006 edition).
- Avoid installing 2 elbows together.
- Use no more than three 90° elbows.
- If an elbow is used, install it as far away as possible from the hood's vent motor exhaust opening.
- Make sure there is a minimum of 18" (45.7 cm) of straight vent between the elbows if more than one elbow is used. Elbows too close together can cause excess turbulence that reduces airflow.
- Do not use a 5" (12.7 cm) elbow in a 6" (15.2 cm) or 3¼" x 10" (8.3 cm x 25.4 cm) system.
- Do not reduce to a 5" (12.7 cm) system after using a 6" (15.2 cm) or 3¹/₄" x 10" (8.3 cm x 25.4 cm) fittings.
- Avoid forming handmade crimps. Handmade crimps may restrict airflow.
- Use a Jenn-Air[®] vent cap for proper performance. If an alternate wall or roof cap is used, be certain the cap size is not reduced and that it has a backdraft damper.
- Use vent clamps and metal duct tape to seal all joints in the vent system.
- Use caulking to seal exterior wall or roof opening around the cap.

The length of vent system and number of elbows should be kept to a minimum to provide efficient performance.

The maximum equivalent length of the vent system is 35 ft (10.7 m). For altitudes above 4,500 ft (1272 m), reduce recommended vent run by 20% for best performance.

Cold Weather Installations

An additional backdraft damper should be installed to minimize backward cold air flow and a thermal break installed to minimize conduction of outside temperatures as part of the vent system. The damper should be on the cold air side of the thermal break.

Makeup Air

Local building codes may require the use of makeup air systems when using ventilation systems greater than specified CFM of air movement. The specified CFM varies from locale to locale.

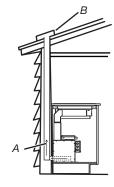
Consult your HVAC professional for specific requirements in your area.

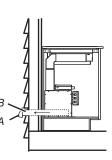
Venting Methods

Common venting methods are shown for a counter-mounted downdraft cooktop. The cooktop may be vented through the wall or floor.

Option 1 – Roof Venting

Option 2 – Wall Venting



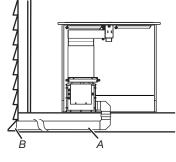


- A. 6" (15.2 cm) round ducting transitioned to 3¹/₄" x 10" (8.3 cm x 25.4 cm) rectangular floor venting
- A. 6" (15.2 cm) round ducting B. Wall cap

B. Roof cap

Option 3 – Venting Between Floor Joist

Front view of cabinet with doors removed

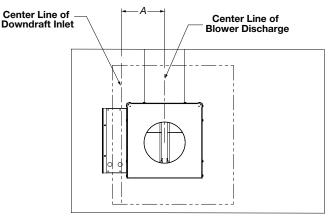


A. 6" (15.2 cm) round wall venting

B. Wall cap

Single Unit with 6" (15.2 cm) External Discharge

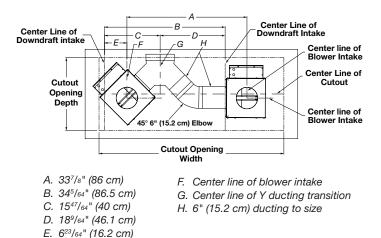
This configuration accommodates one or two 15" (38.1 cm) cooktops, one on either or each side of the downdraft intake.



A. 6²³/₃₂" (16.2 cm)

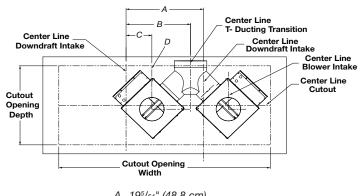
Option: Two Downdrafts with Single 8" (20.3 cm) External Discharge

- This configuration accommodates one or two 15" (38.1 cm) cooktops and a 30" (76.2 cm) or 36" (91.4 cm) cooktop. As shown, the 30" (76.2 cm) or 36" (91.4 cm) (note: 30" [76.2 cm] cooktop requirement shown, add 6" [15.2 cm] to the 18% at [46.1 cm] dimension for a 36" [91.4 cm] cooktop) cooktop would be located between downdraft intakes and the 15" (38.1 cm) on the left side of the larger cooktop. A second 15" (38.1 cm) cooktop can be located on the right side of the 30" (76.2 cm)/36" (91.4 cm) cooktop.
- For a 30" (76.2 cm)/36" (91.4 cm) cooktop and single 15" (38.1 cm) cooktop on the right hand side of the cooktop, the dimensions shown are to be applied as a mirror image.
- Y-Transition Ducting Kit: W11180669

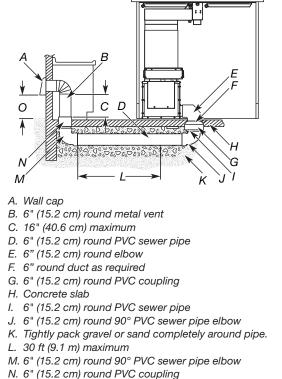


Option: Two Downdrafts with Single 8" (20.3 cm) External Discharge

- This configuration accommodates three 15" (38.1 cm) cooktops, one between downdraft intakes and one on each side of the down draft intakes.
- Order Y-Transition Ducting Kit: W11180669



- A. 19⁵/₆₄" (48.8 cm)
- B. 15²⁹/₃₂" (40.4 cm)
- C. 6²³/₆₄" (16.2 cm)
- D. Center line blower intake



O. 12" (30.5 cm) minimum

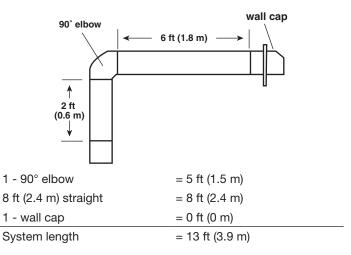
Calculating Vent System Length

To calculate the length of the system you need, add the equivalent feet (meters) for each vent piece used in the system.

6" (15.2 cm) Round	
2.5 ft (0.8 m)	\bigcirc
5.0 ft (1.5 m)	0
0.0 ft (0.0 m)	
4.5 ft (1.4 m)	0
1 ft (0.3 m)	
5.0 ft (1.5 m)	O D
	2.5 ft (0.8 m) 5.0 ft (1.5 m) 0.0 ft (0.0 m) 4.5 ft (1.4 m) 1 ft (0.3 m)

Vent Piece	6" (15.2 cm) Round	
6" (15.2 cm) to 3¼" x 10" (8.3 cm x 25.4 cm) 90° elbow transition	5.0 ft (1.5 m)	
3¼" x 10" (8.3 cm x 25.4 cm) 90° elbow	5.0 ft (1.5 m)	
3 ¹ ⁄ ₄ " x 10" (8.3 cm x 25.4 cm) flat elbow	5.0 ft (1.5 m)	
3¼" x 10" (8.3 cm x 25.4 cm) wall cap	0.0 ft (0.0 m)	

Example vent system



NOTE: A flexible vent is not recommended. Flexible vents create back pressure and air turbulence that greatly reduce performance.

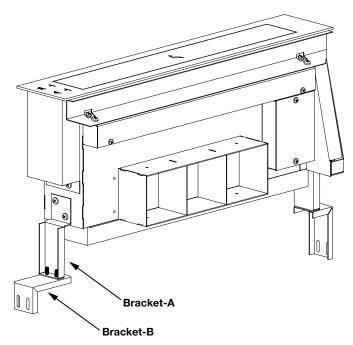
Recirculation: Non-Vented (Recirculating) Installations Only

You will need to order:

- Recirculation Kit part number W10807915 (See the "Assistance or Service" section in your Use and Care manual to order.)
- You may also need a section of 3¹/₄" x 10" (8.3 cm x 25.4 cm) metal duct – length required is determined by the distance from the exhaust outlet to the back flat surface of the Recirculation Kit housing.

INSTALLATION INSTRUCTIONS

Mounting Bracket Installation



- 1. Mount Bracket-A to downdraft body. Screws are in place on downdraft body.
- 2. a) Mount Bracket-B to Bracket-A. Position short leg of "B" against "A" for mounting to front or rear of cabinet. This results in minimum extension of bracket positioning.

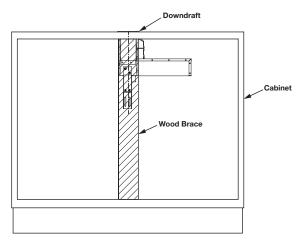
HINT: Pre-drive screws into Bracket-A.

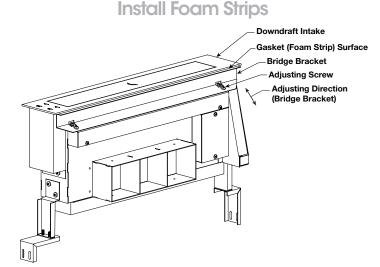
b) Position long leg of "B" against "A" for maximum extension of bracket position.

Positioning will be determined by final location of the downdraft in the cabinet/counter top.

3. To fasten Bracket-B to cabinet, assemble "B" to "A" per instruction (Item-2). Snug screws to allow "B" to be positioned against cabinet (front or rear). Position downdraft intake unit in its final position in countertop. Secure screws holding Bracket-B to "A". Use wood screws (not provided) to secure Bracket-B to front and rear of cabinet.

NOTE: The mounting brackets must be secured to the cabinet, front and rear. The front of the cabinet must have a secure wood surface to mount the bracket to. Depending on the cabinet construction a wooden brace (1 x 2 or equivalent) may be required to be added to the cabinet. Determine planned position of downdraft in cabinet and secure brace to cabinet.





1. If the right side of the downdraft is positioned against the countertop, remove and discard the bridge, do not remove screws.

If the right side of the downdraft is positioned adjacent to a cooktop, adjust the position of the bridge bracket to be level with the top of the countertop.

NOTE: The bridge kit included with a 15" (38.1 cm) module cannot be used on the right side of the downdraft. The bridge bracket provides the required foam strip surface.

2. Install foam strips, cut to size, on the counter top (front and rear) and left side supporting surface (bridge kit or counter top) and on the downdraft bridge bracket.

Recirculation (Non-ducted) Installation

Cabinet Cutouts for Non-ducted Installations

- After laying out the positioning of the desired cooktop and downdraft units to be installed determine the location of the centerline of the downdraft intake. Mark out the required cut out in the cabinet floor and kick plate. It is recommended that the complete layout of downdraft and cooktop(s) be established before cutting any openings.
- **2.** Countertop and cabinet can now be cut to the prepared requirements.
- Assemble the 6" (15.2 cm) round elbow to 6" (15.2 cm) -3¹/₄" x 10" (8.3 cm x 25.4 cm) transition (stack boot) to 3¹/₄" x 10" (8.3 cm x 25.4 cm) elbow to recirculating assembly.
 Secure all joints and seal using the aluminum metal duct

tape. This assembly can now be dropped into the opening in the cabinet floor.

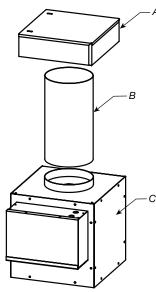
- 4. Secure the recirculation assembly to the kick plate.
- 5. Assemble the blower to the pedestal using supplied brackets and use wood screws (not supplied) to secure blower to pedestal.
- 6. Position assembly from item-5 onto cabinet floor to engage 6" elbow on assembly from item-3. Secure joint and seal with aluminum duct tape.
- 7. Position prepared downdraft intake into cabinet and engage with blower assembly intake. Secure and seal duct joints
- 8. Anchor the pedestal to the cabinet floor with wood screws.
- **9.** Assemble the downdraft mounting brackets previously described.
- **10.** Assemble the recirculation cover to the recirculation assembly in the cabinet kick plate.
- **11.** Option: The opening in the cabinet floor can be covered to trim out the cabinet interior.

Install Cooktop, Downdraft and Blower Motor Assembly

Prepare Blower Motor Assembly

Vented

1. Assemble the 2-piece telescoping round duct to the blower motor assembly top duct extension. Secure with screw and metal duct tape.

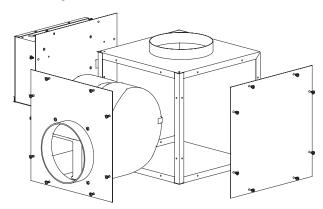


- A. Intake transition
- B. Telescoping round duct
- C. Blower motor

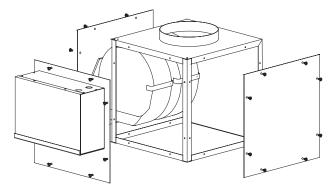
Alternate Blower Configuration

- 1. After establishing the location of the products to be installed. The blower can be configured to support the desired ducting location.
- **2.** Prepare the blower assembly for installation and assemble the two hold down brackets supplied to he blower.
- 3. Locate the downdraft in the countertop.
- **4.** Assemble the supplied transition for connection to the blower assembly using 4-screws supplied.
- 5. Assemble the telescoping duct, supplied to the blower assembly. Secure all joints and seal using aluminum tape.
- 6. Use wood screws to secure the blower to the cabinet floor using the 2-brackets supplied. Secure one at the front and one at the rear.

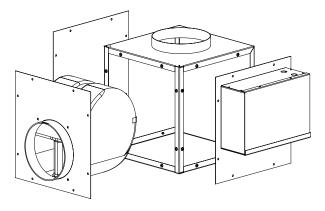
Left Discharge



Rear Discharge

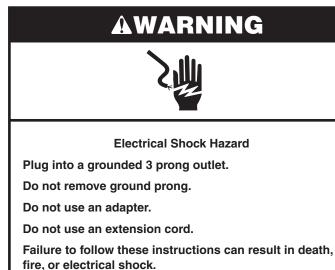


Internal (Non Ducted) Venting and Right Discharge



Complete Installation

- 1. Check that all parts are now installed. If there is an extra part, go back through the steps to see which step was skipped.
- 2. Check that you have all your tools.
- 3. Dispose of/recycle all packaging materials.
- 4. Use a mild solution of liquid household cleaner and warm water to clean cooktop and/or vent before use. Dry thoroughly with a soft cloth. For more information, see the "Cooktop Care" and "Vent Care" sections of the Use and Care manuals.
- **5.** See the "Cooktop Use" and "Vent Use" sections of the Use and Care manuals for operating instructions.



6. Plug into a grounded 3 prong outlet.

7. Test cooktop and downdraft to confirm all are working.

NOTE: If the cooktop and/or vent does not work after turning on the power, check that a circuit breaker has not tripped or a household fuse has not blown. See the "Troubleshooting" section of your Use and Care manual for further information. If you need Assistance or Service:

Please reference the "Warranty" section of your Use and Care manual.

WIRE DIAGRAM

