

GoldStar

website: <http://www.lg.ca>

e-mail: <http://www.lgeservice.com/techsup.html>

MICROWAVE OVEN

INSTALLATION INSTRUCTIONS

PLEASE READ AND SAVE
THESE INSTALLATION INSTRUCTIONS.

GMV-1320RW

P/NO. 3828W5U0209
Printed in Korea

YOUR SAFETY FIRST

BEFORE YOU START

- **Proper installation is the installer's responsibility!**

- Read the entire manual before you begin. The Model number label is located on the oven front. See Figure 1. Mounting plate is located on back side of microwave oven. See Figure 2.

BE SURE TO READ THE FOLLOWING SAFETY INSTRUCTIONS:

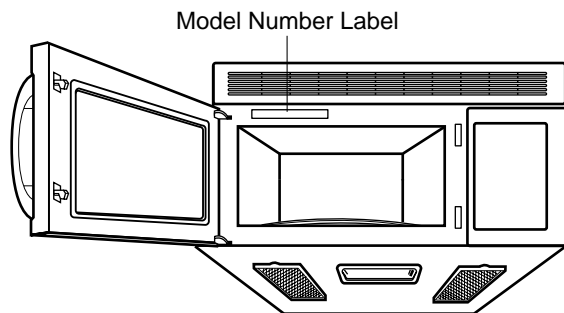


Figure 1

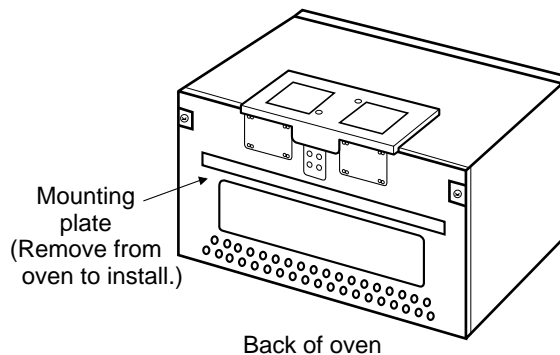


Figure 2



FOR YOUR SAFETY:

- You will need TWO people to install this oven. It is heavy and could cause personal injury if not handled properly. The dimensions of the oven are as follows:

Height : 16 1/8 inches
Width : 22 inches
Depth : 16 5/8 inches
Weight : 48 pounds

- **Avoid Electrical Shock!**

- Before you drill into the wall, note where electrical outlets are and where electrical wires might be behind concealed the wall, **YOU COULD GET AN ELECTRIC SHOCK** if you contact electrical wires with your drill bit.
- Locate and disconnect the power of any electrical circuits that could be affected by installing this oven. **IF YOU DO NOT DISCONNECT THE POWER, YOU COULD GET AN ELECTRIC SHOCK.**

- **ELECTRICAL RATING OF THIS OVEN : 120V AC. 60Hz.**

12.5 Amps / 1350 Watts (Microwave oven + Cooktop Lamp + Ventilation Fan)

- You need a 120V, 60Hz, AC only, 15A or 20A, fused electrical supply (located in the cabinet above the microwave as close as possible to the microwave circuit) serving only the microwave.

YOUR SAFETY FIRST

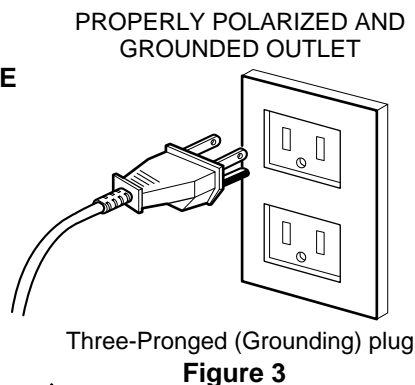
● THIS APPLIANCE MUST BE GROUNDED!

– If there is an electrical short circuit, grounding reduces the risk of electrical shock by providing an escape wire for the electric current. This appliance is equipped with a cord having a grounding wire with a grounding plug.

- Place the plug into a properly installed and grounded outlet. See Figure 3.
- Do not use an extension cord.
- Keep the power cord dry and do not pinch or crush it.

● DO NOT, UNDER ANY CIRCUMSTANCES, REMOVE THE POWER SUPPLY CORD GROUNDING PRONG!

This appliance **MUST** be grounded!



If you use the grounding plug improperly, you risk electric shock!

– Check with a qualified electrician if you are not sure whether the oven is properly grounded or if you do not completely understand the grounding instructions.

DO NOT USE A FUSE IN THE NEUTRAL OR GROUNDING CIRCUIT.



Improper grounding could result in electric shock or other personal injury.

SAVE THESE INSTRUCTIONS FOR THE LOCAL ELECTRICAL INSPECTOR'S USE.

● DO NOT EXPOSE YOURSELF TO EXCESSIVE MICROWAVE ENERGY!

- DO NOT try to operate the microwave oven with the door open.
- DO NOT tamper with or defeat the safety interlocks.
- DO NOT place objects between the microwave oven front face and the door.
- DO NOT allow soil or cleaner residue to build up on the flat surfaces around the microwave oven door.
- DO NOT operate the microwave oven if it is damaged.
- The microwave oven door must close properly to operate safely.
- DO NOT USE THE MICROWAVE OVEN:
 - If the door is bent.
 - If the hinges or latches are broken or loose.
 - If the door seals, sealing surfaces or glass is broken.
- DO NOT ATTEMPT TO ADJUST OR REPAIR THE OVEN YOURSELF!
It should be adjusted and repaired by a qualified technician who can check for microwave leakage after repairing the oven.



If you do not use the microwave oven as instructed, you could be exposed to excessive microwave energy.

YOUR SAFETY FIRST

● MAKE SURE YOU HAVE ENOUGH SPACE AND SUPPORT.

- Mount the oven against a flat, vertical wall, so that it is supported by the wall.
- DO NOT mount the microwave oven to an island or peninsula cabinet.
- BE SURE the upper cabinet and rear wall structures are able to support 150 lbs., plus the weight of any items you place inside the oven or upper cabinet.
- Locate the oven away from strong draft areas, such as windows, doors, and strong heating vents.
- BE SURE you have enough space. See Figure 4 below for minimum vertical and horizontal clearance.

⚠ WARNING ⚠

If you do not mount the oven as instructed, you risk personal injury and/or property damage.

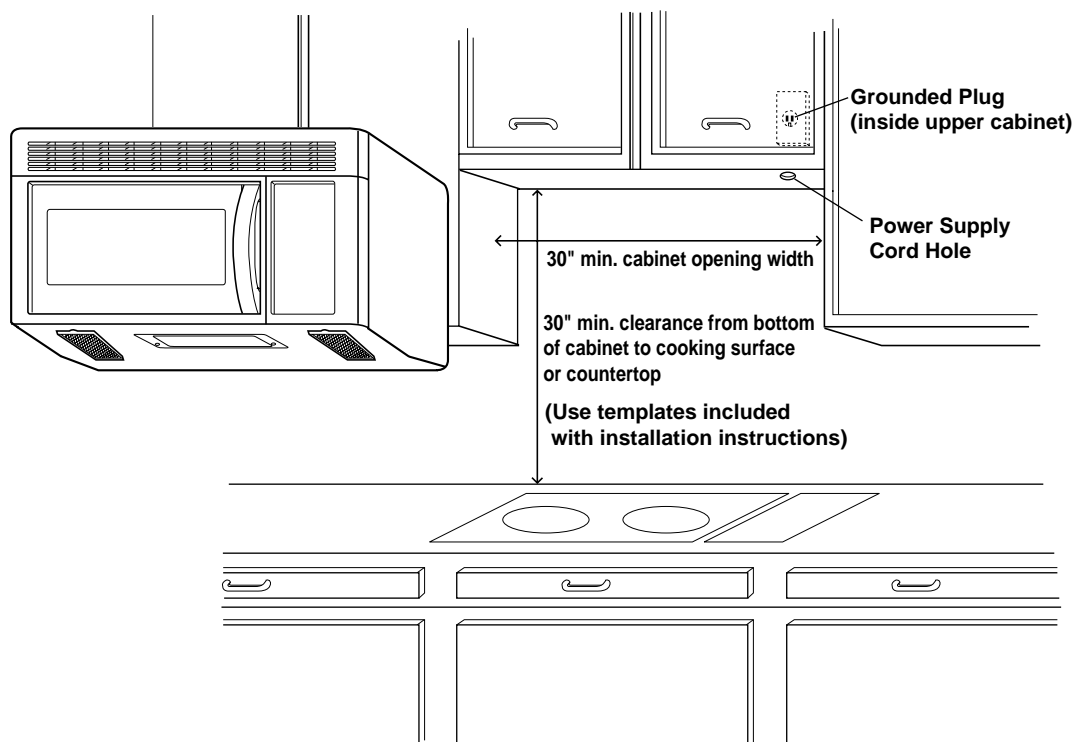


Figure 4

C A U T I O N

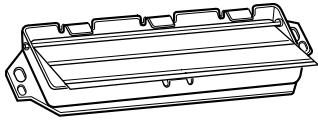
- Before you begin installing the oven, PLACE A PIECE OF THE CARTON OR OTHER HEAVY MATERIAL (a blanket) over the countertop or cooktop to protect it. **Do not use a plastic cover.** Failure to protect these surfaces could result in property damage.

PARTS, TOOLS, MATERIALS

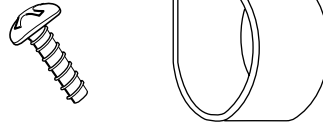
THE FOLLOWING PARTS ARE SUPPLIED WITH THE OVEN:

NOTE: Depending on your ventilation requirements, you may not use all of these parts.

Damper/duct connector
(for roof-venting or wall-venting installation)
Not Actual Size



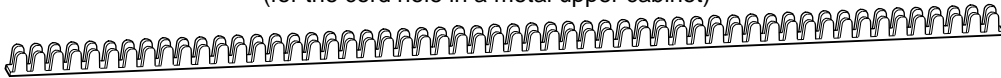
**One power cord clamp and
One dark-colored mounting screw**
(to hold the power cord)
Actual Size



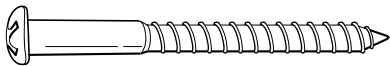
Two tapping screws - Actual Size
(for attaching the damper duct connector)



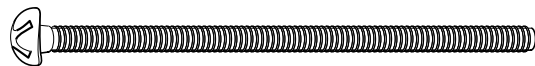
One power cord clamp bushing - Actual Size
(for the cord hole in a metal upper cabinet)



Four 1/4" x 2" lag screws - Actual Size
(for wall stud holes)



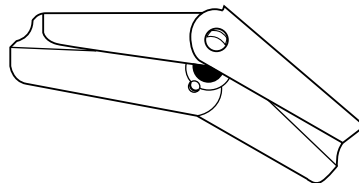
Four 1/4" x 3" toggle bolts - Actual Size
(for drywall holes)



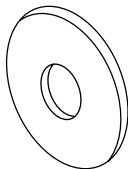
Two 1/4" x 2" bolts - Actual Size
(for securing to the upper cabinet)



Four spring toggle heads - Actual Size
(for the toggle bolts)



Two washers - Actual Size
(for the two upper cabinet bolts)



NOTE: You need to install at least one lag screw into a 2" x 4" stud and four anchor bolts into the wall and the mounting area must meet the 150 lbs. weight requirement.

PARTS, TOOLS, MATERIALS

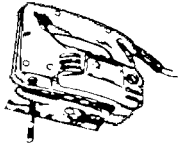
YOU WILL NEED THE FOLLOWING TOOLS AND MATERIALS FOR THE INSTALLATION:

Carton or other heavy material for covering the counter top.

Clear tape
(for taping the templates to the wall)

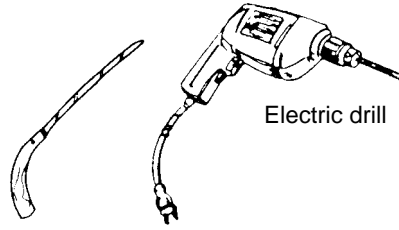


Stud finder or thin nail.



Saber saw (for cutting vent holes for roof or wall venting)

Key hole saw (for the power cord hole)



Electric drill

Phillips screwdriver (for the screws)



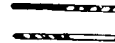
3/8" and 3/4" wood drill bits



Pencil



1/2" and 3/16"
drill bits



Flat blade screwdriver (for the bolts)



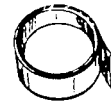
Plumb line



Measuring tape (metal preferred)



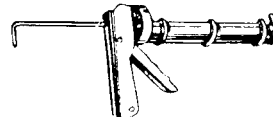
Duct Tape



Small side cutters or tin snips



Caulking gun



- If you have brick or masonry walls, you need special hardware and tools.
- The ductwork you need for the installation is not included. All wall and roof caps must have a back-draft damper.

STEP 1: PREPARE THE ELECTRICAL CONNECTIONS



AVOID ELECTRICAL SHOCK! THIS APPLIANCE MUST BE GROUNDED!

1. Locate the grounded electric outlet for this oven in the cabinet above the oven, as shown in Figure 4 Detail.

NOTE: The outlet should be on a circuit dedicated to the microwave oven 120V, 60Hz., AC only, with a 15 or 20ampere fused electrical supply.

IMPORTANT: If you do not have the proper wall outlet, you **MUST** have one installed by a qualified electrician.

2. You will cut the power-supply-cord hole (shown in Figure 4 Detail) later when you prepare the wall and upper cabinet in Step 4.

NOTE: Do not use an extension cord.
Keep the power cord dry and do not pinch or crush it.

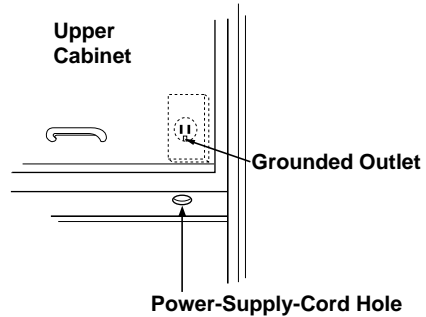


Figure 4 Detail



Improper grounding could result in electric shock or other personal injury.

- **DO NOT, UNDER ANY CIRCUMSTANCES, REMOVE THE POWER SUPPLY CORD GROUNDING PRONG!** This appliance **MUST** be grounded!

STEP 2: PREPARE THE VENTING SYSTEM

NOTE: The ductwork you need for outside ventilation is not included with your oven. The standard ductwork fittings and length are shown in Figure 9, page 9.



WARNING-FIRE HAZARD



THIS OVEN MUST BE PROPERLY VENTED!

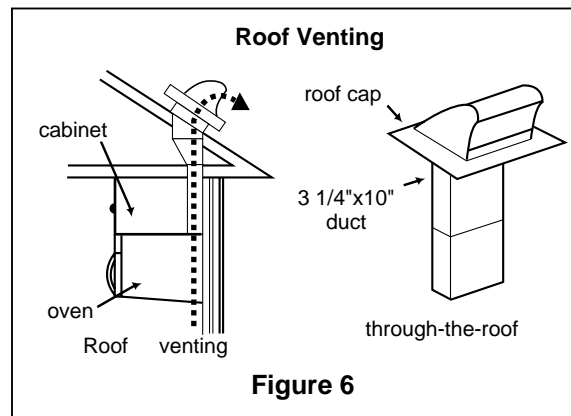
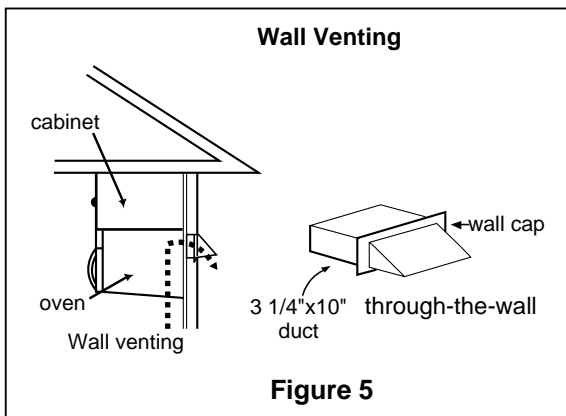
You may vent your oven in one of three ways:

Roof-venting If your oven is located on an outside wall near the roof, as in Figures 6 (3 1/4" x 10" duct) and 8 (6" round duct.)

Wall-venting If your oven is located on an outside wall on the first floor of your house, as in Figures 5 (3 1/4" x 10" duct) and 8 (6" round duct.)

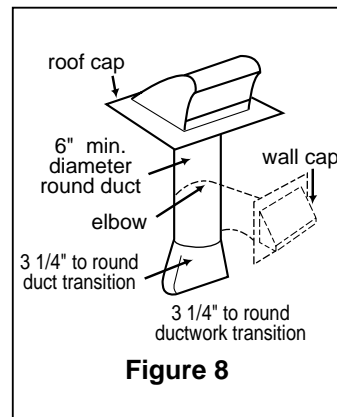
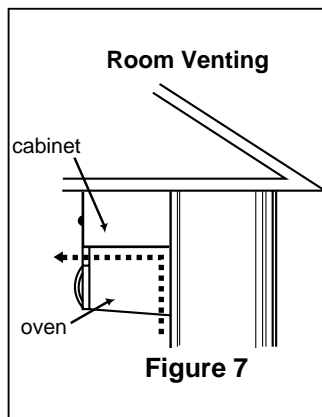
Room-venting If your oven is located on an inside wall of your house, as in Figure 7.

NOTE: If you choose the rear exhaust method (roof-or wall-venting), be sure there is enough clearance within the wall for the exhaust duct.



REMEMBER AS YOU INSTALL THE VENTING:

- Keep the length of the ductwork and the number of elbows to a minimum to ventilate your oven efficiently. See examples on page 9.
- Keep the size of the ductwork the same.
- Do not install two elbows together.
- Use duct tape to seal all joints in the duct system.
- Use caulking to seal the exterior wall or roof opening around the cap.



STEP 2: PREPARE THE VENTING SYSTEM

STANDARD FITTINGS

NOTE: If the existing duct is round, you must use a rectangular-to-round adapter, with a rectangular 3" extension duct installed between the damper assembly and the adapter to prevent the exhaust damper sticking.

DUCT LENGTH

The total length of the duct system, including straight duct, elbows, transitions, wall or roof caps **must not exceed the equivalent of 140 feet.**

For best performance, do not use more than three 90 degree elbows.

Below are the standard fittings and their equivalent length in feet.





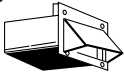

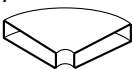
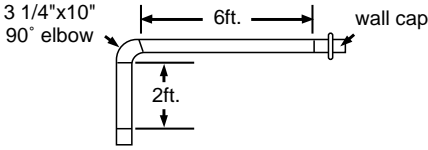
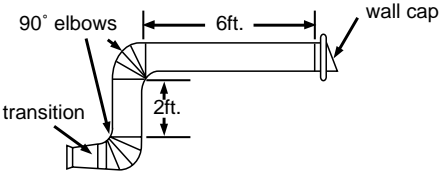
1  3 1/4"x10" to 6"=5ft.	2  3 1/4"x10" roof cap=24ft.	3  3 1/4"x10" 90° elbow=25ft.	
4  90° elbow =10ft.	5  3 1/4"x10" wall cap =40ft.	6  45° elbow =5ft.	7  3 1/4"x10" flat elbow =10ft.

Figure 9

To calculate the equivalent length of each duct piece used, see the examples below.

Examples	
<p>For 3 1/4"x10" SYSTEMS</p> 	<p>For 6" ROUND SYSTEMS</p> 
<p>1-3 1/4" x 10" 90° elbow = 25 ft.</p> <p>1-Wall Cap = 40 ft.</p> <p>8 feet straight duct = 8 ft.</p> <p>TOTAL LENGTH = 73 ft.</p>	<p>1-transition = 5 ft.</p> <p>2-90° elbows = 20 ft.</p> <p>1-Wall Cap = 40 ft.</p> <p>8 feet straight = 8 ft.</p> <p>TOTAL LENGTH = 73 ft.</p>

STEP 3: PREPARE THE VENT MOTOR

Your microwave oven is shipped with the vent motor assembled for wall venting. If you want roof-venting or room-vented (recirculating) installation, you must change the fan, as detailed below.

⚠ WARNING ⚠
ELECTRICAL SHOCK HAZARD!
UNPLUG UNIT BEFORE WORKING ON IT.

- DO NOT PULL OR STRETCH THE BLOWER WIRING! Pulling and stretching the blower wiring could result in electrical shock.

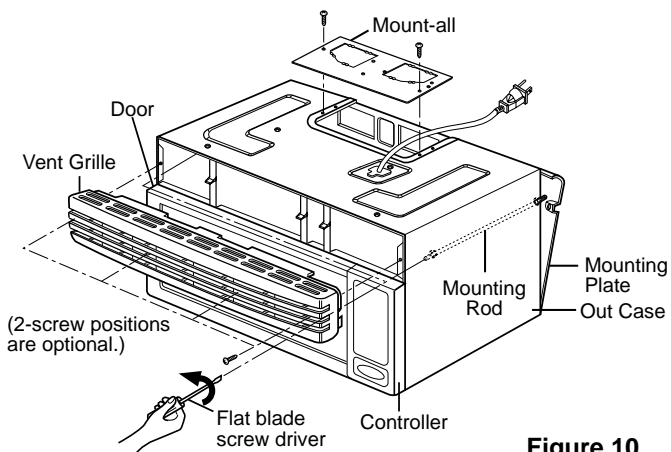
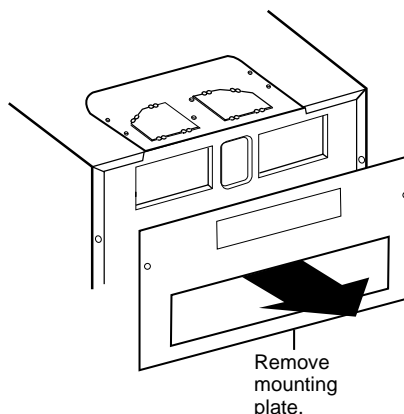


Figure 10



ROOM-VENTED (Recirculating) INSTALLATION:

1. Remove ventgrille by removing two screws on the ventgrille.
2. Turn two mounting rods anti-clockwise with flat blade screwdriver and take off the mounting plate from the unit. See figure 10.
3. The vent motor in your microwave oven is installed for room vented installation at shipping.

ROOF-VENTED INSTALLATION:

1. Remove ventgrille by removing two screws on the ventgrille.
2. Turn two mounting rods anti-clockwise with flat blade screwdriver and take off the mounting plate from the unit. See figure 10.
3. Detach mount-all from out case by removing two mount-all mounting screws and one motor mounting screw. See figure 11.
4. Keep the motor wire being connected, lift up, rotate and reattach the motor so that the exhaust ports face the upper of the cabinet. See figure 12.
5. Use side cutters or tin snips to cut and remove knockouts from mount-all. Be careful not to distort the plate. See figure 13.
6. Reattach the mount-all on the cabinet with three screws.

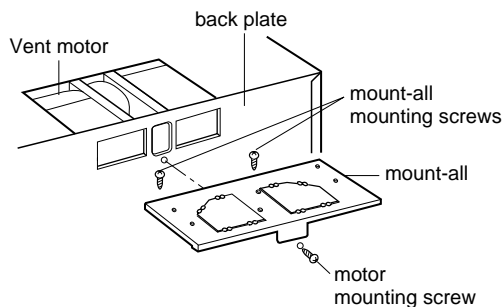


Figure 11

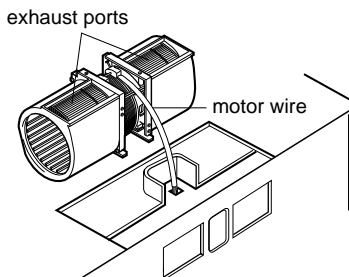


Figure 12

STEP 3: PREPARE THE VENT MOTOR

WALL-VENTED INSTALLATION:

1. Remove one motor mounting screw and two mount-all mounting screws. Take off the mount-all from the oven. See Figure 14.
2. Carefully lift the vent motor of the microwave oven.
3. Rotate the vent motor 180° so the exhaust ports face the back of the cabinet. See Figure 15.
4. Place the motor back into microwave oven.
5. Reattach mount-all to microwave oven. Attach motor mounting screw and then two mount-all mounting screws. See Figure 14.

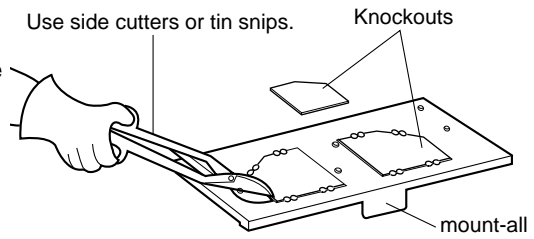


Figure 13

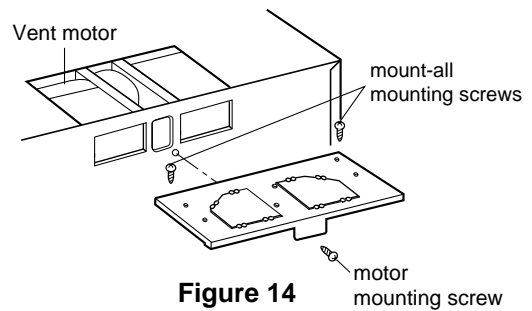


Figure 14

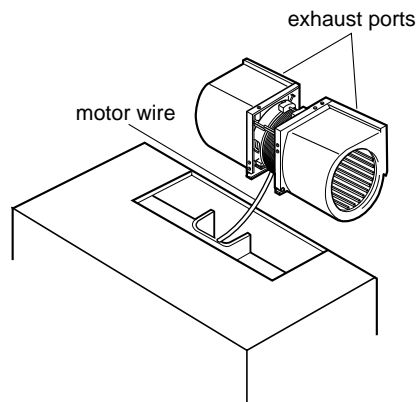


Figure 15

STEP 4: PREPARE THE WALL AND UPPER CABINET FOR INSTALLATION

BEFORE YOU START

1. Remove any shipping materials and parts from inside the microwave oven.
2. Cover the counter top or cooktop with a thick, protective covering to protect it from damage and dirt. See Figure 16.

NOTE: If you have a free-standing range, disconnect it, move it onto a piece of cardboard or hardboard and pull it away from the wall, so that you can get closer to the upper cabinet and back wall for easier measuring and drilling. Be careful not to pinch or damage the cord when you push the range back.

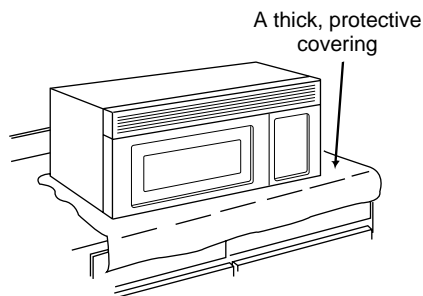


Figure 16

MEASURE AND TACK / TAPE UP THE TEMPLATES

1. Using a plumb line and (metal) measuring tape, find and mark the vertical center line on the back wall, as in Figure 17.
2. Find and mark one or two points where the studs are on the wall. (Studs are normally 16 inches apart) Then measure and mark the stud locations within the mounting plate area on the wall. If you cannot find any wall stud, consult a local building contractor.

CAUTION

DO NOT ATTEMPT TO INSTALL THE MICROWAVE OVEN IF YOU CANNOT FIND A WALL STUD.

NOTE: Be sure the minimum width is 22 inches and the distance from the top of the microwave oven to the cooking surface is at least 30 inches. See Figure 4 on page 4.

3. Securely tape or tack the upper cabinet template to the upper cabinet. See Figure 21.

NOTE: If the cabinets are not plumb, adjust the mounting plate position to the cabinets. Remember, the oven must hang level. If the front edge of the cabinet is lower than the back edge, adjust the mounting plate position to be level with the cabinet front.

4. Using the mounting plate, mark the position for attaching it on the wall with pencil. If you want wall vented installation, mark the position of ventilation rectangular hole (10 3/4" X 4") on the wall too. See Figure 18.
5. Measure the bottom of the upper cabinet frame. Trim the edges power supply cord hole on the upper cabinet template so that the template will fit on the bottom of the upper cabinet. If upper cabinet has a recessed frame, trim the template so it fits inside the recessed area. Align the centerline of the upper cabinet template with the centerline of the wall template, then securely tape or tack the upper cabinet template in place. See Figure 18.

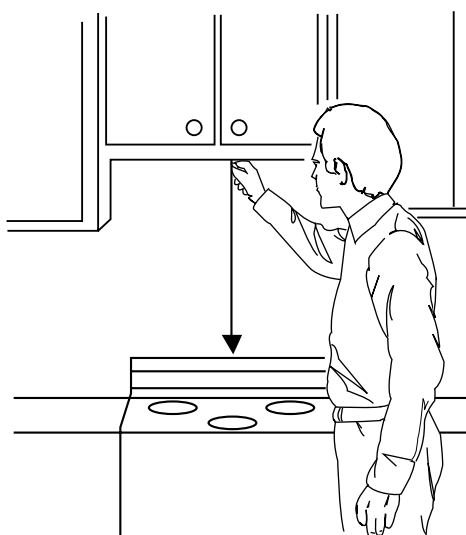


Figure 17

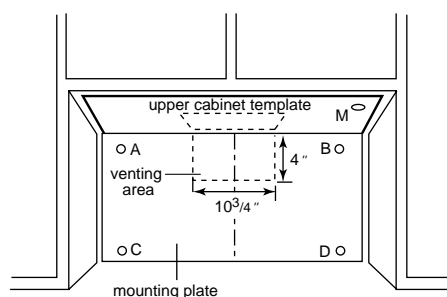


Figure 18

STEP 4: PREPARE THE WALL AND UPPER CABINET FOR INSTALLATION

DRILL THE HOLES IN THE WALL AND UPPER CABINET.



BE VERY CAREFUL WHEN DRILLING HOLES INTO THE WALL.

Electrical wires could be concealed behind the wall covering and if the drill hits them you could get an electric shock.

1. Find the points on the mounting plate labeled A, B, C and D. Drill a 3/16" diameter hole at any points that are over a wall stud. Drill a 3/4" diameter hole at any points over drywall.
2. Locate the wall stud closest to the center of hole on the mounting plate. Drill 3/16" holes into the wall stud in each of the areas. If a wall stud is not located within these areas, drill 3/4" diameter holes nearest to the center of the areas as possible.
If there is not a wall stud within the holed areas or behind points marked A, B, C, and D, DO NOT install microwave oven. (Consult building inspector.) There must be at least one stud in those areas.
3. Cut or drill a 2" diameter hole at the marked area, power supply cord hole **(M)** on the upper cabinet template. If the upper cabinet is metal, you will need to cover the edge of the hole with the power supply cord bushing (not included) to prevent damage to the cord from the rough metal edge.

YOU MUST COVER THE EDGE OF THE POWER SUPPLY CORD HOLE IN A METAL CABINET WITH THE POWER SUPPLY CORD BUSHING. FAILURE TO DO SO COULD RESULT IN DAMAGE TO THE CORD AND ELECTRIC SHOCK.



4. Cut out the venting areas (with the saber saw):
 - **ROOF-VENTED:** cut out the shaded area marked E on the upper cabinet template.
 - **WALL-VENTED:** cut out the marked area on the wall. See Figure 18.
 - **ROOM-VENTED:** Need not to make any rectangular hole (for ventilation) on the upper cabinet and wall, but prepare charcoal filter (not included).
5. Complete whichever venting system you have chosen. Use caulking compound to seal the exterior wall or roof opening around the wall cap or roof cap.

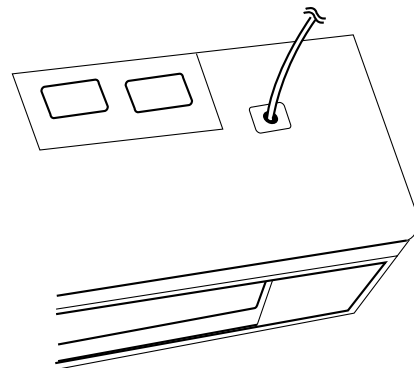


Figure 19

STEP 5: INSTALL THE MOUNTING PLATE

1. Remove the template from upper cabinet.

NOTE: If you are venting the oven through the wall, be sure you align the duct connector (included) on the rear of the mounting plate with the 3 1/4"x10" duct. See Figure 20, 21.

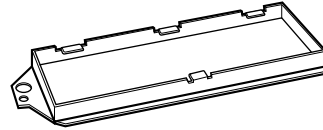


Figure 20

2. If you have drywall, Prepare the toggle bolts (not included) by putting the bolts through the corner holes and attaching a spring toggle head to the end of each toggle bolt as shown in Figure 22.

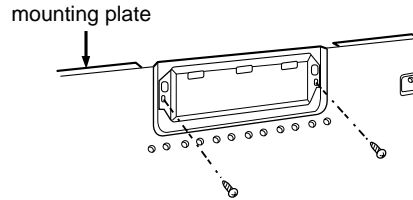


Figure 21

3. Place the mounting plate against the wall and match the screw holes. See Figure 22.

NOTE: Be sure to leave at least one wall-thickness of space between the head of the toggle bolt and the spring toggle head so that the spring toggle can open on the inside of the wall, as shown in Figure 24. You may have to pull out slightly on the bracket to put tension on the toggles.

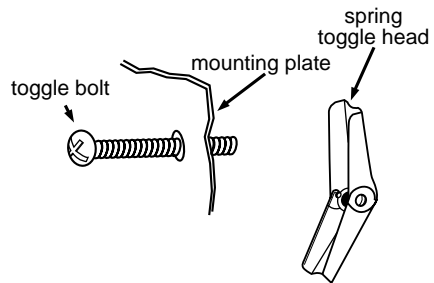


Figure 22

4. Locate the stud holes (3/16") and insert the lag screws through the mounting plate and into the holes. See Figure 25.

5. Insert the toggle bolts through the drywall holes (3/4"). Tighten the toggle bolts.

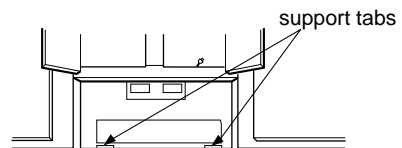


Figure 23

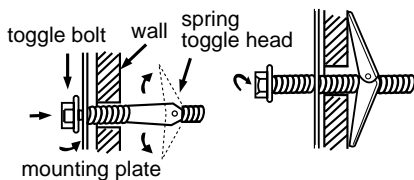


Figure 24

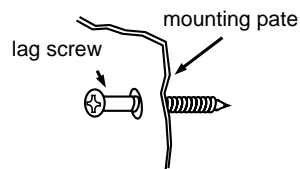


Figure 25

STEP 6: ATTACH THE OVEN TO THE WALL



WARNING



You will need two people to lift this microwave. Failure to use more than one person could result in personal injury.

1. Carefully lift microwave oven and hang it on support tabs (See Figure 23, page 14) at the bottom of the mounting plate. Reaching through upper cabinet, thread power supply cord through the power supply cord hole in the bottom of the upper cabinet. See Figure 26.
2. Rotate the microwave upward so the top of oven is against the bottom of the upper cabinet or cabinet frame.
3. **ROOF-VENTED INSTALLATION:** Align the duct connector with the vent on top of the microwave oven. Damper should be on top of tab. Use two tapping screws (bright-colored) to attach duct connector to the microwave oven. See Figure 27, 28.

NOTE: Duct connector must be attached to microwave oven **after** microwave oven is installed.

4. **ROOF VENTED INSTALLATION:** Install ductwork through the vent opening in the upper cabinet. Complete the venting system through the roof according to the method needed. See Figure 29. See **PREPARE THE VENTING SYSTEM, STEP 2** on the page 8. Use caulking to seal the exterior roof opening around the exhaust cap. See Figure 5 on page 8.
5. Use the power supply cord clamp to bundle the power supply cord. Install the power supply cord clamp, using a screw as shown in Figure 29, to inside of the cabinet.
6. Grasp filter screen with one hand holding the ring and the other hand holding the opposite end. Insert the end of the filter screen without ring into the opening and slide towards the side of the microwave oven. Insert ring end of filter screen into the opening and slide entire screen towards the other side of the microwave until screen is securely in position. Repeat for other filter screen. See Figure 30.
7. Plug in the power supply cord.
8. Read your Owner's Manual, then check the operation of your microwave oven.

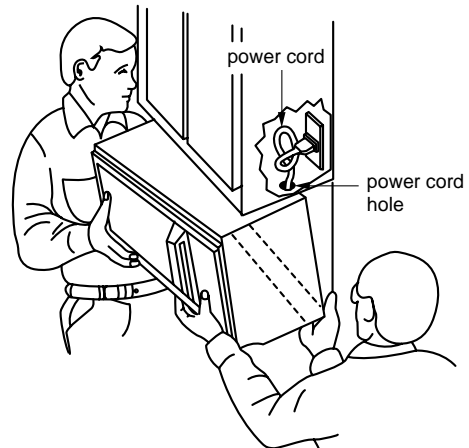


Figure 26

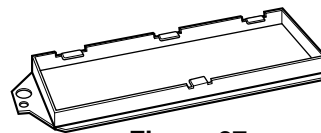


Figure 27

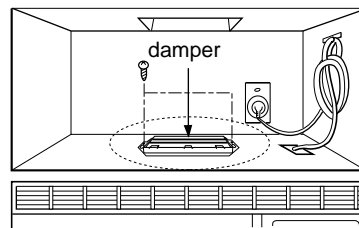


Figure 28

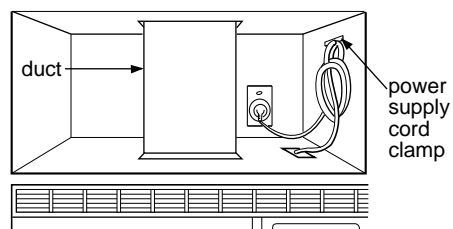


Figure 29

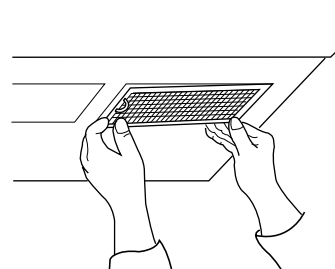


Figure 30