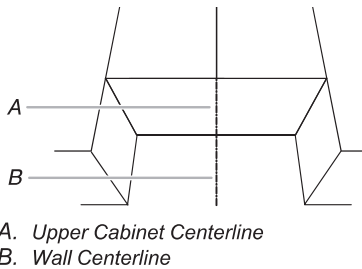


# Mark Upper Cabinet

- Using a tape measure, clearly mark the vertical centerline of the opening. Make sure it aligns with the vertical wall centerline.



**NOTE:** The cardboard plate is fit for depth of 12" to 13" cabinet installation, but need some adjustment for different depth. See the following steps 2, 3.

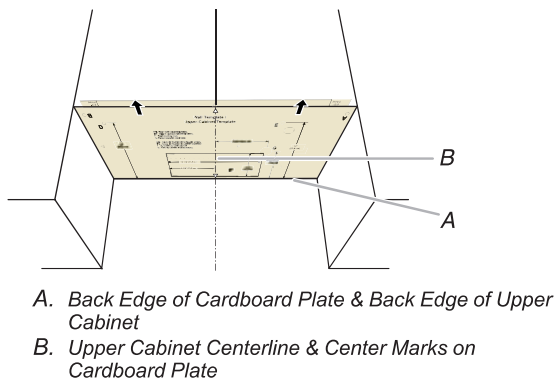
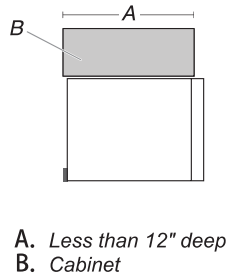
If cabinets are deeper than 13" (33 cm), and up to 16" (40.6 cm), use the bump out mounting kit, replacing the mounting plate supplied with the product. The bump out mounting kit (part#- W11630300) is not provided.

If your cabinet is 12" to 12 3/4" depth, follow the step 2:

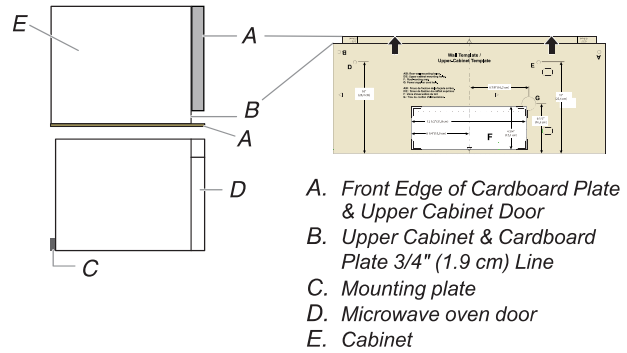
- Place the cardboard plate against the bottom of the upper cabinet.

**NOTES:**

- Make sure the back edge of the cardboard plate aligns with the back edge of upper cabinet.
- Make sure the center marks on the cardboard plate align with the upper cabinet centerline which were drawn in step 1.
- Make sure the arrows on the cardboard plate are facing out.



Flush to cabinet door

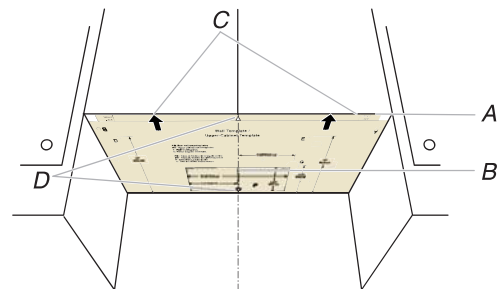
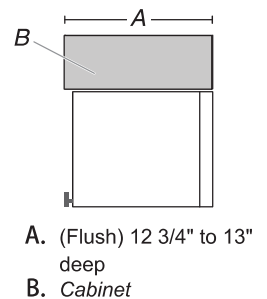


If your cabinet depth is 12.75" to 13" depth:

- Place the cardboard plate against the bottom of the upper cabinet.

**NOTES:**

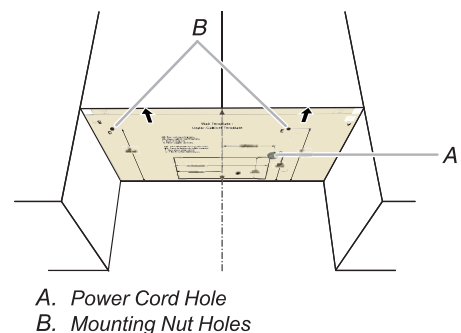
- Make sure the front edge of the cardboard plate aligns with the front edge of upper cabinet.
- Make sure the center marks on the cardboard plate align with the upper cabinet centerline which were drawn in step 1.



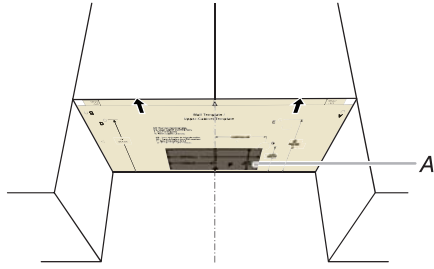
**NOTE:** If the upper cabinet doors protrude from the upper cabinet, the cardboard can be adjusted outward to be flush with the upper cabinet door.

For example the upper cabinet door is 0.75" thick, you can align the cardboard plate 0.75" line with the upper cabinet.

- Use a pencil to mark a power cord hole and two mounting nut holes.



- Use a pencil to mark the upper cabinet vent hole. This step can be skipped if your unit is using recirculation or wall venting installation.

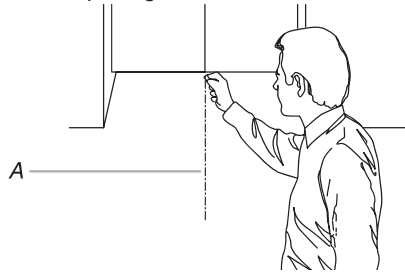


A. Upper Cabinet Hole

## Mark Rear Wall

The microwave oven must be installed on a minimum of 1 wall stud, preferably 2, using a minimum of 1 lag screw, preferably 2. See "Find the Wall Stud(s)" section for find the wall studs.

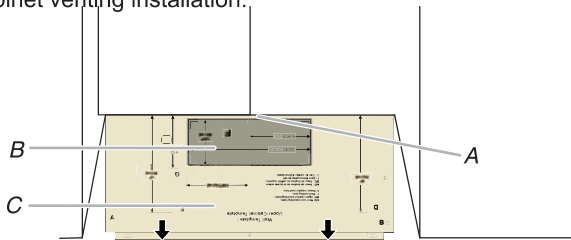
- Use a measuring tape to find and clearly mark the vertical centerline of the opening.



A. Centerline

- Align the center markers on the cardboard plate, to the centerline on the wall, making sure it is level, and that the top of the cardboard template is butted up against the back edge of the upper cabinet (see following **NOTE** before making marks).

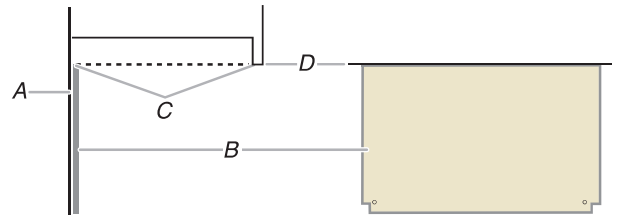
Use a pencil to mark the wall venting hole (wall venting installation only), skip it if your unit is for recirculation or upper cabinet venting installation.



A. Back Edge of Upper Cabinet  
B. Wall Venting Hole  
C. Cardboard Plate

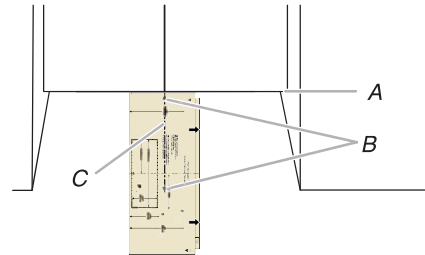
### NOTE:

- If the front edge of the upper cabinet is lower than the back edge, lower the cardboard template so that its top is level with the front edge of the cabinet.



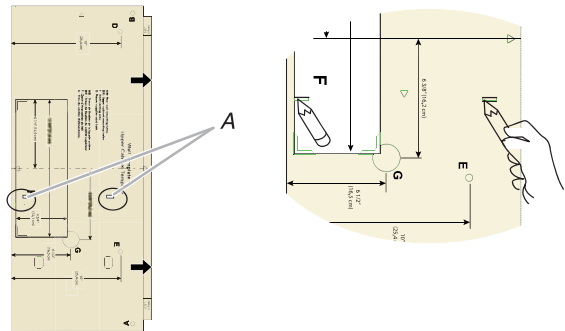
A. Rear wall  
B. Cardboard plate  
C. Top of cardboard plate must align with front edge of cabinet  
D. Front edge of upper cabinet

- Hold the cardboard plate in place on the rear wall while aligning the side center marks (B) on the cardboard plate with the vertical centerline draw in step 1. Make sure the cardboard plate is level, and that the top of the cardboard template is butted up against the bottom edge of the upper cabinet.



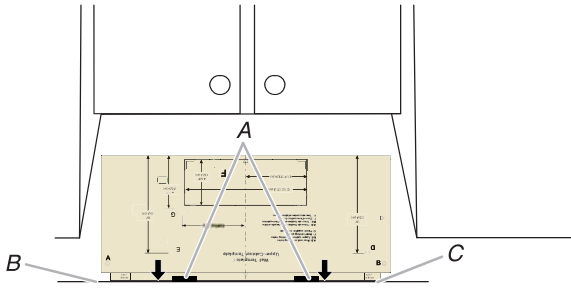
A. Bottom Edge of Upper Cabinet & Top of the Cardboard Plate  
B. Side Center Marks on Cardboard Plate  
C. Centerline

- Find and mark the two bottom position lines (A) on the cardboard plate.



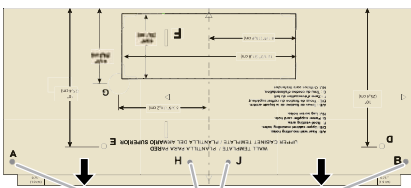
A. Cardboard Plate Bottom Position Line

- Using the bottom edge of the cardboard plate, align it with the two small lines (A), and draw a line (B) indicating where the bottom edge of the mounting plate (C) should be.



- A. Two Small Lines
- B. Cardboard Plate Bottom Line
- C. Bottom Edge of Mounting Plate

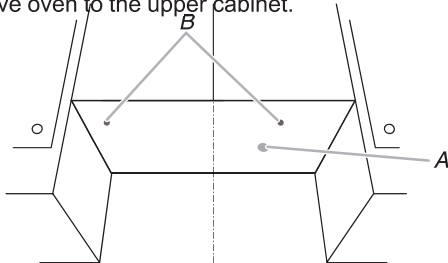
- Draw four small circles using the A, B, H & J holes.



A & B & H & J holes

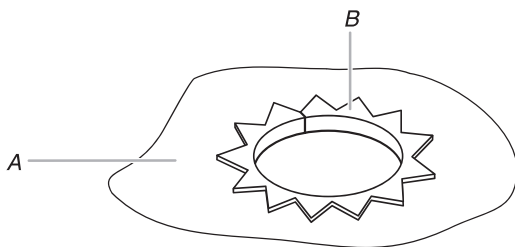
## Drill holes in Upper Cabinet

- Using a drill and the 3/4" hole saw, cut out the power cord hole (A).
- Drill two mounting nut holes (B), which are 3/8" (10 mm) holes at points "D" and "E" on the cardboard template. These are for two 1/4-20 x 3" bolts and washers used to secure the microwave oven to the upper cabinet.



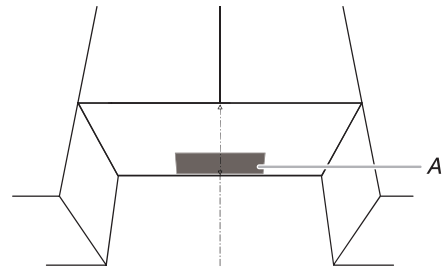
- A. Power Cord Hole
- B. Mounting Nut Holes

**NOTE:** If upper cabinet is metal, the supply cord bushing needs to be installed around the supply cord hole as shown.



- A. Metal cabinet
- B. Power supply cord bushing

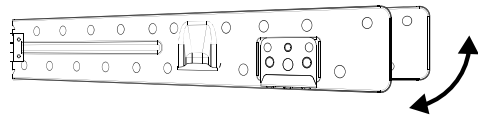
- Using a keyhole saw, cut out the rectangular roof venting cutout area. Skip this step if for recirculation venting or wall venting installation.



A. Roof Venting Cutout Area

## Drill holes in Rear Wall

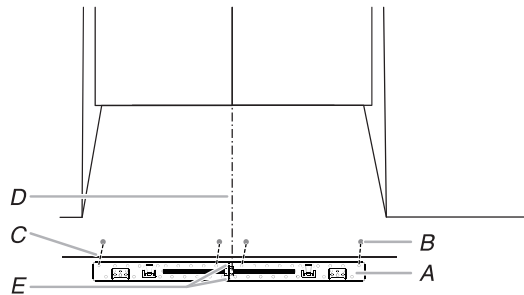
- The mounting plate is located inside the inner foam in the cavity, take it out. The mounting plate is folded, open it to 180 degree at plate.



- Attach the mounting plate to wall. Make sure the 4 holes on mounting plate align with the A, B, H & J holes marked in the "Mark Rear wall" section and the mounting plate center markers align with the Center Mark.

**NOTE:** It may be necessary to use a number of the spacers, between the mounting plate and the wall, to achieve a more 'Flush' appearance. See "Attach Mounting Plate to Wall" section for more details.

Measure from the back wall to where the front bottom surface of the microwave oven needs to be to determine the number of spacers needed.



- A. Mounting Plate
- B. A & B & H & J holes
- C. Mounting Plate Bottom Line
- D. Center Mark
- E. Mounting plate center markers

- Drill holes at A, B, H & J, if the Wall studs are not located A & B hole, do not drill A & B hole, and follow the below instruction.  
In addition to being installed on at least 1 wall stud, the mounting plate must attach to the wall at both end holes. If the end holes are not over wall studs, use two 3/16-24 x 3" round head bolts with toggle nuts; if 1 end hole is over a wall stud, use 1 lag screw and one 3/16-24 x 3" round-head bolt with toggle nut; or if both end holes are over wall studs, use 2 lag screws. Following are 3 installation configurations.

**Installation for No Wall Studs at End Holes (Figures 1 and 2 in Find the Wall Stud(s) section)**

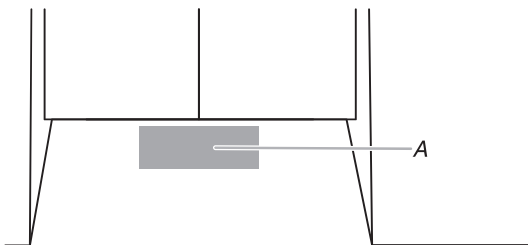
- Drill 5/8" (1.6 cm) holes through the wall at both end holes marked in Step 3 of the "Mark Rear Wall."
- Drill 3/16" (5 mm) hole(s) into the wall stud(s) at the hole(s) marked in step 6 of the "Mark Rear Wall." Refer to figures 1 and 2 in "Possible Wall Stud Configurations" in the "Locate Wall Stud(s)" section.

**Installation for Wall Stud at One End Hole (Figure 3 in Find the Wall Stud(s) section)**

- Drill a 3/16" (5 mm) hole into the wall stud at the end hole marked in Step 3 of the "Mark Rear Wall."
- If installing on a second wall stud, drill a 3/16" (5 mm) hole into the wall stud at the other hole marked in Step 6 of the "Mark Rear Wall." Refer to Figure 3 in "Possible Wall Stud Configurations" in the "Locate all Stud(s)" section.
- Drill a 5/8" (1.6 cm) hole through the wall at the other end.

**Installation for Wall Studs at Both End Holes (Figure 4 in Find the Wall Stud(s) section)**

- Drill 3/16" (5 mm) holes into the studs at the end holes marked in Step 3 of the "Mark Rear Wall."
- Using a keyhole saw, cut out the rectangular wall venting cutout area. Skip this step if for recirculation venting or roof venting installation.



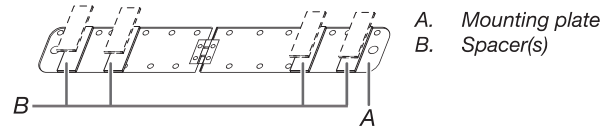
A. Wall Venting Cutout Area

## Attach Mounting Plate to Wall

- Position mounting plate on the wall.

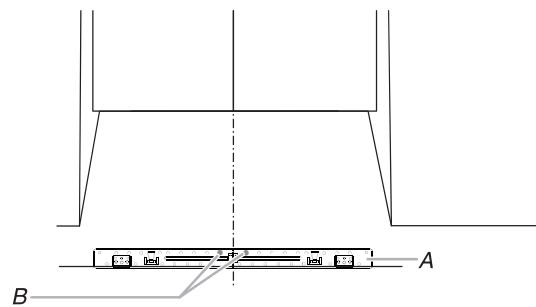
**NOTE:** It may be necessary to use a number of the spacers, between the mounting plate and the wall, to achieve a more 'Flush' appearance. Stick spacers before position mounting plate on the wall.

Measure from the back wall to where the front bottom surface of the microwave oven needs to be to determine the number of spacers needed.



| Depth of cabinet | Mounting plate                   |
|------------------|----------------------------------|
| 12" to 13"       | Mounting plate                   |
| 13 1/16"         | Mounting plate + 4 piece spacer  |
| 13 1/8"          | Mounting plate + 8 pieces spacer |

- Secure the mounting plate to the wall at both end holes drilled into the wall studs and/or drywall using either 3/16-24 x 3" round-head bolts and toggle nuts or 1/4 x 2" lag screws. Refer to illustrations in "Possible Wall Stud Configurations" in the "Locate Wall Stud(s)" section, and the following sections "No Wall Studs at End Holes (Figures 1 and 2 in Find the Wall Stud(s) section)" or "Wall Stud at One End Hole (Figure 3 in Find the wall Stud(s) section)".
- Insert lag screws into both end holes.
- Check alignment of mounting plate, making sure it is level.
- Secure the two end hole screws.
- Secure the mounting plate to the wall at both H & J holes using two 1/4 x 2" lag screws.

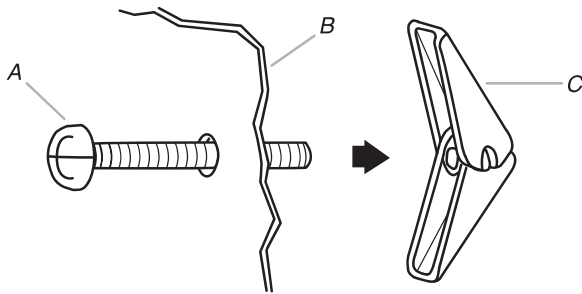


A. Mounting Plate  
B. H & J holes

## No Wall Studs at End Holes (Figures 1 and 2 in Find the Wall Stud(s) section)

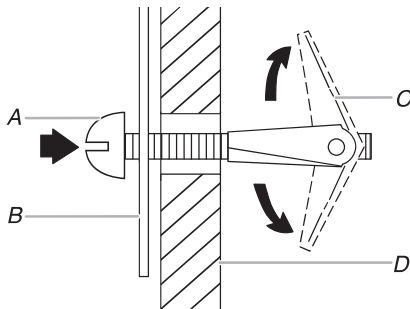
**NOTE:** The mounting plate must be secured to the wall on at least 1 wall stud as well as at both ends.

1. With the support tabs of the mounting plate facing forward, insert 3/16-24 x 3" round-head bolts through both end holes of mounting plate.
2. Start toggle nuts on bolts from the back of the mounting plate. Leave enough space for the toggle nuts to go through the wall and to open.



A. 3/16-24 x 3" round-head bolt  
 B. Mounting plate  
 C. Spring toggle nut

3. Position mounting plate on the wall.
4. Push the 2 bolts with toggle nuts through the drywall, and finger tighten the bolts to make sure toggle nuts have opened against drywall.



A. 3/16-24 x 3" round-head bolt  
 B. Mounting plate  
 C. Spring toggle nut  
 D. Drywall

5. Insert lag screw(s) into the hole(s) drilled into wall stud(s) in Step 2 of "Installation for No Wall Studs at End Holes" in the "Drill Holes in Rear Wall" section.
6. Check alignment of mounting plate, making sure it is level.
7. Securely tighten all lag screws and bolts.

## Wall Stud at One End Hole (Figure 3 in Find the Wall Stud(s) section)

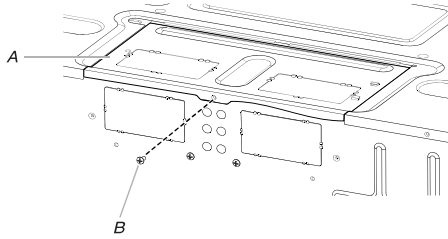
1. With the support tabs of the mounting plate facing forward, insert a 3/16-24 x 3" round-head bolt through the end hole that fits over the 5/8" (16 mm) hole drilled in step 3 of "Installation for Wall Stud at One End Hole" in the "Drill Holes in Rear Wall" section.
2. Start a toggle nut on the bolt from the back of the mounting plate. Leave enough space for the toggle nut to go through the wall and to open.
3. Position mounting plate on the wall.
4. Push the bolt with toggle nut through the drywall, and finger tighten the bolt to make sure toggle nut has opened against drywall.
5. Insert a lag screw into the remaining end hole.
6. If installing on a second wall stud, insert a lag screw into the other hole drilled in Step 2 of "Installation for Wall Stud at One End Hole" in the "Drill Holes in Rear Wall" section.
7. Check alignment of mounting plate, making sure it is level.
8. Securely tighten the lag screw(s) and bolt.

## Rotate Blower Motor

This section include wall and roof venting installation, both venting installation need rotate blower motor, select one ventilation type before install the microwave oven. And follow the propriated instruction to rotate the blower motor. If for recirculation installation, no need to rotate the blower motor, this section can be skip.

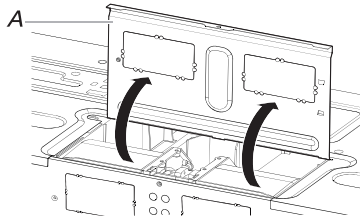
### Rotate Blower Motor for Wall Venting Installation

1. Remove screw attaching damper plate to back of microwave oven, set the screws aside.



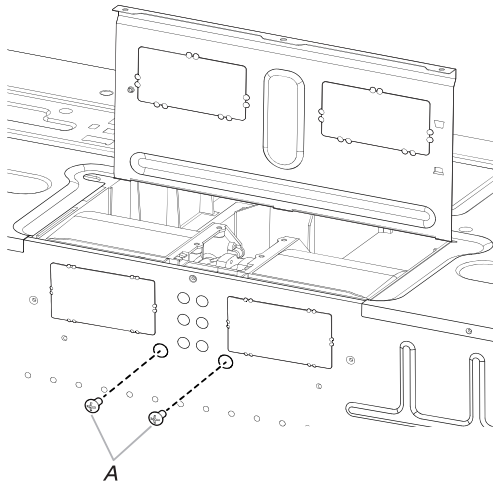
A. Damper plate  
B. Screw

2. Turn and hold the damper plate vertically as shown.



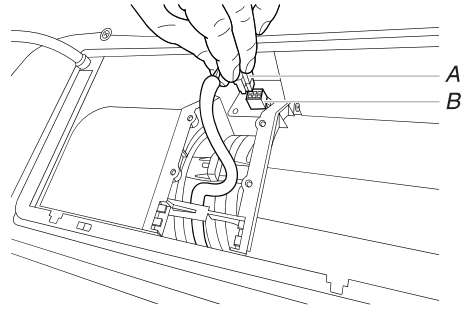
A. Damper plate

3. Remove 2 blower screws attaching blower motor to the microwave oven, and set aside.



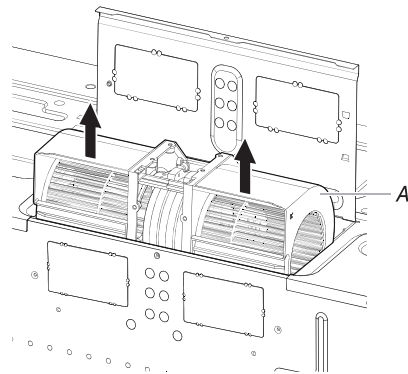
A. Blower screws

4. Disconnect the blower motor wire from the connector.



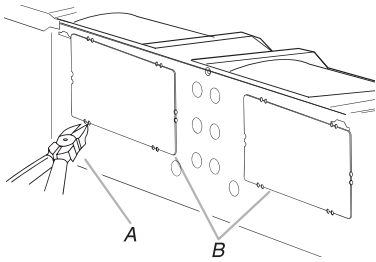
A. Blower motor wire  
B. Connector

5. Lift blower motor out of microwave oven, and set aside.



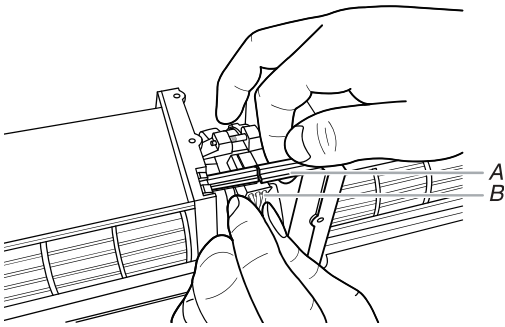
A. Blower motor

6. Using diagonal wire cutting pliers, gently snip out the rectangular damper vent covers at the perforations.



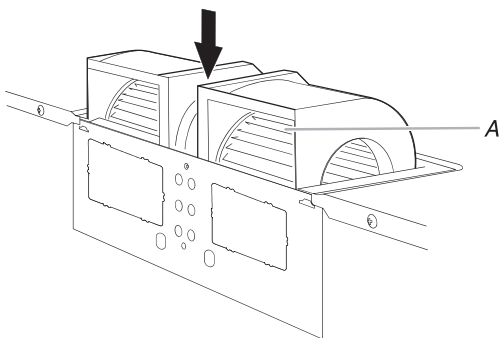
A. Diagonal wire cutting pliers  
B. Rectangular damper vent cover

7. Hold the blower motor wire, put the wire through the blower motor bridge.



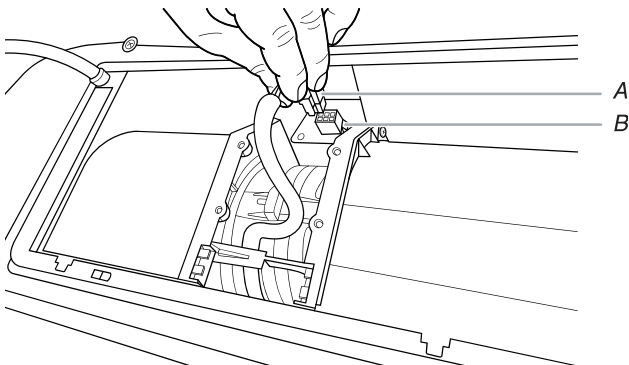
A. Blower motor bridge  
B. Blower motor wire

8. Lower blower motor back into the microwave oven. Exhaust ports face the back of the microwave oven.



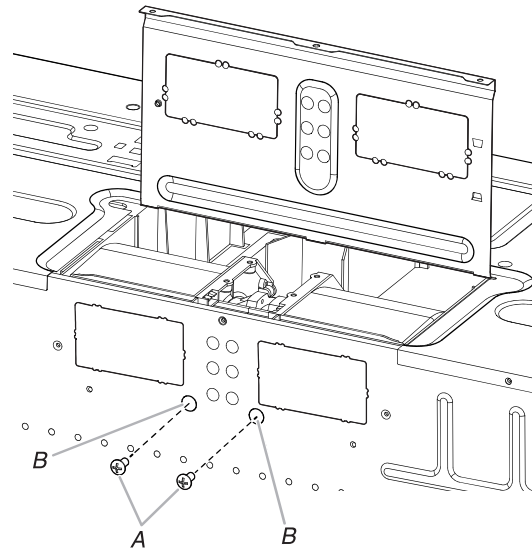
A. Exhaust Port

9. Reconnect the blower motor wire into the connector.



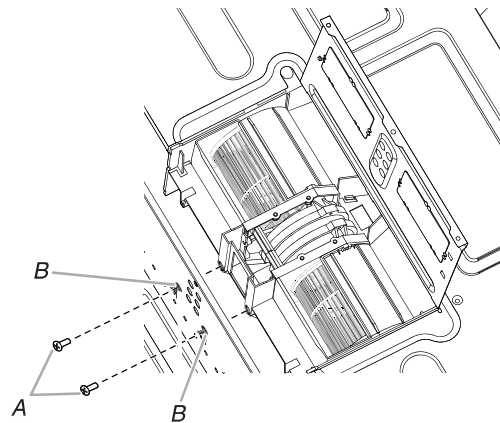
A. Blower motor wire  
B. Connector

10. Reattach the 2 blower screws into the recessed holes in the back of the microwave.



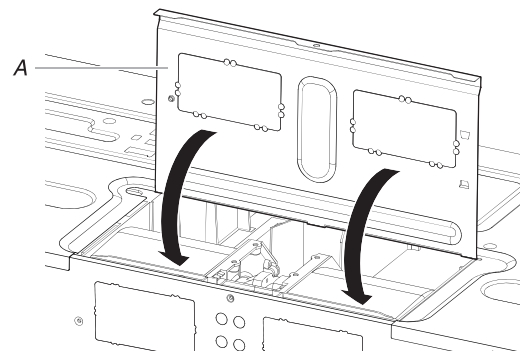
A. Screws  
B. Holes

11. Check to make sure the 2 screws are secured properly in the blower motor screw holes, so that the motor cannot move.



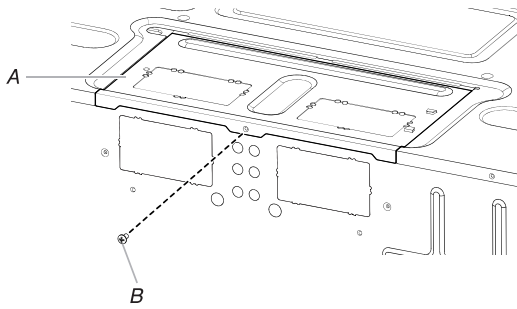
A. Screws  
B. Blower motor screw holes

12. Return the damper plate to its original horizontal position.



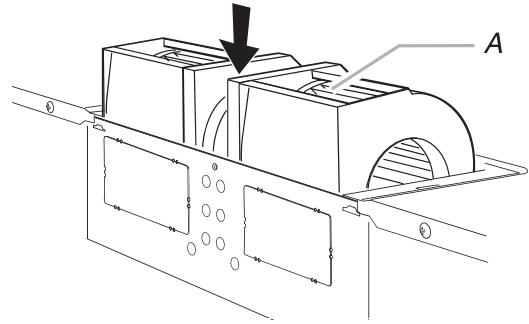
A. Damper plate

13. Secure damper plate with screw removed in Step 1.



A. Damper plate  
B. Screw

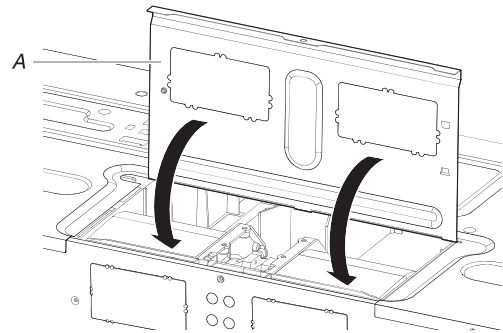
3. Lower blower motor back into microwave oven. Exhaust ports face the top of microwave oven.



A. Exhaust port

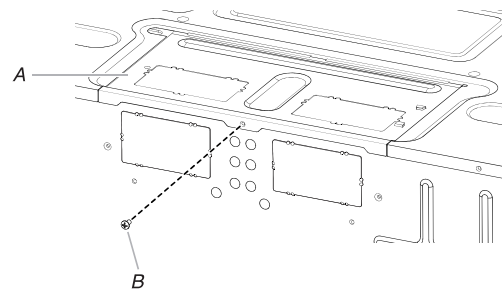
**IMPORTANT:** If blower motor is not positioned with flat side facing the back of the microwave oven (as shown), performance will be poor.

4. Reconnect the blower motor wire into the connector.
5. Reattach the 2 blower screws into the recessed holes in the back of the microwave.
6. Check to make sure the 2 screws are secured properly in the blower motor screw holes, so that the motor cannot move.
7. Return the damper plate to its original horizontal position.



A. Damper plate

8. Secure damper plate with screw removed in Step 1.



A. Damper plate  
B. Screw

9. Repeat Step 14 from "Wall Venting Installation Only."

## ⚠ WARNING



### Electrical Shock Hazard

Plug into a grounded 3 prong outlet.

Do not remove ground prong.

Do not use an adapter.

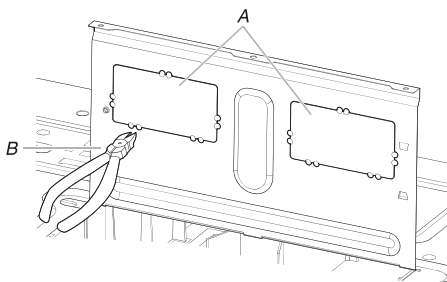
Do not use an extension cord.

Failure to follow these instructions can result in death, fire, or electrical shock.

14. Plug in the microwave oven. Check if the vent fan runs with abnormal sounds, go back through the steps to see which step was skipped.

### Rotate Blower Motor for Roof Venting Installation

1. Repeat Steps 1 to 5 from "Wall Venting Installation Only."
2. Using diagonal wire cutting pliers, gently snip out the rectangular vent covers on the damper plate at the perforations.



A. Rectangular vent covers  
B. Diagonal wire cutting pliers

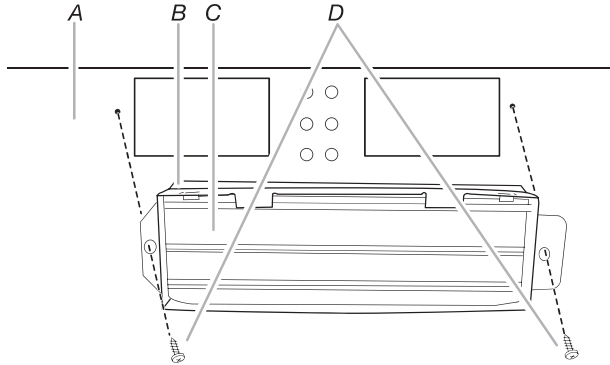


## Install Damper Assembly

If for recirculation installation, no need to install the damper assembly, this section can be skip. And save it for future use.

### Install Damper Assembly for Wall Venting Installation

1. Check that damper blade moves freely and opens fully.
2. Position the damper assembly on the back of the microwave oven so that the damper blade hinge is at the top, and the damper blade opens away from the microwave oven.



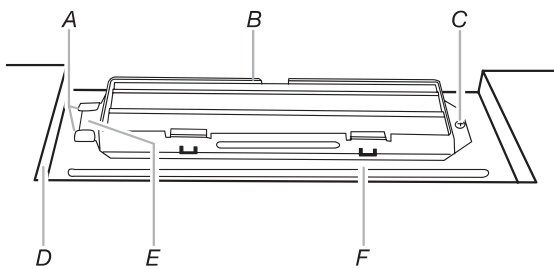
- A. Back of microwave oven
- B. Damper assembly
- C. Damper blade
- D. #6 x 3/8" Sheet metal screws

3. Secure damper assembly with two #6 x 3/8" sheet metal

### Install Damper Assembly for Roof Venting Installation

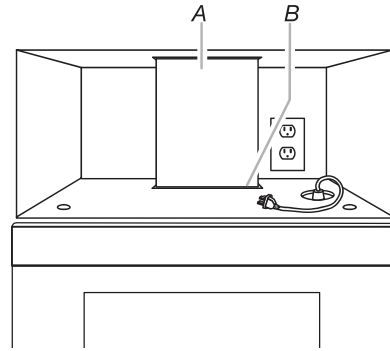
1. Check that damper blade moves freely and opens fully.
2. Insert damper assembly through the cabinet cutout so that the long tab of the damper assembly slides under the raised tabs of the damper plate. Then secure with #6 x 3/8" sheet metal screw.

**NOTE:** The screw cannot be installed if the damper assembly is not positioned as shown



- A. Raised tabs
- B. Damper assembly
- C. #6 x 3/8" Sheet metal screws
- D. Upper cabinet cutout
- E. Long tab
- F. Damper plate

3. Connect vent to damper assembly.



- A. Vent
- B. Damper assembly (under vent)

## Install the Microwave Oven

### ⚠ WARNING

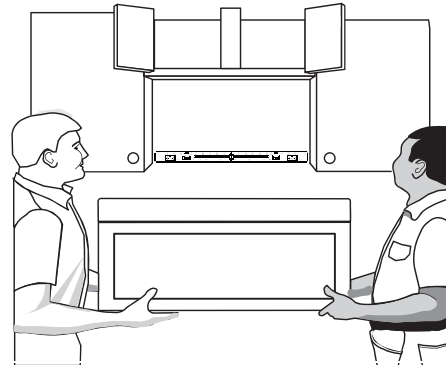
#### Excessive Weight Hazard

Use two or more people to move and install or uninstall appliance.

Failure to do so can result in back or other injury.

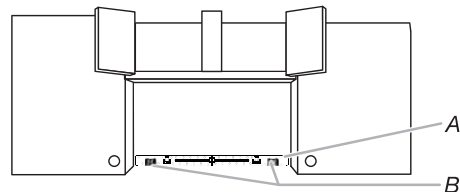
**IMPORTANT:** The control side of the microwave oven is the heavy side. Handle the microwave oven gently.

1. Place a washer on each 1/4–20 x 3" flat-head bolt and place inside upper cabinet near the 3/8" (10 mm) holes.
2. Make sure the microwave oven door is closed and taped shut.



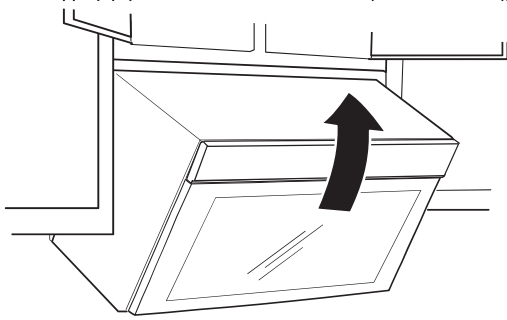
3. Using 2 or more people, lift microwave oven and hang it on support tabs at the bottom of mounting plate.

**NOTE:** To avoid damage to the microwave oven, do not grip or use the door or while the microwave oven is being handled.



- A. Mounting plate
- B. Support tabs

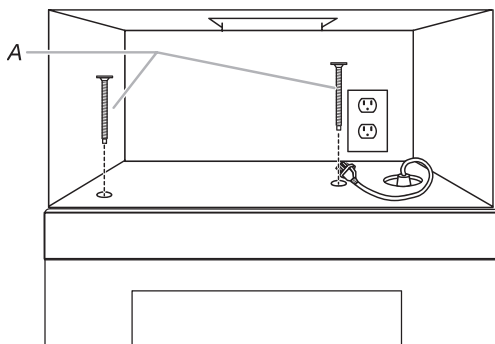
- With front of microwave oven still tilted, thread power supply cord through the power supply cord hole in the bottom of the upper cabinet.



- Rotate microwave oven up toward upper cabinet.  
**NOTE:** If venting through the wall, make sure the damper assembly fits easily into the vent in the wall cutout.
- Push microwave oven against mounting plate and hold in.  
**NOTE:** If microwave oven does not need to be adjusted, skip steps 6 through 8.
- If adjustment is required, rotate microwave oven downward. Using 2 or more people, lift microwave oven off of mounting plate, and set aside on a covered surface.
- Loosen mounting plate screws. Adjust mounting plate and retighten screws.
- Repeat steps 3 through 6.
- With the microwave oven centered, and with at least one person holding it in place, insert bolts through upper cabinet into microwave oven. Tighten bolts until there is no gap between upper cabinet and microwave oven.

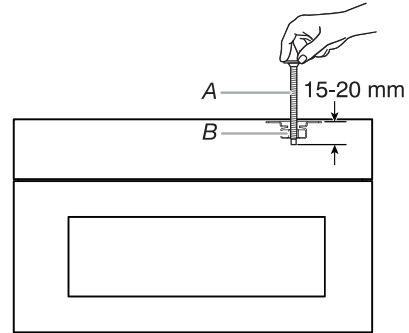
**NOTES:**

- Some upper cabinets may require bolts longer or shorter than 3" (7.6 cm). Longer or shorter bolts are available at most hardware stores.
- Overtightening bolts may warp the top of the microwave oven. To avoid warping, wood filter blocks (installer to provide) may be added. The blocks must be the same thickness as the space between the upper cabinet bottom and the microwave oven.



A. Bolts

- Avoid damage to the mounting nut, screw the bolts into the mounting nut holes around 15–20 mm by hand first, make sure the bolts thread in properly. Then tighten with tools.



A. Bolt  
B. Mounting Nut

## Complete Installation

- Check that all parts are now installed. If there is an extra part, go back through the steps to see which step was skipped.
- Dispose of/recycle all packaging materials.

⚠ WARNING

Electrical Shock Hazard

Plug into a grounded 3 prong outlet.

Do not remove ground prong.

Do not use an adapter.

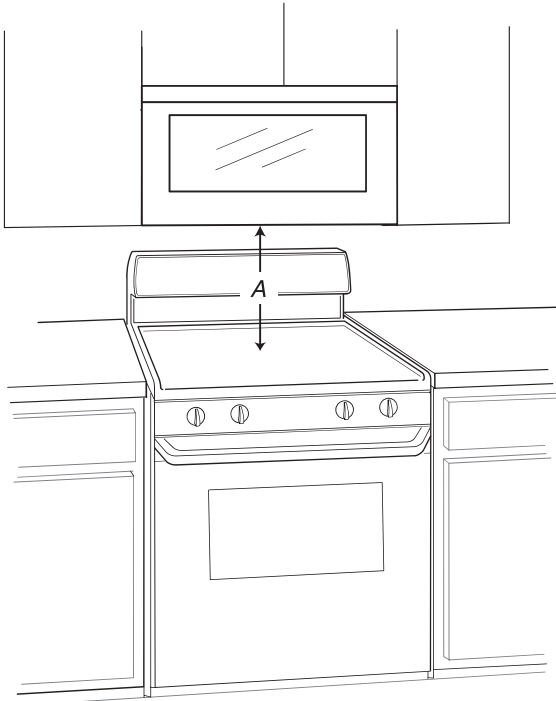
Do not use an extension cord.

Failure to follow these instructions can result in death, fire, or electrical shock.

- Plug microwave oven into grounded 3 prong outlet.
- Reconnect power.
- Check the operation of microwave oven by placing 1 cup (250 mL) of water on the cavity and programming a cook time of 1 minute at 100% power. Test vent fan and exhaust by operating the vent fan.
- Check the vent door if auto open.
- If the microwave oven does not operate:
  - Check that a household fuse has not blown, or that a circuit breaker has not tripped. Replace the fuse or reset the circuit breaker. If the problem continues, call an electrician.
  - Check that the power supply cord is plugged into a grounded 3 prong outlet.
  - See the User Instructions for troubleshooting information.

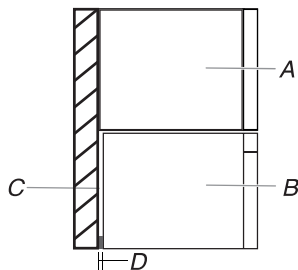
The installation is now complete.

Save Installation Instructions for future use.



A. The height from the highest point of the stove to the bottom of the microwave oven.

| Minimum |      | Recommendation |    |
|---------|------|----------------|----|
| inches  | cm   | inches         | cm |
| 12 1/8  | 30.8 | 18 1/8         | 46 |



- A. Cabinet
- B. Microwave oven
- C. Wall or back of the cabinet
- D. 1/2" - 3/4" (1.3-1.9 cm)

## VENTING DESIGN SPECIFICATIONS

### Venting Design Specifications

This section is intended for architectural designer and builder/contractor reference only.

**NOTES:**

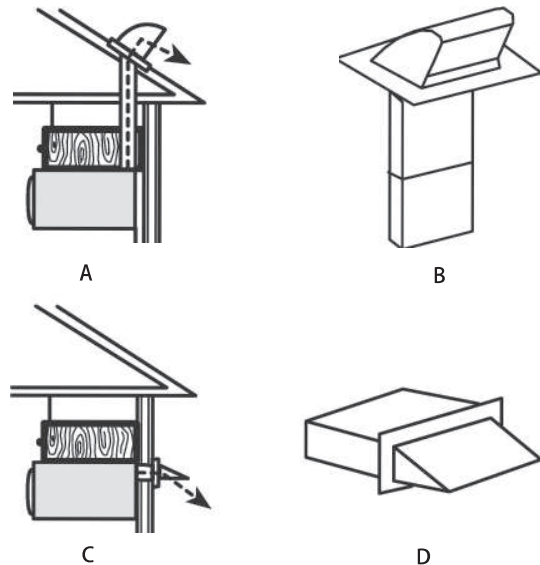
- Vent materials needed for installation are not provided with microwave hood combination.
- We do not recommend using a flexible metal vent.
- To avoid possible product damage, be sure to vent air outside, unless using recirculation installation. Do not vent exhaust air into concealed spaces, such as spaces within walls or ceilings, attics, crawl spaces or garages.

**For optimal venting installation, we recommend:**

- Using roof or wall caps that have backdraft dampers.
- Using a rigid metal vent.
- Using the most direct route by minimizing the length of the vent and number of elbows to provide efficient performance.
- Using uniformly sized vents.
- Using duct tape to seal all joints in the vent system.
- Using caulking compound to seal exterior wall or roof opening around cap.
- Not installing 2 elbows together, for optimal hood performance.

If venting through the wall, be sure that there is proper clearance within the wall for the damper to open fully.

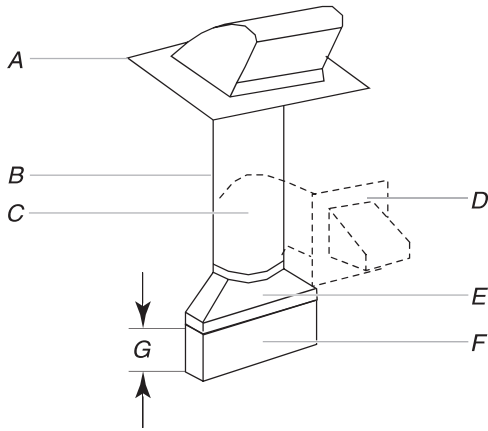
If venting through the roof, and rectangular-to-round transition is used, be sure there are at least 3" (76 mm) of clearance between the top of the microwave oven and the transition piece. See "Rectangular-to-Round Transition" illustration.



- A. Roof venting
- B. Roof cap
- C. Wall venting
- D. Wall cap

### Rectangular-to-Round Transition

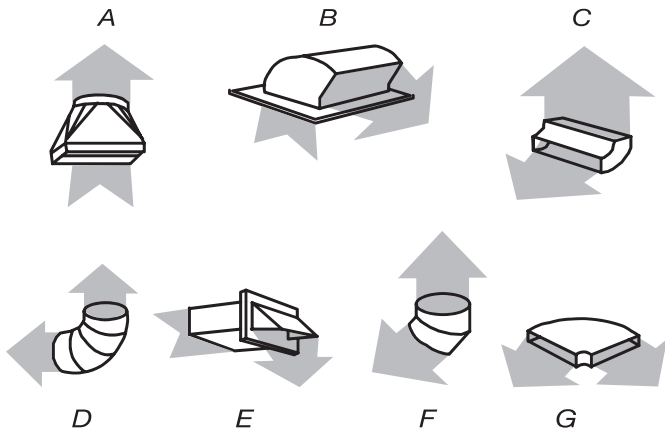
**NOTE:** The minimum 3" (76 mm) clearance must exist between the top of the microwave oven and the rectangular-to-round transition piece so that the damper can open freely and fully.



- A. Roof cap
- B. 6" (152 mm) minimum diameter round vent
- C. Elbow (for wall venting only)
- D. Wall cap
- E. 3 1/4" x 10" to 6" (83 x 254 mm to 152 mm) rectangular-to-round transition piece
- F. Vent extension piece, at least 3" (76 mm) high
- G. 3" (7.6 cm)

### Recommended Standard Fittings

The following length equivalents are for use when figuring vent length. See the examples in "Recommended Vent Length."



- A. Rectangular-to-round transition piece: 3 1/4" x 10" to 6" = 5 ft (83 x 254 mm to 152 mm = 1.5 m)
- B. Roof cap: 3 1/4" x 10" = 24 ft (83 x 254 mm = 7.3 m)
- C. 90° elbow: 3 1/4" x 10" = 25 ft (83 x 254 mm = 7.6 m)
- D. 90° elbow: 6" = 10 ft (152 mm = 3 m)
- E. Wall cap: 3 1/4" x 10" = 40 ft (83 x 254 mm = 12.2 m)
- F. 45° elbow: 6" = 5 ft (152 mm = 1.5 m)
- G. 90° flat elbow: 3 1/4" x 10" = 10 ft (83 x 254 mm = 3 m)

### Recommended Vent Length

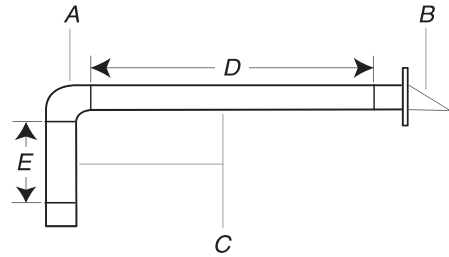
A 3 1/4" x 10" (83 x 254 mm) rectangular or 6" (152 mm) round vent should be used.

The total length of the vent system including straight vent, elbow(s), transitions and wall or roof caps must not exceed the equivalent of 140 ft (42.7 m) for either type of vent. See the "Recommended Standard Fittings" section for equivalent lengths.

For best performance, use no more than three 90° elbows.

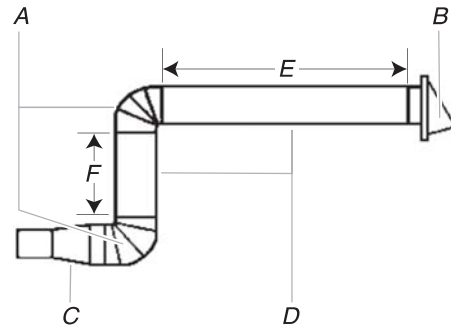
To calculate the length of the system you need, add the equivalent lengths of each vent piece used in the system. See the following examples:

**3 1/4" x 10" (83 x 254 mm) vent system = 73 ft (22.2 m) total**



- A. One 3 1/4" x 10" (83 x 254 mm) 90° elbow = 25 ft (7.6 m)
- B. 1 wall cap = 40 ft (12.2 m)
- C. 2 ft (0.6 m) + 6 ft (1.8 m) straight = 8 ft (2.4 m)
- D. 6 ft (1.8 m)
- E. 2 ft (0.6 m)

**6" (152 mm) vent system = 73 ft (22.2 m) total**



- A. Two 90° elbows = 20 ft (6.1 m)
- B. 1 wall cap = 40 ft (12.2 m)
- C. 1 rectangular-to-round transition piece = 5 ft (1.5 m)
- D. 2 ft (0.6 m) + 6 ft (1.8 m) straight = 8 ft (2.4 m)
- E. 6 ft (1.8 m)
- F. 2 ft (0.6 m)

If the existing vent is round, a rectangular to round transition piece must be used. In addition, a rectangular 3" (7.6 cm) extension vent between the damper assembly and rectangular to round transition piece must be installed to keep the damper from sticking.