Installation Instructions

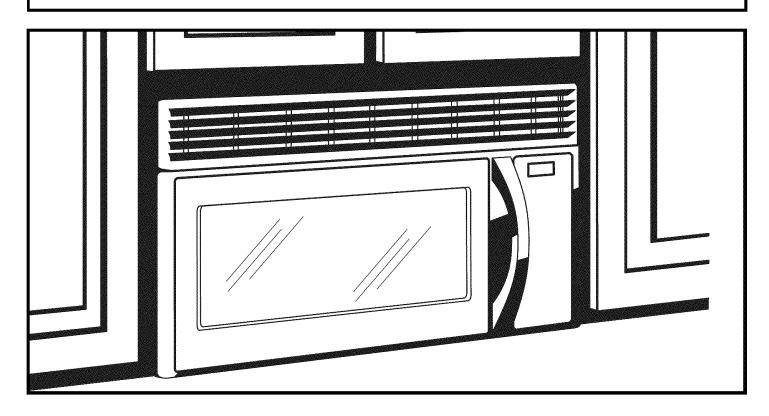
Over the Range Microwave Oven

Questions? Call 1-800-944-9044(US) 1-800-668-4606(Canada) or Visit our Website at: http://www.frigidaire.com

BEFORE YOU BEGIN

Read these instructions completely and carefully.

- **IMPORTANT** Save these instructions for local inspector's use.
- **IMPORTANT** Observe all governing codes and ordinances.
- Note to Installer Be sure to leave these instructions with the Consumer.
- Note to Consumer Keep these instructions for future reference.
- Skill level Installation of this appliance requires basic mechanical and electrical skills.
- Proper installation is the responsibility of the installer.
- Product failure due to improper installation is not covered under the Warranty.



READ CAREFULLY. KEEP THESE INSTRUCTIONS.

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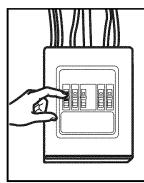
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IMPORTANT SAFETY INSTRUCTIONS

This product requires a three-prong grounded outlet. The installer must perform a ground continuity check on the power outlet box before beginning the installation to insure that the outlet box is properly grounded. If not properly grounded, or if the outlet box does not meet electrical requirements noted (under ELECTRICAL REQUIREMENTS), a qualified electrician should be employed to correct any deficiencies.



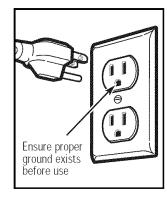
CAUTION: For personal safety, remove house fuse or open circuit breaker before beginning installation to avoid severe or fatal shock injury.

CAUTION: For personal safety, the mounting surface must be capable of supporting the cabinet load, in addition to the added weight of this 63–85 pound (28.5–38.5 kg) product, plus additional oven loads of up to 50 pounds (22.7 kg) or a total weight of 113–135 pounds (51.3–61.2 kg).

CAUTION: For personal safety, this product cannot be installed in cabinet arrangements such as an island or a peninsula. It must be mounted to BOTH a top cabinet AND a wall.

NOTE: For easier installation and personal safety, it is recommended that two people install this product.

IMPORTANT – PLEASE READ CAREFULLY. FOR PERSONAL SAFETY, THIS APPLIANCE MUST BE PROPERLY GROUNDED TO AVOID SEVERE OR FATAL SHOCK.



The power cord of this appliance is equipped with a three-prong (grounding) plug which mates with a standard three-prong (grounding) wall receptacle to minimize the possibility of electric shock hazard from this appliance. You should have the wall receptacle and circuit checked by a qualified electrician to make sure the receptacle is properly grounded.

Where a standard two-prong wall receptacle is encountered, it is very important to have it replaced with a properly grounded three-prong wall receptacle, installed by a qualified electrician.

DO NOT, UNDER ANY CIRCUMSTANCES, CUT, DEFORM OR REMOVE ANY OF THE PRONGS FROM THE POWER CORD. DO NOT USE WITH AN EXTENSION CORD.

ELECTRICAL REQUIREMENTS

Product rating is 120 volts AC, 60 Hertz, 15 amps and 1.6 kilowatts. This product must be connected to a supply circuit of the proper voltage and frequency. Wire size must conform to the requirements of the National Electrical Code or the prevailing local code for this kilowatt rating. The power supply cord and plug should be brought to a separate 15- to 20- ampere branch circuit single grounded outlet. The outlet box should be located in the cabinet above the microwave oven. The outlet box and supply circuit should be installed by a qualified electrician and conform to the National Electrical Code or the prevailing local code.

HOOD EXHAUST

NOTE: Read these next two pages only if you plan to vent your exhaust to the outside. If you plan to recirculate the air back into the room, proceed to page 6.

OUTSIDE TOP EXHAUST (EXAMPLE ONLY)

The following chart describes an example of one possible ductwork installation.

$\langle \rangle$	DUCT PIECES		EQUIVALENT LENGTH	x	NUMBER USED	=	EQUIVALENT LENGTH
		Roof Cap	24 Ft. (7.3 m)	Х	(1)		24 Ft. (7.3 m)
		12 Ft. (3.6 m) Straight Duct (6"/15.2 cm Round)	12 Ft. (3.6 m)	Х	(1)		12 Ft. (3.6 m)
		Rectangular-to-Round Transition Adaptor*	5 Ft. (1.5 m)	Х	(1)	***	5 Ft. (1.5 m)
	Equivalent lengths of duct pieces are based on actual tests and reflect requirements for good venting performance with any vent hood.				Total Length	1 =	41 Ft. (12.5 m)

IMPORTANT: If a rectangular-to-round transition adaptor is used, the bottom corners of the damper will have to be cut to fit, using the tin snips, in order to allow free movement of the damper.

OUTSIDE BACK EXHAUST (EXAMPLE ONLY)

The following chart describes an example of one possible ductwork installation.

n	DUCT PIECES	_	EQUIVALENT LENGTH*	x	NUMBER USED	=	EQUIVALENT LENGTH
FA		Wall Cap	40 Ft. (12.2 m)	Х	(1)		40 Ft. (12.2 m)
		3 Ft. Straight Duct (3¼″ x 10″/8.2 x 25.4 cm Rectangular)	3 Ft. (0.9 m)	Х	(1)	-	3 Ft. (0.9 m)
		90° Elbow	10 Ft. (3 m)	Х	(2)		20 Ft. (3 m)
	Equivalent length: reflect requirement	Total Length	=	63 Ft. (19.2 m)			
NOTE: For	OTE: For back exhaust, care should be taken to align exhaust with space between studs, or wall should be prepared						

NOTE: For back exhaust, care should be taken to align exhaust with space between studs, or wall should be prepared at the time it is constructed by leaving enough space between the wall studs to accommodate exhaust.

NOTE: If you need to install ducts, note that the total duct length of $3\frac{1}{4}$ " x 10" (8.2 x 25.4 cm) rectangular or 6" (15.2 cm) diameter round duct **should not exceed 120 equivalent feet (36.5 m).**

Outside ventilation requires a HOOD EXHAUST DUCT. Read the following carefully.

NOTE: It is important that venting be installed using the most direct route and with as few elbows as possible. This ensures clear venting of exhaust and helps prevent blockages. **Also, make sure dampers swing freely and nothing is blocking the ducts.**

Exhaust connection:

The hood exhaust has been designed to mate with a standard $3\frac{1}{4}$ x $10^{"}$ (8.2 x 25.4 cm) rectangular duct.

If a round duct is required, a rectangular-to-round transition adaptor must be used. Do not use less than a $6^{"}$ (15.2 cm) diameter duct.

Maximum duct length:

For satisfactory air movement, the total duct length of $3\frac{1}{4}$ " x 10" (8.2 x 25.4 cm) rectangular or 6" (15.2 cm) diameter round duct **should not exceed 120 equivalent** feet (36.5 m).

Elbows, transitions, wall and roof caps,

etc., present additional resistance to airflow and are equivalent to a section of straight duct which is longer than their actual physical size. When calculating the total duct length, add the equivalent lengths of all transitions and adaptors plus the length of all straight duct sections. The chart below shows you how to calculate total equivalent ductwork length using the approximate feet of equivalent length of some typical ducts.

DUCT PIECES		EQUIVALENT LENGTH	х	NUMBER USED	=	EQUIVALENT LENGTH
Rect Tran	tangular-to-Round sition Adaptor*	5 Ft. (1.5 m)	Х	()	=	Ft. or m
Wal	II Cap	40 Ft. (12.2 m)	Х	()	ano ano	Ft. or m
90°	Elbow	10 Ft. (3 m)	Х	()		Ft. or m
45°	Elbow	5 Ft. (1.5 m)	Х	()	=	Ft. or m
90°	Elbow	25 Ft. (7.6 m)	х	()		Ft. or m
45°	Elbow	5 Ft. (1.5 m)	Х	()	ann Mar	Ft. or m
Root	f Cap	24 Ft. (7.3 m)	х	()		Ft. or m
Rou	iight Duct 6" (15.2 cm) nd or 3¼" x 10" x 25.4 cm) Rectangular	1 Ft. (0.3 m)	Х	()		Ft. or m
			Tota	l Ductwork		Ft. or m



* **IMPORTANT:** If a rectangular-to-round transition adaptor is used, the bottom corners of the damper will have to be cut to fit, using the tin snips, in order to allow free movement of the damper.

Equivalent lengths of duct pieces are based on actual tests and reflect requirements for good venting performance with any vent hood.

DAMAGE—SHIPMENT/ INSTALLATION

- If the unit is damaged in shipment, return the unit to the store in which it was bought for repair or replacement.
- If the unit is damaged by the customer, repair or replacement is the responsibility of the customer.
- If the unit is damaged by the installer (if other than the customer), repair or replacement must be made by arrangement between customer and installer.

PARTS INCLUDED

HARDWARE PACKET

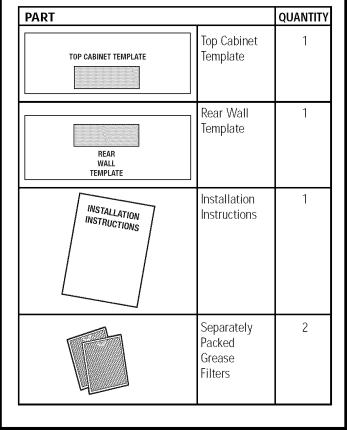
PART		QUANTITY
- Salar	Wood Screws (¼" x 2")	2
	Toggle Bolts (and wing nuts) (³/16" x 3")	4
	Self-Aligning Machine Screws (¼° -28 x 3¼°)	3
CONTRACTOR OF THE OWNER	Nylon Grommet (for metal cabinets)	2
	Power Cord Strap (plastic)	1

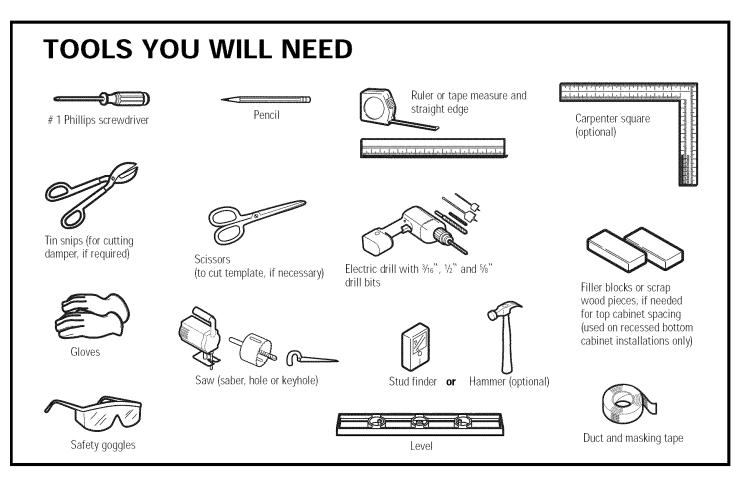
You will find the installation hardware contained in a packet with the unit. Check to make sure you have all these parts.

NOTE: Some extra parts are included.

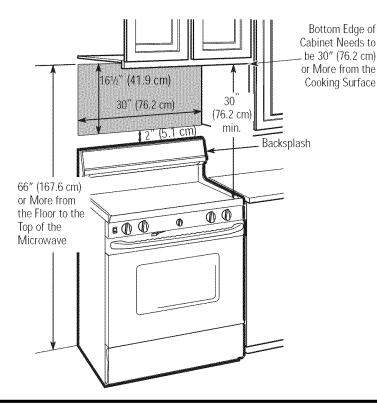
PARTS INCLUDED (CONT.)

ADDITIONAL PARTS





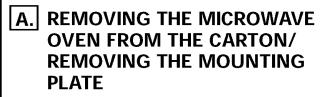
MOUNTING SPACE



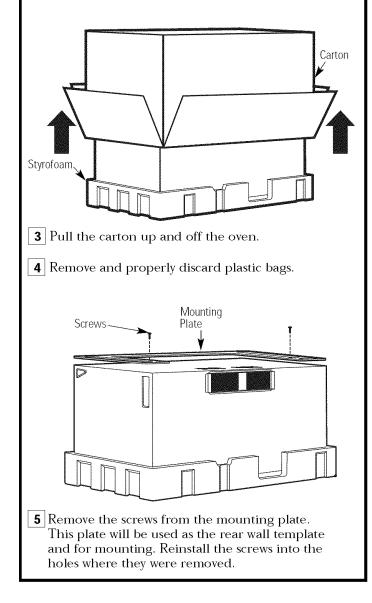
NOTES:

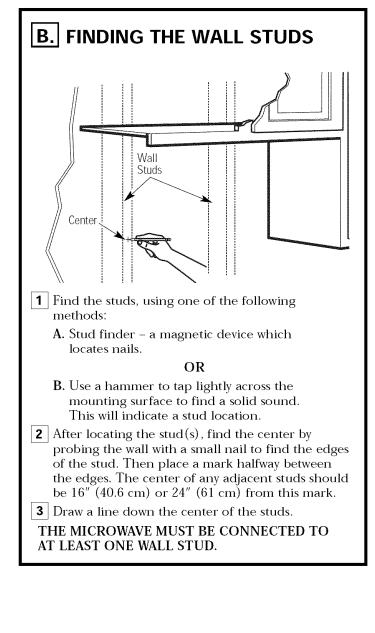
- The space between the cabinets must be 30" (76.2 cm)wide and free of obstructions.
- If you are going to vent your microwave oven to the outside, see Hood Exhaust Section for exhaust duct preparation.
- When installing the microwave oven beneath smooth, flat cabinets, be careful to follow the instructions on the top cabinet template for power cord clearance.

1 PLACEMENT OF THE MOUNTING PLATE



- **1** Remove the installation instructions, filters, glass tray and the small hardware bag. Do not remove the Styrofoam protecting the front of the oven.
- **2** Fold back all 4 carton flaps fully against carton sides. Then carefully roll the oven and carton over onto the top side. The oven should be resting in the Styrofoam.





C. DETERMINING WALL PLATE LOCATION UNDER YOUR CABINET

Plate position—beneath flat bottom cabinet

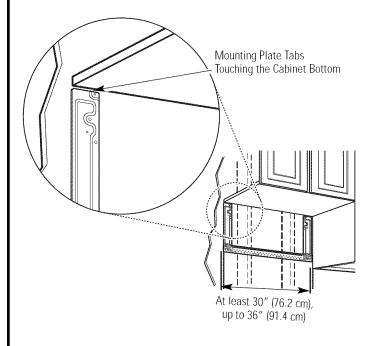


Plate position—beneath framed recessed cabinet bottom

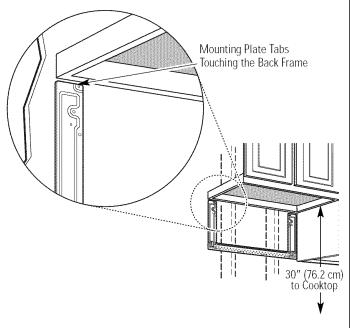
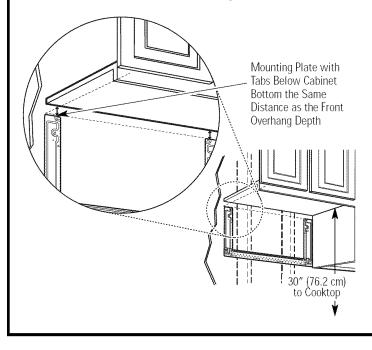


Plate position—beneath recessed bottom cabinet with front overhang



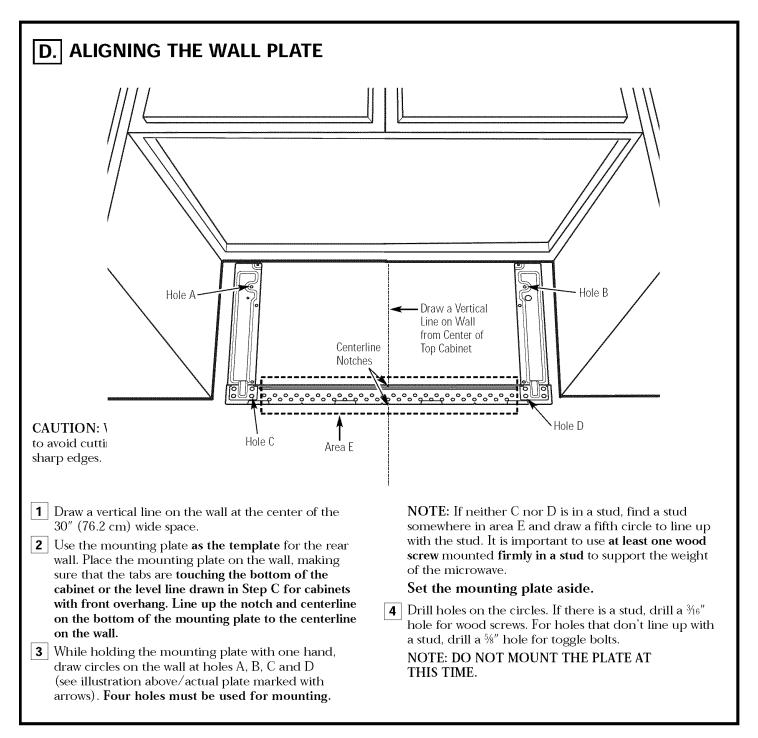
Your cabinets may have decorative trim that interferes with the microwave installation. Remove the decorative trim to install the microwave properly and to make it level.

THE MICROWAVE MUST BE LEVEL.

Use a level to make sure the cabinet bottom is level.

If the cabinets have a front overhang only, with no back or side frame, install the mounting plate down the same distance as the front overhang depth. This will keep the microwave level.

- **1** Measure the inside depth of the front overhang.
- **2** Draw a horizontal line on the back wall an equal distance below the cabinet bottom as the inside depth of the front overhang.
- **3** For this type of installation with front overhang only, align the mounting tabs with this horizontal line, not touching the cabinet bottom as described in Step D.



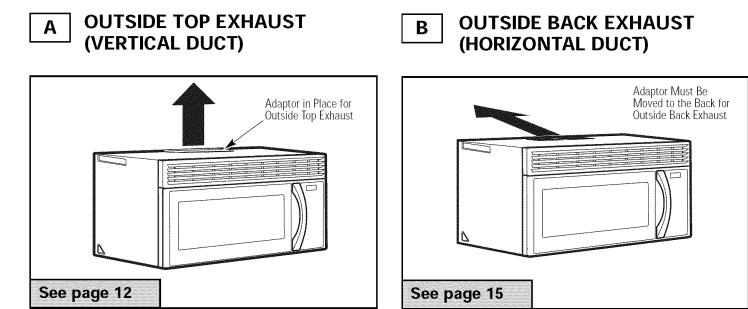
2

INSTALLATION TYPES (Choose A, B or C)

This microwave oven is designed for adaptation to the following three types of ventilation:

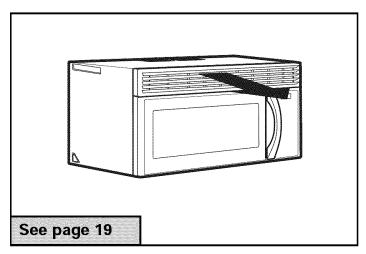
- A. Outside Top Exhaust (Vertical Duct)
- B. Outside Back Exhaust (Horizontal Duct)
- C. Recirculating (Non-Vented Ductless)

NOTE: This microwave is shipped assembled for Outside Top Exhaust (except for non-vented models). Select the type of ventilation required for your installation and proceed to that section.





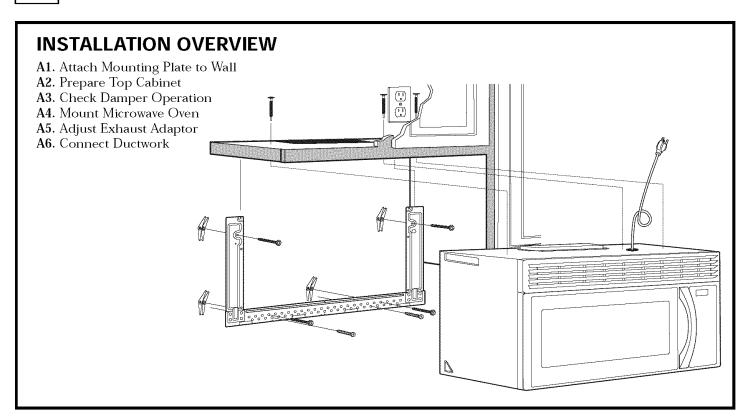
RECIRCULATING (NON-VENTED DUCTLESS)

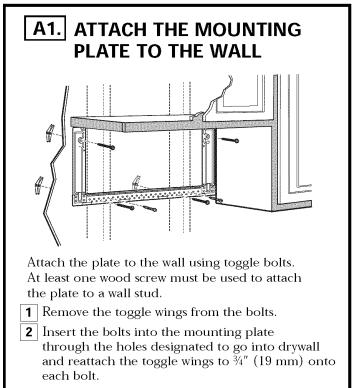


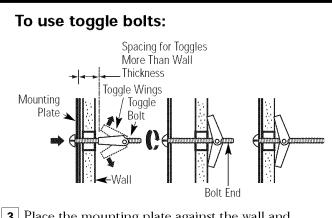
On models shipped for recirculating exhaust, a disposable charcoal filter is factory installed to help remove smoke and odors.

On Models shipped for outside top exhaust or outside back exhaust, a Charcoal filter Accessory Kit is required for the recirculating exhaust. (See your Owner's Manual for kit number.)

A OUTSIDE TOP EXHAUST (Vertical Duct)







3 Place the mounting plate against the wall and insert the toggle wings into the holes in the wall to mount the plate.

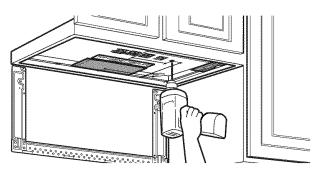
NOTE: Before tightening toggle bolts and wood screw, make sure the tabs on the mounting plate touch the bottom of the cabinet when pushed flush against the wall and that the plate is properly centered under the cabinet.

CAUTION: Be careful to avoid pinching fingers between the back of the mounting plate and the wall.

4 Tighten all bolts. Pull the plate away from the wall to help tighten the bolts.

A2. USE TOP CABINET TEMPLATE FOR PREPARATION OF TOP CABINET

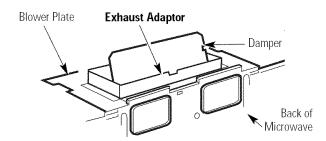
You need to drill holes for the top support screws, a hole large enough for the power cord to fit through, and a cutout large enough for the exhaust adaptor.



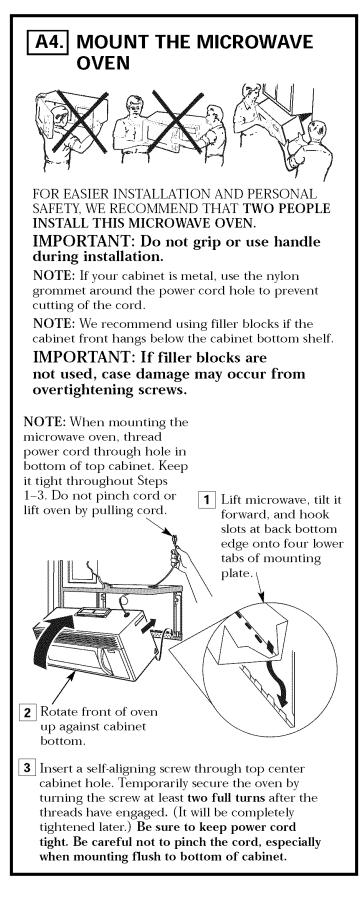
- Read the instructions on the TOP CABINET TEMPLATE.
- Tape it underneath the top cabinet.
- Drill the holes, following the instructions on the TOP CABINET TEMPLATE.

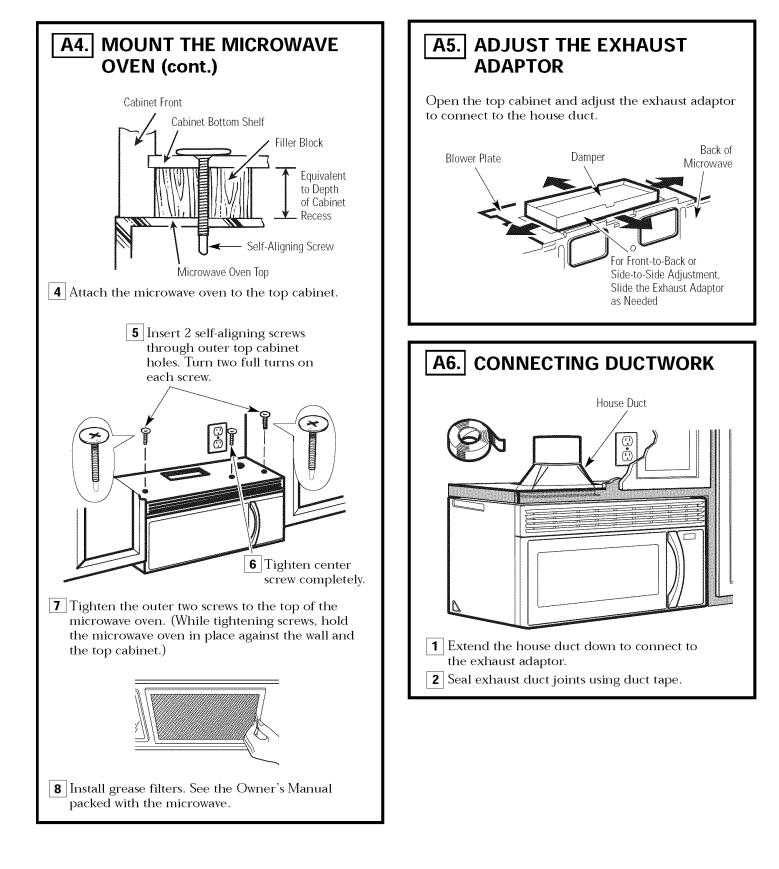
CAUTION: Wear safety goggles when drilling holes in the cabinet bottom.

A3. CHECK FOR PROPER DAMPER OPERATION



- Place the microwave in its upright position, with the top of the unit facing up.
- Make sure tape securing damper is removed and damper pivots easily before mounting microwave.
- You will need to make adjustments to assure proper alignment with your house exhaust duct after the microwave is installed.





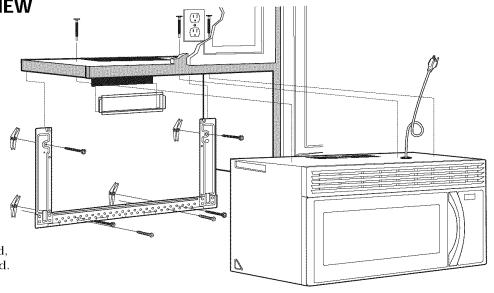
B OUTSIDE BACK EXHAUST (Horizontal Duct)

INSTALLATION OVERVIEW

- **B1**. Prepare Rear Wall
- **B2.** Remove Exhaust Adaptor
- B3. Attach Mounting Plate to Wall
- B4. Prepare Top Cabinet
- **B5.** Adjust Blower
- **B6.** Mount the Microwave Oven

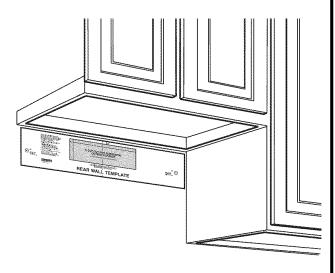
IMPORTANT NOTES:

- Make sure the screws for the blower motor and blower plate are securely tightened when they are reinstalled. This will help to prevent excessive vibration.
- Make sure the motor wiring has been properly routed and secured, and that the wires are not pinched.



B1. PREPARING THE REAR WALL FOR OUTSIDE BACK EXHAUST

You need to cut an opening in the rear wall for outside exhaust.

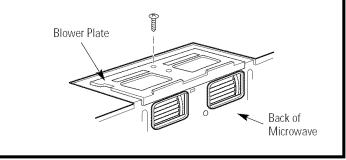


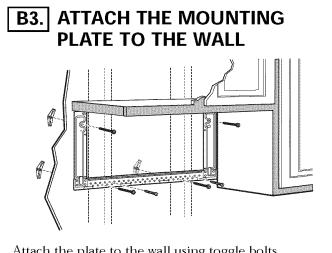
- Read the instructions on the REAR WALL TEMPLATE.
- Tape it to the rear wall, lining up with the holes previously drilled for holes A and B in the wall plate.
- Cut the opening, following the instructions of the REAR WALL TEMPLATE.

B2. REMOVE EXHAUST ADAPTOR

This microwave oven is shipped assembled for top exhaust. You will need the exhaust adaptor for installation in the rear wall opening. To remove the exhaust adaptor from the microwave oven:

- Remove tape securing damper.
 Raise damper flap.
 Blower Plate
 Gover the track on the blower frame by pressing and twisting both ends.
 Back of Microwave
- **4** Remove and save the screw that holds the blower plate to the microwave. Lift off the blower plate.

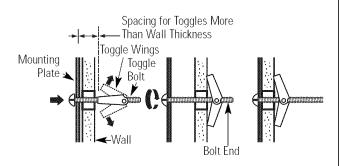




Attach the plate to the wall using toggle bolts. At least one wood screw must be used to attach the plate to a wall stud.

- **1** Remove the toggle wings from the bolts.
- 2 Insert the bolts into the mounting plate through the holes designated to go into drywall and reattach the toggle wings to ³/₄" (19 mm) onto each bolt.

To use toggle bolts:



3 Place the mounting plate against the wall and insert the toggle wings into the holes in the wall to mount the plate.

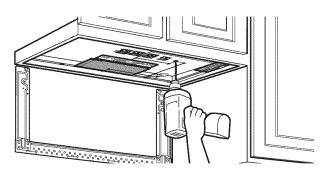
NOTE: Before tightening toggle bolts and wood screw, make sure the tabs on the mounting plate touch the bottom of the cabinet when pushed flush against the wall and that the plate is properly centered under the cabinet.

CAUTION: Be careful to avoid pinching fingers between the back of the mounting plate and the wall.

4 Tighten all bolts. Pull the plate away from the wall to help tighten the bolts.

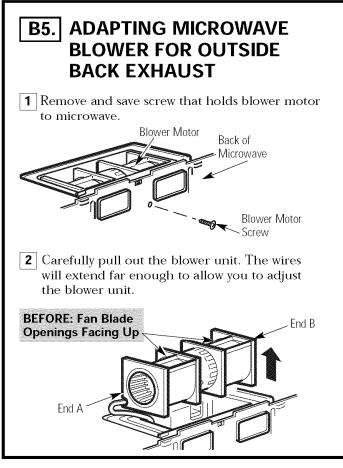
B4. USE TOP CABINET TEMPLATE FOR PREPARATION OF TOP CABINET

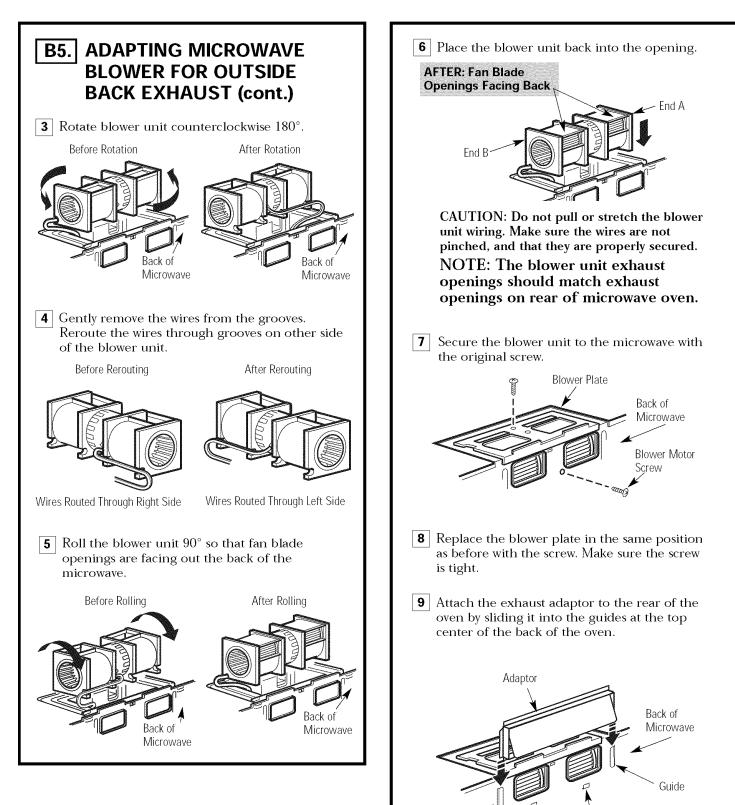
You need to drill holes for the top support screws and a hole large enough for the power cord to fit through.



- Read the instructions on the TOP CABINET TEMPLATE.
- Tape it underneath the top cabinet.
- Drill the holes, following the instructions on the TOP CABINET TEMPLATE.

CAUTION: Wear safety goggles when drilling holes in the cabinet bottom.

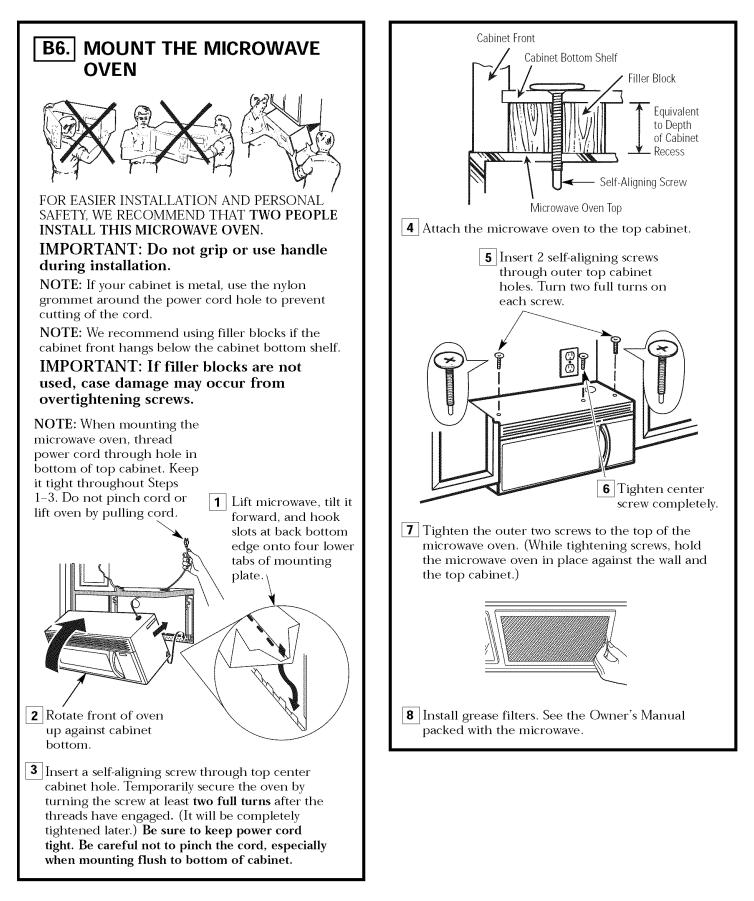




Push in securely until it is in the lower locking tabs. Take care to assure that the damper hinge is installed so that it is at the top and that the damper swings freely.

Locking Tabs

Guide



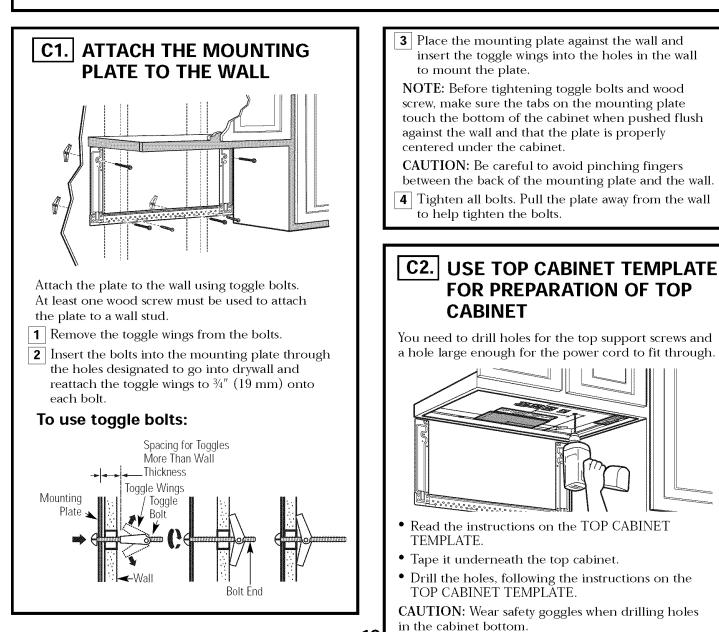
C RECIRCULATING (Non-Vented Ductless)

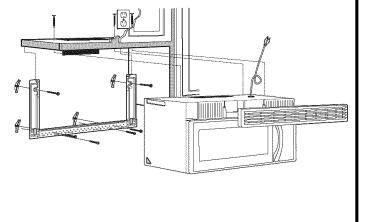
INSTALLATION OVERVIEW

- C1. Attach Mounting Plate to Wall
- C2. Prepare Top Cabinet
- C3. Check Microwave Assembly
- C4. Adjust Blower
- $\textbf{C5.} \ \textbf{Mount the Microwave Oven}$
- C6. Install Charcoal Filter

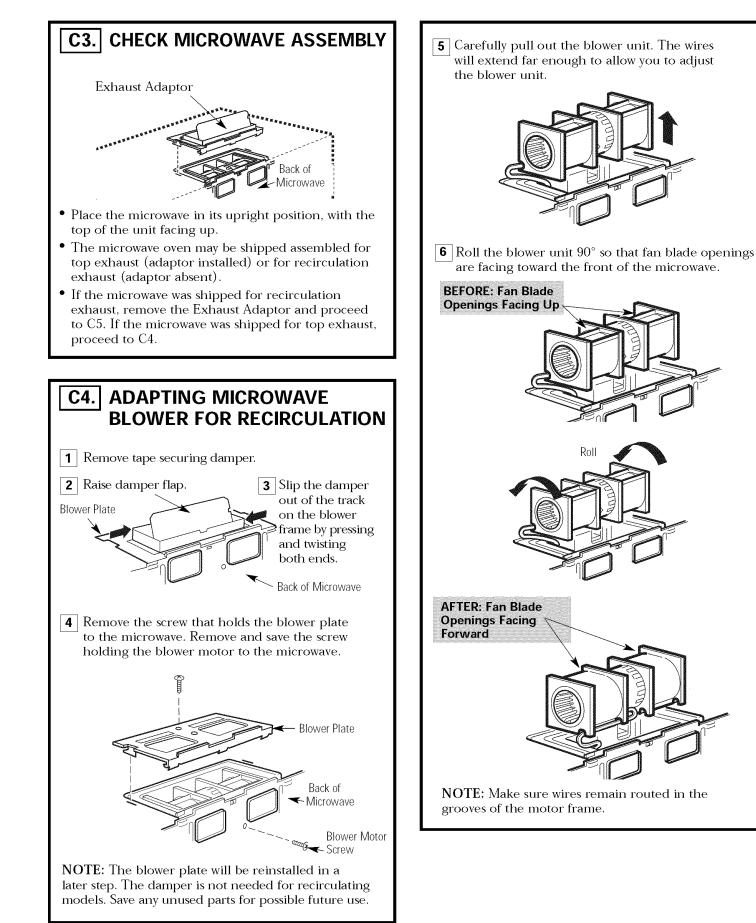
IMPORTANT NOTES:

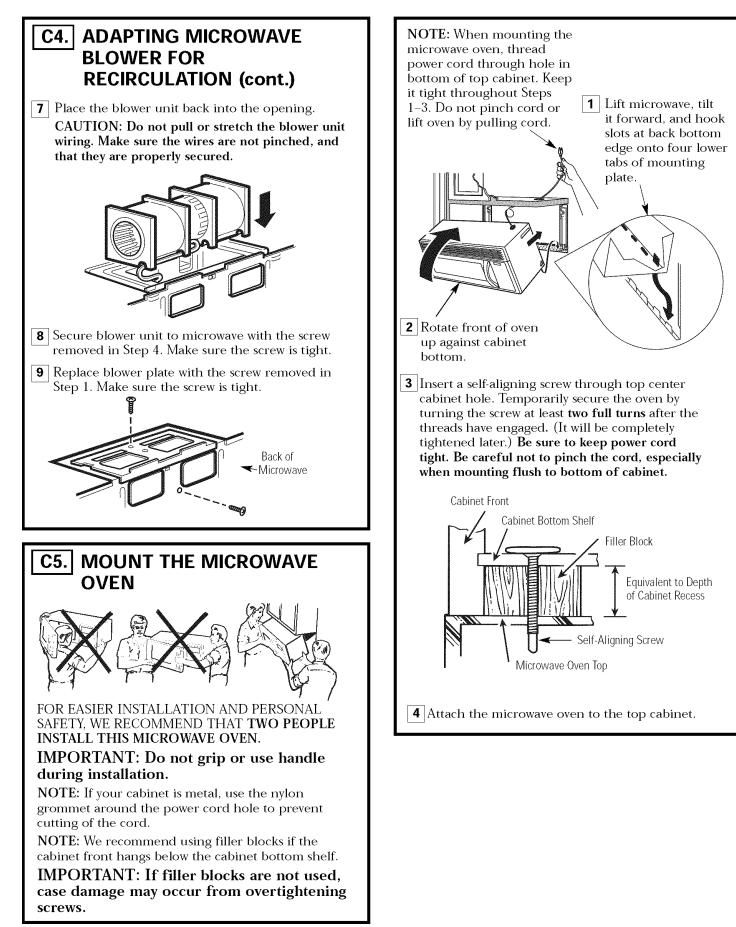
- Make sure the screws for the blower motor and blower plate are securely tightened when they are reinstalled. This will help to prevent excessive vibration.
- Make sure the motor wiring has been properly routed and secured, and that the wires are not pinched.

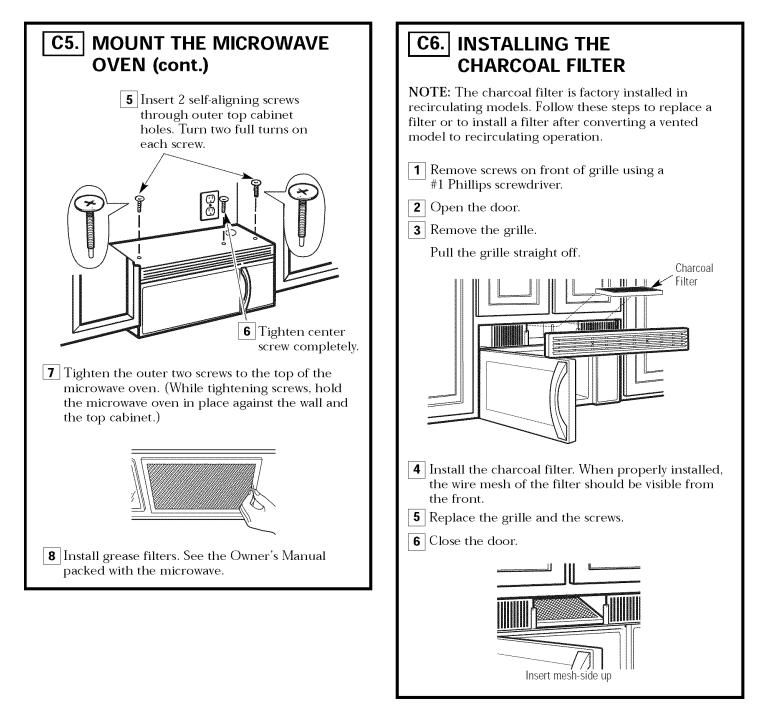




19







BEFORE YOU USE YOUR MICROWAVE

