# MICROWAVE HOOD COMBINATION INSTALLATION INSTRUCTIONS

This product is suitable for use above electric or gas cooking products up to and including 36" (91.4 cm) wide. See "Installation Requirements" section for further notes.

These installation instructions cover different models. The appearance of your particular model may differ slightly from the illustration in these installation instructions.

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## MICROWAVE HOOD COMBINATION 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:

## **ADANGER**

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

## **AWARNING**

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.

## INSTALLATION REQUIREMENTS

The microwave oven is set for recirculation installation. For external (wall or roof) venting, see "Venting Design Specifications" section.

### **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
- T10 TORX®† screwdriver
- No. 3 Phillips screwdriver for 1/4-20 x 3" bolts
- Drill
- 3/16" (5 mm) and 3/8"
   (10 mm) drill bits
- 3/4" (19 mm) hole saw
- Diagonal cutting pliers

### Stud finder

- 7/16" socket wrench (or box wrench) for 1/4" x 2"
   lag screws
- 1½" (3.8 cm) diam. hole drill bit for wood or metal cabinet
- Keyhole saw
- Caulking gun and weatherproof caulking compound
- Duct tape

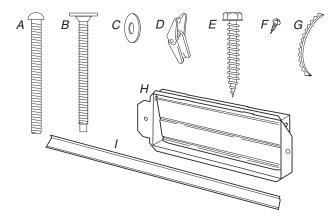
### Materials needed

 Standard fittings for wall or roof venting. See "Venting Design Specifications" section.

### **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. 1/4-20 x 3" round-head bolts (2)
- B. 1/4-20 x 3" flat-head bolts (2)
- C. Washers (2)
- D. Toggle nuts (2)
- E. 1/4" x 2" lag screws (2)
- F. Mounting screws (3)
- G. Power supply cord bushing (1)
- H. Damper assembly (for wall or roof venting)
- I. Vent deflector (for wall or roof venting)

### Not Shown:

Upper cabinet template
Wall template
Mounting plate
Aluminum grease filters
Charcoal filters (Depending
on model, charcoal filters
may not be included. See
Use and Care Guide.)

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

### **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 3" (7.6 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.
- For gas cooktop, we recommend that combined cooking surface rating does not exceed 55,000 BTU/hr.
- The microwave oven is set for recirculation mode. For external (wall or roof) venting, see "Venting Design Specifications" section.

### 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, 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.

### **Dimension Requirements**

For proper ventilation, the vent screen must be free and clear of the surrounding cabinetry. The maximum allowable upper cabinet and side cabinet depth (from rear wall to front of cabinetry) must be no greater than the depth of the microwave oven metal outer wrapper (from back of microwave oven to the vent screen).

**NOTE:** If the upper cabinet is deeper than the maximum allowable depth (see "Installation Dimensions" in this section), then the installer must space the microwave oven forward so that the vent screen is free and clear of any surrounding cabinetry.

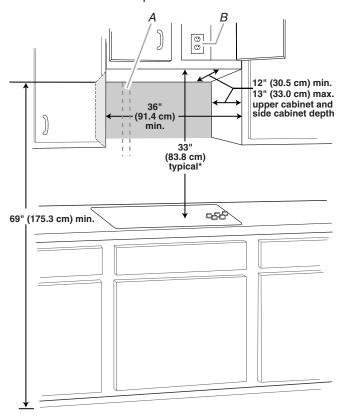


A. Microwave oven metal outer wrapper

B. Vent screen

### **Installation Dimensions**

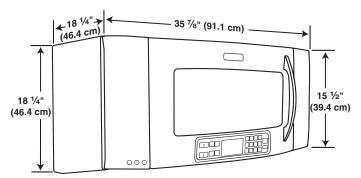
**NOTE:** The grounded 3 prong outlet must be inside the upper cabinet. See "Electrical Requirements" section.



A. 2" x 4" wall stud
B. Grounded 3 prong outlet

\*33" (83.8 cm) is typical for 69" (175.3 cm) installation height. Exact dimension may vary depending on type of range/cooktop below.

### **Product Dimensions**



## **Electrical Requirements**

## AWARNING



### **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.

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.

**WARNING:** Improper use of the grounding plug can result in a risk of electric shock. Consult a qualified electrician or serviceman if the grounding instructions are not completely understood, or if doubt exists as to whether the microwave oven is properly grounded.

Do not use an extension cord. If the power supply cord is too short, have a qualified electrician or serviceman install an outlet near the microwave oven.

## SAVE THESE INSTRUCTIONS

**NOTE:** The power source for this microwave oven is an inverter, and is incompatible with household inverter power supplies.

## 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.

- Remove any remaining contents from the microwave oven cavity.
- 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.

# Convert Microwave Oven to External Venting

(for wall or roof venting only)

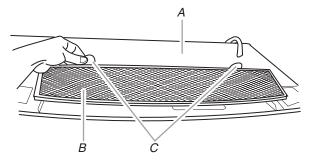
The microwave oven is set for recirculation installation. For wall or roof venting, changes must be made to the venting system. See "Venting Design Specifications" section.

**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.

To prepare the microwave oven for wall or roof venting, the vent deflector (L-shaped metal bar) must be installed, and the appropriate damper vent opening must be uncovered.

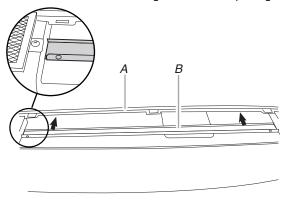
### **To Install Vent Deflector:**

 Gently pull the rings and lift vent screen from the top of the microwave oven.

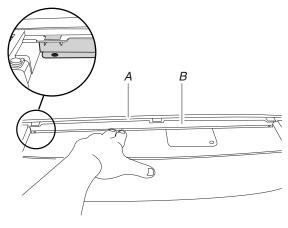


- A. Top of microwave oven
- B. Vent screen
- C. Rings

2. With vent deflector oriented as shown (wide side down), slide it back and under the back edge of the vent opening.

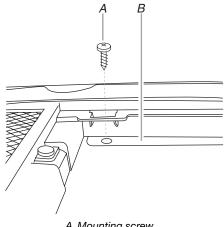


- A. Vent opening
- B. Vent deflector
- 3. When the vent deflector is as far back as it can easily slide, flip it so that the wide side is to the back of the microwave oven, and the narrow side (with holes) is down. The vent deflector holes should align with mounting holes in the vent opening, as shown in inset.



- A. Vent opening
- B. Vent deflector

4. Secure vent deflector with 2 mounting screws (1 on each end).



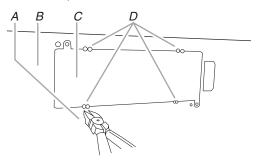
A. Mounting screw B. Vent deflector

5. Replace vent screen.

### **Wall Venting Installation Only**

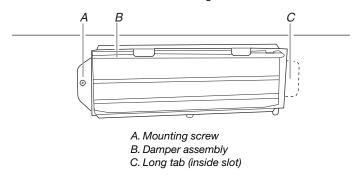
### To Remove Wall Damper Vent Cover:

- Locate the wall damper vent cover on the back of the microwave oven.
- 2. Using diagonal wire cutting pliers, gently snip out the damper vent cover at the perforations.



- A. Diagonal wire cutting pliers
- B. Back of microwave oven
- C. Wall damper vent cover
- D. Perforations
- 3. Save the cover for possible change of venting method in the future.

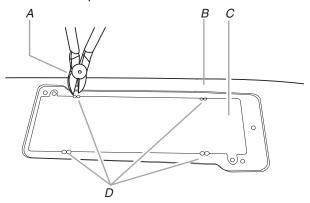
**4.** Position the damper assembly so that the long tab slides into the slot on the right side of the damper vent opening, as shown. Then secure with mounting screw.



### **Roof Venting Installation Only**

### **To Remove Roof Damper Vent Cover:**

- Locate the roof damper vent cover on the top of the microwave oven.
- 2. Using diagonal wire cutting pliers, gently snip out the damper vent cover at the perforations.



- A. Diagonal wire cutting pliers
- B. Top of microwave oven
- C. Roof damper vent cover
- D. Perforations
- Save the cover for possible change of venting method in the future.

NOTE: Do not install damper assembly at this time.

### Locate Wall Stud(s)

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

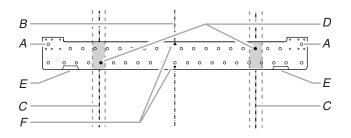
See illustrations in "Possible Wall Stud Configurations."

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

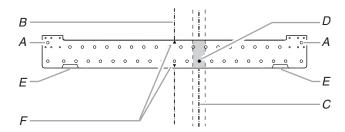
### **Possible Wall Stud Configurations**

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

## No Wall Studs at End Holes Figure 1

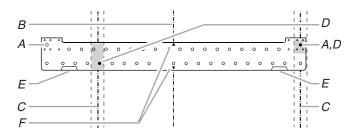


## No Wall Studs at End Holes Figure 2

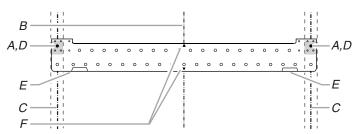


**NOTE:** If wall stud is within 6" (15.2 cm) of the vertical centerline (see "Mark Rear Wall" section), only recirculation or roof venting installation can be done.

## Wall Stud at One End Hole Figure 3



## Wall Studs at Both End Holes Figure 4

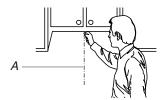


- A. End holes (on mounting plate)
- B. Cabinet opening vertical centerline
- C. Wall stud centerlines
- D. Holes for lag screws
- E. Support tabs
- F. Mounting plate center markers

### 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.

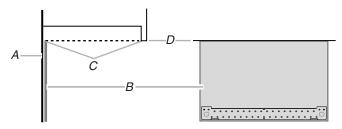


A. Centerline

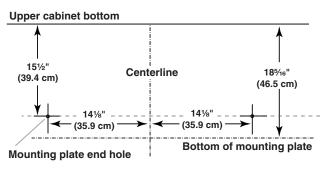
 Align the centerline of the wall template with the centerline on the wall, making sure it is level, and that the top of the wall template abuts the bottom edge of the upper cabinet. Tape the wall template into place.

#### 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.



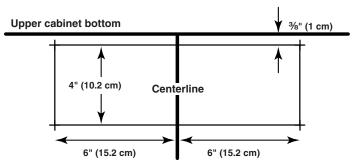
- A. Rear wall
- B. Wall template
- C. Top of wall template must align with front edge of cabinet.
- D. Front edge of upper cabinet
- Mark both end holes of the mounting plate through the wall template.
- 4. Remove the wall template and check the markings:



- The bottom edge line must be 185/16" (46.5 cm) from the bottom of the upper cabinet, and must be level.
- The end holes must be 15½" (39.4 cm) from the bottom edge of the upper cabinet, and must be on a level line with each other. They must each be 14½" (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.
- Using measuring tape, measure out 6" (15.2 cm) on both sides of the centerline, and mark.
- 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  $1/4-20 \times 3$ " round-head bolts with toggle nuts; if 1 end hole is over a wall stud, use 1 lag screw and one  $1/4-20 \times 3$ " 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)

- Drill 3/4" (19 mm) holes through the wall at both end holes marked in Step 3 of "Mark Rear Wall."
- 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)

- Drill a 3/16" (5 mm) hole into the wall stud at the end hole marked in Step 3 of "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 "Mark Rear Wall." Refer to Figure 3 in "Possible Wall Stud Configurations" in "Locate Wall Stud(s)" section.
- 3. Drill a 3/4" (19 mm) hole through the wall at the other end hole.

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

 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**

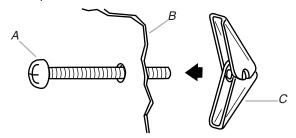
**NOTE:** Secure the mounting plate to the wall at both end holes drilled into the wall studs and/or drywall using either  $1/4-20 \times 3$ " round-head bolts and toggle nuts or  $1/4 \times 2$ " lag screws.

Refer to illustrations in "Possible Wall Stud Configurations" in "Locate Wall Stud(s)" section.

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

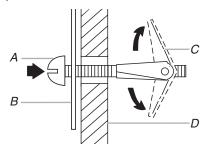
**NOTE:** The mounting plate must be secured to the wall on at least 1 wall stud as well as at both ends.

- With the support tabs of the mounting plate facing forward, insert 1/4-20 x 3" round-head bolts through both end holes of mounting plate.
- 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. 1/4-20 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. 1/4-20 x 3" round-head bolt B. Mounting plate

C. Spring toggle nut D. Drywall

- 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)

- With the support tabs of the mounting plate facing forward, insert a 1/4-20 x 3" round-head bolt through the end hole that fits over the 3/4" (19 mm) hole drilled in Step 3 of "Installation for Wall Stud at One End Hole" in the "Drill Holes in Rear Wall" section.
- 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.
- 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.

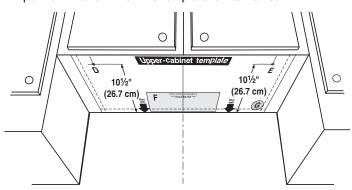
## **Prepare Upper Cabinet**

- 1. Disconnect power to outlet.
- 2. Remove all contents from upper cabinet.
- Place Upper Cabinet Template against the bottom of the upper cabinet, and tape or tack it in place. 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.

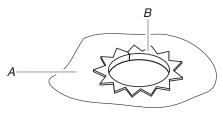
#### **NOTES:**

- 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 10½" (26.7 cm) dimension from the rear wall to points "D" and "E" on the template is maintained.



Cut the 1½" (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.



A. Metal cabinet
B. Power supply cord bushing

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 the Microwave Oven**

### AWARNING

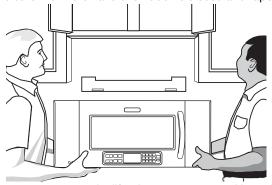
### **Excessive Weight Hazard**

Use two or more people to move and install microwave oven.

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

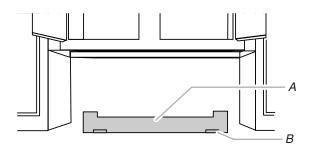
**IMPORTANT:** The right side of the microwave oven is the heavy side. Handle the microwave oven gently.

- 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.



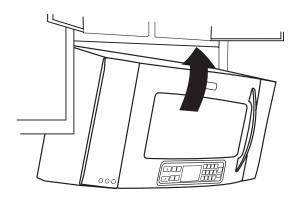
3. Using 2 or more people, lift microwave oven and hang it on support tabs at the bottom of mounting plate.

**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.

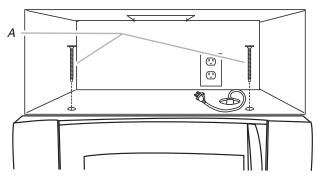
**6.** Push microwave oven against mounting plate and hold in place.

**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 may be added. The blocks must be the same thickness as the space between the upper cabinet bottom and the microwave oven.

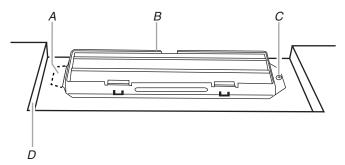


A. 1/4-20 x 3" flat-head bolts

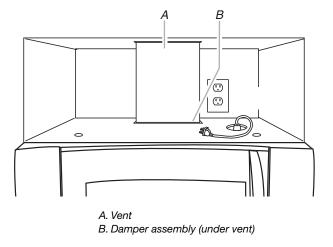
### For Roof Venting Installation Only

 Insert damper assembly through the cabinet cutout so that the long tab of the damper assembly slides into the slot on the left side of the damper vent opening, as shown. Then secure with mounting screw.

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

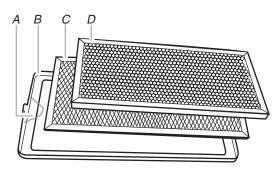


- A. Long tab (inside slot)
- B. Damper assembly
- C. Mounting screw
- D. Upper cabinet cutout
- 2. Connect vent to damper assembly.



### **Install Filters**

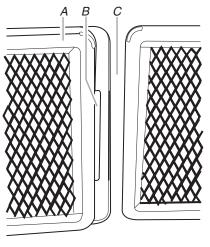
The grease and charcoal filters must be installed in the bottom of the microwave hood combination. See the User Instructions for care and replacement information.



- A. Retaining spring
- B. Filter frame
- C. Grease filter (metal)
- D. Charcoal filter (black)

### To Install Filters:

- Make sure filters are stacked in the filter frame as shown above.
- 2. Install the filters by inserting the wide tab of the filter frame into the inner portion of the filter housing, then swinging the outside of the frame up until it fits into place.



- A. Filter frame
- B. Wide tab
- C. Microwave oven bottom

### **Complete Installation**

## AWARNING



### **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.

- 1. Plug microwave oven into grounded 3 prong outlet.
- 2. Reconnect power.
- 3. 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.
- **4.** 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.

## 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 back draft 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 is at least 3" (7.6 cm) of clearance between the top of the microwave oven and the transition piece. See "Rectangular to Round Transition" illustration.



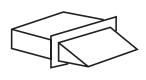




Roof cap



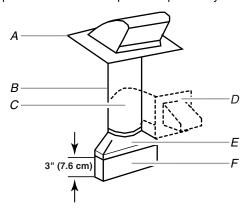




Wall cap

### **Rectangular to Round Transition**

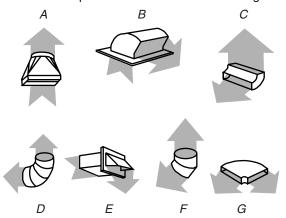
**NOTE:** The minimum 3" (7.6 cm) clearance must exist between the top of the microwave oven and the rectangular to round transition piece so that the damper can open freely and fully.



- A. Roof cap
- B. 6" (15.2 cm) min. diameter round vent
- C. Elbow (for wall venting only)
- D. Wall cap
- E. 3 ¼" x 10" to 6" (8.3 x 25.4 cm to 15.2 cm) rectangular to round transition piece
- F. Vent extension piece, at least 3" (7.6 cm) high

### **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:  $3 \frac{1}{4}$ " x 10" to 6" = 5 ft (8.3 x 25.4 cm to 15.2 cm = 1.5 m)
- B. Roof cap:  $3\frac{1}{4}$ " x 10" = 24 ft (8.3 x 25.4 cm = 7.3 m)
- C.  $90^{\circ}$  elbow:  $3\frac{1}{4}$ " x 10" = 25 ft (8.3 x 25.4 cm = 7.6 m)
- D.  $90^{\circ}$  elbow: 6'' = 10 ft (15.2 cm = 3 m)
- E. Wall cap: 3 1/4" x 10" = 40 ft (8.3 x 25.4 cm = 12.2 m)
- F.  $45^{\circ}$  elbow: 6'' = 5 ft (15.2 cm = 1.5 m)
- G. 90° flat elbow:  $3\frac{1}{4}$ " x 10" = 10 ft (8.3 x 25.4 cm = 3 m)

### **Recommended Vent Length**

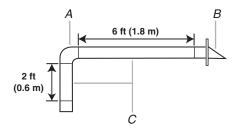
A 31/4" x 10" (8.3 x 25.4 cm) rectangular or 6" (15.2 cm) round vent should be used.

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 "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:

### 31/4" x 10" (8.3 x 25.4 cm) vent system = 73 ft (22.2 m) total

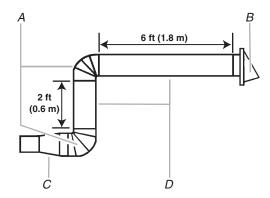


A. One  $3\frac{1}{4}$ " x 10" (8.3 x 25.4 cm) 90° elbow = 25 ft (7.6 m)

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)

### 6" (15.2 cm) vent system = 73 ft (22.2 m) total



A. Two  $90^{\circ}$  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)

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.

## **ASSISTANCE**

Call your authorized dealer or service center. When you call, you will need the microwave oven model number and serial number. Both numbers can be found on the model and serial number plate, which is located behind the microwave oven door on the front frame of the microwave oven.

If you need additional assistance, call us at our toll free number or visit our website listed in the User Instructions.

### **Replacement Parts**

If any of the installation hardware needs to be replaced, call us at our toll free number listed in the User Instructions.

Following is a list of available replacement parts. You will need your model number located on the front facing of the microwave oven opening, behind the door.

- **Damper Assembly**
- Mounting Plate
- **Upper Cabinet Template**
- Wall Template
- Mounting Screw Kit (includes parts A-G in "Parts Supplied" in the "Tools and Parts" section)
- Vent Deflector