# Installation Instructions

# Over the Range Microwave Oven

# **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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This is the safety alert symbol. This symbol alerts you to potential hazards that can kill or hurt you and others. All safety messages will follow the safety alert symbol and the word "DANGER", "WARNING", or "CAUTION". These words are defined as:

Indicates a hazardous situation which, if not avoided, will result in death or serious injury.

Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

## IMPORTANT SAFETY INSTRUCTIONS

A qualified electrician must perform a ground continuity check on the wall receptacle before beginning the installation to ensure that the outlet box is properly grounded. If not properly grounded, or if the wall receptacle does not meet electrical requirements noted (under ELECTRICAL REQUIREMENTS), a qualified electrician should be employed to correct any deficiencies.



## **A**WARNING

Risk of Electric Shock. Can cause injury or death: Remove house fuse or open circuit breaker

before beginning installation to avoid severe or fatal shock injury.



## 

Risk of Electric Shock. Can cause injury or death: 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.

Where a standard two-prong wall receptacle is encountered, it must be replaced with a properly grounded three-prong wall receptacle, installed by a qualified electrician.

## **RISK OF ELECTRIC SHOCK**

**AWARNING** Can cause injury or death: DO NOT, under any circumstances, cut, deform or remove any of the prongs from the power cord. Do not use with an extension cord. Failure to comply may cause fire.

### **ELECTRICAL REQUIREMENTS**

Product rating is 120 volts AC, 60 Hertz, 14.5 amps and 1.7 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.

### FOR YOUR SAFETY:

### 

### 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 product, plus additional oven loads of up to 50 pounds or a total weight of 113–135 pounds.

**For personal safety**, this product cannot be installed in cabinet as an island or a peninsula. It must

arrangements such as an island or a peninsula. It must be mounted to BOTH a top cabinet AND a wall.

## 

To avoid the risk of personal injury (back injury or other injuries

due to excessive weight of the microwave oven) or property damage, you will need two people to install this microwave oven.

### 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 11.

### OUTSIDE TOP EXHAUST (EXAMPLE ONLY)

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

$\bigcirc$		I	EQUIVALENT LENGTH	x	NUMBER USED	=	LENGTH
		Roof Cap	24 Ft.	x	(1)	=	24 Ft.
		12 Ft. Straight Duct (6″ Round)	12 Ft.	х	(1)	=	12 Ft.
		Rectangular-to-Round Transition Adaptor*	5 Ft.	х	(1)	=	5 Ft.
	Equivalent lengths of duct pieces are based on actual tests and reflect requirements for good venting performance with any vent hood. <b>Total Length</b> =						41 Ft.

\* **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.

accommodate exhaust.

_l	DUCT PIECES		EQUIVALENT LENGTH*	х	NUMBER USED	=	LENGTH
<b>F</b>		Wall Cap	40 Ft.	x	(1)	=	40 Ft.
		3 Ft. Straight Duct (3¼″ x 10″ Rectangular)	3 Ft.	x	(1)	=	3 Ft.
		90° Elbow	10 Ft.	x	(2)	=	20 Ft.
	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.				63 Ft.		
		ck exhaust, care should ared at the time it is cor					

**NOTE:** If you need to install ducts, note that the total duct length of  $3\frac{1}{4}$ " x 10" rectangular or 6" diameter round duct **should not exceed 140 equivalent feet.** 

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" rectangular duct.

If a round duct is required, a rectangular-to-round transition adaptor must be used. **Do not use less than a 6**" diameter duct.

### Maximum duct length:

For satisfactory air movement, the total duct length of 3<sup>1</sup>/<sub>4</sub>" x 10" rectangular or 6" diameter round duct **should not exceed 140 equivalent feet.** 

### 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	=	LENGTH
	Rectangular-to-Round Transition Adaptor*	5 Ft.	х	( )	=	Ft.
	Wall Cap	40 Ft.	х	( )	=	Ft.
	90° Elbow	10 Ft.	x	( )	=	Ft.
Ø	45° Elbow	5 Ft.	x	( )	=	Ft.
	90° Elbow	25 Ft.	х	( )	=	Ft.
	45° Elbow	5 Ft.	x	( )	=	Ft.
	Roof Cap	24 Ft.	x	( )	=	Ft.
	Straight Duct 6" Round or 31/4" x 10" Rectangular	1 Ft.	х	( )	=	Ft.
			Tota	I Ductwork	=	Ft.



\* **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
1 Junior Marine	Wood screws (1/4" x 2")	2
	Toggle bolts (and wind nuts) (3/16" x 3")	2
H.	Self-aligning machine screws (1/4" - 28 x 3 1/4")	2
Contraction of the second s	Nylon Grommet (for metal cabinets)	1
	Tapping screws (for attaching the damper duct connector)	3
	One power cord clamp and One dark-colored mounting screw (to hold the power cord)	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.

## ADDITIONAL PARTS

Part		Quantity
TOP CABINET TEMPLATE	Top Cabinet Template	1
REAR WALL TEMPLATE	Rear Wall Template	1
INSTALLATION INSTRUCTIONS	Installation Instructions	1
	Separately Packed Grease Filter	2
	Mounting Plate (for supporting the microwave Oven)	1
	Cover plate (for Room Venting installation)	1

# TOOLS YOU WILL NEED



Phillips screwdriver





Tin snips (for cutting damper, if required)



Gloves



template, if necessary)

Pencil



Saw (saber, hole or keyhole)



Level

# **MOUNTING SPACE**



### NOTES:

Stud

finder

Ruler or tape measure and

Electric drill with 3/16", 7/16",

1/2" and 5/8" drill bits

straight edge

- The space between the cabinets must be 30" wide and free of obstructions.
- This oven is for installation over ranges up to 36" wide.

Hammer (optional)

- If the space between the cabinets is greater than 30", a Filler Panel Kit may be used to fill in the gap between the microwave oven and the cabinets. Your Owner's Manual contains the kit number for your model.
- If you are going to vent your oven to the outside, see Hood Exhaust Section for exhaust duct preparation.
- When installing the oven beneath smooth, flat cabinets, be careful to follow the instructions on the top cabinet template for power cord clearance.
- \* 13" max: for standard installation, 15" cabinet depth requires additional steps using an additional installation kit JX15BUMPWW/BB.
- For models with top venting holes: Do not allow cabinetry or other objects to block the airflow of the vent.
- Café branded over-the-range microwaves should only be installed over Café branded ranges. Installation over any other range may result in surface temperatures that can cause burns.
- All other over-the-range microwaves should not be installed over any cooktop or range with a combined BTU greater than 60,000 BTU.

Filler blocks or scrap wood pieces, if need

Carpenter square

(optional)

wood pieces, if needed for top cabinet spacing (used on recessed bottom cabinet installations only)



Duct and masking tape

# 1 PLACEMENT OF THE MOUNTING PLATE

# A. REMOVING THE MICROWAVE

- 1 Remove the installation instructions, filters, glass tray, mounting plate, and the small hardware bag. Do not remove the foam 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 foam.





## C DETERMINING MOUNTING PLATE LOCATION UNDER YOUR CABINET



Draw a vertical line on the wall at the center of the 30" wide space. Tape the Rear Wall Template onto the wall matching the centerline and touching the bottom of the cabinet

# Plate Position – beneath recessed bottom cabinet with front overhang.





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

Tape the Rear Wall Template onto the wall matching the centerline and touching the bottom cabinet frame.

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 Rearwall Template with this horizontal line, not touching the cabinet bottom as described in Step D.



### 

Wear gloves to avoid cutting fingers

on sharp edges.

### **A**WARNING

#### Risk of electric shock. Can cause injury or death. Take care to not drill into electrical wiring inside walls or cabinets.

This Rear Wall Template serves to locate the mounting holes for the bottom mounting plate and to locate the horizontal exhaust outlet.

- 1. Use a level to check that the template is positioned accurately.
- 2. Locate and mark at least one stud on the left or right side of the centerline.

**NOTE:** It is important to use at least one wood screw mounted firmly in a stud to support the weight of the microwave.

- 3. Mark the hole location on the wall using the template at holes A and B. Mark at least one hole location in area C that lines up with the location of a stud. A minimum of three holes must be used for mounting.
- 4. Drill holes in the marked locations. Where there is a stud, drill a 3/16" hole for wood screws. For holes that do not line up with a stud, drill 5/8" holes for toggle bolts.

#### NOTE: DO NOT INSTALL THE MOUNTING PLATE AT THIS TIME

5. Remove the template from the rear wall.

# Installation Instructions



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

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

A. Recirculating (Non-Vented Ductless)

- B. Outside Top Exhaust (Vertical Duct)
- C. Outside Back Exhaust (Horizontal Duct)





A Charcoal Filter Accessory Kit is required for the non-vented exhaust. (See your Owner's Manual for the kit number.)



**NOTE:** Select the type of ventilation required for your installation and proceed to that section.

# B OUTSIDE TOP EXHAUST (VERTICAL DUCT)



## Α

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

## INSTALLATION OVERVIEW

- A1. Attach Mounting Plate to Wall
- A2. Prepare Top Cabinet
- A3. Check Blower Orientation
- A4. Adapting Microwave Blower For Recirculation
- A5. Mount the Oven
- A6. Installing The Charcoal Filter







# **Installation Instructions**



### A4. MOUNT THE OVEN (continued)

3 Attach the oven to the top cabinet by inserting 2 self-aligning screws through outer top cabinet holes. Turn two full turns on each screw. Be sure to keep power cord tight. Be careful not to pinch the cord, especially when mounting flush to bottom of cabinet.



4 Tighten the two screws to the top of the oven completely. (While tightening screws, hold the oven in place against the wall and the top cabinet.)



5 Install grease filters. See the Owner's Manual packed with the oven.

## A6. WHEN REPLACING THE CHARCOAL FILTER

If the model is not vented to the outside, the air will be recirculated through a disposable charcoal filter that helps remove smoke and odors.

The charcoal filter should be replaced when it is noticeably dirty or discolored (usually after 6 to 12 months, depending on hood usage). See your Owner's Manual for the filter kit number.

### To replace the charcoal filter:

- Open the microwave door.
- 2 Remove 2 screws from the top of the grille. (You may need to open the cabinet doors to remove the screws.
- 3 Slide the grille to the left and forward to remove.



- **4** Slide the old filter down and out to remove it.
- **5** Remove plastic and other outer wrapping from the new filter and install the new filter. When properly installed, the wire mesh of the filter should be visible from the front.
- 6 Replace the grille and the 2 screws.
- 7 Close the door.



# OUTSIDE TOP EXHAUST (Vertical Duct)





B

## B2 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 <u>TOP CABINET</u> TEMPLATE.

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

## B3. CHECK BLOWER MOTOR ORIENTATION

The blower fan blade opening should be facing the top of the microwave. If the fan opening is already facing the top of the microwave, skip to Step B5. Otherwise, continue to Step B4 to adjust the motor orientation.





2 Slide the blower plate from under its retaining flange and lift it off. Remove the cover plate installed on the back. Remove and save screws that hold blower unit to the oven



3 Carefully pull out the blower unit. The wires will extend far enough to allow you to adjust the blower unit.



A Roll the blower unit 90° so that fan blade openings are facing toward the top of the microwave.

BEFORE: Fan Blade Openings Facing Front





## B7. ADJUST THE EXHAUST ADAPTOR

Open the top cabinet and adjust the exhaust adaptor to connect to the house duct.





## **OUTSIDE BACK EXHAUST** (Horizontal Duct)

### **INSTALLATION OVERVIEW**

- C1. Prepare Rear Wall
- C2. Attach Mounting Plate to Wall
- C3. Prepare Top Cabinet
- C4. Adjust Blower

С

C5. Mount The Oven









Back of

Oven

Back of

Oven

# **Installation Instructions**





# **BEFORE YOU USE YOUR MICROWAVE**

1.       Make sure the microwave oven has been installed according to instructions.         Installed according to instructions.         Installed installed according to instructions.	6. Read the Owner's Manual.
<b>2.</b> Remove all packing material from the microwave oven.	7. KEEP INSTALLATION INSTRUCTIONS FOR THE LOCAL INSPECTOR'S USE.
<ul> <li><b>3.</b> Install turntable and ring in cavity.</li> <li><b>4.</b> Replace house fuse or turn breaker back on.</li> </ul>	INSTALLATION INSTRUCTIONS
5. Plug power cord into a dedicated 15- to 20-amp electrical outlet.	

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