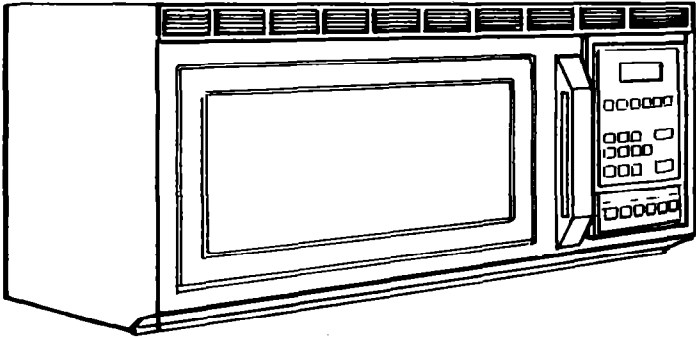


Installation Instructions

Microwave Hood Combination



ROPER

IMPORTANT:

Installer: Leave Installation Instructions with the homeowner.

Homeowner: Keep Installation Instructions for future reference.

Save Installation Instructions for local electrical inspector's use.

Part No. 4B74956A/4158658

Before you start...

Proper installation is the installer's responsibility.

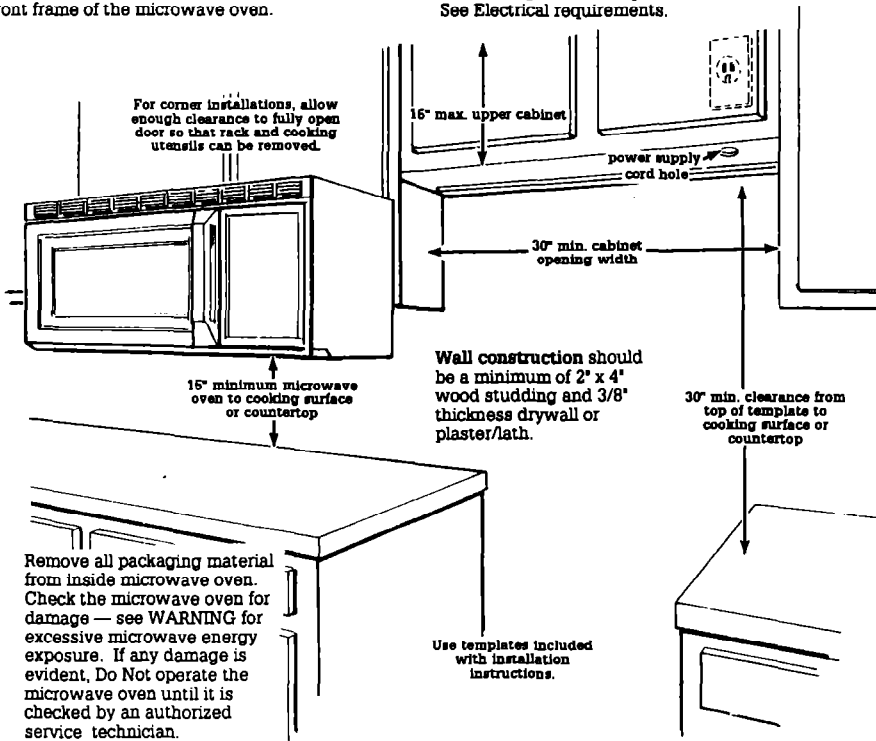
A qualified technician should install this microwave oven. Make sure you have everything necessary for proper installation. It is the responsibility of the installer to comply with the installation clearances specified on the serial/rating plate. The serial/rating plate is located behind the microwave oven door on the front frame of the microwave oven.

Check location where microwave oven will be installed. The wall must be strong enough to support the microwave weight of 150 lbs., plus the weight of any items placed inside the microwave or the upper cabinet. The location should be away from draft areas, such as windows, doors, and strong heating vents. The microwave oven should be located for convenient use in the kitchen.

Electrical ground is required. See Electrical requirements.

Remove all contents from the upper cabinet.

Important: Observe all governing codes and ordinances.



For corner installations, allow enough clearance to fully open door so that rack and cooking utensils can be removed.

15" minimum microwave oven to cooking surface or countertop

15" max. upper cabinet

power supply cord hole

30" min. cabinet opening width

Wall construction should be a minimum of 2" x 4" wood studing and 3/8" thickness drywall or plaster/lath.

30" min. clearance from top of template to cooking surface or countertop

Remove all packaging material from inside microwave oven. Check the microwave oven for damage — see WARNING for excessive microwave energy exposure. If any damage is evident, Do Not operate the microwave oven until it is checked by an authorized service technician.

Use templates included with installation instructions.

CAUTION

Property Damage

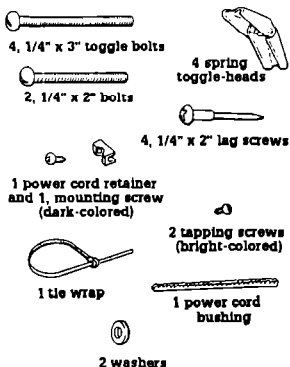
Place a portion of carton or another heavy material over the countertop and range before installing the microwave hood. Do Not use a plastic cover.

Failure to protect cooking surface or countertop could result in property damage.

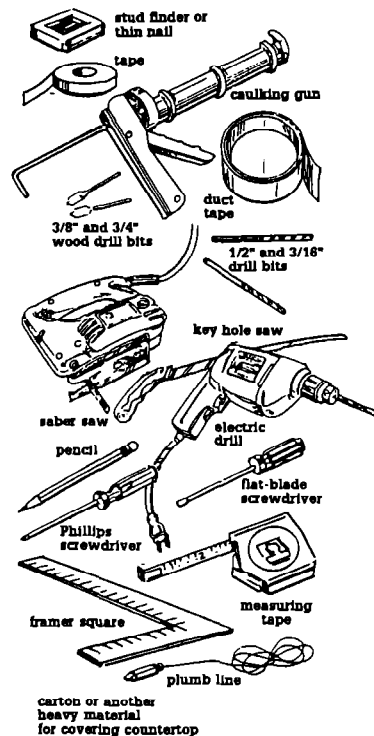
NOTE:

Do Not use this microwave oven for commercial purposes. This microwave oven is designed for household use only.

Parts supplied for installation:



Tools and materials needed for installation:



Special hardware and tools are required for brick or masonry walls.

At least four anchor bolts must be anchored into the wall and the mounting area must be capable of meeting the 150 lb. weight requirement.

WARNING

Personal Injury /Property Damage Hazard

- Two people are required to lift this microwave oven.
- Failure to use more than one person during installation may result in personal injury.
- This microwave oven must be mounted against and supported by a flat, vertical wall.
- This microwave oven must be attached with two lag screws to a minimum of one, vertical 2" x 4" wall stud.
- Do Not mount microwave oven to an island or peninsula cabinet.
- The microwave oven top and rear supporting structures must be capable of supporting 150 lbs., plus the weight of any items placed inside the microwave oven or upper cabinet.

Failure to mount the microwave oven as instructed could result in personal injury and/or property damage.

Electrical Shock Hazard

It is the customer's responsibility:

- To contact a qualified electrical installer.
- To assure that the electrical installation is adequate and in conformance with National Electrical Code, ANSL/NFPA 70-latest edition, and all local codes and ordinances.

Failure to do so could result in fire, electrical shock or other personal injury.

- Care must be taken when drilling holes into the wall. Electrical wires may be concealed behind the wall covering.
 - Locate any electrical circuits that could be affected by the installation of this product and disconnect power.
- Failure to do so could result in electrical shock.

Excessive Microwave Energy Exposure

- Do Not attempt to operate this 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 accumulate on sealing surface of microwave oven door.
- Do Not operate microwave oven if it is damaged.
- The microwave oven door must close properly to provide safe operation. Do Not use microwave oven if door is bent; hinges and latches are broken or loose; or door seals, sealing surfaces or glass is broken.
- The microwave oven should only be adjusted and repaired by a qualified repair person.
- Have a qualified repair person check for microwave leakage if a repair is made.

Failure to use microwave oven except as instructed may result in exposure to excessive microwave energy.

Electrical requirements

⚠ WARNING

Electrical Shock Hazard

- Electrical ground is required on this appliance.
- Improper connection of the conductor can result in electrical shock.
- Check with a qualified electrician if you are in doubt as to whether the appliance is properly grounded.
- Do Not use an extension cord with this appliance.

Such use may result in a fire, electrical shock or other personal injury.

Do Not have a fuse in the neutral or grounding circuit.

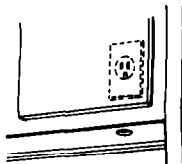
A fuse in the neutral or grounding circuit could result in electrical shock.

Failure to follow these instructions could result in electrical shock or other personal injury.

IMPORTANT:

Save Installation Instructions for electrical inspector's use.

A 120-volt, 60-Hz, AC-only, 15- or 20-ampere, fused electrical supply (located in the upper cabinet as close as possible to the microwave oven) is required. A time-delay fuse or circuit breaker is recommended. It is recommended that a separate circuit serving only this appliance be provided.



Recommended grounding method

Do Not, under any circumstances, remove the power supply cord grounding prong.

For your personal safety, this appliance must be grounded. This appliance is equipped with a power supply cord having a 3-prong grounding plug. To minimize possible shock hazard, the cord must be plugged into a mating 3-prong grounding-type wall receptacle, grounded in accordance with the National Electrical Code, ANS/NFPA 70-latest edition, and all local codes and ordinances. See Figure 1.

If a mating wall receptacle is not available, it is the personal responsibility and obligation of the customer to have a properly grounded, 3-prong wall receptacle installed by a qualified electrician.

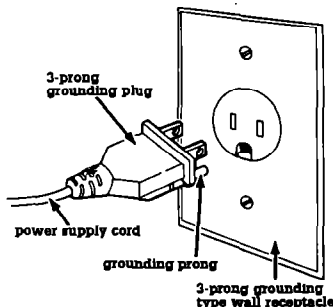


Figure 1

Venting requirements

If you have purchased a non-vented model, go to the Now start...section. If you have purchased a vented model, follow these instructions.

Ductwork needed for installation is not included. Wall and roof caps used must have back-draft damper.

⚠ WARNING

Fire Hazard

- Venting system must terminate to the outside.
 - Do Not terminate the ductwork in an attic or other enclosed space.
 - Do Not use 4" laundry-type wall caps.
 - Do Not use plastic or flexible plastic ductwork.
- Failure to follow recommended venting procedures may result in a fire.

Rigid metal ductwork is recommended. Flexible ductwork is Not recommended. If flexible metal ductwork is used, calculate each foot of flexible ductwork as two feet of straight metal ductwork. Flexible elbows count twice as much as standard elbows.

Determine which venting method (roof-venting or wall-venting) you need to use. This microwave hood is equipped for roof- or wall-venting installation.

The length of the ductwork and number of elbows should be kept to a minimum to provide efficient performance. The size of ductwork should be uniform. Do Not install two elbows together. Use duct tape to seal all joints in the duct system. Use caulking to seal exterior wall or roof opening around cap. Figures 2 - 5 show common venting methods and types of materials needed.

Note: If the rear exhaust method is chosen, be sure that there is proper clearance within the wall for the exhaust duct.

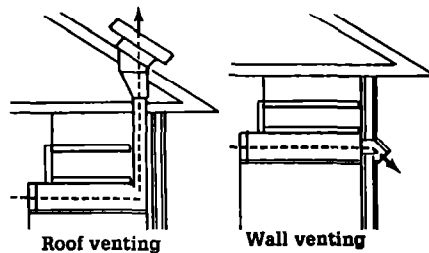


Figure 2

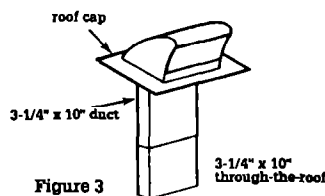


Figure 3

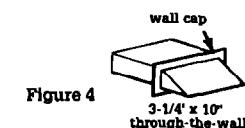


Figure 4

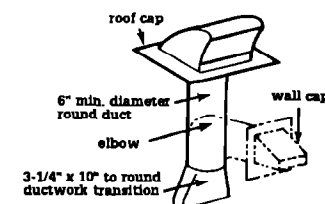
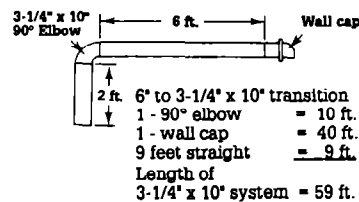


Figure 5

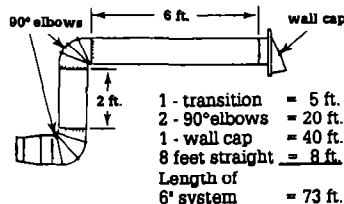
Recommended duct length

Use 3-1/4" x 10" or 6" duct. The total length of the duct system including straight duct, elbows, transitions, wall or roof caps must not exceed the equivalent of 140 feet of 3-1/4" x 10" rectangular or 6" diameter round duct. For best performance, use no more than three 90° elbows. To calculate the length of system you need, add the equivalent feet for each duct piece used in the system. See the following example:

3-1/4" x 10" duct system



6" duct system



Recommended standard fittings

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

If the existing duct is round, a rectangular-to-round adapter must be used and a rectangular 3" extension duct between the damper assembly and the adapter must be installed to prevent sticking of the exhaust damper.

Venting preparation

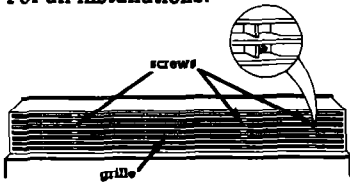
⚠ WARNING

Electrical Shock Hazard

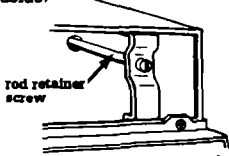
- Do not pull or stretch blower wiring.
- Pulling and stretching blower wire could result in electrical shock.
- Reinsert wires in clips before reinstalling blower unit into microwave oven.
- Failure to do so could result in electrical shock.

This microwave oven is shipped assembled for roof-venting installation. Adjustments must be made for wall-venting installation. Follow the instructions for preparing your microwave oven for the type of venting method you need.

For all installations:



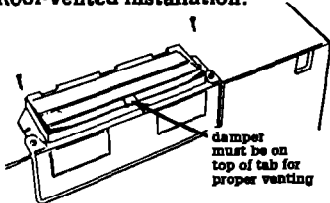
a. Remove the three screws from the grille on the top front of the microwave oven. Remove the grille. Set grille and screws aside.



b. Loosen rod retainer screws and remove wall mounting plate from the rear of the microwave oven.

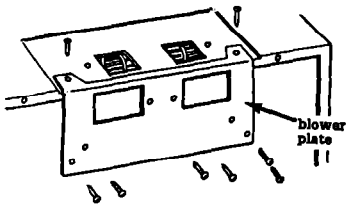
For non-vented installations, go to Now start...

Roof-vented installation:

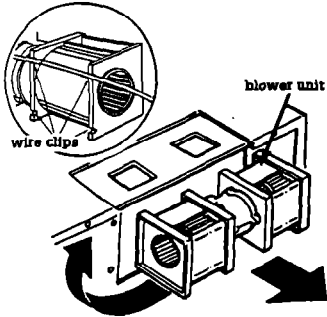


Remove two blower-plate screws. Slide damper/duct connector under blower plate. Align the damper/duct connector with the vent on top of the microwave oven. Damper should be on top of tab. Use two tapping screws (bright-colored) to attach damper/duct connector to the microwave oven.

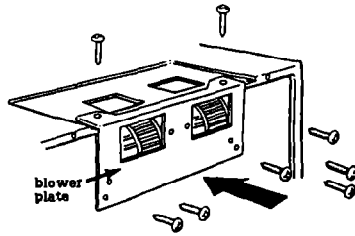
Wall-vented installation:



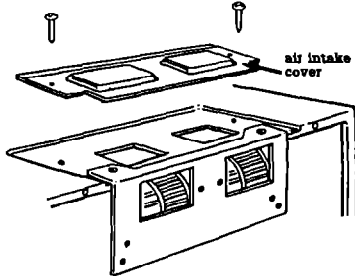
a. Remove and save the eight blower-plate screws and blower plate.
b. Carefully pull the blower unit out of the microwave oven, slipping wires out of clips.



c. Rotate blower unit end-over-end. Rotate the unit 90° so that the exhaust ports face the front of the unit. Slip wires into clips at the upper left hand corner of blower unit.
d. Place blower unit back into microwave oven.



e. Reattach the blower plate to microwave oven with the eight blower-plate screws.

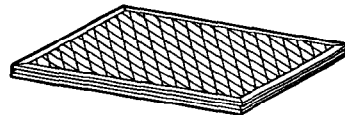


f. Attach air intake cover with two tapping screws (bright-colored).

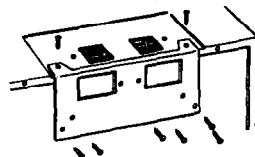
In Using Ventless Installation:

In Vented Model (MHE 10VW), if you have to install ventless (recirculating) installation, follow next steps.

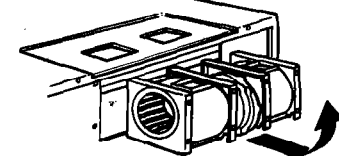
NOTE: You will find charcoal filter in your microwave oven.



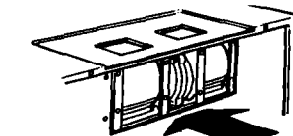
a. Remove the three recessed screws from the grille on the front of the microwave oven. Push the grille up or down slightly and pull the grille towards you to remove. Set grille and screws aside.
b. Loosen rod retainer screws and remove wall mounting plate from the rear of the microwave oven.



c. Remove and save the eight blower-plate screws and blower plate.
d. Carefully pull the blower unit out of the microwave oven.



e. Rotate blower unit 1/4 turn so that the exhaust ports face the rear of the unit.



f. Reattach the blower plate to microwave oven with eight blower-plate screws. See step "e" of wall-vented installation.
g. Slide a charcoal filter into place. The charcoal filter should rest at the angle. See page 20 found in the USE and CARE GUIDE.

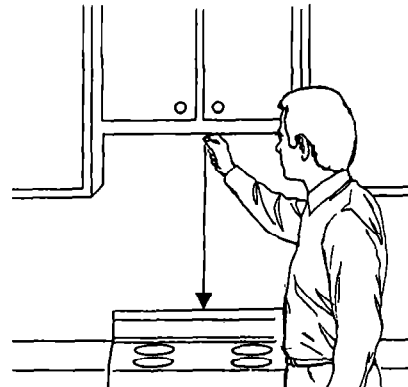
Now start...
with microwave hood in kitchen.

1. Remove shipping materials and parts from inside microwave oven.

CAUTION

Floor Damage
Slide range onto cardboard or hardboard before moving across floor.
Failure to do so may damage floor covering.

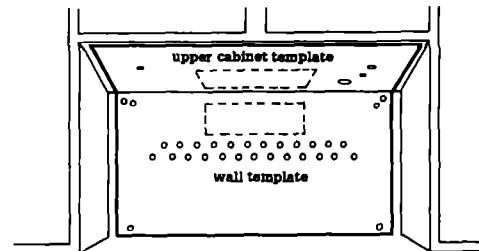
2. Disconnect and move freestanding range out of the cabinet opening to provide easier access to the upper cabinet and back wall. Put a thick, protective covering over cooktop, set-in range or countertop to protect from damage and dirt.



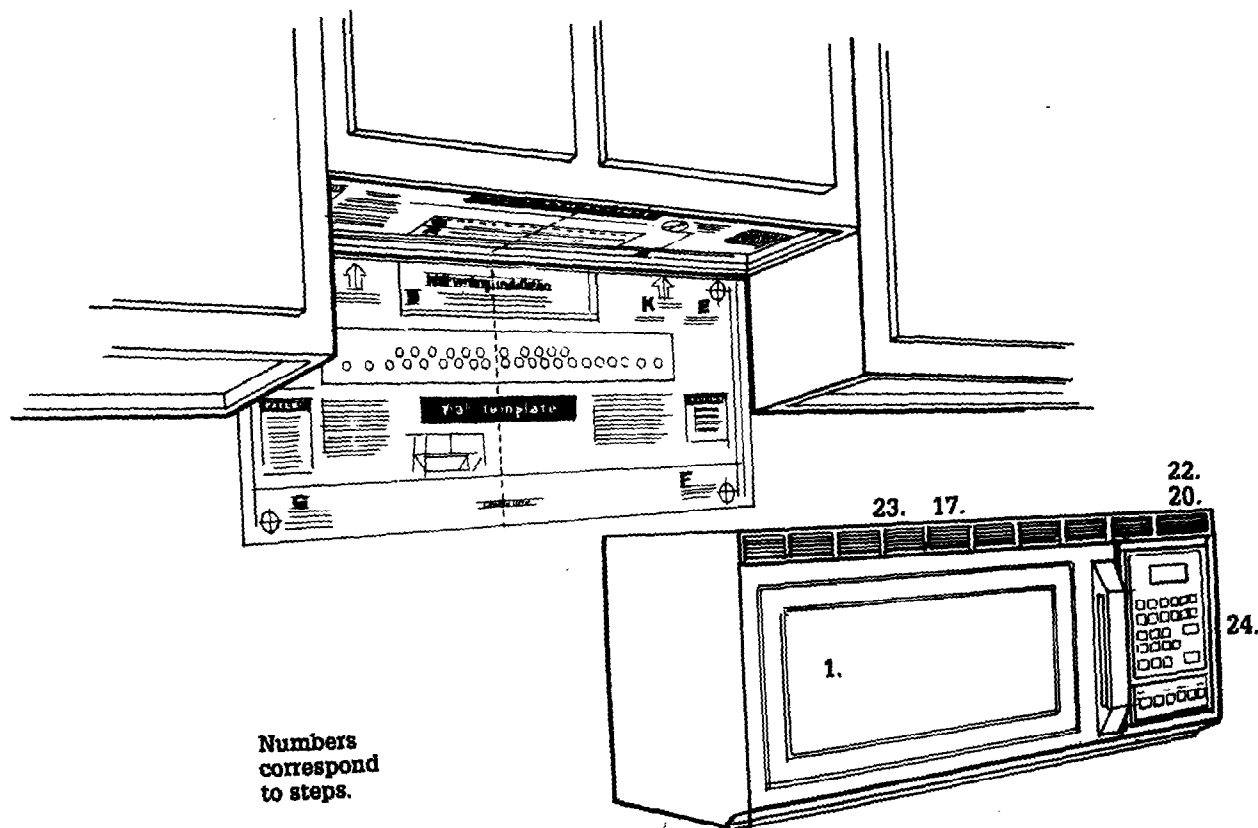
3. Using a plumb line and measuring tape, determine and clearly mark a vertical center line on the wall in the area the microwave oven is to be installed. Find and mark the location of the wall stud(s) on the wall; then measure and mark their location on the wall template. If one wall stud cannot be found in the area the microwave oven is to be installed, consult a local building inspector. Do Not attempt to install microwave oven if a wall stud cannot be found.

4. Center wall template in opening by lining up the plumb line on wall with center line on wall template. Make sure the minimum width is 30 inches and that the top of the wall template is located a minimum of 30 inches above the cooking surface. Securely tape or tack the wall template to the wall.

Note:
• If cabinets are not plumb, adjust the wall template to the cabinets.
• If front edge of cabinet is lower than the back edge, adjust the wall template so that it is 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 templates will fit on the bottom of the upper cabinet. If upper cabinet has a recessed frame, trim template so that it fits inside the recessed area. Align the center line of the upper cabinet template with the center line of the wall template; then securely tape or tack the upper cabinet template in place.



Numbers correspond to steps.

⚠ WARNING

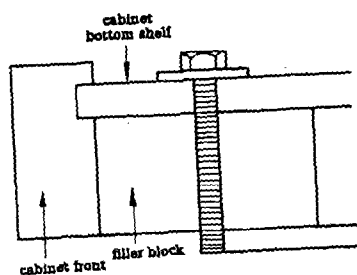
Electrical Shock Hazard

Take special care when drilling holes into the wall. Electrical wires may be concealed behind the wall covering, and contact with them could result in electrical shock.

6. Find the points on the wall template labeled "D", "E", "F", and "G". Drill a 3/16" diameter hole at the points that are over a wall stud and a 3/4" diameter hole at the points that are over drywall.

7. Using a thin nail to probe the wall, find and clearly mark the two template points closest to the center of the wall stud(s) located within the shaded area marked "H" on the wall template. Drill a 3/16" hole into the wall stud(s) at the two stud marks.

8. Drill a 1/2" hole for the mounting rods at points "J" and "K" on the wall template.



9. Drill a 3/8" hole at points "L" and "M" on the upper cabinet template. Place a washer over each 1/4" x 2" bolt. Then insert a bolt down through each hole in the upper cabinet bottom.

If bottom of upper cabinet is recessed 3/4" or more, align 2" x 2" filler blocks of required recess thickness (not included) with the shaded squares marked "N" and "P" on the upper-cabinet template. Mark the cut out position on the filler blocks through the upper cabinet holes "L" and "M". Drill 3/8" diameter hole at the marks on filler blocks. Attach filler blocks to upper cabinet.

⚠ WARNING

Electrical Shock Hazard

Install power-supply-cord bushing around hole drilled in metal cabinet.

Failure to do so could result in electrical shock.

10. Cut out or drill a 2" diameter hole at the area marked "power-supply-cord hole" on the upper cabinet template. If upper cabinet is metal, install power-supply-cord bushing around the edge of hole to prevent the power-supply cord from rubbing on the cabinet bottom.

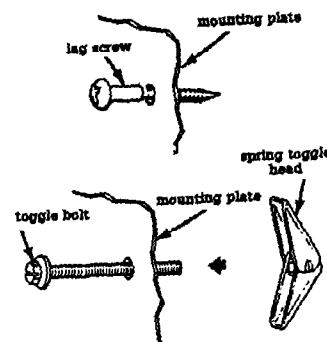
11. If you have a non-vented model, go to Step 14.

For vented models, determine which venting method (roof-venting or wall-venting) you need to use. This microwave oven is manufactured for roof- or wall-venting installation.

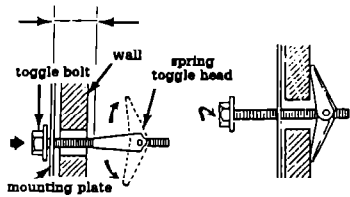
12. To vent through the roof, cut out the rectangular area marked "R" on the upper cabinet template. If the bottom of the upper cabinet is recessed less than 3/4", cut out the area marked "R" to allow room for the damper/duct connector.

To vent through the wall, cut out the rectangular area marked "S" on the wall template. Remove the upper-cabinet and wall templates.

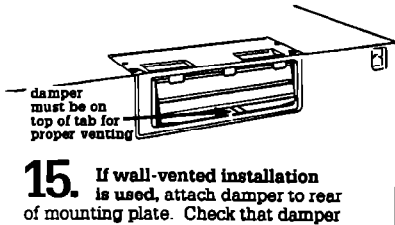
13. Install ductwork through the vent opening in the upper cabinet or wall. Complete the venting system through the wall or roof according to the method needed. See Venting requirements and Venting preparation. Use caulking to seal exterior wall or roof opening around exhaust cap.



14. Insert lag screws through the holes on the mounting plate ("H") where the mounting plate will be attached to a wall stud. Insert toggle bolts at "D", "E", "F", and "G", where it will be attached to drywall.

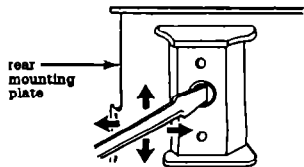


Attach a spring toggle head to the end of each toggle bolt. Leave at least one wall-thickness of space between the mounting plate and the end of the spring toggle head so that the spring toggle head can properly open on the other side of the wall.



15. If wall-vented installation is used, attach damper to rear of mounting plate. Check that damper is on top of tab. Align 3-1/4" x 10" duct with damper and check that damper moves freely.

Position the mounting plate on the wall making sure that the top of the mounting plate is 3/16" below the bottom of the cabinet frame. Insert the toggle bolts and spring toggle heads through the drywall holes and start the lag screws through the wall-stud holes. Tighten bolts and screws to secure mounting plate to wall.



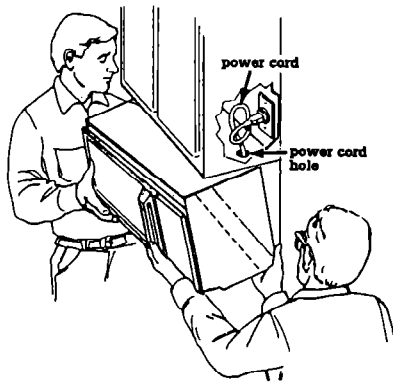
16. Insert a flat-blade screwdriver through turn-rod clearance holes in mounting plate and into retainers. Move screwdriver around to make sure the retainers move freely. If retainers do not move freely, loosen toggle bolts and lag screws, and readjust mounting plate.

⚠ WARNING

Personal Injury Hazard

Two people are required to lift this microwave.

Failure to use more than one person during installation may result in personal injury.



17. Carefully lift the microwave oven and hang it on the tabs at the bottom of the mounting plate. Reaching through upper cabinet, thread power cord through the power-cord hole in the bottom of the upper cabinet.

18. Swing the microwave oven upward so that the top of the oven meets the top of the mounting plate. Hold oven securely.



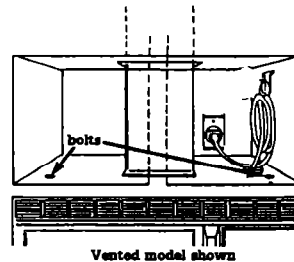
19. Using a flat-blade screwdriver, push in and thread the turn-rod screws clockwise until they are tight in rear mounting-plate nuts. Check that the microwave is securely fastened to the mounting plate.

⚠ WARNING

Personal Injury or Property Damage Hazard

Secure the microwave oven with the two mounting bolts inserted through the upper cabinet holes. Failure to do so could result in personal injury and/or property damage.

20. Tighten the bolts inserted in the upper cabinet holes until the gap between the upper cabinet and microwave oven is closed.



21. Mount the power-supply-cord retainers as shown to the inside of the cabinet. Use power-supply-cord tie wraps to bundle the power-supply cord and secure it to the power-supply-cord retainers.

22. Reattach grille to the front of the microwave oven with the three grille screws.

23. Plug in the power supply cord.

24. Read your Use & Care Guide, then check the operation of your microwave oven.

To get the most efficient use from your new Roper microwave hood, read your Roper Use and Care Guide. Keep Installation Instructions and Guide close to microwave hood for easy reference.

If microwave does not operate...

Check that the circuit breaker is not tripped or the fuse blown. Check that the power-supply cord is plugged into the wall receptacle.

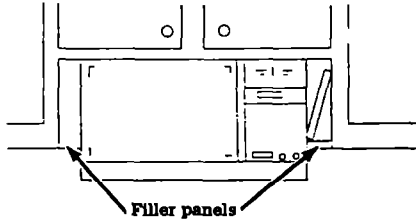
If you need assistance...

When you call, you will need the microwave hood model number and serial number. Both numbers can be found on the serial/rating plate located behind the microwave oven door on the front frame.

Accessory Kits

Accessory Kit No. 4158439 - White
4158311 - Black

Filler panel kits are available from your Roper parts dealer to use when installing this microwave oven in a 36"- or 42"-wide opening. The filler panels come in pairs and each panel is 3" wide.



ROPER

Appliances

Benton Harbor, Michigan 49022

Part No. 4B74956A/4158658
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