

INSTALLATION REQUIREMENTS

Tools and Parts

Tools Needed:

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

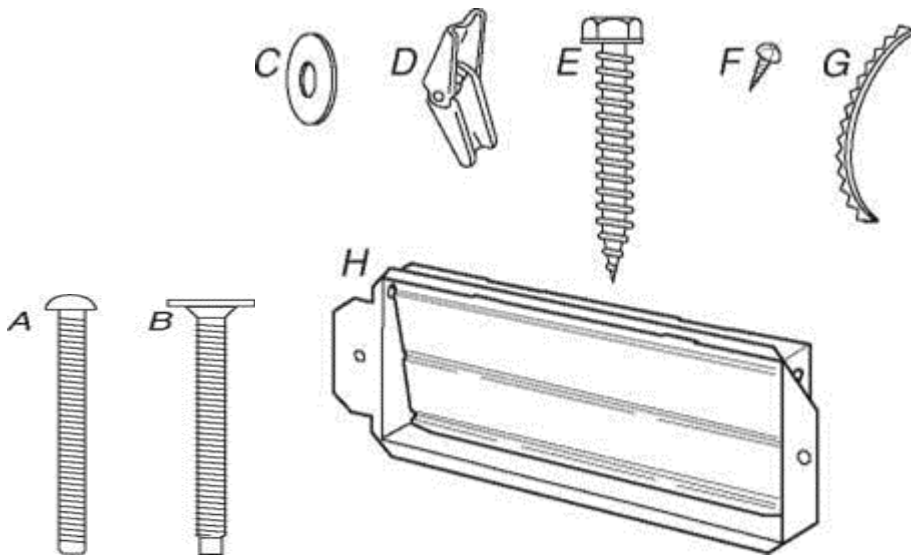
- Measuring tape
- Pencil
- Masking tape or thumbtacks
- Scissors
- No. 2 Phillips screwdriver
- No. 3 Phillips screwdriver for 1/4-20 x 3" bolts
- Drill
- 3/16" (5 mm), 3/8" (10 mm), 5/8" (16 mm) drill bits
- 3/4" (19 mm) hole saw
- Diagonal wire cutting pliers
- Stud finder
- 7/16" socket wrench (or box wrench) for 1/4" x 2" lag screws
- 1 1/2" (3.8 cm) diam. hole drill bit for wood or metal cabinet
- Keyhole saw
- Caulking gun and weatherproof caulking compound
- Duct tape

Parts Supplied:

For information on reordering, see "Replacement Parts" section.

NOTE: The hardware items listed here are for wood studs.

For other types of wall structures, be sure to use appropriate fasteners.



A. 3/16-24 x 3" round-head bolts

B. 1/4-20 x 3" flat-head bolts (2)

C. Washers (2)

D. 3/16" toggle nuts (2)

E. 1/4" x2" lag screws (2)

F. Sheet metal screws (2)

G. Power supply cord bushing (1)

H. Damper assembly (for wall or roof venting)

(2) **Not Shown:**

Upper cabinet template Mounting plate (attached to back of microwave oven) Wall template Aluminum grease filters Charcoal filters (Depending on model, charcoal filters may not be included.

See User Instructions.)

NOTE: Depending on model, aluminum grease filter and charcoal filter may be combined.

Materials needed:

- Standard fittings for wall or roof venting.

See "Venting Design Specifications" section.

Location Requirements

Check the opening where the microwave oven will be installed.

The location must provide:

- Minimum installation dimensions. See "Installation Dimensions" illustration.



- Minimum one 2" x 4" (50.8 x 101.6 mm) wood wall stud and minimum 3/8" (10 mm) thickness drywall or plaster/lath within cabinet opening.
- Support for weight of 150 lbs (68 kg), which includes microwave oven and items placed inside the microwave oven and upper cabinet.
- Grounded electrical outlet inside upper cabinet.

See "Electrical Requirements" section.

NOTES:

- If installing the microwave oven near a left sidewall, make sure there is at least 6" (15.2 cm) of clearance between the wall and the microwave oven, so that the door can open fully.
- Some cabinet and building materials are not designed to withstand the heat produced by the microwave oven for cooking. Check with your builder or cabinet supplier to make sure that the materials used will not discolor, delaminate or sustain other damages.

Special Requirements

For Wall Venting Installation Only:

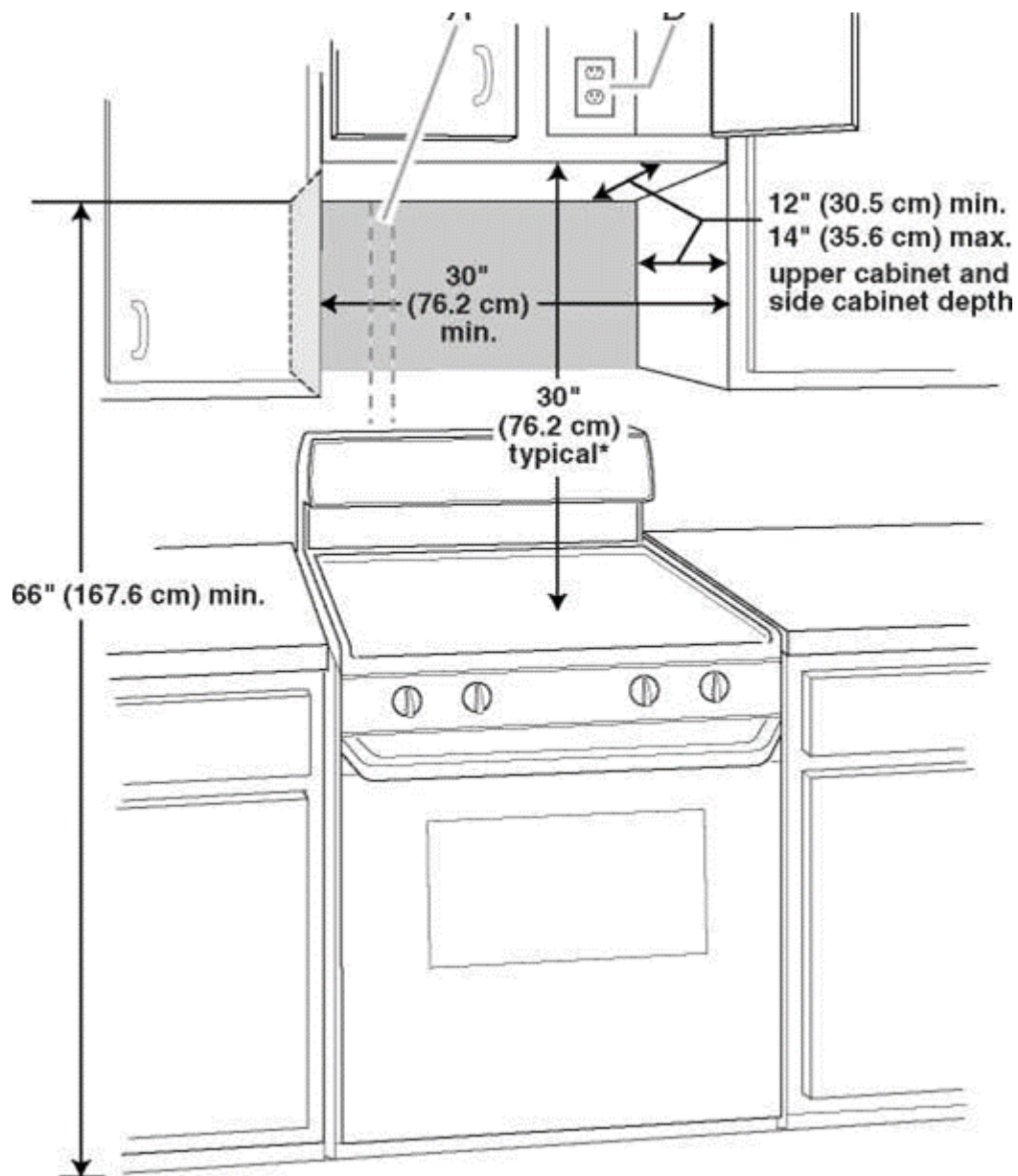
- Cutout must be free of any obstructions so that the vent fits properly, and the damper blade opens freely and fully.

For Roof Venting Installation Only:

- If you are using a rectangular to round transition piece, the 3" (7.6 cm) clearance needs to exist above the microwave oven so that the damper blade can open freely and fully. See "Rectangular to Round Transition" illustration in "Venting Design Specifications" section.

Installation Dimensions:

NOTE: The grounded 3 prong outlet must be inside the upper cabinet. See "Electrical Requirements" section.



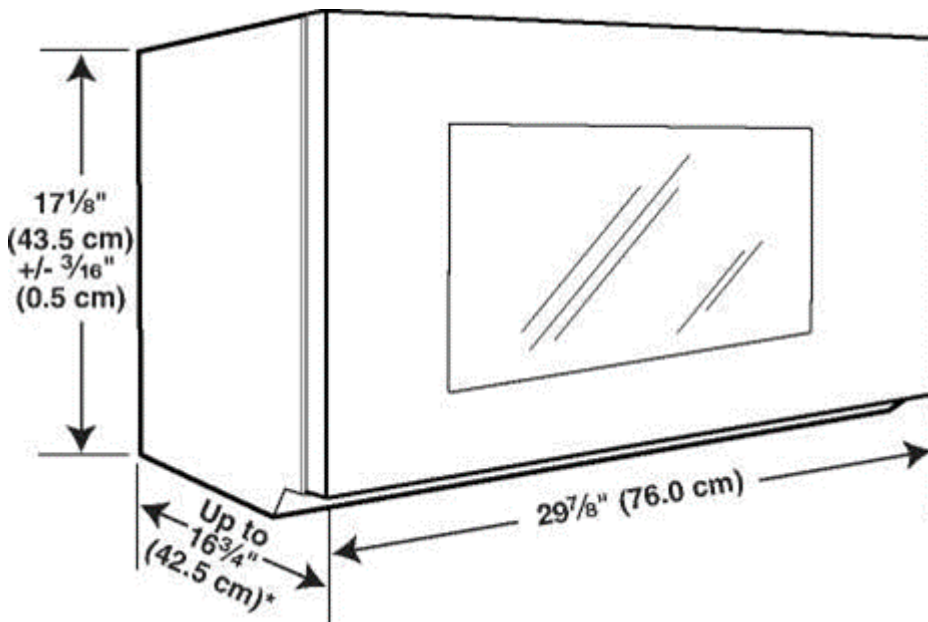
A. 2" x 4" wall stud

B. Grounded 3 prong outlet

*30" (76.2 cm) is typical for 66" (167.6 cm) installation height. Exact dimensions may vary depending on type of range/cooktop below.



Product Dimensions



*Overall depth of product will vary slightly depending on door design.

Electrical Requirements

Observe all governing codes and ordinances.

Required:

- A 120 volt, 60 Hz, AC only, 15- or 20-amp electrical supply with a fuse or circuit breaker.

Recommended:

- A time-delay fuse or time-delay circuit breaker.
- A separate circuit serving only this microwave oven.

GROUNDING INSTRUCTIONS

- For all cord connected appliances:

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

INSTALLATION INSTRUCTIONS

Remove Mounting Plate

Depending on your model, the mounting plate may be in the foam packaging, or it may be attached to the back of the microwave oven.

NOTE: To avoid possible damage to the work surface, cover the work surface.

1. Remove any remaining contents from the microwave oven cavity.
2. If the mounting plate is attached to the back of the microwave oven, remove it and set it aside.
3. Tape the microwave oven door closed so that door does not swing open while the microwave oven is being handled.

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

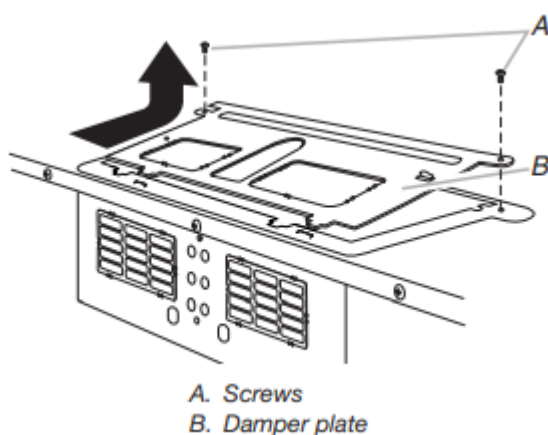
Rotate Blower Motor

The microwave oven is set for recirculation installation. For wall or roof venting, changes must be made to the venting system.

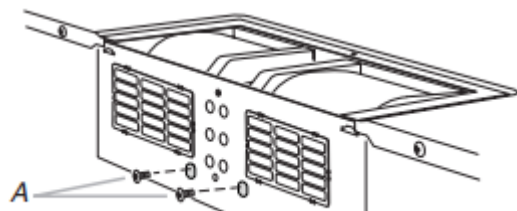
NOTE: Skip this section if you are using recirculation installation. Keep the damper assembly in case the venting method is changed or the microwave oven is reinstalled in another location where wall or roof venting may be used.

Wall Venting Installation Only

1. Remove screws attaching damper plate to top of microwave oven exterior. Slide damper plate toward the front of the microwave oven and lift up.

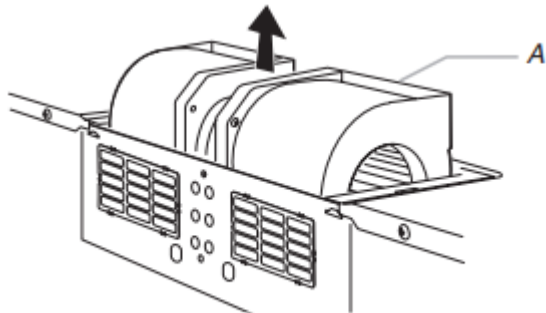


2. Keep damper plate and screws together and set aside.
3. Remove 2 screws attaching blower motor to back of microwave oven.



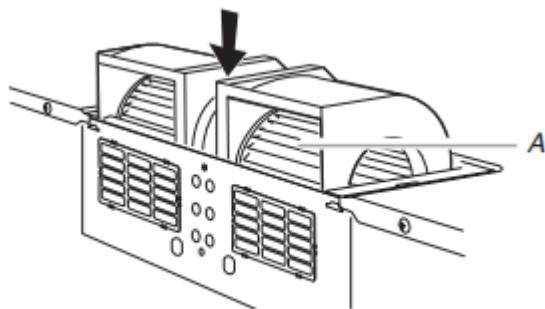
A. Screws (in recessed holes)

4. Lift blower motor out of microwave oven



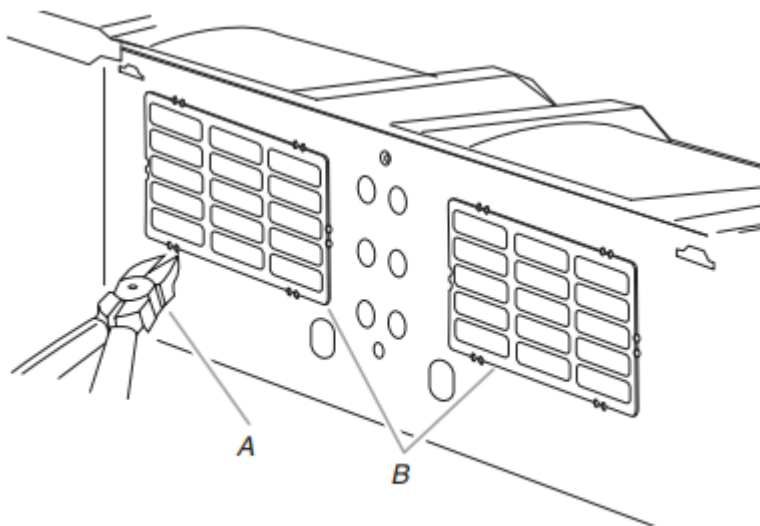
A. Blower motor

5. Rotate blower motor 180° so that exhaust ports face the back of microwave oven, and lower blower motor back into the microwave oven.



A. Exhaust port

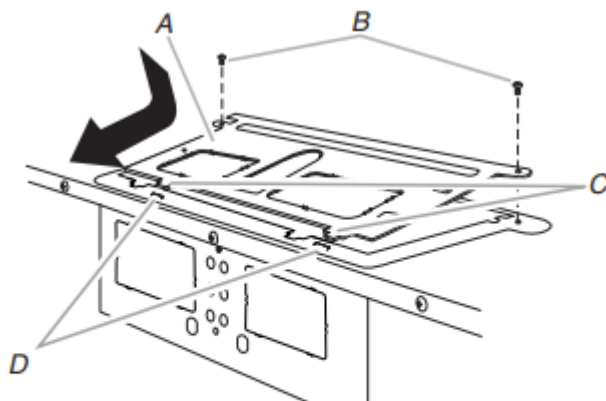
6. Using diagonal wire cutting pliers, gently snip out the rectangular damper vent covers at the perforations.



A. Diagonal wire cutting pliers
 B. Damper vent covers

7. Reattach blower motor to back of microwave oven with 2 screws removed in Step 3.

8. Reattach damper plate. Make sure damper plate tabs are inserted into the slots in the top of the microwave oven.



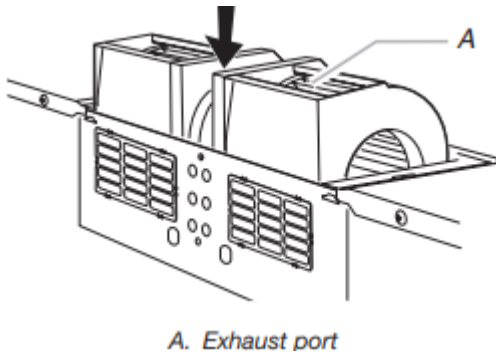
A. Damper plate
 B. Screws
 C. Damper plate tabs
 D. Slots

9. Secure damper plate with 2 screws removed in Step 1.

Roof Venting Installation Only

1. Repeat steps 1 to 4 from “Wall Venting Installation Only.”

2. Rotate blower motor so that exhaust ports face the top of microwave oven and flat sides of blower motor face back of microwave oven. Lower blower motor back into microwave oven.

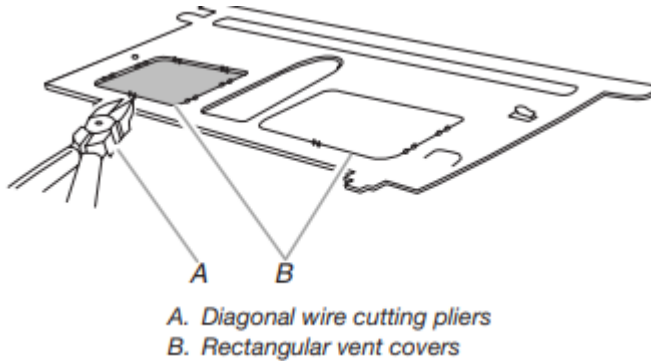


IMPORTANT: If blower motor is not positioned with flat sides facing the back of the microwave oven (as shown), performance will be poor.

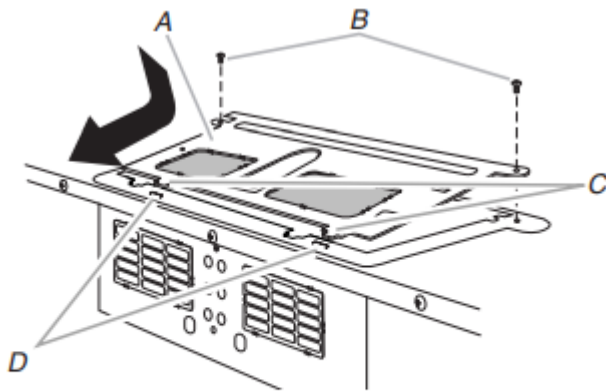
3. Reattach blower motor to back of microwave oven with 2 screws removed in Step 3 of “Wall Venting Installation Only.” Securely tighten screws.

NOTE: If blower motor is not correctly oriented, the 2 screws removed in Step 3 cannot be reattached to the microwave oven.

4. Using diagonal wire cutting pliers, gently snip out the rectangular vent covers on the damper plate removed in Step 1 at the perforations.



5. Reattach damper plate. Make sure damper plate tabs are inserted into the slots in the top of the microwave oven.



- A. Damper plate
- B. Screws
- C. Damper plate tabs
- D. Slots

6. Secure damper plate with 2 screws removed in Step 1 of “Wall Venting Installation Only.”

Locate Wall Stud(s)

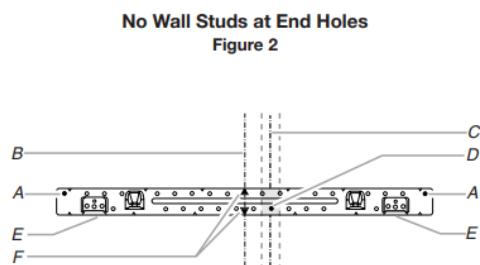
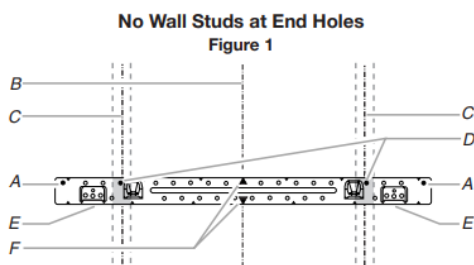
NOTE: If no wall studs exist within the cabinet opening, do not install the microwave oven.

See illustrations in “Possible Wall Stud Configurations.”

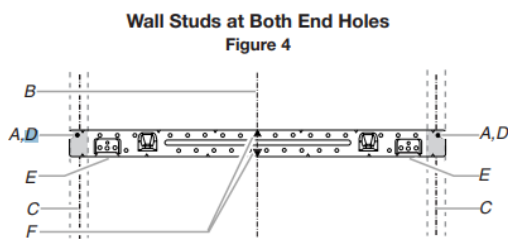
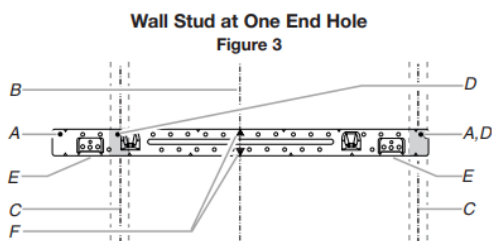
1. Using a stud finder, locate the edges of the wall stud(s) within the opening.
2. Mark the center of each stud, and draw a plumb line down each stud center. See illustrations in “Possible Wall Stud Configurations.”

Possible Wall Stud Configurations

These depictions show examples of preferred installation configurations with the mounting plate.



NOTE: If wall stud is within 6" (15.2 cm) of the vertical centerline (see “Mark Rear Wall” section), only recirculation or roof venting installation can be done.

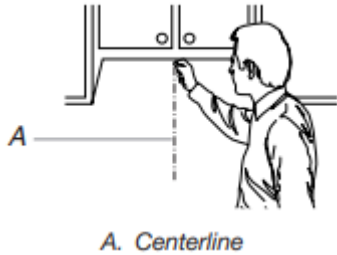


- A. End holes (on mounting plate)
- B. Cabinet opening vertical centerline
- C. Wall stud centerlines
- D. Holes for lag screws
- E. Support tabs
- F. Mounting plate center markers

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.

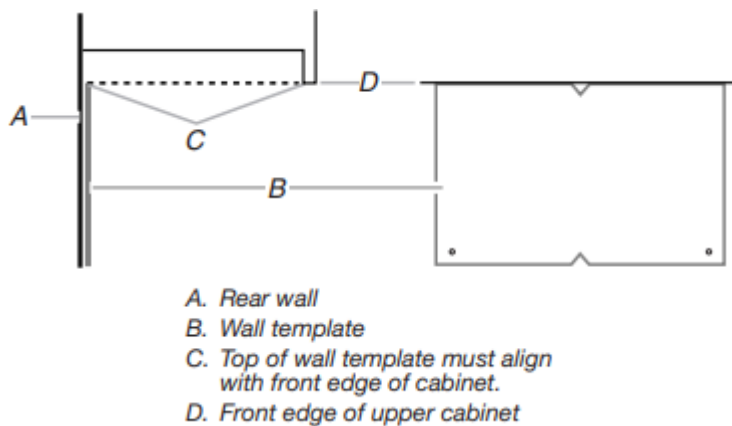
1. Using measuring tape, find and clearly mark the vertical centerline of the opening.



2. Align the center markers on the wall template to the centerline on the wall, making sure it is level and that the top of the wall template is butted up against the bottom edge of the upper cabinet.

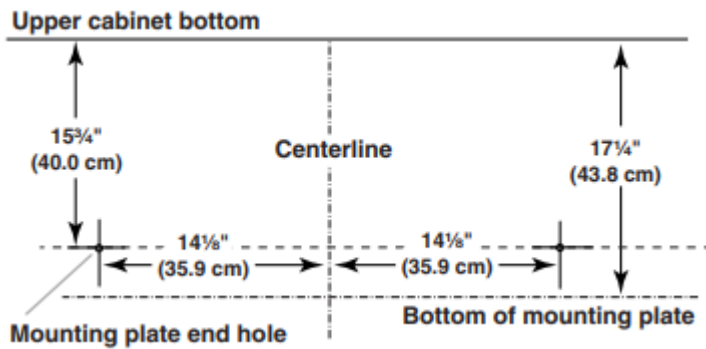
NOTES:

- If the front edge of the upper cabinet is lower than the back edge, lower the wall template so that its top is level with the front edge of the cabinet.
- If the wall template is damaged or unusable, measure and mark the wall with the dimensions described in Step 4.



3. Tape the wall template in place. Mark both holes in the lower corners, and draw a horizontal line across the bottom edge of the wall template. These represent the mounting plate's end holes and bottom edge.

4. Remove the wall template and check the markings:



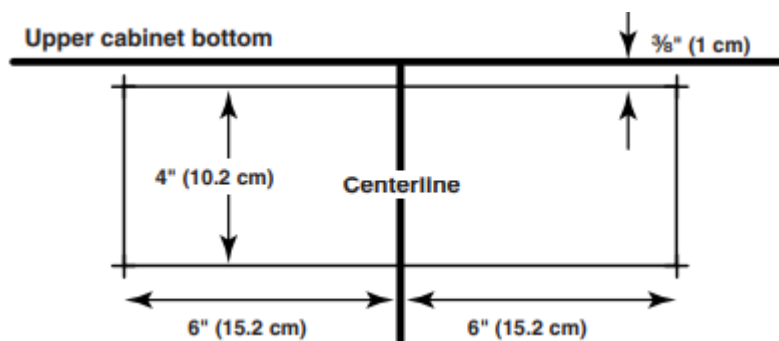
- The bottom edge line must be 17 1/4" (43.8 cm) from the bottom of the upper cabinet and must be level.
- The end holes must be 15 3/4" (40 cm) from the bottom edge of the upper cabinet and must be on a level line with each other. They must each be 14 1/8" (35.9 cm) from the centerline.

5. With the support tabs facing forward (see illustrations in "Locate Wall Stud(s)" section), align the mounting plate center markers to the centerline on the wall, making sure its bottom edge is aligned to the horizontal line drawn in Step 3, and that the end holes are properly marked. Make sure the mounting plate is level.

6. Holding the mounting plate in place, find the wall stud centerline(s) drawn in Step 2 of "Locate Wall Stud(s)," and mark at least 1, preferably 2, hole(s) through the mounting plate closest to the wall stud centerline(s). See figures 1, 2 and/or 3 in "Possible Wall Stud Configurations" in "Locate Wall Stud(s)" section. The blackened holes in the shaded areas are ideal hole locations.

7. Set the mounting plate aside.

Wall Venting Installation Only



8. Mark the centerline 3/8" (1 cm) down from the bottom edge of the upper cabinet.

9. Using measuring tape, measure out 6" (15.2 cm) on both sides of the centerline, and mark.

10. Measure down 4" (10.2 cm) from the mark made in Step 8, and mark.

11. Using a straightedge, draw the 2 horizontal, level lines through the marks made in steps 8 and 10.

12. Draw the 2 vertical, plumb lines down from the marks made in Step 9 to complete the 12" x 4" (30.5 x 10.2 cm) rectangle. This is the venting cutout area.

13. Cut a 3/4" (19 mm) hole in one corner of the cutout area.

14. Using a keyhole saw, cut out the venting cutout area.

Drill Holes in Rear Wall

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)

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

Installation for Wall Stud at One End Hole (Figure 3)

1. Drill a 3/16" (5 mm) hole into the wall stud at the end hole marked in Step 3 of "Mark Rear Wall."
2. 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 "Mark Rear Wall." Refer to Figure 3 in "Possible Wall Stud Configurations" in "Locate Wall Stud(s)" section.
3. Drill a 5/8" (16 mm) hole through the wall at the other end hole.

Installation for Wall Studs at Both End Holes (Figure 4)

1. Drill 3/16" (5 mm) holes into the studs at the end holes marked in Step 3 of "Mark Rear Wall."

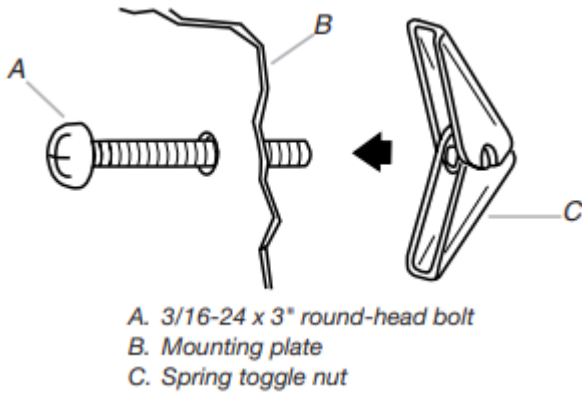
Attach Mounting Plate to Wall

NOTE: 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 "Locate Wall Stud(s)" section.

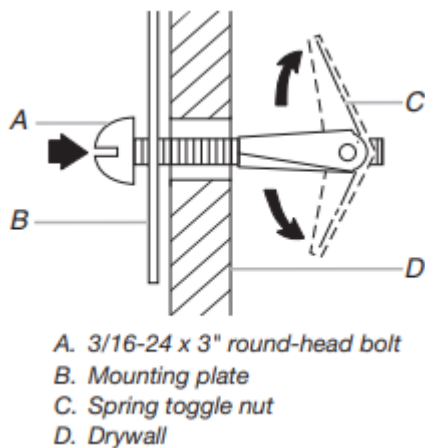
No Wall Studs at End Holes (Figures 1 and 2)

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.



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.



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)

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.

Wall Studs at Both End Holes (Figure 4)

1. Position mounting plate on the wall.
2. Insert lag screws into both end holes.
3. Check alignment of mounting plate, making sure it is level.
4. Securely tighten the lag screws.

Prepare Upper Cabinet

1. Disconnect power to outlet.
2. Remove all contents from upper cabinet.
3. Place Upper Cabinet Template against the bottom of the upper cabinet, and attach with tape or thumbtacks.

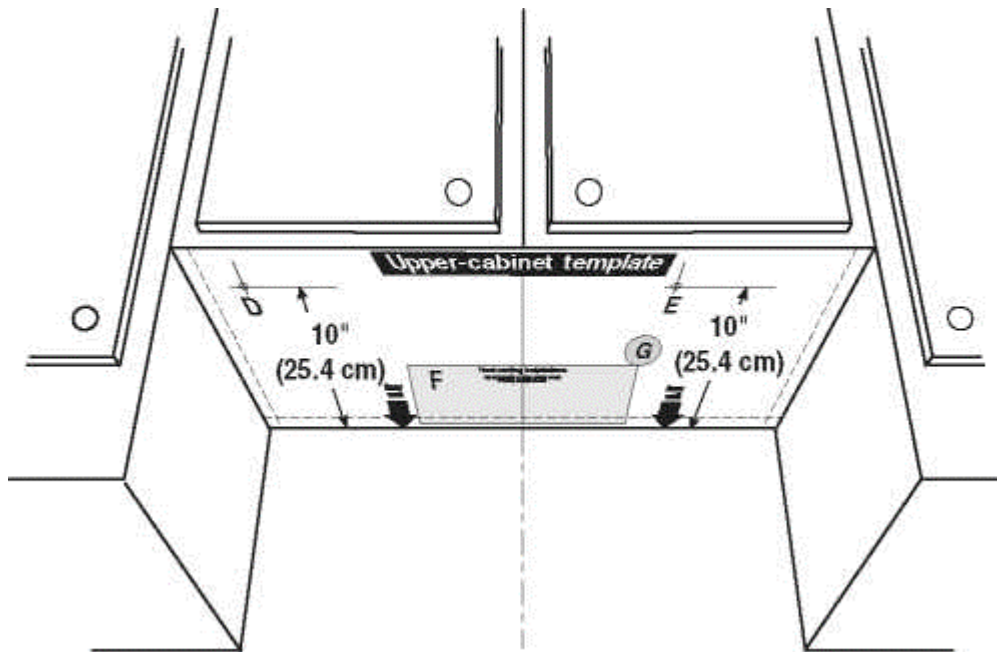
Make sure the template centerline aligns with the vertical centerline on the rear wall.

The "rear wall" arrows must be against the rear wall so that the holes cut into the upper cabinet align with the holes in the top of the microwave oven

NOTES:

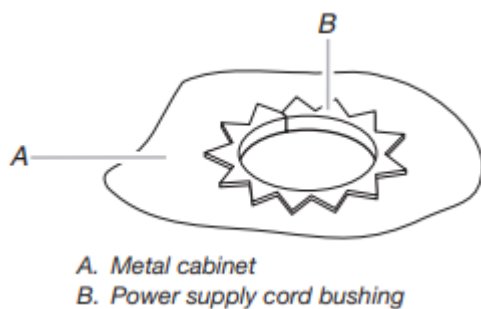
- If the upper cabinet has a frame around it, trim the template edges so that it fits inside the frame, against the upper cabinet bottom. The template has trim lines to use as guides.
- If the wall behind the microwave oven (as installed) has a partial wall covering (for example, tile backsplash), be sure the "Rear Wall" arrows align to the thickest part of the rear wall (for example, the thickness of the tiles rather than the drywall).

4. Make sure the 10" (25.4 cm) dimension from the rear wall to points "D" and "E" on the template is maintained.



5. Cut the 1 1/2" (3.8 cm) diameter hole at the circular shaded area "G" on the template. This hole is for the power supply cord.

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



6. Drill 3/8" (10 mm) holes at points "D" and "E" on the template. These are for two 1/4-20 x 3" bolts and washers used to secure the microwave oven to the upper cabinet.

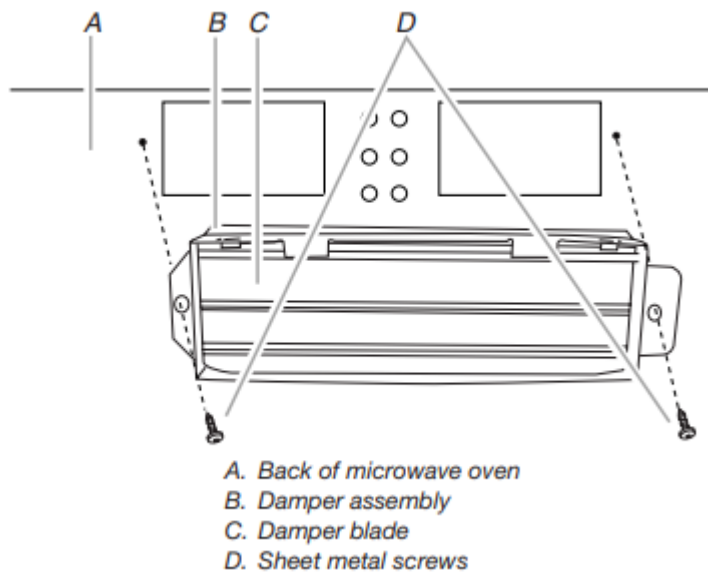
For Roof Venting Installation Only

7. Cut 3/4" (19 mm) hole at one corner of the shaded rectangular area "F" on Upper Cabinet Template.

8. Using a keyhole saw, cut out the rectangular area.

Install Damper Assembly (for wall venting only)

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.



3. Secure damper assembly with 2 sheet metal screws.

Install the Microwave Oven

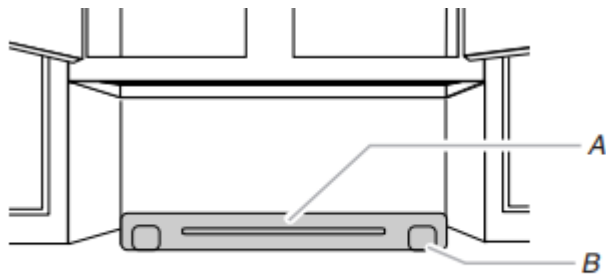
IMPORTANT: The control side of the microwave oven is the heavy side. Handle the microwave oven gently.

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.



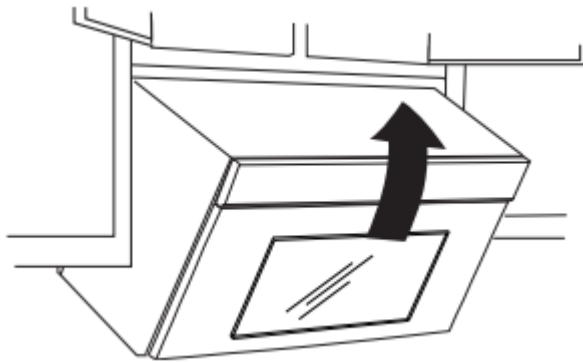
3. Using 2 or more people, lift microwave oven and hang it on support tabs at the bottom of mounting plate.

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



A. Mounting plate
B. Support tabs

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



5. 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.

6. Push microwave oven against mounting plate and hold in place.

NOTE: If microwave oven does not need to be adjusted, skip steps 7-9.

7. 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.

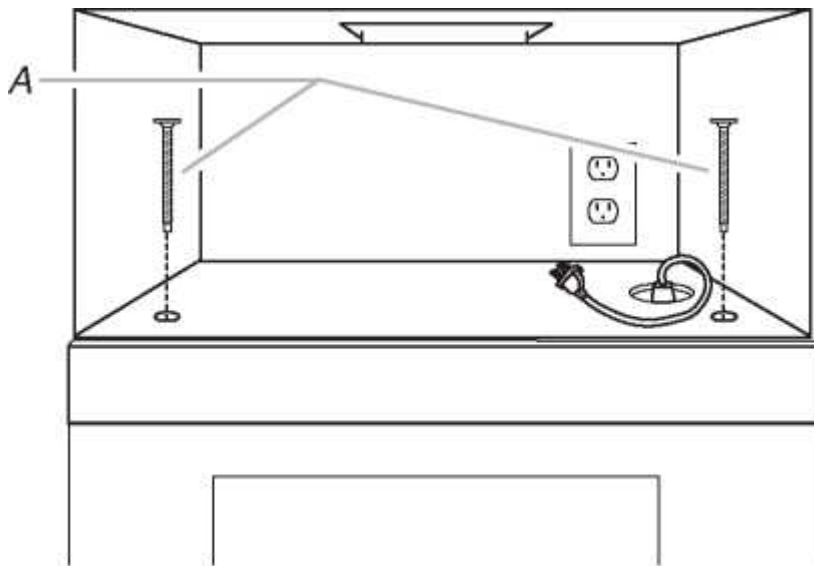
8. Loosen mounting plate screws. Adjust mounting plate and retighten screws.

9. Repeat steps 3-6.

10. 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 filler 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.

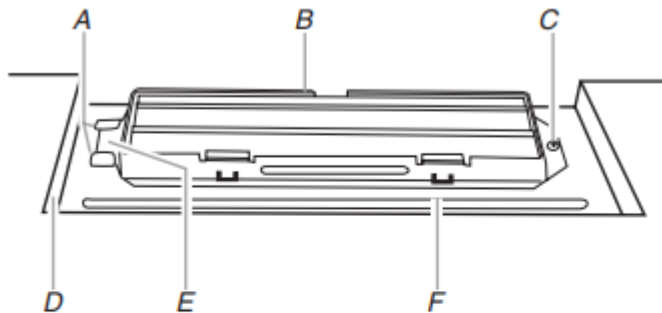


A. Bolts

For Roof Venting Installation Only

1. 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 sheet metal screw.

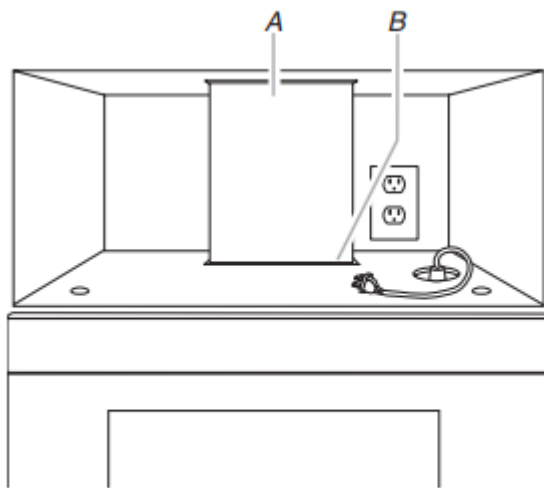
NOTE: The screw cannot be installed if the damper assembly is not positioned as shown.



*A. Raised tabs
 B. Damper assembly
 C. Sheet metal screw
 D. Upper cabinet cutout
 E. Long tab
 F. Damper plate*

2. Connect vent to damper assembly.





A. Vent
B. Damper assembly (under vent)

Complete Installation

1. Install filters. Refer to the User Instructions for filter placement.
2. Plug microwave oven into grounded 3 prong outlet.
3. Reconnect power.
4. Check the operation of microwave oven by placing 1 cup (250 mL) of water on the turntable and programming a cook time of 1 minute at 100% power. Test vent fan and exhaust by operating the vent fan.
5. 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.

Installation is now complete.

Save Installation Instructions for future use.

Warning

This content is compiled from multiple sources and is provided for reference purposes only. It may not be complete or fully applicable to all situations. If you are unable to resolve your issue, please contact the product manufacturer or an authorized service provider for official support.