



Website: <http://www.lg.com>

MICROWAVE OVEN

INSTALLATION INSTRUCTIONS

PLEASE READ AND SAVE THESE INSTALLATION INSTRUCTIONS.



MFL06206509_01

Your Safety First

BEFORE YOU START

- **Proper installation is the installer's responsibility!**
Proper installation by a qualified technician or installer is recommended.
 - Read the entire manual before you begin. The model number label is located on the oven front. See Figure 1. The mounting plate is located on the upper packing. See Figure 2.

NOTE: Vent grille appearance varies by model.

BE SURE TO READ THE FOLLOWING SAFETY INSTRUCTIONS:

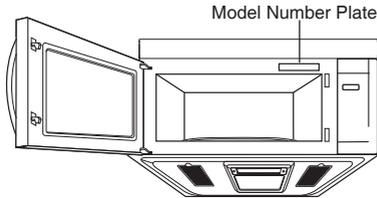


Figure 1

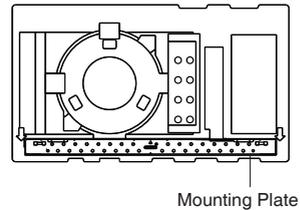


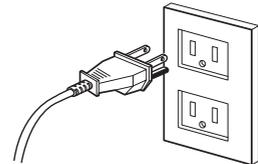
Figure 2

⚠ W A R N I N G

For Your Safety

- **This oven should not be installed or located by anyone except properly qualified service personnel.**
- **You will need TWO people to install this oven. It is heavy and could cause personal injury if not handled properly.**
- **Avoid Electric Shock!**
 - Before you drill into the wall, note where electrical outlets are and where electrical wires might be concealed behind the wall. **YOU COULD GET AN ELECTRIC SHOCK** if you contact electrical wires with your drill bit.
 - Locate and disconnect the power to 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.**
 - You need a DEDICATED 120V, 60Hz, AC only, 15 or 20A, fused electrical supply (located in the cabinet above the microwave as close as possible to the microwave) serving only the microwave.
- **THIS APPLIANCE MUST BE GROUNDED!**
 - If there is an electrical short circuit, grounding reduces the risk of electric 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.
Failure to follow this instruction may cause a fire hazard.
- **DO NOT, UNDER ANY CIRCUMSTANCES, REMOVE THE POWER SUPPLY CORD GROUNDING PRONG!**
This appliance **MUST** be grounded!

PROPERLY POLARIZED AND GROUNDED OUTLET



Three-Pronged (Grounding) Plug

Figure 3

⚠ W A R N I N G

If you use the grounding plug improperly, you risk electric shock and/or fire!

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.

⚠ W A R N I N G

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

Your Safety First

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.

⚠ WARNING

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

• **MAKE SURE YOU HAVE ENOUGH SPACE AND SUPPORT.**

- Mount the oven against a flat, vertical wall, so it is supported by the wall. The wall should be constructed of minimum 2" x 4" wood studding and 3/8" thick drywall or plaster/lath.
- ATTACH (See note on page 4) the two lag screws supporting the oven to a vertical, 2" x 4" wall stud.
- DO NOT mount the microwave oven to an island or peninsula cabinet.
- BE SURE the upper cabinet and rear wall structures can 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.

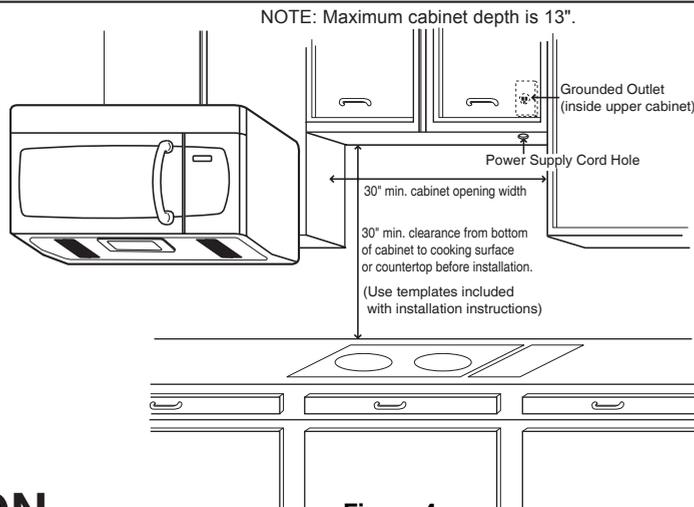


Figure 4

⚠ CAUTION

- 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.

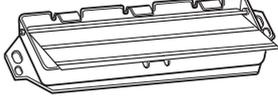
Parts, Tools, Materials

THE FOLLOWING PARTS ARE SUPPLIED WITH THE OVEN:

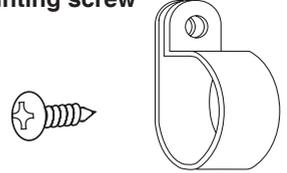
NOTE: Depending on your ventilation requirements, you may not use all of these parts.

Damper/duct connector

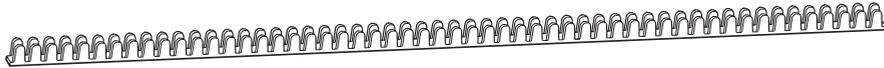
(for roof venting or wall venting installation)
Not Actual Size (2 pieces must be assembled as shown) Not used if venting into kitchen.



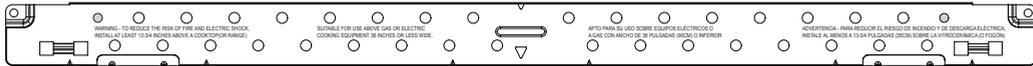
**One power cord clamp and
One dark-colored mounting screw**
(to hold the power cord)
Actual Size



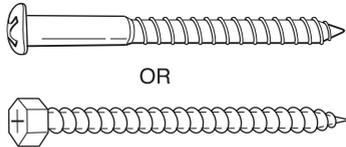
One power cord clamp bushing - Actual Size (for the cord hole in a metal upper cabinet)



One mounting plate - Not Actual Size (for supporting the Microwave Oven)



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

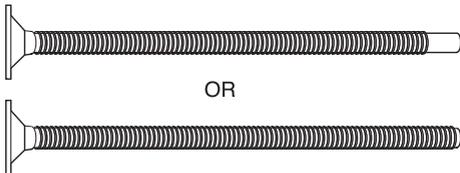


OR

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



Two 1/4" x 3" bolts - Actual Size
(for securing to the upper cabinet)

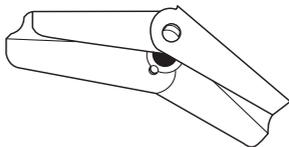


OR

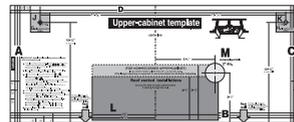
Two tapping screws - Actual Size
(for attaching the damper duct connector)



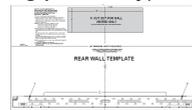
Two 1/4" x 3" bolts - Actual Size
(for drywall holes)



One upper cabinet template- Not Actual Size



One rear wall template- Not Actual Size
(1 piece mounting plate only)



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

Parts, Tools, Materials

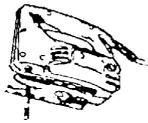
You will need the following tools and materials for the installation:

Carton or other heavy material such as a blanket for covering the counter top.

Clear Tape
(for taping the templates to the wall)



Stud Finder or Thin Nail

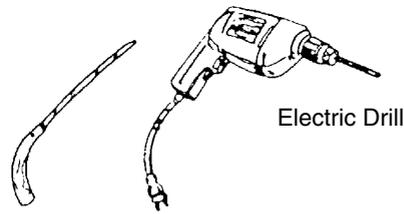


Saber Saw
(for cutting vent holes for roof
or wall venting)

Phillips Screwdriver
(for the screws)



Keyhole Saw (for the power cord hole)

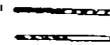


Electric Drill

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



1/2" and 3/16"
drill bits



Pencil



Gloves



Flat Blade Screwdriver
(for the toggle bolts)



Plumb Line



Measuring Tape
(metal preferred)



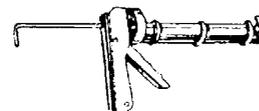
Duct Tape



Small Side Cutters(Nipper) or Tin Snips



Caulking Gun and Caulk



- If you have brick or masonry walls, you will 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. (Shown on page 4).
- Wear proper gloves to protect your hands from injury.

STEP 1: Prepare The Electrical Connection

⚠ WARNING

AVOID ELECTRIC 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 5.

NOTE: The outlet should be on a circuit dedicated to the microwave oven (120V, 60 Hz., AC only) with a 15 or 20A 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 hole for the power supply cord (shown in Figure 5) 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.

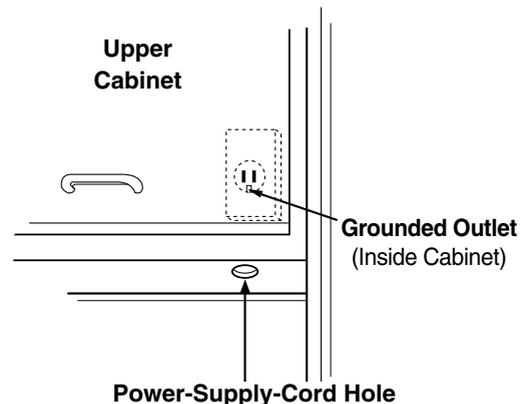


Figure 5

⚠ WARNING

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 10, page 8.

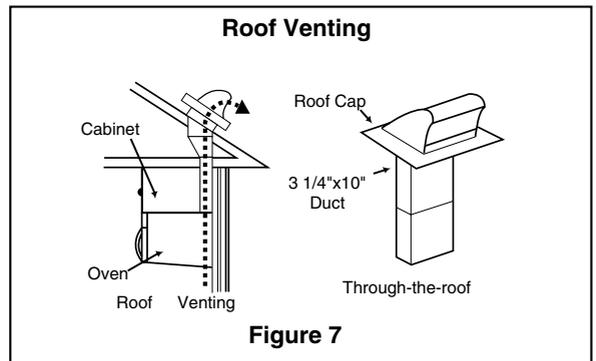
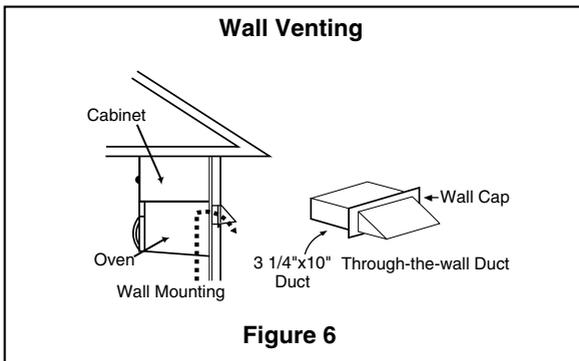
WARNING

THIS OVEN MUST BE PROPERLY VENTED!

You may vent your oven in one of three ways. However, do NOT vent into a wall cavity, an attic, or an unused area.

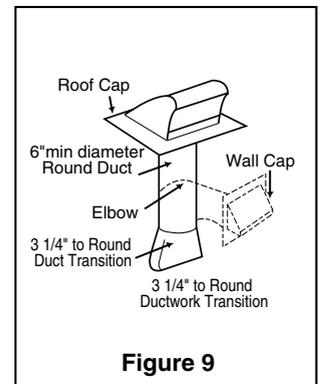
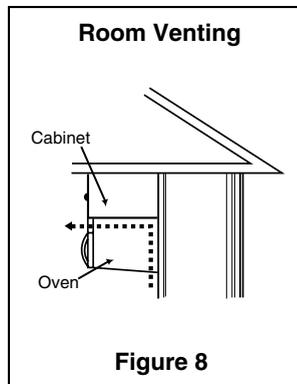
- **Roof-venting** If your oven is located on an outside wall near the roof, as in Figure 7 (3 1/4" x 10" duct) and Figure 9 (6" round duct.)
- **Wall-venting** If your oven is located on an outside wall of your house, as in Figure 6 (3 1/4" x 10" duct) and Figure 9 (6" round duct.)
- **Room-venting** If your oven is located on an inside wall of your house, as in Figure 8.

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 8.
- 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.
- After installation, you should check outside hood opening and operation.
- When you install the oven, please refer to the Installation Manual.
For the outside hood opening position and size refer to the upper cabinet template or rear wall template.



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's sticking.

Duct Length

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

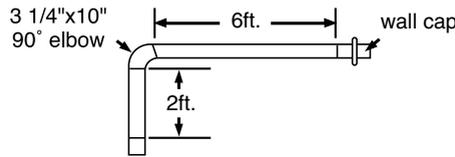
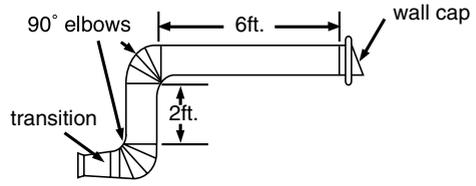
For best performance, do not use more than three 90 degree elbows, and keep the length as short as possible.

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

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

Figure 10

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

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

STEP 3: Prepare The Venting Blower

Your microwave oven is shipped with the blower assembled for room-vented. You need to adjust the blower if you want wall-vented or roof-vented installation.

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.

1. Remove any shipping materials and parts from inside the microwave oven. Set them aside for later use.

2. Cover the counter top or cooktop with a thick, protective covering to protect it from damage and dirt. See Figure 11.

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.

3. Locate exhaust adaptor, grease filters and hardware packet.

4. At this point, remove any adhesive tape (if there is any), on the exhaust adaptor, the grease filters and the power supply cord.

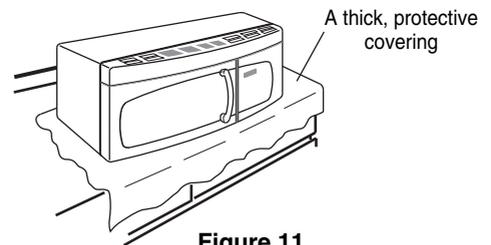


Figure 11

ROOM-VENTED INSTALLATION:

This oven is shipped assembled for room-vented. You need to go to **STEP 4: PREPARE THE WALL & UPPER CABINET** located on page 13 .

WARNING

: F9 < 5 N5 F8 ° 7 CFF97 H@M-BGH5 @@H< 9 J9BH: 5 B'69: CF9 I G9 .

- When changing the vent fan position for rear wall vent or roof vent:

1. Properly align the ventilation fan openings and blower plate knockouts.
2. Ventilation fan openings should be completely exposed to the outside.
3. After installation, check the air ventilation path. Refer to page 8 Figures 6-8 for proper vent selection.

- Wrong installation can cause problems such as:

1. Inability to assembly blower plate or ventilation motor correctly.
2. Abnormal noise during product operation.
3. Weak ventilation.
4. Product overheating - possibility of product breakdown or fire.

STEP 3: Prepare The Venting Blower

WALL-VENTED INSTALLATION:

1. Remove one blower unit mounting screw and one or several blower plate mounting screw(s). Remove the blower plate from cabinet. See Figure 12.
2. Carefully lift the blower unit out of the microwave oven.
3. Use side cutters or tin snips to cut and remove knockouts B from Back plate. Discard knockouts. Be careful not to distort the plate. See Figure 13.
4. Reassemble the blower wire. See Figure 14.
5. Rotate the blower unit so that the exhaust ports face the rear of the cabinet. See Figure 15.
6. Place blower unit back into cabinet. Check that the exhaust ports face towards the rear of the cabinet. Be sure the wires are not pinched. See Figure 16.
7. Reattach the blower plate to cabinet so the exhaust ports and blower plate opening are aligned. Attach with one blower unit mounting screw and then one or several blower plate mounting screw(s). See Figure 17.
8. Insert the tabs on each side of the damper into the holes at the inside rear of the adaptor. Attach the exhaust adaptor to the back plate wall side. Push in securely until it is past the top locking tabs and in the lower locking tabs. Take care to assure the damper hinge is installed so that it is at the top and that the damper swings freely. See Figure 18.

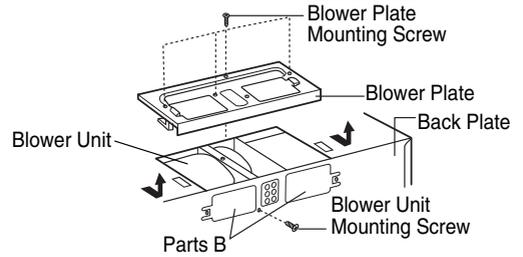


Figure 12

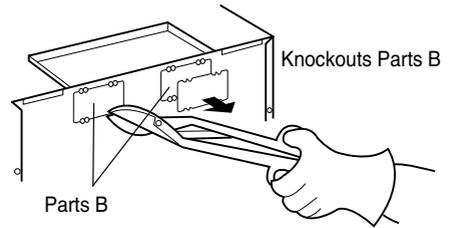


Figure 13

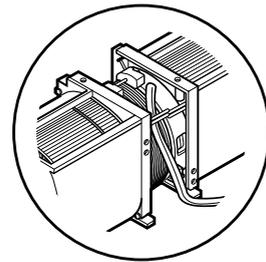


Figure 14

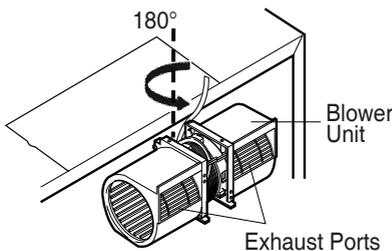


Figure 15

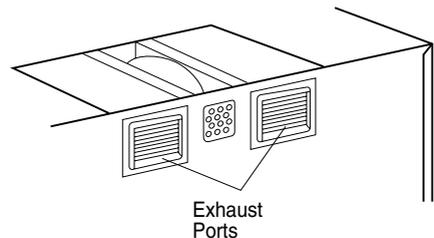


Figure 16

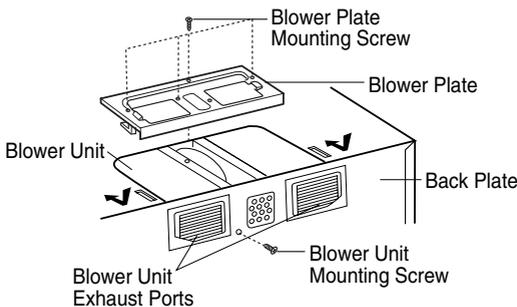


Figure 17

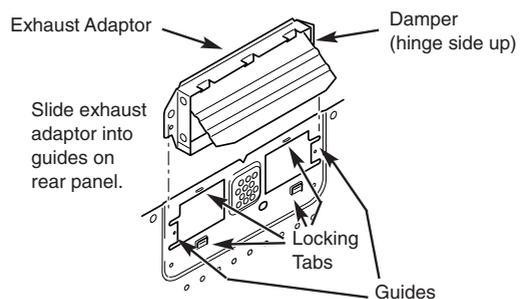


Figure 18

STEP 3: Prepare The Venting Blower

ROOF-VENTED INSTALLATION:

1. Remove one blower unit mounting screw and one or several blower plate mounting screw(s). Remove the blower plate from cabinet. See Figure 19.
2. Carefully lift the blower unit out of the microwave oven.
3. Rotate blower unit 90° so the exhaust ports face the top of the cabinet. See Figure 20.
4. Place blower unit back into microwave oven.
5. Use side cutter or tin snips to cut and remove knockouts "A" from blower plate. Discard knockouts. Be careful not to distort the plate. See Figure 21.
(This step is optional, depending on the model.)
6. Reattach blower plate to microwave oven. Attach with the one blower unit mounting screw and then the one or several blower plate mounting screw(s). See Figure 22.
7. Insert the tabs on each side of the damper into the holes at the inside rear of the adaptor. Attach the exhaust adaptor to the blower plate with the two tapping screws provided. See Figure 23. Make sure that the damper swings freely.

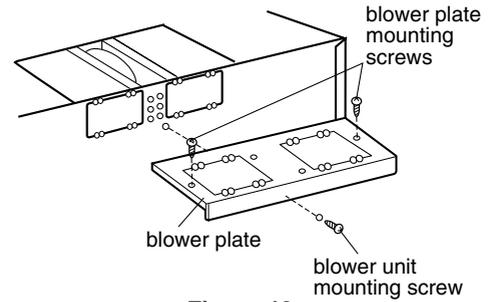


Figure 19

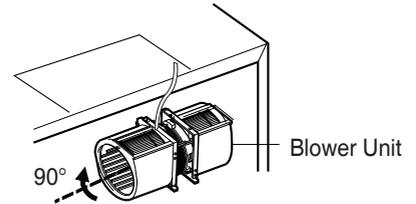


Figure 20

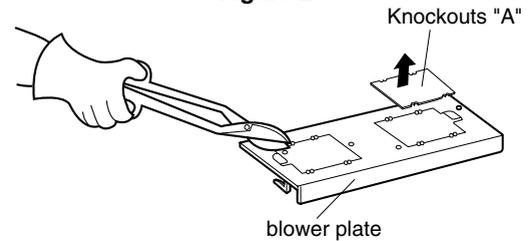


Figure 21 (Optional)

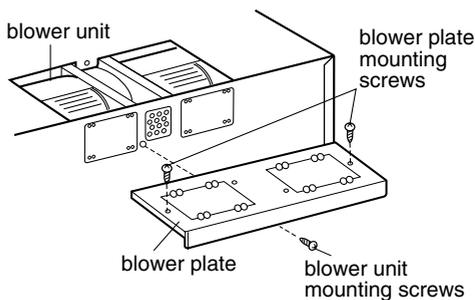


Figure 22

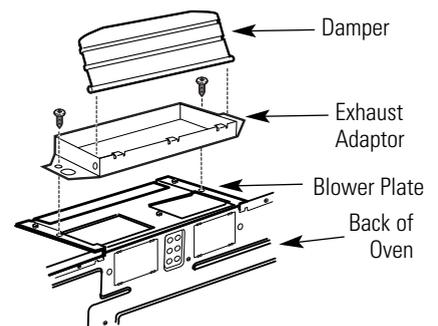


Figure 23

STEP 4: Prepare The Wall & Upper Cabinet

⚠ WARNING

To avoid personal injury or property damage, do not attempt to install this microwave oven if you cannot find a wall stud. Consult a carpenter or contractor.

Measure And Track/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 24.
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. 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.

3. Draw a vertical line on the wall at the center of the 30" wide space.

NOTE: Be sure the minimum width is 30 inches.

4. Center rear wall template in operating by lining up the plumb line on wall with centerline on template. Then securely tape or tack the rear wall template in place. Make sure the minimum width is 30 inches and that the top of the rear wall template is located a minimum of 30 inches above the cooking surface. See Figure 24.

NOTE: If the cabinets are not plumb, adjust the rear wall template to the cabinets. If the front edge of the cabinet is lower than the back edge, adjust the template to be level with the cabinet front.

5. Measure the bottom of the upper cabinet frame. Trim the edges A, B, and C 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 rear wall template, then securely tape or tack the upper cabinet template in place. See Figure 25.

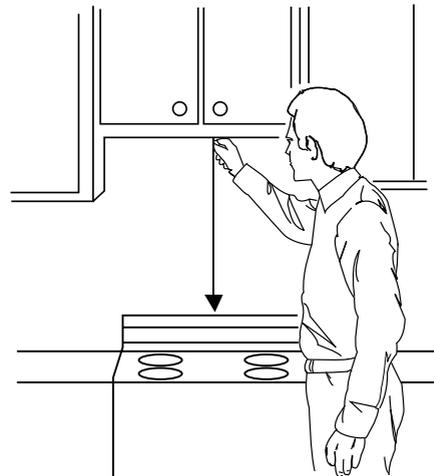


Figure 24

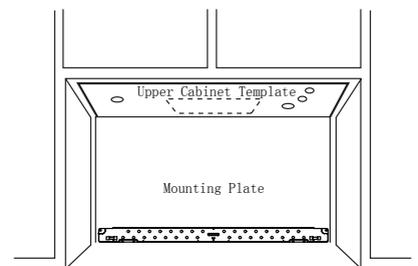


Figure 25

STEP 4: Prepare The Wall & Upper Cabinet

⚠ WARNING

To avoid risk of personal injury, electrical shock or death:

- Note where electrical outlets and electrical wires are before you drill into the wall.
- Locate and disconnect power to any electrical circuits that could be affected by installing this oven.

⚠ WARNING

To avoid risk of personal injury, electrical shock or death, cover the edge of the power supply cord hole with the power supply cord bushing.

Drill The Holes In The Wall And Upper Cabinet.

1. Drill holes on the circles. If there is a stud, drill a 3/16" hole for lag screws. If there is no stud, drill a 3/4" hole for toggle bolts. Make sure to use at least 1 lag screws in a stud, and 2 toggle screws in the drywall or the plaster.
2. Drill a 3/8" hole at points **J** and **K** on the upper cabinet template.

NOTE: If the bottom of the upper cabinet is recessed 3/4" or more, you will need 2"x 2" filler blocks (not included) to provide additional support for the bolts. See Figure 26.

- Mark the center of each filler block and drill a 3/8" diameter hole at the marks.
 - Align filler blocks over the two openings in the top of the microwave oven cabinet and attach to cabinet with masking tape. See Figure 27.
3. Cut or drill a 2" diameter hole at the area marked **M**. Power supply cord hole 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 (supplied) to prevent damage to the cord from the rough metal edge.
 4. Cut out the venting areas (with the saber saw):
 - Roof-Vented: cut out the shaded area marked **L** on the upper cabinet template.
 - Wall-Vented: Cut out the shaded area marked **F** on the REAR WALL TEMPLATE.
 - Room-Vented: go to STEP 5, INSTALL THE MOUNTING PLATE, located on page 14.
 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.

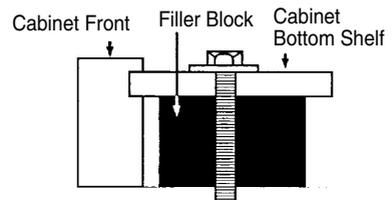


Figure 26

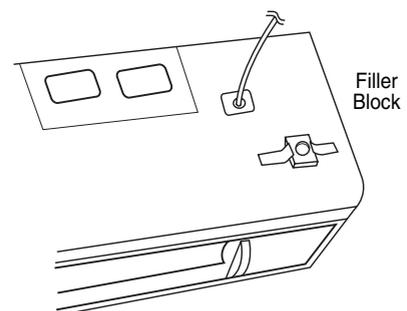


Figure 27

STEP 5: Install The Mounting Plate

The Oven Must Be Connected To At Least One

Wall Stud.

1. Center rear wall template in operating by lining up the plumb line on wall with centerline on template. Then securely tape or tack the rear wall template in place. Make sure the minimum width is 30 inches and that the top of the rear wall template is located a minimum of 30 inches above the cooking surface. See Figure 24.

NOTE: If the cabinets are not plumb, adjust the rear wall template to the cabinets. If the front edge of the cabinet is lower than the back edge, adjust the template to be level with the cabinet front.

2. Drill holes at points A, B. Drill the third hole inside area C, through one of the bottom holes to match the location of a stud. If there is a stud, drill a 3/16" hole for lag screws. If there is no stud, drill a 5/8" hole for toggle bolts. These holes must be used for mounting. If the holes are not used, the installation will not be secure. Installer must use these holes for proper installation. See Figure 28. Use toggle bolts through these holes, unless one of them lines up with a stud. Use a wood screw for studs. Make sure to use at least 1 lag screw in a stud, and 2 toggle bolts in the drywall or the plaster.

NOTE: Cut out the shaded area marked F on the REAR WALL TEMPLATE for wall-venting.

3. Remove the template from the rear wall.
4. Attach the plate to the wall. To use spring toggle head bolts: Remove the toggle wings from the bolts. Insert the bolts into the mounting plate and replace the spring toggle head to 3/4 past the bolt ends. Insert the spring toggle head into the holes in the wall to mount the plate. You may pull forward on the plate to help in tightening the toggle bolts. Tighten all bolts.

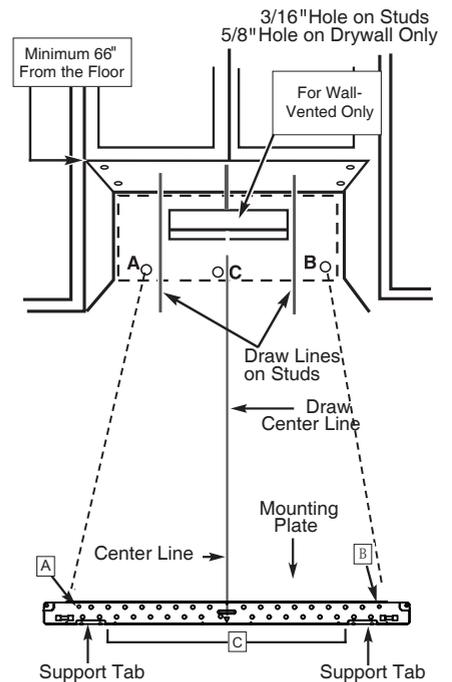


Figure 28

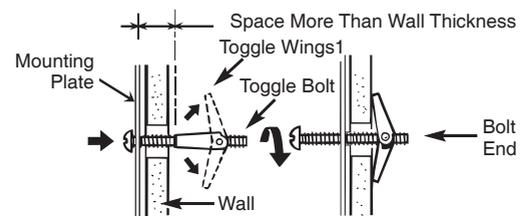


Figure 29

STEP 6: Attach The Oven To The Wall

⚠ WARNING

To avoid risk of personal injury or property damage, you will need two people to install this microwave oven.

1. Carefully lift microwave oven and hang it on support tabs (See Figure 28) 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 30.
2. Rotate the microwave oven upward so the top of oven is against the bottom of the upper cabinet or cabinet frame.
3. Then insert a bolt down through each hole in the upper cabinet bottom. See Figure 31. Tighten the bolts until the gap between the upper cabinet and microwave oven is closed.
4. If wall-vented or room-vented installation is used, go to No. 7 on the next page.
5. Roof venting installation: See Figure 32. Install ductwork through the vent opening in the upper cabinet. Complete the venting system through the roof according to the method needed. See Prepare The Venting System STEP 2. Use caulking gun to seal the exterior roof opening around the exhaust cap. See Figure 7 on page 8.
6. 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 33, to inside of the cabinet.
7. 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 center of the microwave until screen is securely in position. Repeat for other filter screen. See Figure 34.
8. Plug in the power supply cord.
9. Read your Owner's Manual, then check the operation of your microwave oven.

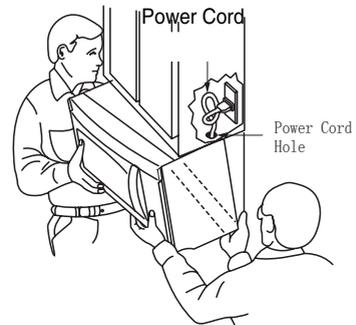


Figure 30

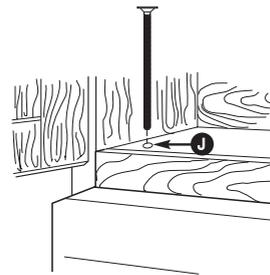


Figure 31

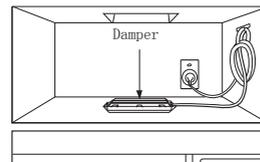


Figure 32

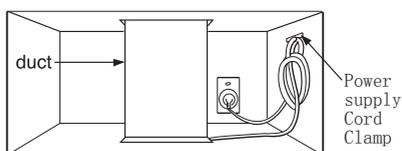


Figure 33

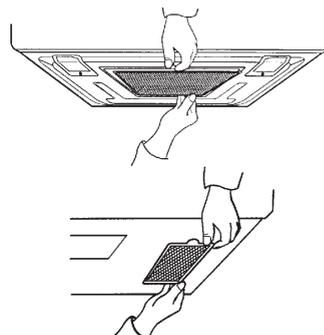


Figure 34



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