# Installation Instructions

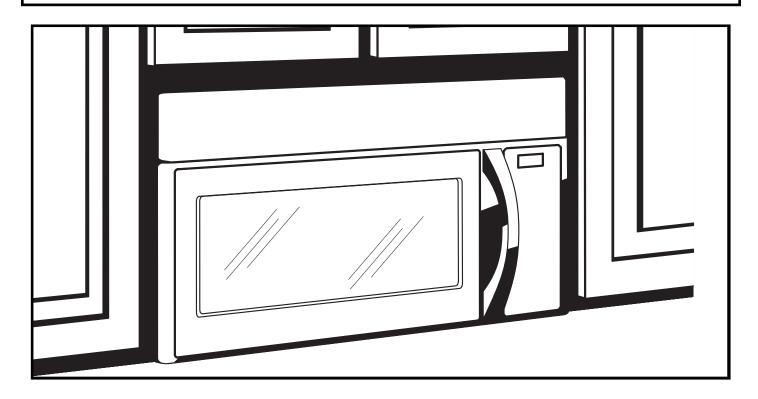
# Over the Range Microwave Oven

Questions? Call 1-800-944-9044(US) or 1-800-265-8352(Canada)

# **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.

p/n 316495162 April 2017

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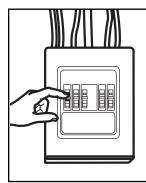
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### **IMPORTANT SAFETY INSTRUCTIONS**

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 ensure 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 seperate and dedicated 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 seperate and dedicated 15- to 20- ampere branch circuit single grounded outlet. The outlet box should be located in the cabinet above the microwave oven. The outler box and supply circuit should be installed by a qualifed electrician and conform to the National Electrical Code or the prevailing local code.

### 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

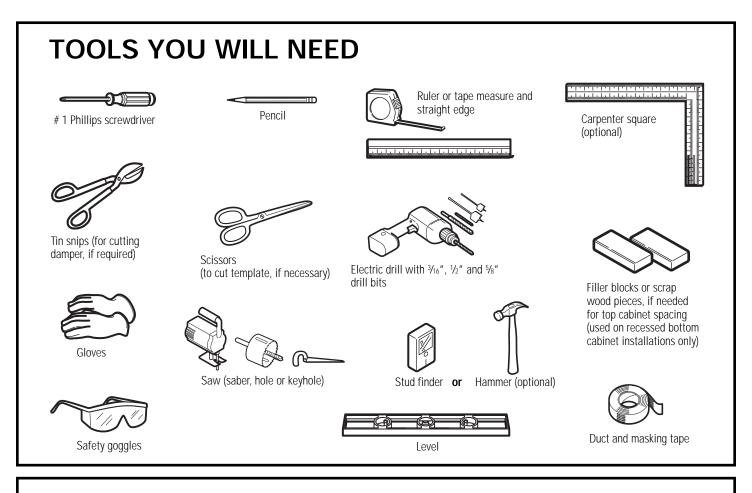
PART	QUANTITY		
- Spining	2		
	Toggle Bolts (and wing nuts) (3/16" x 3")	2	
	Self-Aligning Machine Screws (¼"-28 x 3¼")	3	
CONTRACTOR OF THE OWNER OF	Nylon Grommet (for metal cabinets)	1	

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

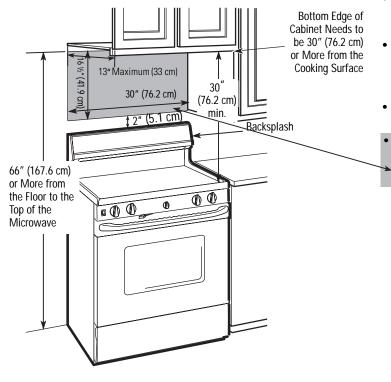
NOTE: Some extra parts are included.

### PARTS INCLUDED (CONT.) ADDITIONAL PARTS

PART		QUANTITY
	Top Cabinet Template	1
	Rear Wall Template	1
INSTALLATION INSTRUCTIONS USE & CARE MANUAL	Installation Instructions	1
	Use & Care Manual	1
	Separately Packed Grease Filters	2
	Exhaust adaptor	1
	Glass Tray	1
	Turntable Ring	1
For some models	Convection wire rack	1
For some models	Shelf	1
For some models	PureAir@ Microwave Filter	1

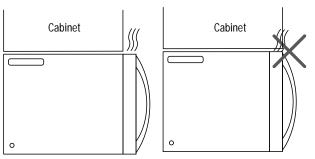


# MOUNTING SPACE



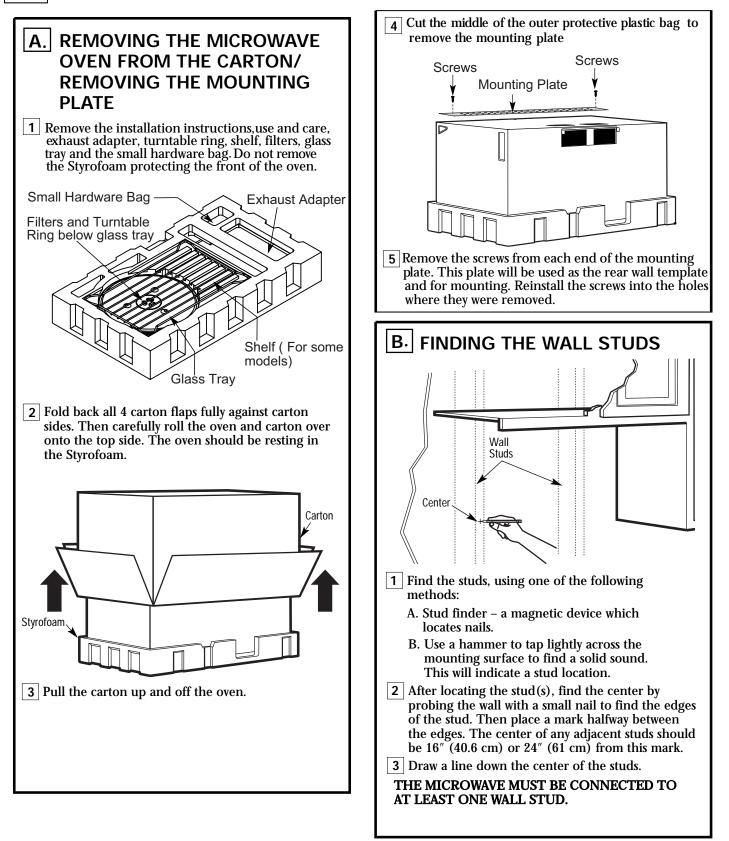
#### NOTES:

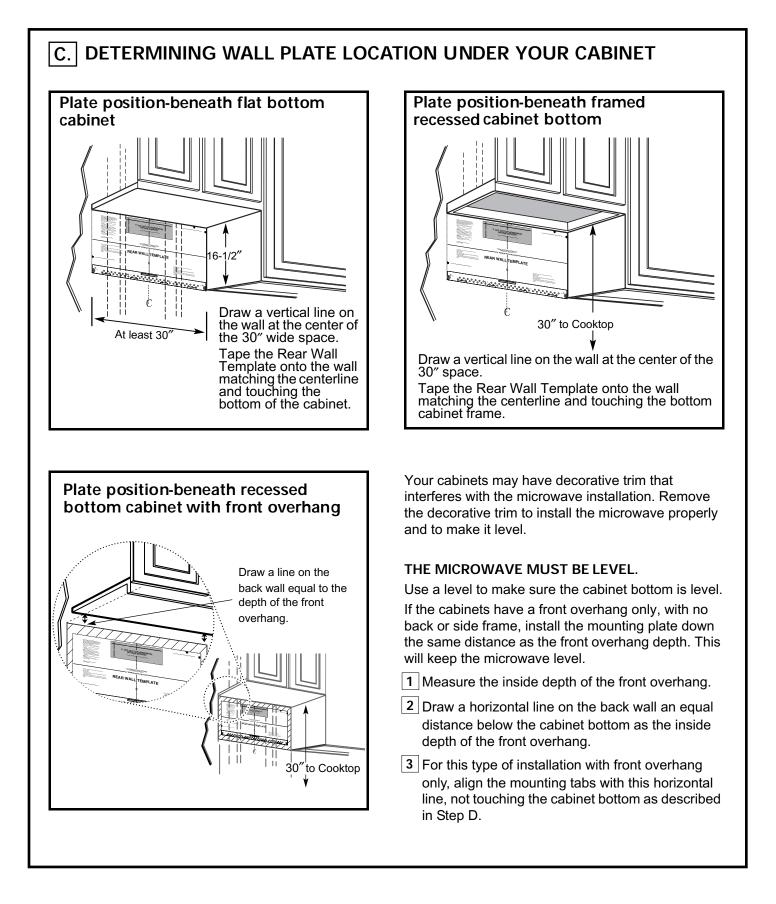
- The space between the cabinets must be 30" (76.2 cm)wide and free of obstructions.
- If you are going to vent your microwave oven to the outside, see Hood Exhaust Section for exhaust duct preparation.
- When installing the microwave oven beneath smooth, flat cabinets, be careful to follow the instructions on the top cabinet template for power cord clearance.
- As a guide to installation, see page 24 for Mounting Template Information.
- If the cabinet depth including the cabinet doors is more than 13" then the unit must be spaced
   out from wall using adequate materials supporting 150 Ibs to allow proper top vent air exhaust/intake.

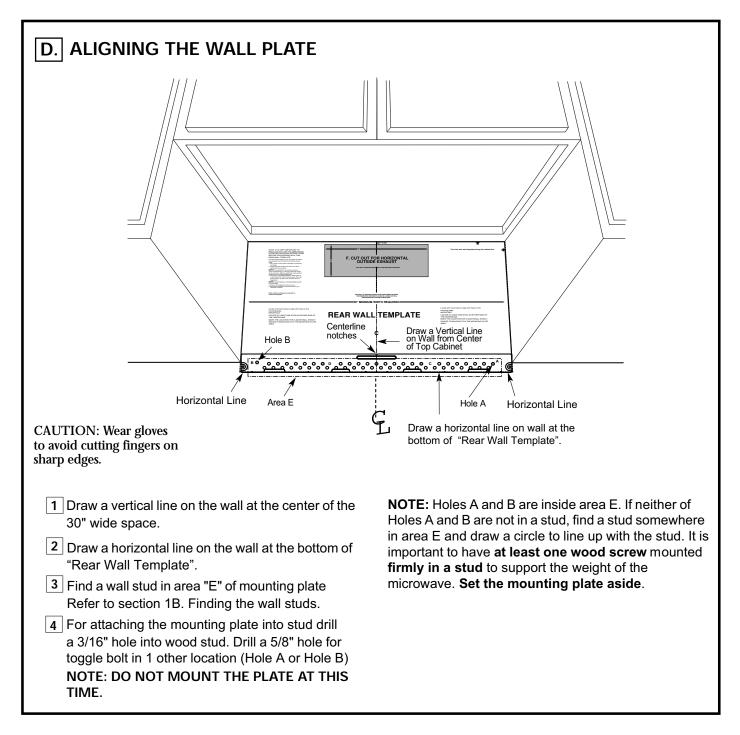


# PLACEMENT OF THE MOUNTING PLATE

1







## 2

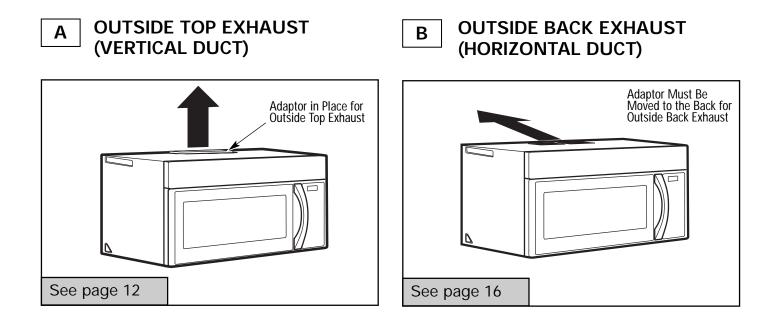
### **INSTALLATION TYPES** (Choose A, B or C)

This microwave oven is designed for adaptation to

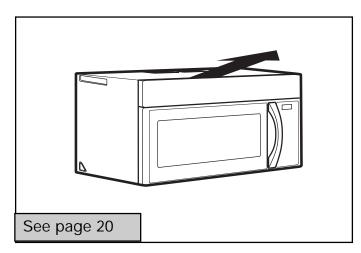
the following three types of ventilation: A. Outside Top Exhaust (Vertical Duct)

A. Outside Top Exhaust (Vertical Duct)

B. Outside Back Exhaust (Horizontal Duct) C. Recirculating (Non-Vented Ductless) **NOTE:** This microwave is shipped assembled for Recirculating. Select the type of ventilation required for your installation and proceed to that section.



C RECIRCULATING (NON-VENTED DUCTLESS)



Models are shipped for recirculating exhaust. Some models have a disposable charcoal filter installed to help remove smoke and odors.

NOTE: Read the 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 20.

### INSTALLATION INSTRUCTIONS FOR EXTERNAL EXHAUST DUCTING

**NOTE:** If you need to install ducts, note that the total duct length of 3<sup>1</sup>/<sub>4</sub>" x 10" (8.2 x 25.4 cm) rectangular or 5" (12.7 cm) diameter / 6" (15.2 cm) diameter round duct **should not exceed 120 equivalent feet (36.5 m).** 

Outside ventilation requires an EXTERNAL 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 exhaust adaptor 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. A 5<sup>w</sup>(12.7cm)/ 6<sup>w</sup> (15.2cm) diameter duct is acceptable to use.

#### 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 5" (12.7 cm) diameter / 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	x	NUMBER USED	=	EQUIVALENT LENGTH
	Rectangular-to-Round Transition Adaptor*	5 Ft. (1.5 m)	Х	( )	=	Ft. or m
	Wall Cap	40 Ft. (12.2 m)	Х	( )	=	Ft. or m
	90° Elbow	10 Ft. (3 m)	Х	( )	Ш	Ft. or m
	45° Elbow	5 Ft. (1.5 m)	Х	( )	н	Ft. or m
	90° Elbow	25 Ft. (7.6 m)	х	( )	Ш	Ft. or m
	45° Elbow	5 Ft. (1.5 m)	Х	( )	=	Ft. or m
	Roof Cap	24 Ft. (7.3 m)	х	( )	=	Ft. or m
	Straight Duct 6" (15.2 cm) Round or 3 <sup>1</sup> /4" x 10" (8.2 x 25.4 cm Rectangular)	1 Ft. (0.3 m)	Х	( )	=	Ft. or m
			Tota	al Ductwork	=	Ft. or m



<sup>4</sup> **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.

## EXTERNAL EXHAUST DUCTING

#### **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	n =	41 Ft. (12.5 m)

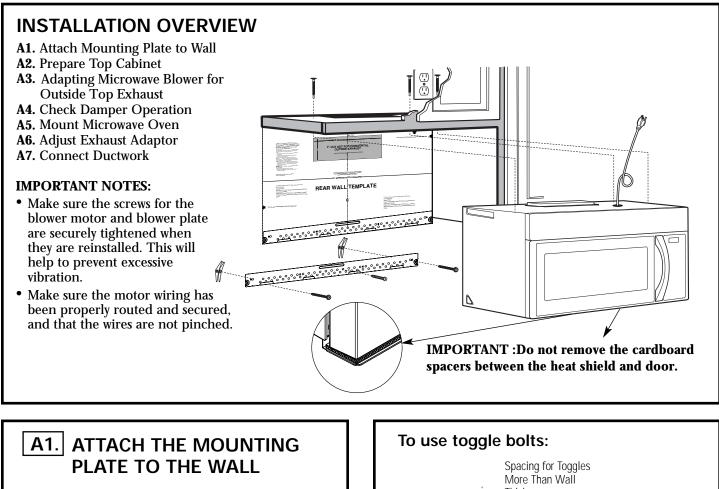
will have to be cut to fit, using the tin snips, in order to allow free movement of the damper.

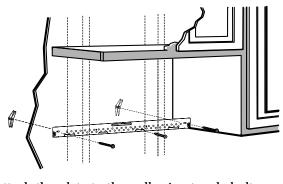
### **OUTSIDE BACK EXHAUST (EXAMPLE ONLY)**

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

n	DUCT PIECES		EQUIVALENT LENGTH*	x	NUMBER USED	=	EQUIVALENT LENGTH
		Wall Cap	40 Ft. (12.2 m)	х	(1)	II	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 lengths of duct pieces are based on actual tests and reflect requirements for good venting performance with any vent hood.				Total Length	=	63 Ft. (19.2 m)
	<b>NOTE:</b> 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.						

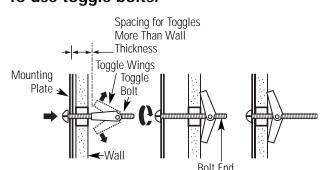
### A OUTSIDE TOP EXHAUST (Vertical Duct)





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 <sup>3</sup>/<sub>4</sub>" (19 mm) onto each bolt.



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

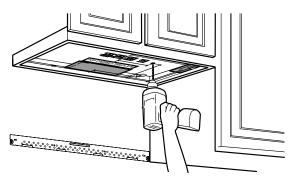
**NOTE:** Before tightening toggle bolts and wood screw, make sure the bottom of the mounting plate touch the bottom of the cabinet when pushed flush against the wall and that the plate is properly centered under the cabinet.

**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

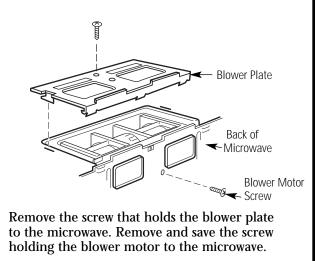
You need to drill holes for the top support screws, a hole large enough for the power cord to fit through, and a cutout large enough for the exhaust adaptor.

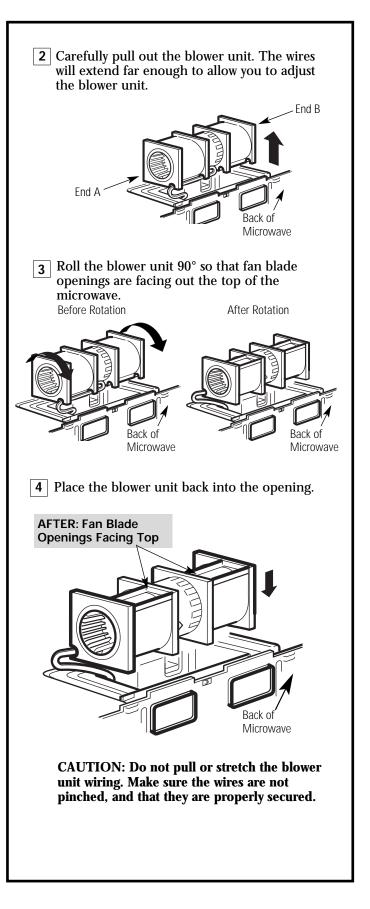


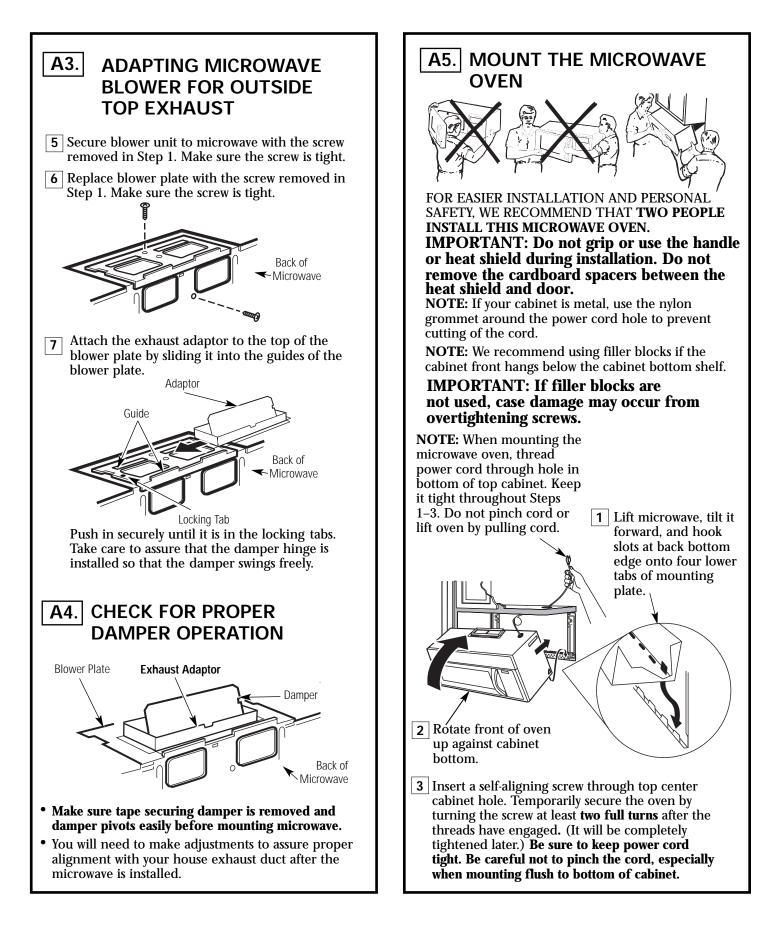
- Read the instructions on the TOP CABINET TEMPLATE.
- Tape it underneath the top cabinet.
- Drill the holes, following the instructions on the TOP CABINET TEMPLATE.

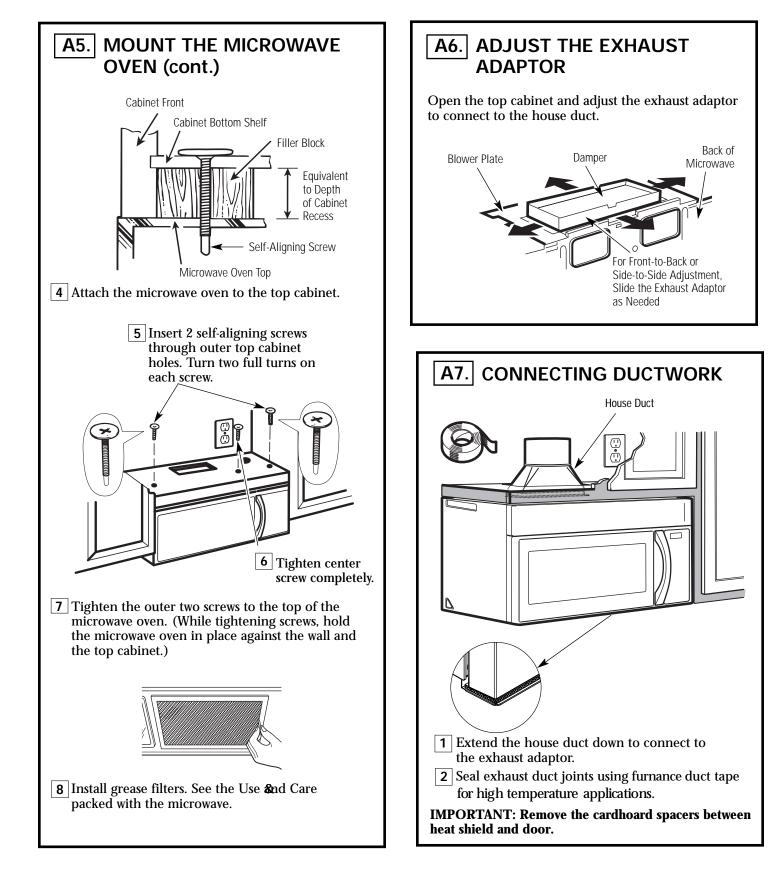
**CAUTION:** Wear safety goggles when drilling holes in the cabinet bottom.

### A3. ADAPTING MICROWAVE BLOWER FOR OUTSIDE TOP EXHAUST Place the microwave in its upright position, with the top of the unit facing up.

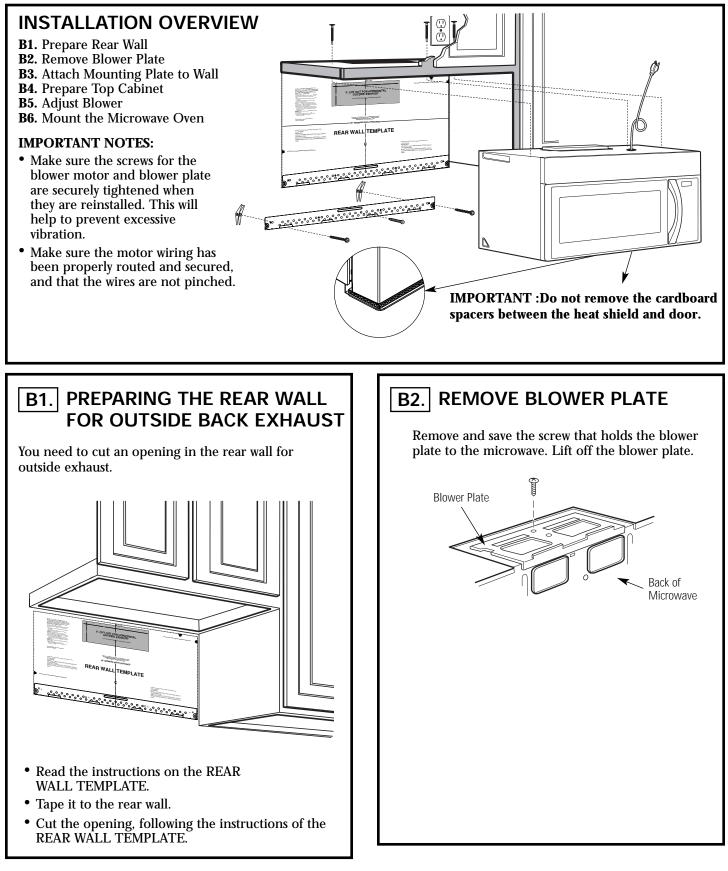




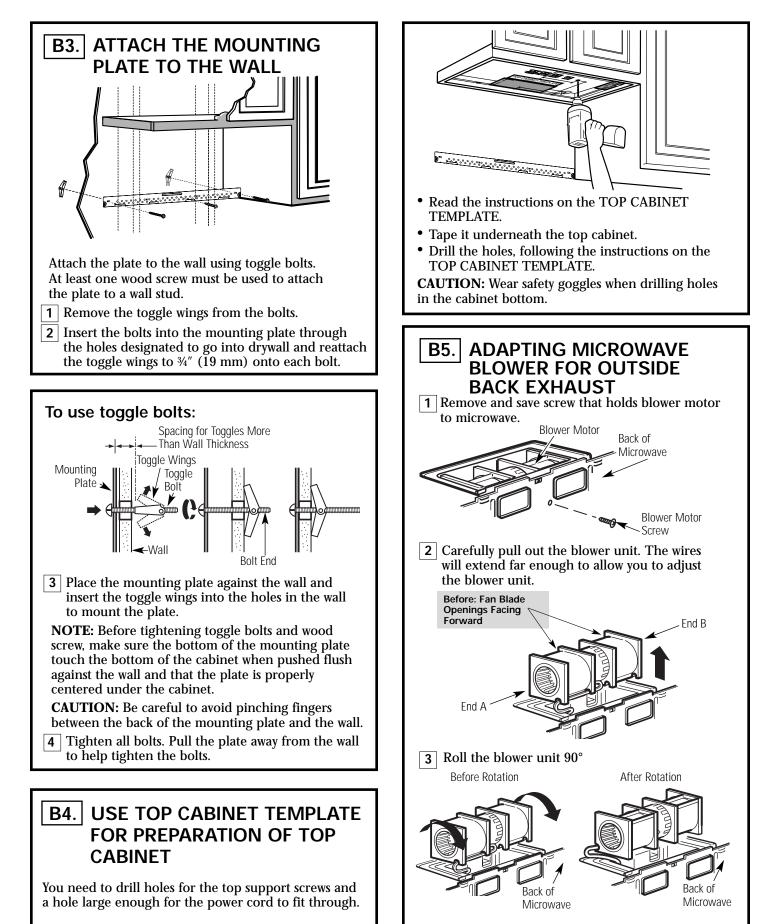


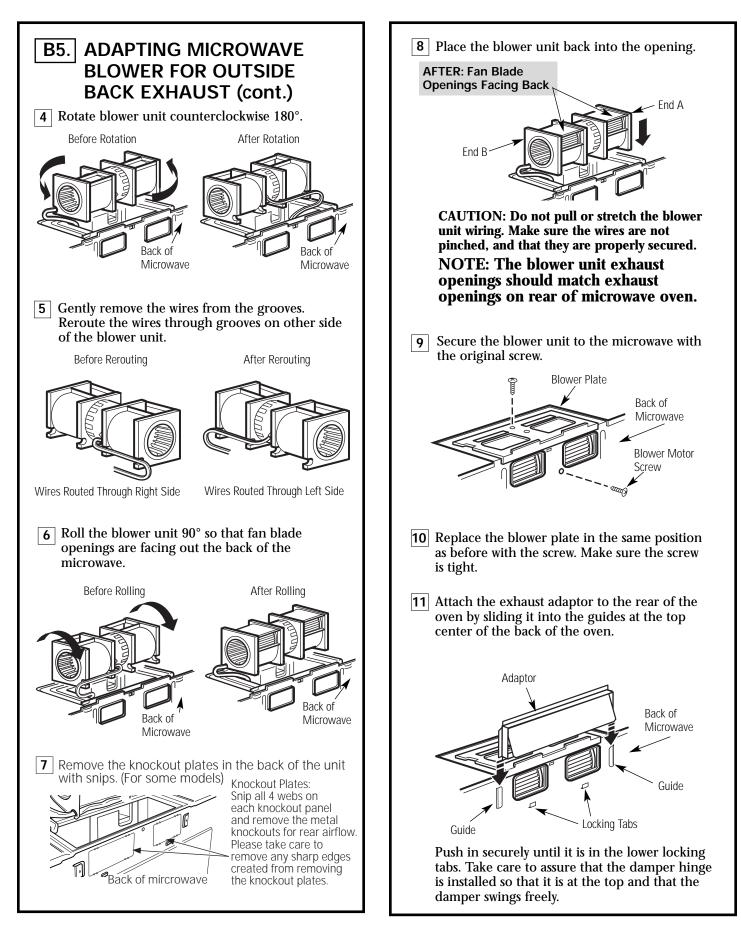


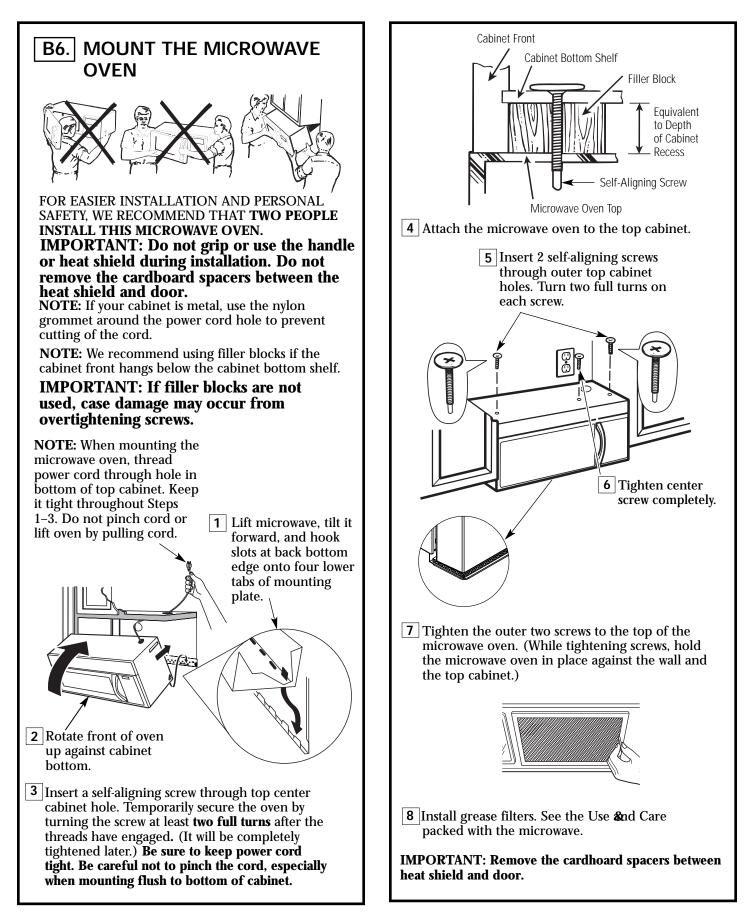
### B OUTSIDE BACK EXHAUST (Horizontal Duct)



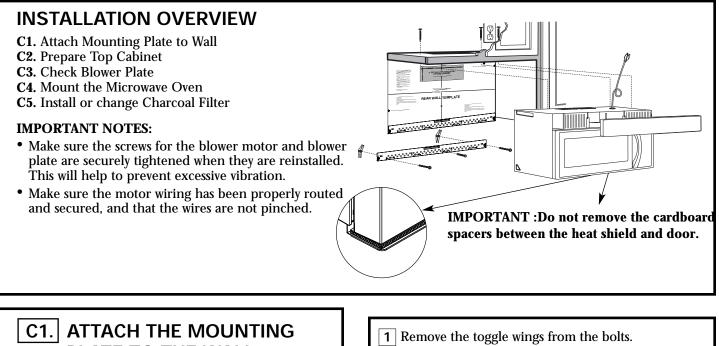
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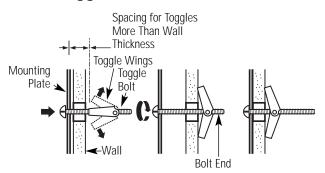


### **RECIRCULATING** (Non-Vented Ductless)



**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:



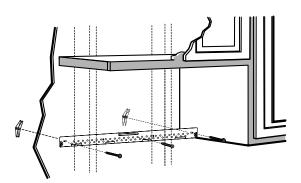
**3** Place the mounting plate against the wall and insert the toggle wings into the holes in the wall to mount the plate.

**NOTE:** Before tightening toggle bolts and wood screw, make sure the bottom of 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.

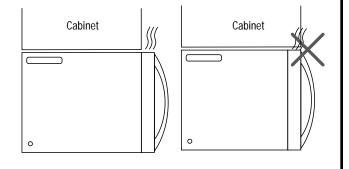
4 Tighten all bolts. Pull the plate away from the wall to help tighten the bolts.

PLATE TO THE WALL

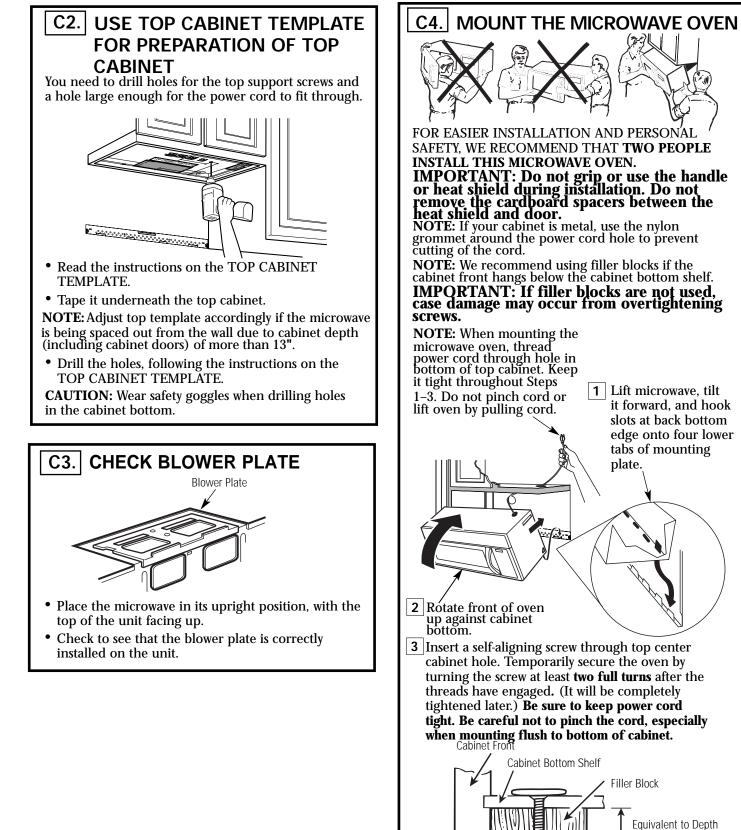


Attach the plate to the wall using toggle bolts. At least one wood screw must be used to attach the plate to a wall stud.

**NOTE:** If the cabinet depth including the cabinet doors is more than 13" then the unit must be spaced out from wall using adequate materials supporting 150 Ibs to allow proper top vent air exhaust/intake.



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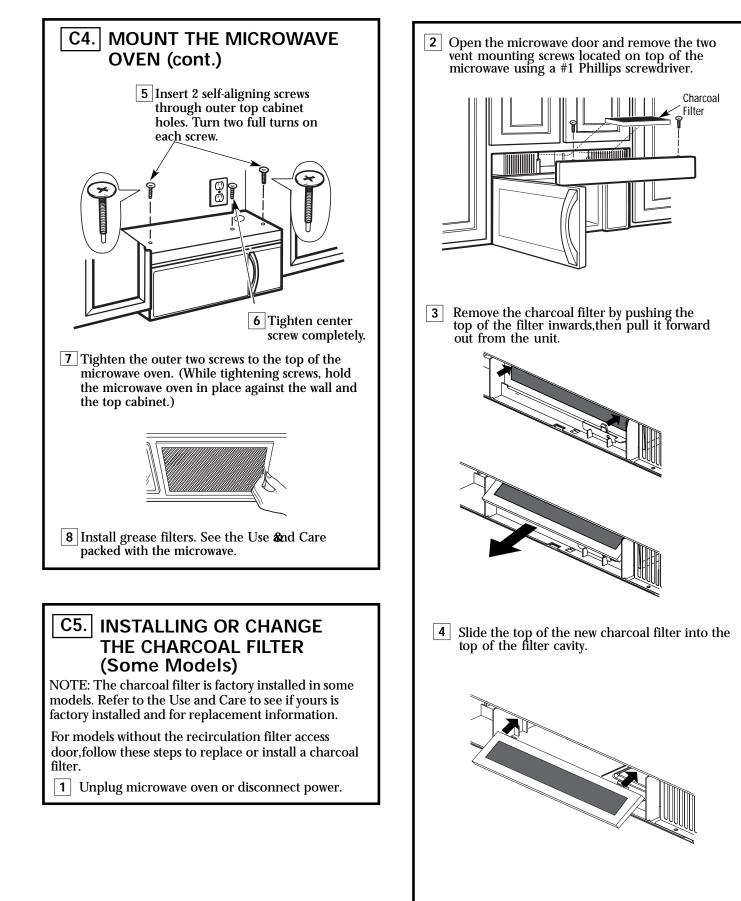


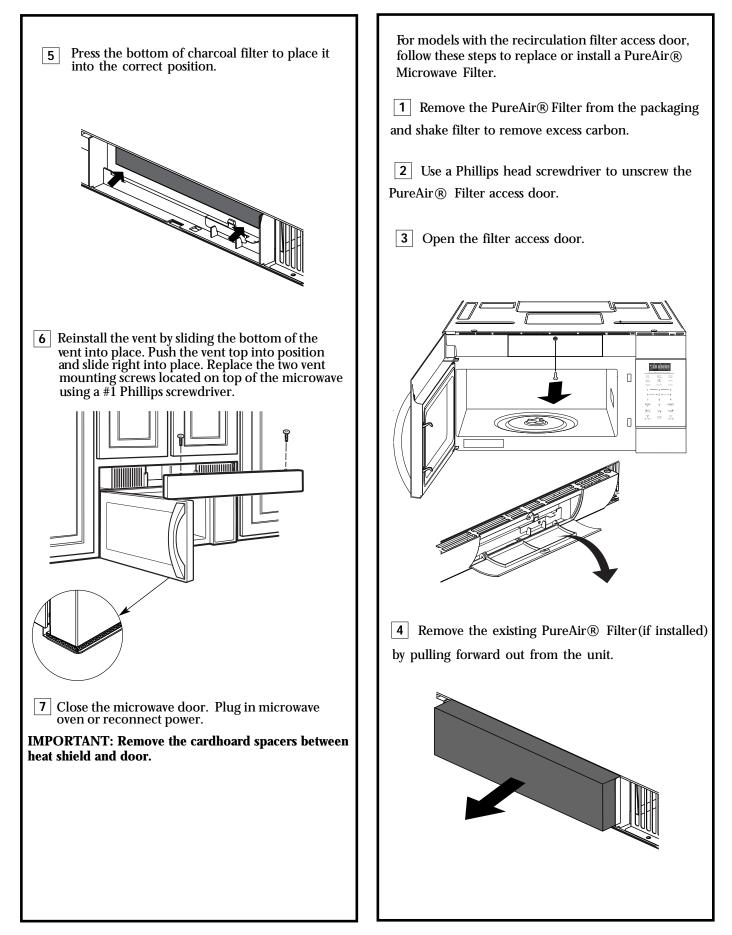
EN-21

of Cabinet Recess

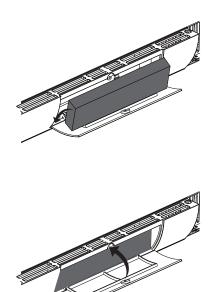
Self-Aligning Screw

Attach the microwave oven to the top cabinet.





**5** Place the new PureAir® Filter into the slot behind the door at an angle until it's upright and securely placed in the duct.



6 Make sure the PureAir® Filter is nested vertically in the slot. Close access door,tighten screw and the PureAir® Filter is ready to use.

### **BEFORE YOU USE YOUR MICROWAVE**

