

#### Model:RV-500-OTR

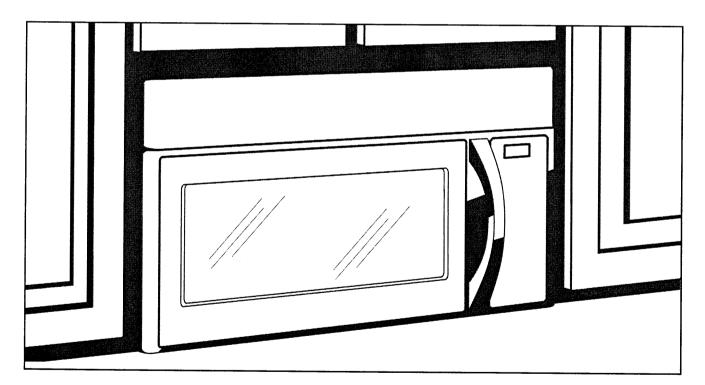
# Installation Instructions

# **Over the Range Microwave Oven**

# **BEFORE YOU BEGIN**

Read these instructions completely and carefully.

- IMPORTANT Save these **INTERVICE AND A CONTINUE** – 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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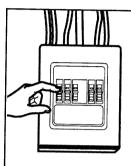
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# **IMPORTANT SAFETY INSTRUCTIONS**

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.



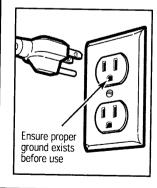
CAUTION: For personal safety, remove house fuse or open circuit breaker before beginning installation to avoid severe or fatal shock injury.

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.

#### 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

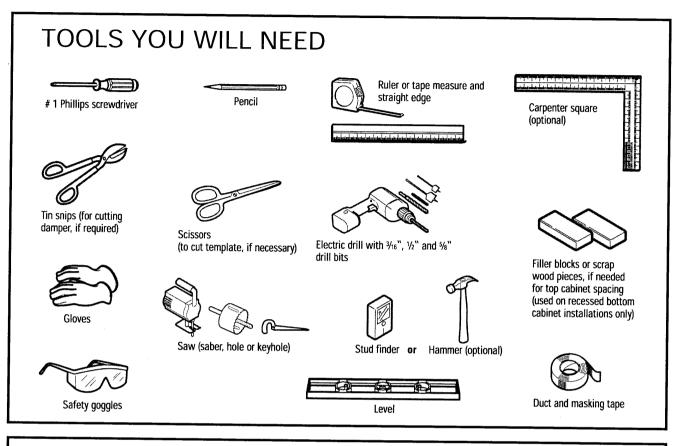
#### **HARDWARE PACKET**

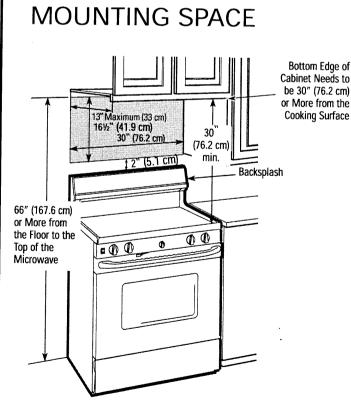
PART		QUANTITY
- Standard	Wood Screws (¼" x 2")	2
0-}-	Toggle Bolts (and wing nuts) (¾6" x 3")	2
	Self-Aligning Machine Screws (1/4" x 31/4")	3
Contraction of the second second	<ul> <li>Nylon Grommet (for metal cabinets)</li> </ul>	1

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 Combined Top Cabinet Template and 1 Rear Wall Template Installation 1 INSTALLATION INSTRUCTIONS Instructions Separately 2 Packed Grease Filters Exhaust 1 adaptor Glass 1 Tray 03 Turntable 1 **?** Ring





#### 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.

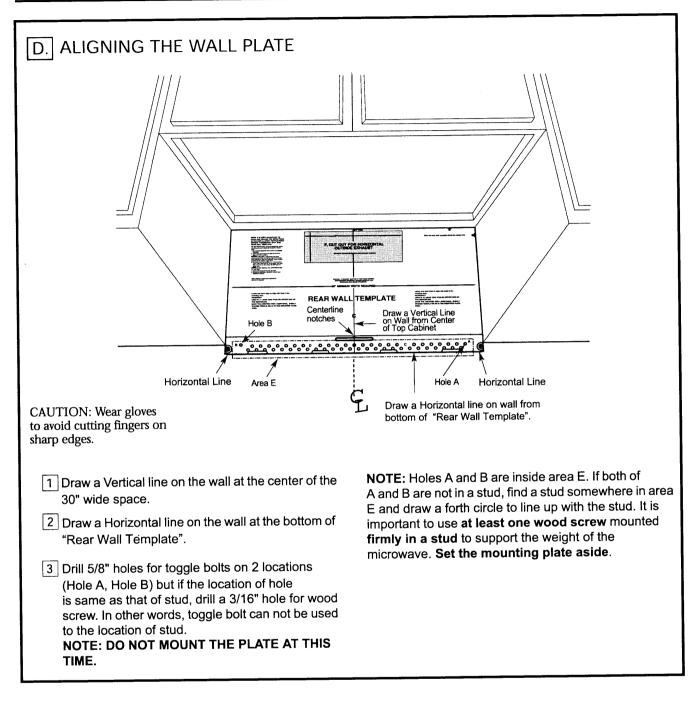
As a guide to installation, see page 24 for Mounting Template Information.

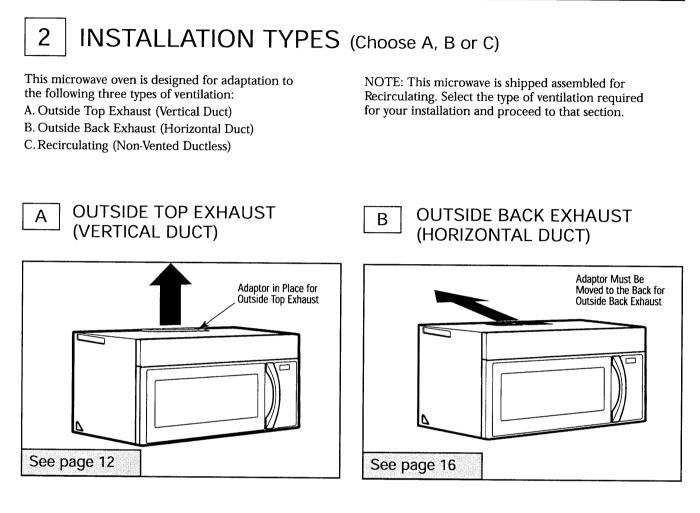
#### Installation Instructions PLACEMENT OF THE MOUNTING PLATE 1 A. REMOVING THE MICROWAVE **B.** FINDING THE WALL STUDS OVEN FROM THE CARTON/ **REMOVING THE MOUNTING** PLATE 1 Remove the installation instructions, filters, glass tray and the small hardware bag. Do not remove the Styrofoam protecting the front of the oven. Wall Studs 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. Center Carton 1 Find the studs, using one of the following methods: A. Stud finder - a magnetic device which locates nails. OR B. Use a hammer to tap lightly across the Styrofoam mounting surface to find a solid sound. This will indicate a stud location. 2 After locating the stud(s), find the center by probing the wall with a small nail to find the edges 3 Pull the carton up and off the oven. of the stud. Then place a mark halfway between the edges. The center of any adjacent studs should Cut the middle of the outer protective plastic bag to be 16" (40.6 cm) or 24" (61 cm) from this mark. 4 remove the mounting plate 3 Draw a line down the center of the studs. Screws THE MICROWAVE MUST BE CONNECTED TO Screws AT LEAST ONE WALL STUD. Mounting Plate 5 Remove the screws from the mounting plate. This plate will be used as the rear wall template and for mounting. Reinstall the screws into the holes where they were removed.

#### C. DETERMINING WALL PLATE LOCATION UNDER YOUR CABINET Plate position—beneath framed recessed Plate position-beneath flat bottom cabinet cabinet bottom 12' in the second second È Draw a vertical line on 33" to Cooktop the wall at the center of the 30" wide space. At least 30 Tape the Rear Wall Draw a vertical line on the wall at the center of the Template onto the wall 30" space. matching the centerline Tape the Rear Wall Template onto the wall matching the centerline and touching the bottom cabinet frame. and touching the bottom of the cabinet. Plate position—beneath recessed bottom Your cabinets may have decorative trim that cabinet with front overhang interferes with the microwave installation. Remove the decorative trim to install the microwave properly and to make it level. THE MICROWAVE MUST BE LEVEL. Draw a line on the back wall equal to the Use a level to make sure the cabinet bottom is level. depth of the front If the cabinets have a front overhang only, with no overhang. back or side frame, install the mounting plate down the same distance as the front overhand 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 33" to Cooktop only, align the mounting tabs with this horizontal line, not touching the cabinet bottom as described in Step D.

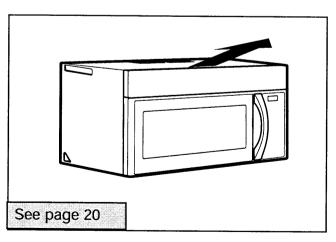
### Installation Instructions

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

### INSTALLATION INSTRUCTIONS FOR EXTERNAL EXHAUST DUCTING

NOTE: If you need to install ducts, note that the total duct length of 31/4" x 10" (8.2 x 25.4 cm) rectangular or 5" (10.5 cm) diameter / 6" (15.2 cm) diameter round duct should not exceed 120 equivalent feet (36.5 m).

Outside ventilation requires a 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''(10.5 cm)/6''(15.2 cm) 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" (10.5 cm) diameter / 6 " (15.2 cm) diameter round duct should not exceed120 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)	x	( )	=	Ft. or m
	Wall Cap	40 Ft. (12.2 m)	x	( )	=	Ft. or m
	90° Elbow	10 Ft. (3 m)	x	( )	=	Ft. or m
Ø	45° Elbow	5 Ft. (1.5 m)	X	( )	=	Ft. or m
	90° Elbow	25 Ft. (7.6 m)	X	( )	=	Ft. or m
	45° Elbow	5 Ft. (1.5 m)	X	( )	=	Ft. or m
	Roof Cap	24 Ft. (7.3 m)	x	( )	=	Ft. or m
	Straight Duct 6" (15.2 cm) Round or 3¼" x 10" (8.2 x 25.4 cm) Rectangular	1 Ft. (0.3 m)	X	( )	=	Ft. or m
			Tota	al 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.						

# EXTERNAL EXHAUST DUCTING

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 20.

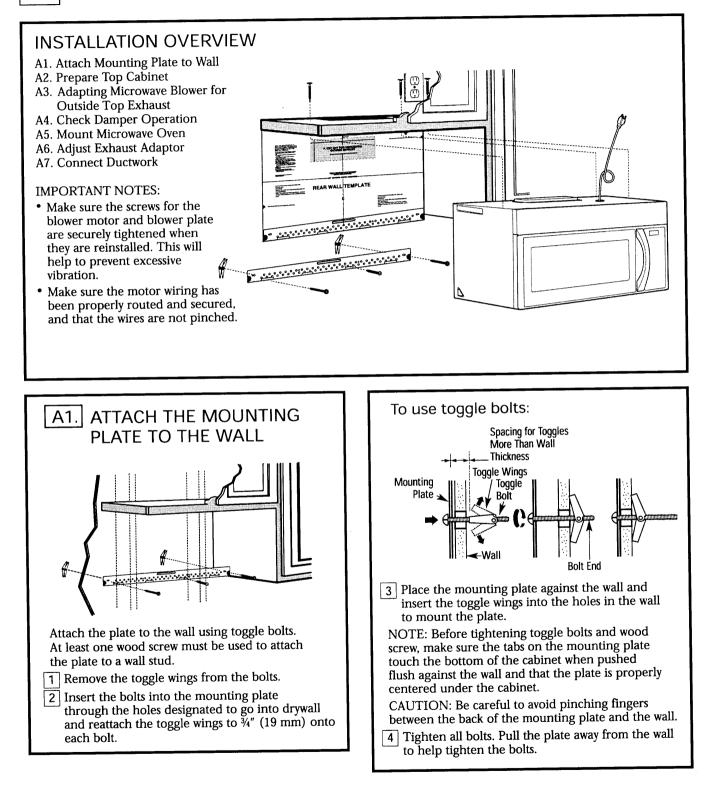
OUTSIDE TOP EXHAUST (EXAMPLE ONLY) The following chart describes an example of one possible ductwork installation.							
	DUCT PIECES	·····	EQUIVALENT LENGTH	x	NUMBER USED	=	EQUIVALENT LENGTH
		Roof Cap	24 Ft. (7.3 m)	x	(1)	=	24 Ft. (7.3 m)
		12 Ft. (3.6 m) Straight Duct (6"/15.2 cm Round)	12 Ft. (3.6 m)	x	(1)	=	12 Ft. (3.6 m)
		Rectangular-to-Round Transition Adaptor*	5 Ft. (1.5 m)	X	(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 = 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.							

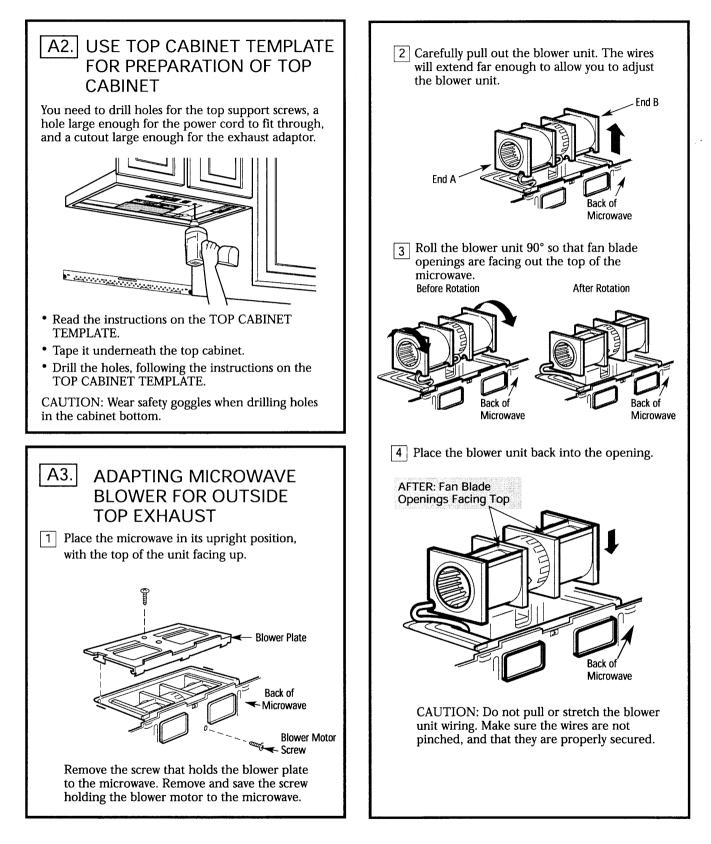
#### OUTSIDE BACK EXHAUST (EXAMPLE ONLY)

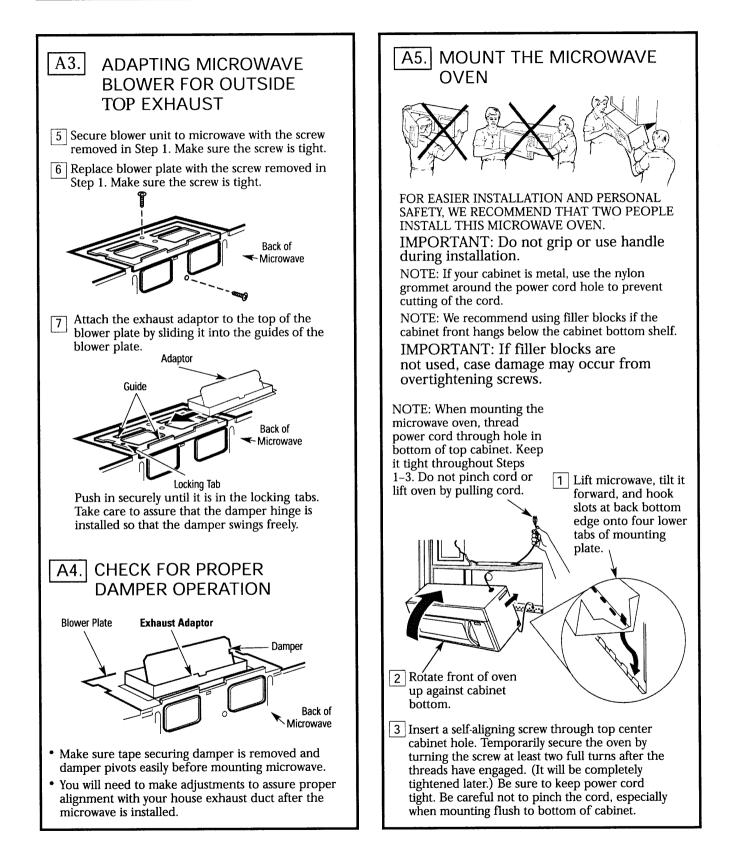
The following chart describes an example of one possible ductwork installation.

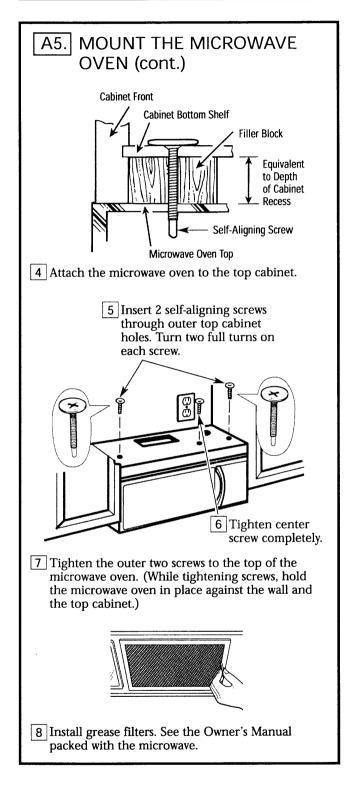
n	DUCT PIECES		EQUIVALENT LENGTH*	x	NUMBER USED	=	EQUIVALENT LENGTH
FP		Wall Cap	40 Ft. (12.2 m)	x	(1)	=	40 Ft. (12.2 m)
		3 Ft. Straight Duct (3¼″ x 10″/8.2 x 25.4 cm Rectangular)	3 Ft. (0.9 m)	X	(1)	=	3 Ft. (0.9 m)
		90° Elbow	10 Ft. (3 m)	X	(2)	=	20 Ft. (3 m)
Equivalent lengths of duct pieces are based on actual tests and reflect requirements for good venting performance with any vent hood. Total Length = 63 Ft. (19.2 m)							
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.							

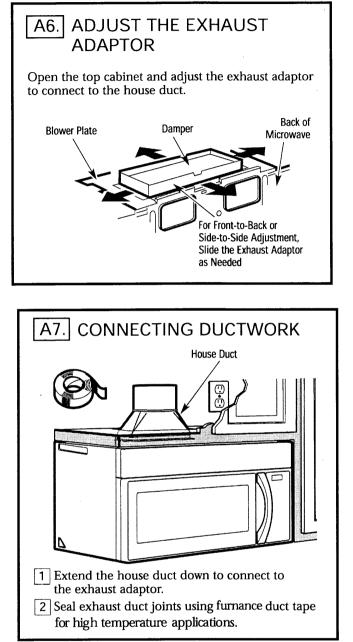
# A OUTSIDE TOP EXHAUST (Vertical Duct)



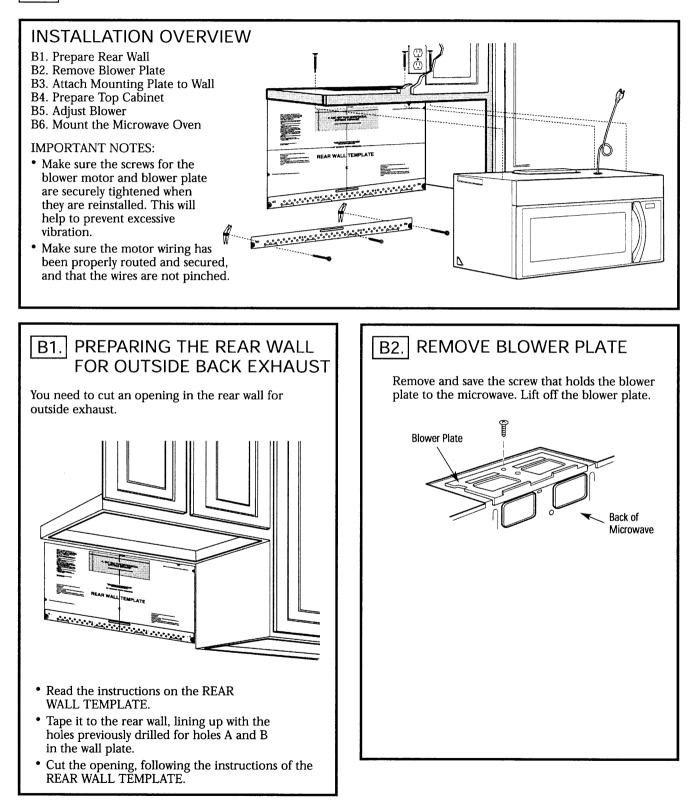


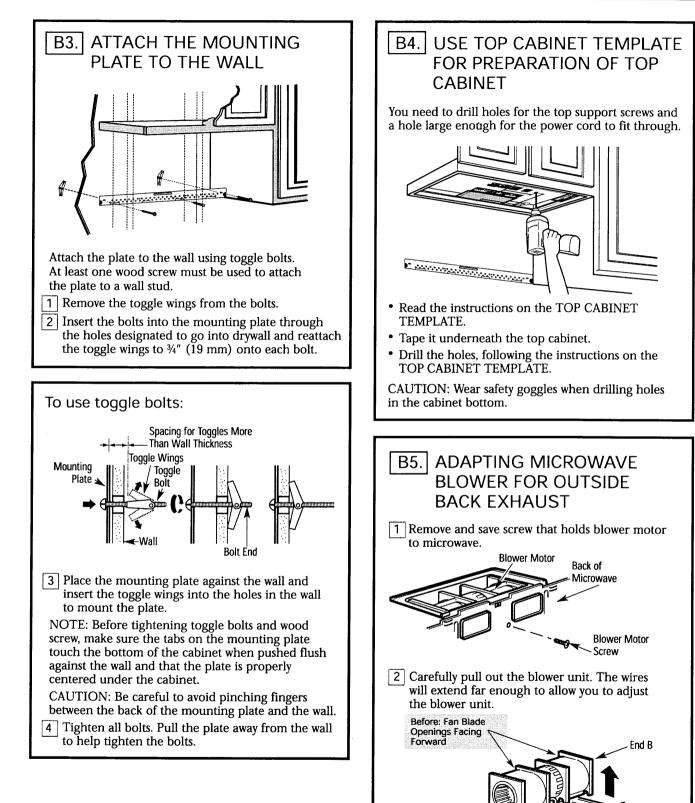




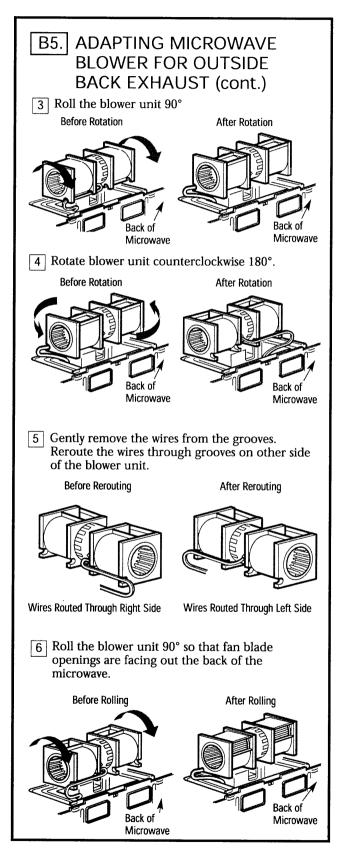


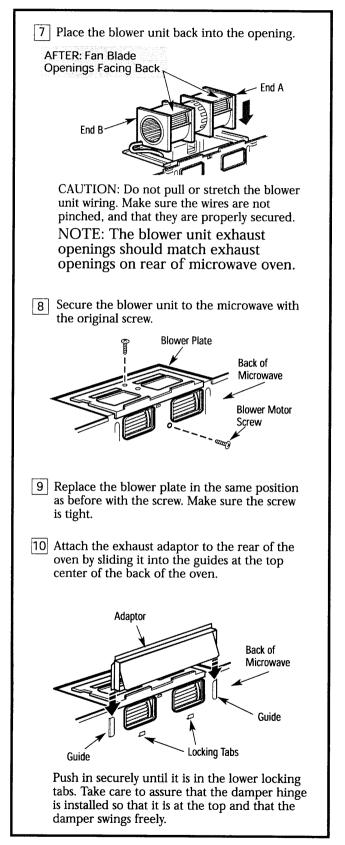
# B OUTSIDE BACK EXHAUST (Horizontal Duct)

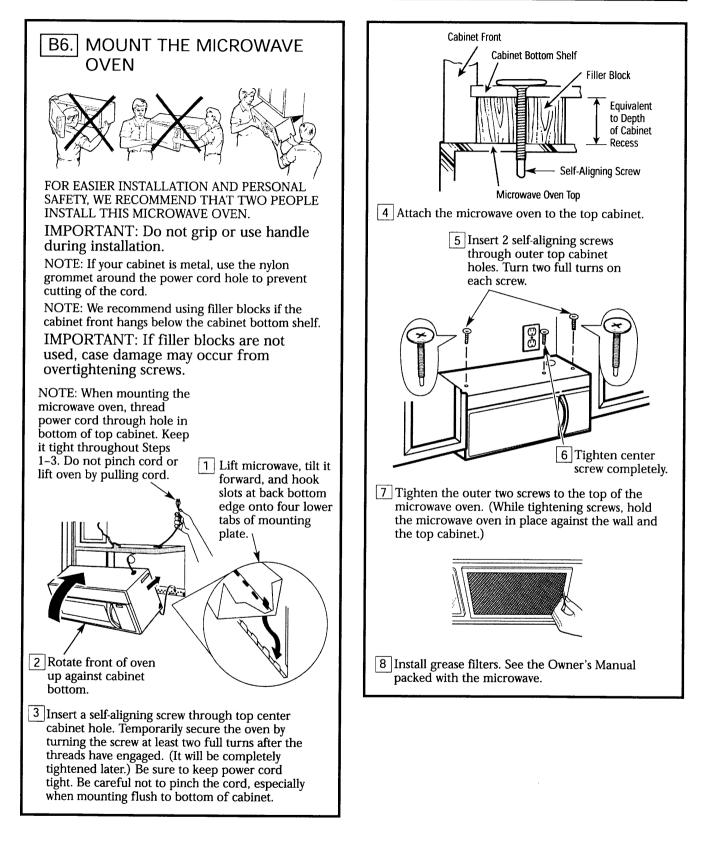




End A







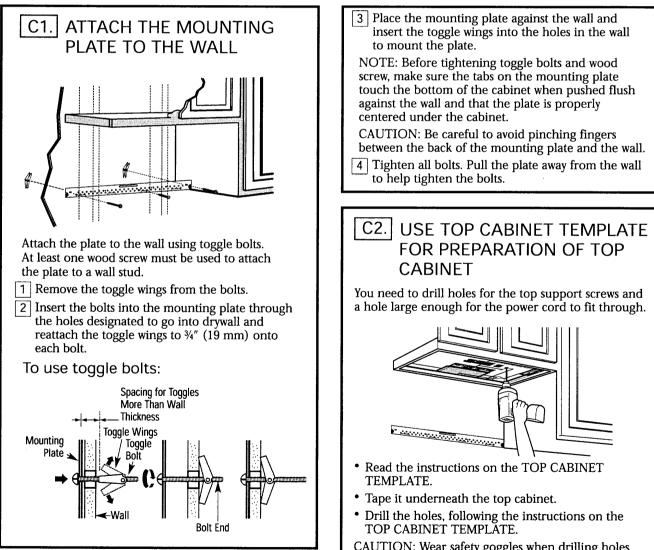
# C RECIRCULATING (Non-Vented Ductless)

#### INSTALLATION OVERVIEW

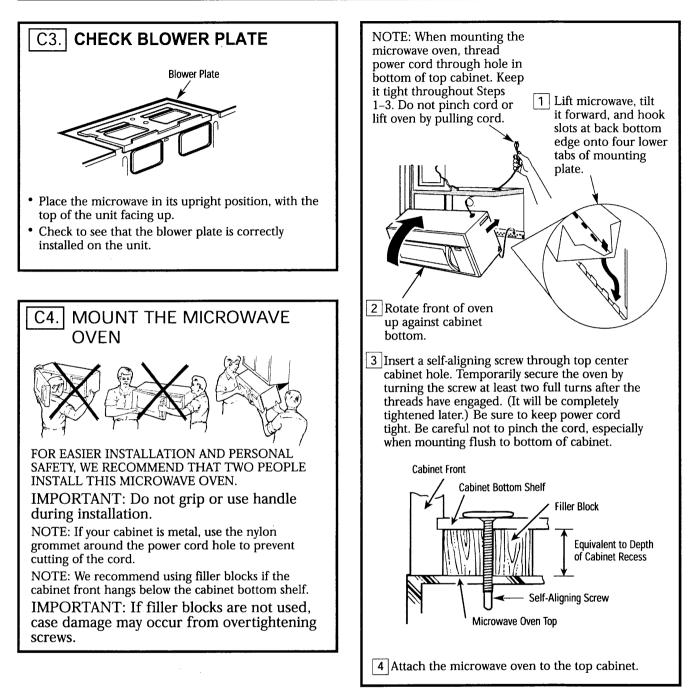
- C1. Attach Mounting Plate to Wall
- C2. Prepare Top Cabinet
- C3. Check Blower Plate
- C4. Mount the Microwave Oven
- C5. Install or change Charcoal Filter

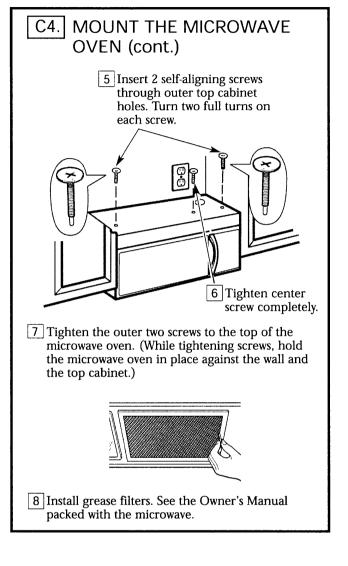
#### IMPORTANT NOTES:

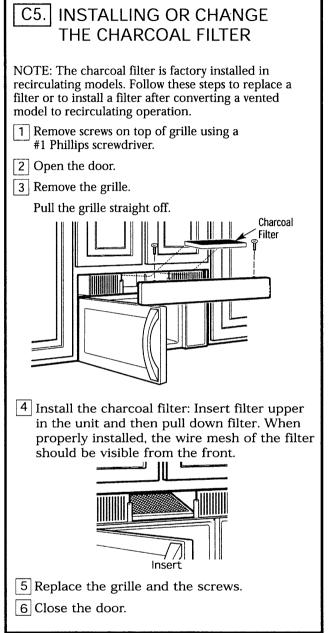
- Make sure the screws for the blower motor and blower plate are securely tightened when they are reinstalled. # This will help to prevent excessive vibration.
- Make sure the motor wiring has been properly routed and secured, and that the wires are not pinched.



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







# BEFORE YOU USE YOUR MICROWAVE

