

# Microwave Oven

## **INSTRUCTION MANUAL**

Model:TC051K6BW-S

Read these instructions carefully before using your microwave oven, and keep it carefully.

If you follow the instructions, your oven will provide you with many years of good service.

**SAVE THESE INSTRUCTIONS CAREFULLY**

# PRECAUTIONS TO AVOID POSSIBLE EXPOSURE TO EXCESSIVE MICROWAVE ENERGY

- (a) Do not attempt to operate this oven with the door open since open door operation can result in harmful exposure to microwave energy.  
It is important not to defeat or tamper with the safety interlocks.
- (b) Do not place any object between the oven front face and the door or allows soil or cleaner residue to accumulate on sealing surfaces.
- (c) Do not operate the oven if it is damaged. It is particularly important that the oven door close properly and that there is no damage to the:
  - (1) DOOR (bent)
  - (2) HINGES AND LATCHES (broken or loosened)
  - (3) DOOR SEALS AND SEALING SURFACES
- (d) The oven should not be adjusted or repaired by anyone except properly qualified service personnel.

## Specifications

Model:	TC051K6BW-S
Rated Voltage:	120V~ 60Hz
Rated Input Power (Microwave):	1650W
Rated Output Power (Microwave):	1000W
Rated Output Power (Convection):	1600W

# IMPORTANT SAFETY INSTRUCTIONS

When using electrical appliances basic safety precautions should be followed, including the following:

**WARNING** - To reduce the risk of burns, electric shock, fire, injury to persons or exposure to excessive microwave energy:

1. Read all instructions before using the appliance.
2. Read and follow the specific: "PRECAUTIONS TO AVOID POSSIBLE EXPOSURE TO EXCESSIVE MICROWAVE ENERGY" found on page 2.
3. This appliance must be grounded. Connect only to properly grounded outlet. See "GROUNDING INSTRUCTIONS" found on page 5.
4. Install or locate this appliance only in accordance with the provided installation instructions.
5. Some products such as whole eggs and sealed containers - for example, closed glass jars - are able to explode and should not be heated in this oven.
6. Use this appliance only for its intended use as described in the manual. Do not use corrosive chemicals or vapors in this appliance. This type of oven is specifically designed to heat, cook or dry food. It is not designed for industrial or laboratory use.
7. As with any appliance, close supervision is necessary when used by children.
8. Do not operate this appliance if it has a damaged cord or plug, if it is not working properly, or if it has been damaged or dropped.
9. This appliance should be serviced only by qualified service personnel. Contact nearest authorized service facility for examination, repair, or adjustment.
10. Do not cover or block any openings on the appliance.
11. Do not store this appliance outdoors. Do not use this product near water - for example, near a kitchen sink, in a wet basement, near a swimming pool, or similar location.
12. Do not immerse cord or plug in water.
13. Keep cord away from heated surface.
14. Do not let cord hang over edge of table or counter.
15. When cleaning surfaces of door and oven that comes together on closing the door, use only mild, nonabrasive soaps, or detergent applied with a sponge or soft cloth.
16. To reduce the risk of fire in the oven cavity:
  - 1). Do not overcook food. Carefully attend appliance when paper, plastic, or other combustible materials are placed inside the oven to facilitate cooking.
  - 2). Remove wire twist-ties from paper or plastic bag before placing bag in oven.
  - 3). If material inside of the oven ignite, keep oven door closed, turn oven off, and disconnect the power cord, or shut off power at the fuse or circuit breaker panel.
  - 4). Do not use the cavity for storage purposes. Do not leave paper products, cooking utensils, or food in the cavity when not in use.

17. Liquids, such as water, coffee, or tea are able to be overheated beyond the boiling point without appearing to be boiling. Visible bubbling or boiling when the container is removed from the microwave oven is not always present.  
THIS COULD RESULT IN VERY HOT LIQUID SUDDENLY BOILING OVER WHEN THE CONTAINER IS DISTURBED OR A UTENSIL IS INSERTED INTO THE LIQUID.  
To reduce the risk of injury to persons:
- 1) Do not overheat the liquid.
  - 2) Stir the liquid both before and halfway through heating it.
  - 3) Do not use straight-sided containers with narrow necks.
  - 4) After heating, allow the container to stand in the microwave oven for a short time before removing the container.
  - 5) Use extreme care when inserting a spoon or other utensil into the container.
18. Oversized food or oversized metal utensils should not be inserted in a microwave/toaster oven as they may create a fire or risk of electric shock.
19. Do not clean with metal scouring pads. Pieces can burn off the pad and touch electrical parts involving a risk of electric shock.
20. Do not use paper products when appliance is operated in the toaster mode.
21. Do not store any materials, other than manufacturer's recommended accessories, in this oven when not in use.
22. Do not cover racks or any other part of the oven with metal foil. This will cause overheating of the oven.
23. Clean Ventilation Hoods Frequently - Grease should not be allowed to accumulate on hood or filter.
24. When flaming foods under the hood, turn the fan on.
25. Use care when cleaning the vent-hood filter. Corrosive cleaning agents, such as lye-based oven cleaners, may damage the filter.
26. Suitable for use above both gas and electric cooking equipment.

This device complies with Part 18 of the FCC Rules

## **SAVE THESE INSTRUCTIONS**

# GROUNDING INSTRUCTIONS

This appliance must be grounded. In the event of an electrical short circuit, grounding reduces the risk of electric shock by providing an escape wire for the electric current. This appliance is equipped with a cord having a grounding wire with a grounding plug. The plug must be plugged into an outlet that is properly installed and grounded.

**WARNING** - Improper use of the grounding can result in a risk of electric shock. Consult a qualified electrician or serviceman if the grounding instructions are not completely understood, or if doubt exists as to whether the appliance is properly grounded. If it is necessary to use an extension cord, use only a 3-wire extension cord that has a 3-blade grounded plug, and 3-slot receptacle that will accept the plug on the appliance. The marked rating of the extension cord shall be equal to or greater than the electrical rating of the appliance.

## **DANGER** - Electric Shock Hazard

Touching some of the internal components can cause serious personal injury or death. Do not disassemble this appliance.

## **WARNING** - Electric Shock Hazard

Improper use of the grounding can result in electric shock. Do not plug into an outlet until appliance is properly installed and grounded.

1. A short power-supply cord is provided to reduce the risks resulting from becoming entangled in or tripping over a longer cord.
2. Longer cord sets or extension cords are available and may be used if care is exercised in their use.
3. If a long cord or extension cord is used:
  - 1) The marked electrical rating of the cord set or extension cord should be at least as great as the electrical rating of the appliance.
  - 2) The extension cord must be a grounding-type 3-wire cord.
  - 3) The longer cord should be arranged so that it will not drape over the counter top or tabletop where it can be pulled on by children or tripped over unintentionally.

# **RADIO INTERFERENCE**

1. Operation of the microwave oven may cause interference to your radio, TV or similar equipment.
2. When there is interference, it may be reduced or eliminated by taking the following measures:
  - 1) Clean door and sealing surface of the oven
  - 2) Reorient the receiving antenna of radio or television.
  - 3) Relocate the microwave oven with respect to the receiver.
  - 4) Move the microwave oven away from the receiver.
  - 5) Plug the microwave oven into a different outlet so that microwave oven and receiver are on different branch circuits.

## **FCC RF Exposure Requirements**

This device complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. The antenna(s) used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter and must be installed to provide a separation distance of at least 20cm from all persons.

# UTENSILS

## **CAUTION - Personal Injury Hazard**

Tightly-closed utensils could explode. Closed containers should be opened and plastic pouches should be pierced before cooking.

See the instructions on "Materials you can use in microwave oven or to be avoided in microwave oven."

There may be certain non-metallic utensils that are not safe to use for microwaving. If in doubt, you can test the utensil in question following the procedure below.

### **Utensil Test:**

1. Fill a microwave-safe container with 1 cup of cold water (250ml) along with the utensil in question.
2. Cook on maximum power for 1 minute.
3. Carefully feel the utensil. If the empty utensil is warm, do not use it for microwave cooking.
4. Do not exceed 1 minute cooking time.

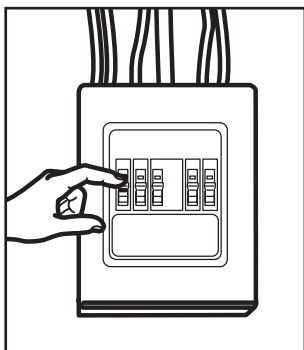
# INSTALLATION INSTRUCTIONS

## 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.



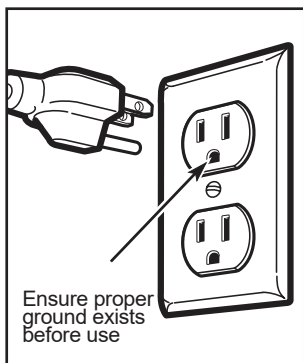
**CAUTION:** For personal safety, remove house fuse or open circuit breaker before beginning installation to avoid severe or fatal shock injury.

**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 separate 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 separate 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 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




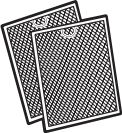
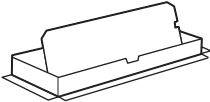




PART		QUANTITY
	Wood Screws (1/4" x 2")	2
	Toggle Bolts (and wing nuts) 3/16" ( x 3")	2
	Self-Aligning Machine Screws 1/4"-28 1x/4 "3)	3
	Nylon Grommet (for metal cabinets)	1

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.

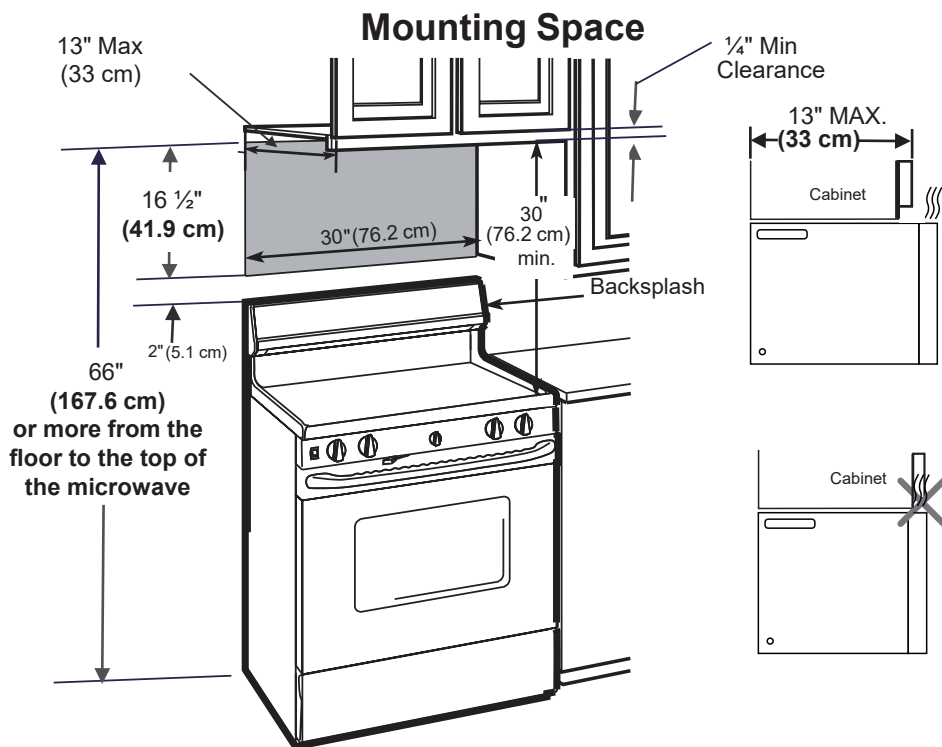
PARTS INCLUDED (CONT.)

ADDITIONAL PARTS

PART		QUANTITY
	Top Cabinet Template	1
	RearWall Template	1
	Installation Instructions	1
	Separately Packed Grease Filters	2
	Exhaust adaptor	1
	Glass Tray	1
	Turntabl Ring	1
For some models 	Convection wire rack	1
For some models 	Shelf	1

## Tools you will need:

- Tape measure
- Hole saw
- Stud finder or hammer
- Level
- Duct and masking tape
- Scissors
- #1 Phillips screw driver
- Electric drill
- 3/16", 1/2", 5/8" drill bit
- Filler wood blocks for recessed bottom cabinets
- Tin snips

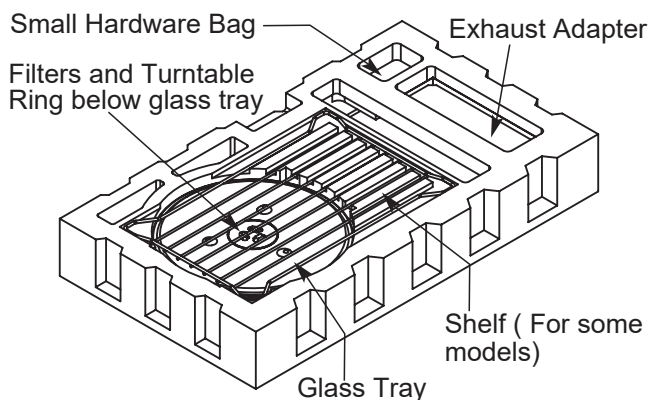


- The space between the cabinets must be 30" (76.2 cm) wide and free of obstructions.
- If you are going to vent your microwave oven to the outside, see Hood Exhaust Section for exhaust duct preparation
- When installing the microwave oven beneath smooth, flat cabinets, be careful to follow the instructions on the top cabinet template for power cord clearance.
- As a guide to installation, see page 25 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 lbs to allow proper top vent air exhaust/intake.

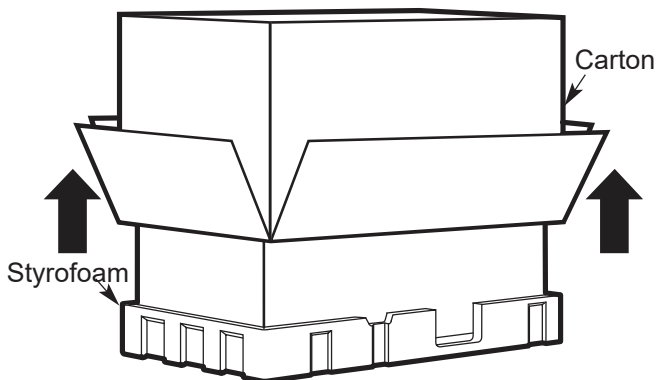
# 1. PLACEMENT OF THE MOUNTING 1 PLATE

## A. REMOVING THE MICROWAVE OVEN FROM THE CARTON/ REMOVING THE MOUNTING PLATE

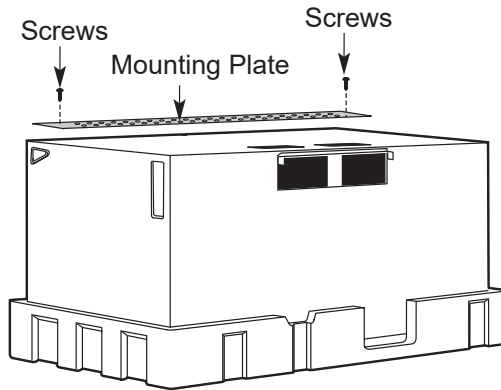
1. Remove the installation instructions, use and care, exhaust adapter, turntable ring, shelf, filters, glass tray and the small hardware bag. Do not remove the Styrofoam protecting the front of the oven.  
please note: Do Not Remove plastic plug protective cover until just before hanging the unit.  
Keep the unit at least 8 inches away from the counter top edge to prevent dropping because of the heavy door.



2. Fold back all 4 carton flaps fully against carton sides. Then carefully roll the oven and carton over on to the top side. The oven should be resting in the Styrofoam.

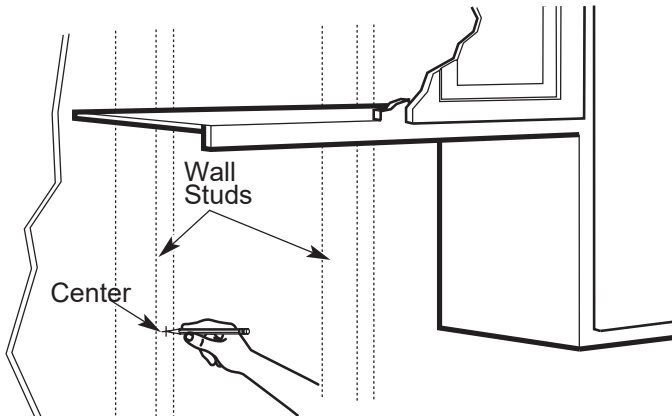


3. Pull the carton up and off the oven.
4. Cut the middle of the outer protective plastic bag to remove the mounting plate.



5. Remove the screws from each end of 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.

## B. FINDING THE WALL STUDS



1. Find the studs, using one of the following methods:
  - A. Stud finder—magnetic device which locates nails.
  - B. Use a hammer to tap lightly across the 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 of the stud. Then place a mark half way between the edges. The center of any adjacent studs should be 16 (40.6cm) or 24 (61cm) from this mark.
3. Draw a line down the center of the studs.

THE MICROWAVE MUST BE CONNECTED TO AT LEAST ONE WALL STUD.

C. DETERMINING WALL PLATE LOCATION UNDER YOUR CABINET ET

Plate position-beneath flat bottom cabinet.

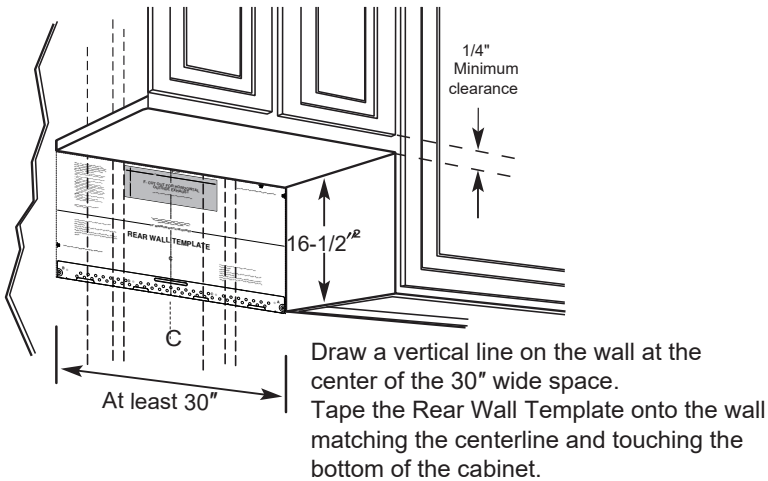
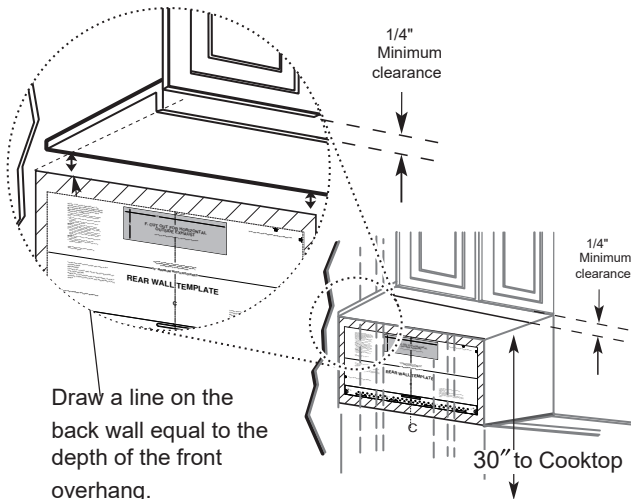
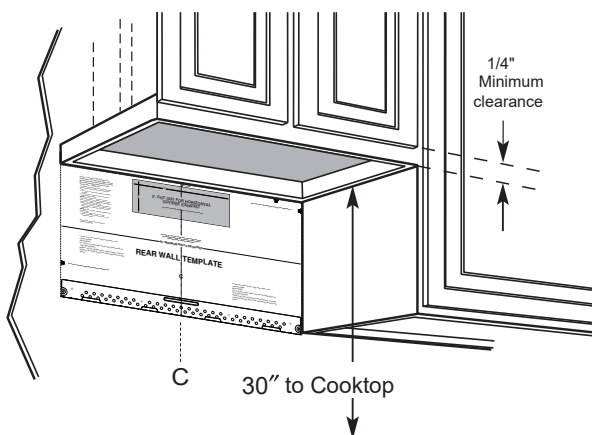


Plate position-beneath recessed bottom cabinet with front overhang



## Plate position-beneath framed recessed cabinet bottom



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.

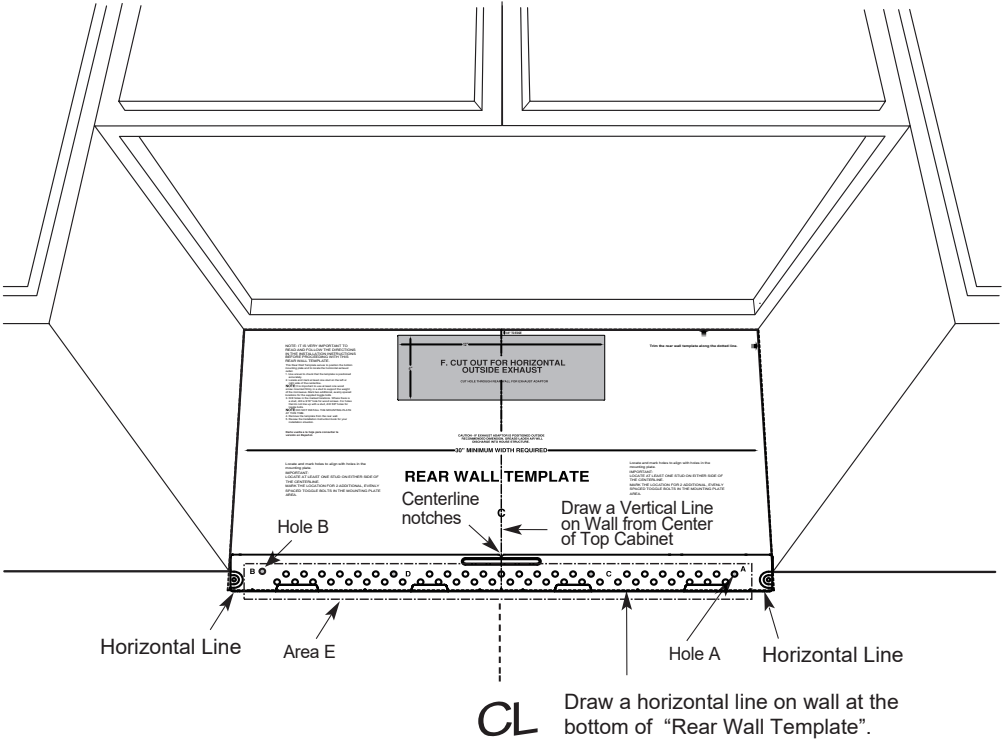
Use a level to make sure the cabinet bottom is level.

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

D. ALIGNING THE WALL PLATE



**CAUTION:** Wear gloves during installation.

1. Draw a vertical line on the wall at the center of the 30" wide space.
2. Draw a horizontal line on the wall at the bottom of "Rear Wall Template".
3. Find a wall stud in area "E" of mounting plate Refer to section 1B. Finding the wall studs.
4. For attaching the mounting plate into stud drill a 3/16" hole into wood stud. Drill a 5/8" hole for toggle bolt in 1 other location (Hole A or Hole B)

**NOTE:** DO NOT MOUNT THE PLATE AT THIS TIME.

**NOTE:** Holes A and B are inside area E. If neither of Holes A and B are not in a stud, find a stud somewhere in area E and draw a circle to line up with the stud. It is important to have at least one wood screw mounted firmly in a stud to support the weight of the microwave. Set the mounting plate aside.



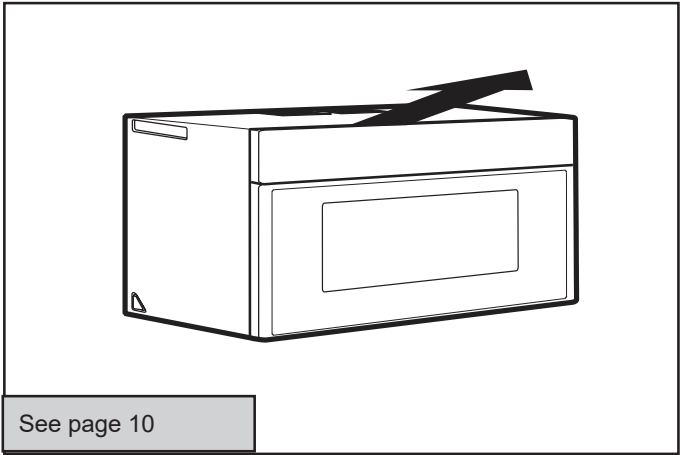
## 2. INSTALLATION TYPES (Choose A, B or C)

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

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

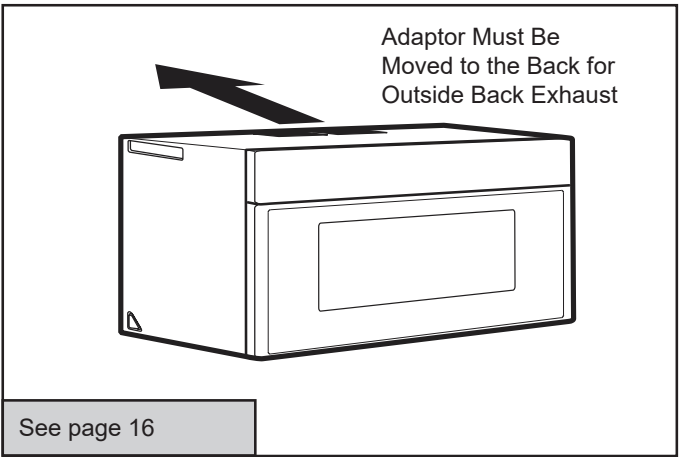
NOTE: This microwave is shipped assembled for Recirculating. Select the type of ventilation required for your installation and proceed to that section.

### A. RECIRCULATING (NON-VENTED DUCTLESS)

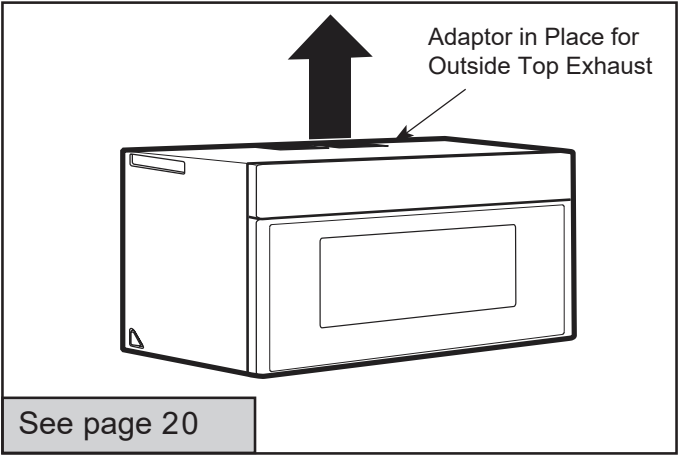


Models are shipped for recirculating exhaust.  
Some models have a disposable charcoal filter installed to help remove smoke and odors.

### B. OUTSIDE BACK EXHAUST (HORIZONTAL DUCT)



C. OUTSIDE TOP EXHAUST (VERTICAL DUCT)

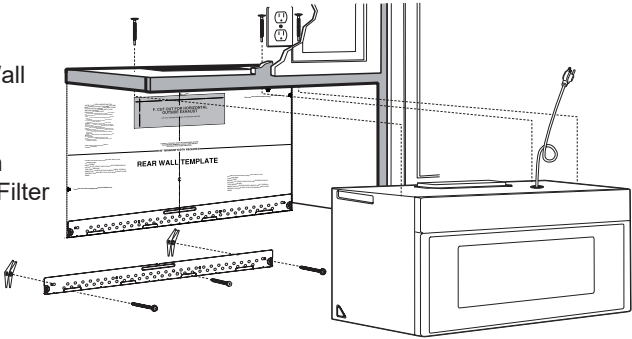


NOTE: Read the pages 14-15 only if you plan to vent your exhaust to the outside. If you plan to recirculate the air back into the room, proceed to page 10.

A. RECIRCULATING (Non-Vented Ductless)

INSTALLATION OVERVIEW

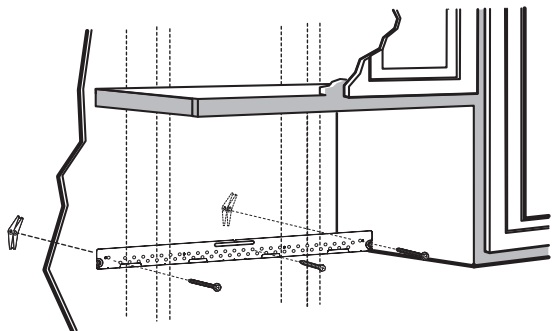
- A1. Attach Mounting Plate to Wall
- A2. Prepare Top Cabinet
- A3. Check Blower Plate
- A4. Mount the Microwave Oven
- A5. Install or change Charcoal Filter



IMPORTANT NOTES:

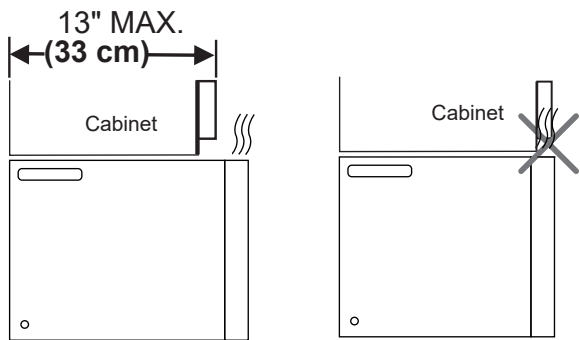
- Make sure the screws for the blower motor and blower plate are securely tightened when they are reinstalled.  
This will help to prevent excessive vibration.
- Make sure the motor wiring has been properly routed and secured, and that the wires are not pinched.

A1. ATTACH THE MOUNTING PLATE TO THE WALL



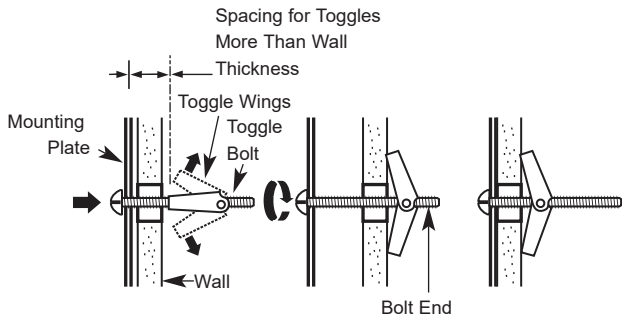
Attach the plate to the wall using toggle bolts.  
At least one wood screw must be used to attach the plate to a wall stud.

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 lbs to allow proper top vent air exhaust/intake.



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.

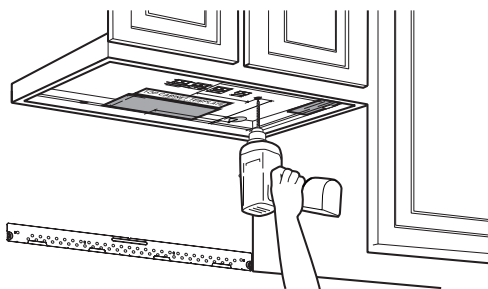
**NOTE:** Before tightening toggle bolts and wood screw, make sure the bottom of the mounting plate touch the bottom of the cabinet when pushed flush against the wall and that the plate is properly centered under the cabinet.

**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 and a hole large enough for the power cord to fit through.



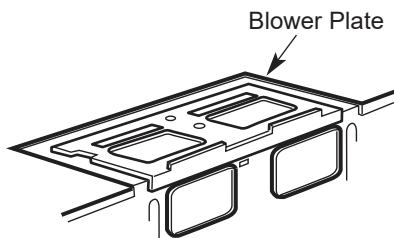
- Read the instructions on the TOP CABINET TEMPLATE.
- Tape it underneath the top cabinet.

**NOTE:** Adjust top template accordingly if the microwave is being spaced out from the wall due to cabinet depth (including cabinet doors) of more than 13".

- Drill the holes, following the instructions on the TOP CABINET TEMPLATE.

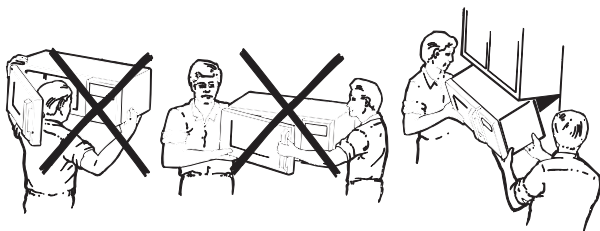
**CAUTION:** Wear safety goggles when drilling holes in the cabinet bottom.

## A3. CHECK BLOWER PLATE



- Place the microwave in its upright position, with the top of the unit facing up.
- Check to see that the blower plate is correctly installed on the unit.

## A4. MOUNT THE MICROWAVE OVEN



FOR EASIER INSTALLATION AND PERSONAL SAFETY, WE RECOMMEND THAT TWO PEOPLE INSTALL THIS MICROWAVE OVEN.

**IMPORTANT:** Do not grip or use the handle or heat shield during installation. Do not remove the cardboard spacers between the heat shield and door.

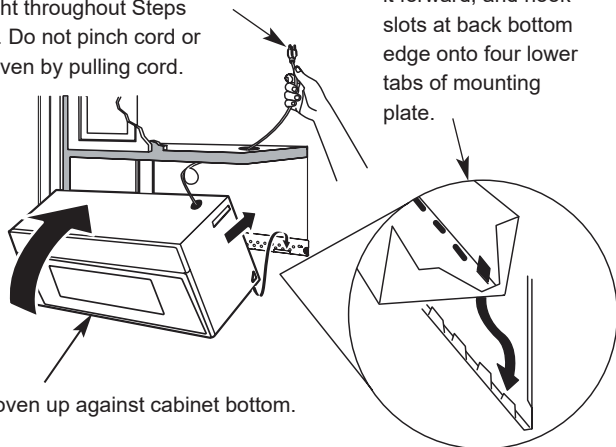
**NOTE:** If your cabinet is metal, use the nylon grommet around the power cord hole to prevent cutting of the cord.

**NOTE:** We recommend using filler blocks if the cabinet front hangs below the cabinet bottom shelf.

**IMPORTANT:** If filler blocks are not used, case damage may occur from overtightening screws.

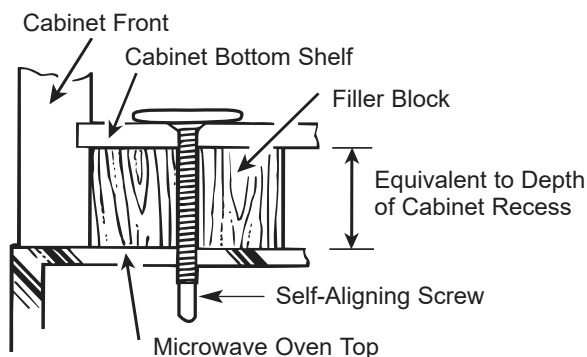
**NOTE:** When mounting the microwave oven, thread power cord through hole in bottom of top cabinet. Keep it tight throughout Steps 1–3. Do not pinch cord or lift oven by pulling cord.

1. Lift microwave, tilt it forward, and hook slots at back bottom edge onto four lower tabs of mounting plate.



2. Rotate front of oven up against cabinet bottom.

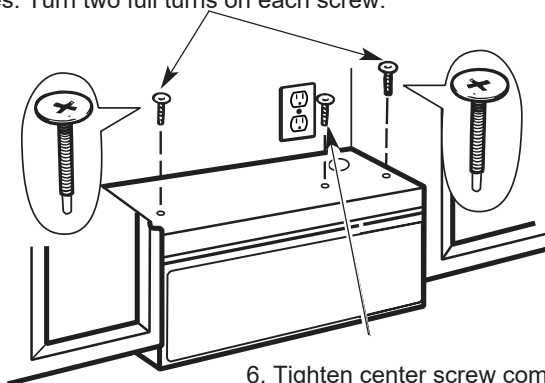
3. Insert a self-aligning screw through top center cabinet hole. Temporarily secure the oven by turning the screw at least two full turns after the threads have engaged. (It will be completely tightened later.) Be sure to keep power cord tight. Be careful not to pinch the cord, especially when mounting flush to bottom of cabinet.



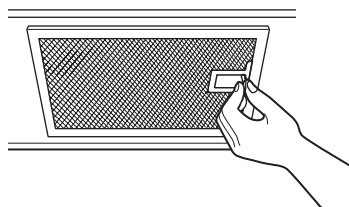
A4. Attach the microwave oven to the top cabinet.

#### A4. MOUNT THE MICROWAVE OVEN (cont.)

5. Insert 2 self-aligning screws through outer top cabinet holes. Turn two full turns on each screw.



6. Tighten center screw completely.
7. Tighten the outer two screws to the top of the microwave oven. (While tightening screws, hold the microwave oven in place against the wall and the top cabinet.)



8. Install grease filters. See the Use & Care packed with the microwave.

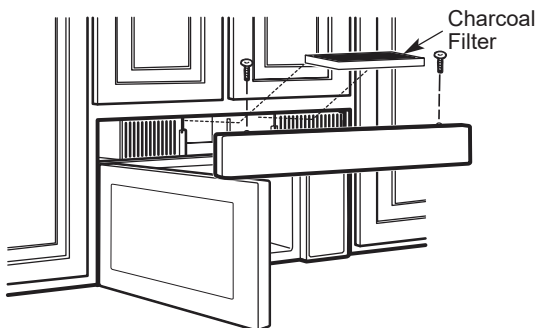
## A5. INSTALLING OR CHANGE THE CHARCOAL FILTER (Some Models)

NOTE: The charcoal filter is factory installed in some models. Refer to the Use and Care to see if yours is factory installed and for replacement information.

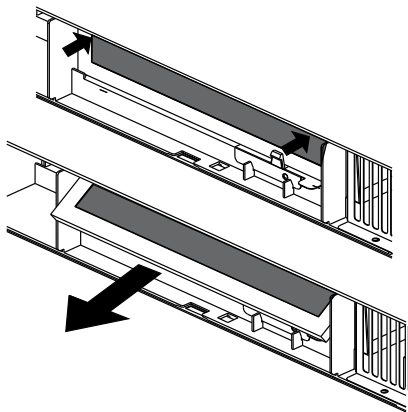
For models without the recirculation filter access door, follow these steps to replace or install a charcoal filter.

A5.1 Unplug microwave oven or disconnect power.

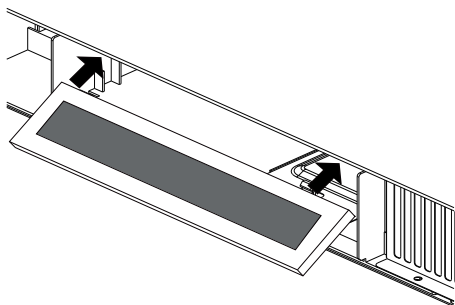
A5.2 Open the microwave door and remove the two vent mounting screws located on top of the microwave using a #1 Phillips screwdriver.



A5.3 Remove the charcoal filter by pushing the top of the filter inwards, then pull it forward out from the unit.

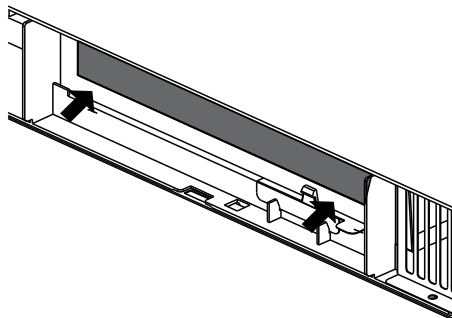


A5.4 Slide the top of the new charcoal filter into the top of the filter cavity.

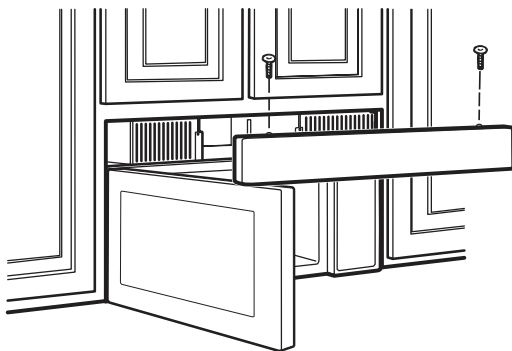


## A5. INSTALLING OR CHANGE THE CHARCOAL FILTER(cont.)

A5.5 Press the bottom of charcoal filter to place it into the correct position.



A5.6 Reinstall the vent by sliding the bottom of the vent into place. Push the vent top into position and slide right into place. Replace the two vent mounting screws located on top of the microwave using a #1 Phillips screwdriver.



A5.7 Close the microwave door. Plug in microwave oven or reconnect power.



## 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" (12.7cm) diameter / 6" (15.2 cm) diameter round duct should not exceed 140 equivalent feet (42.7 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 31/4" 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.

A5" (12.7cm) / 6" (15.2cm) diameter duct is acceptable to use.









**Maximum duct length:**

For satisfactory air movement, the total duct length of 31/4" x 10" (8.2 x 25.4 cm) rectangular or 5" (12.7cm) diameter / 6" (15.2cm) diameter round duct should not exceed 140 equivalent feet (42.7 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
	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
	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 31/4" x 10" (8.2 x 25.4 cm Rectangular)	1 Ft. (0.3 m)	x	( )	=	Ft. or m
Total Ductwork					=	




\* **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.







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. <div>Total Length =</div>					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.



DUCT PIECES	EQUIVALENT LENGTH*	x	NUMBER USED	=	EQUIVALENT LENGTH
 Wall Cap	40 Ft. (12.2 m)	x	(1)	=	40 Ft. (12.2 m)
 3 Ft. Straight Duct (31/4" x 107/8.2 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. <div>Total Length =</div>					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.

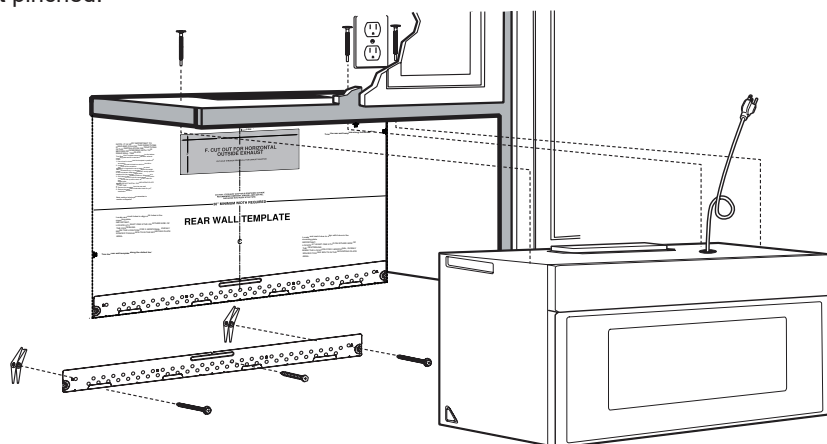
## B. OUTSIDE BACK EXHAUST (Horizontal Duct)

### INSTALLATION OVERVIEW

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

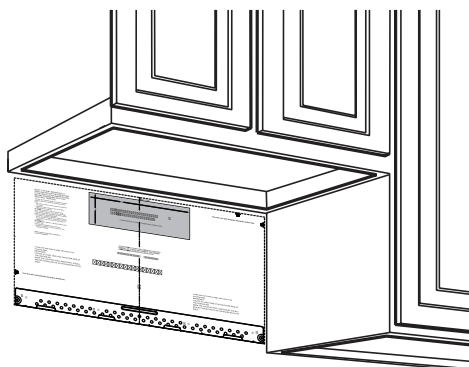
### IMPORTANT NOTES:

- 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

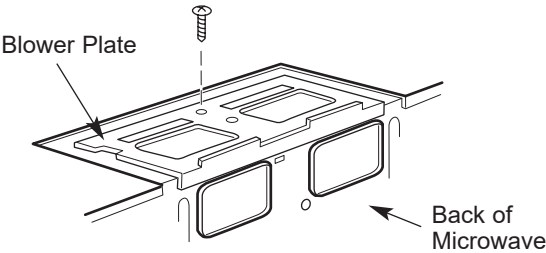
You need to cut an opening in the rear wall for outside exhaust.



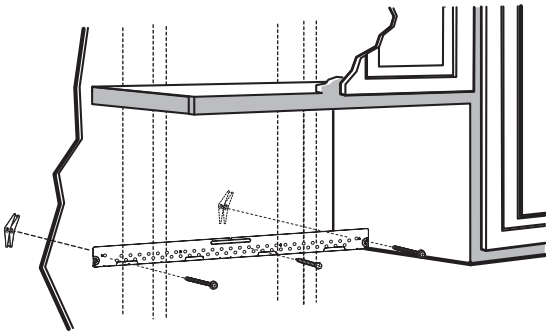
- Read the instructions on the REAR WALL TEMPLATE.
- Tape it to the rear wall.
- Cut the opening, following the instructions of the REAR WALL TEMPLATE.

**B2. REMOVE BLOWER PLATE**

Remove and save the screw that holds the blower plate to the microwave. Lift off the blower plate.



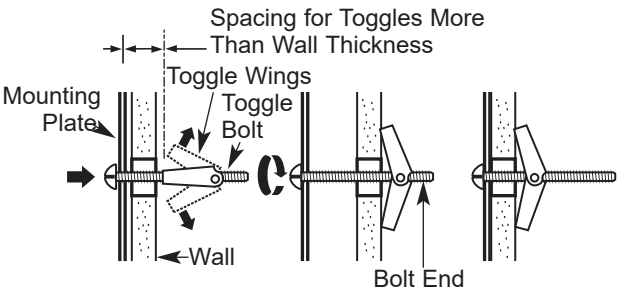
**B3. ATTACH THE MOUNTING PLATE TO THE WALL**



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.

- 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.

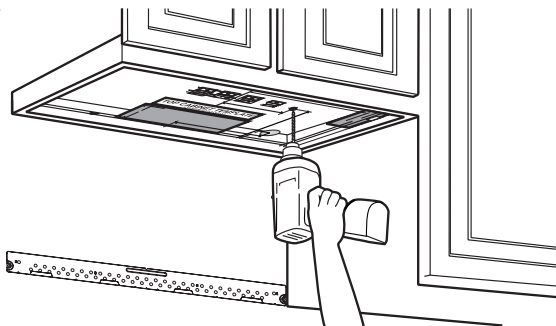
**NOTE:** Before tightening toggle bolts and wood screw, make sure the bottom of the mounting plate touch the bottom of the cabinet when pushed flush against the wall and that the plate is properly centered under the cabinet.

**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.

#### 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.

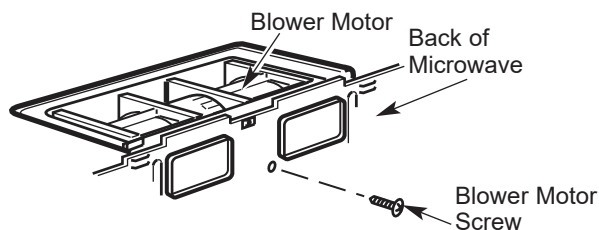


- Read the instructions on the TOP CABINET TEMPLATE.
- Tape it underneath the top cabinet.
- Drill the holes, following the instructions on the TOP CABINET TEMPLATE.

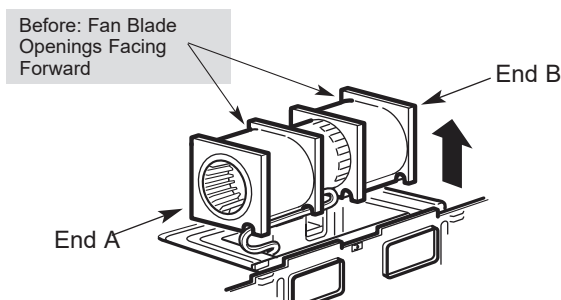
**CAUTION:** Wear safety goggles when drilling holes in the cabinet bottom.

#### B5. ADAPTING MICROWAVE BLOWER FOR OUTSIDE BACK EXHAUST

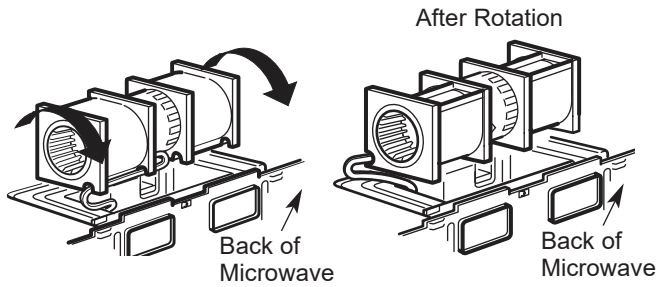
1. Remove and save screw that holds blower motor to microwave.



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

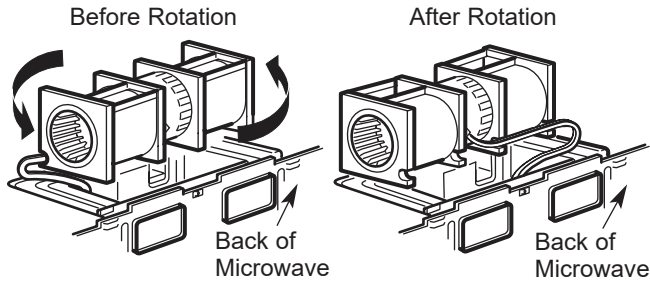


3. Roll the blower unit 90°

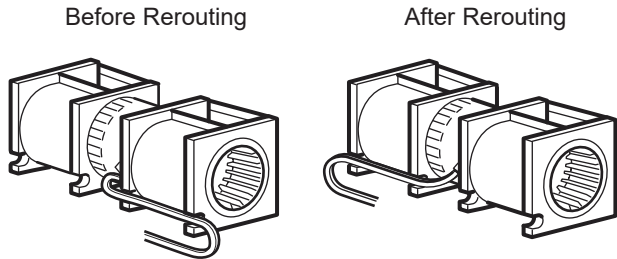


B5. ADAPTING MICROWAVE BLOWER FOR OUTSIDE BACK EXHAUST (cont.)

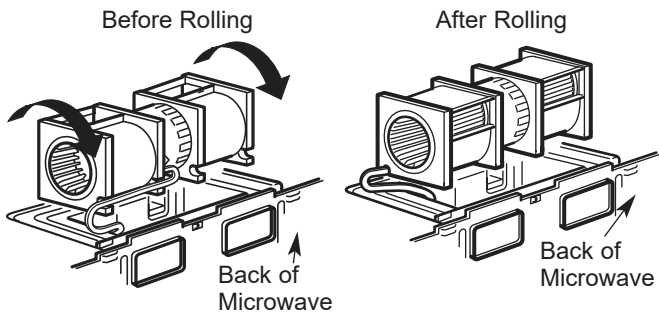
4. Rotate blower unit counterclockwise 180°.



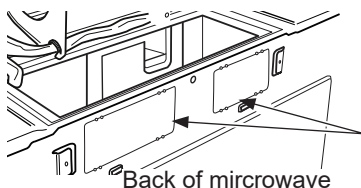
5. Gently remove the wires from the grooves.  
Reroute the wires through grooves on other side of the blower unit.



6. Roll the blower unit 90° so that fan blade openings are facing out the back of the microwave.



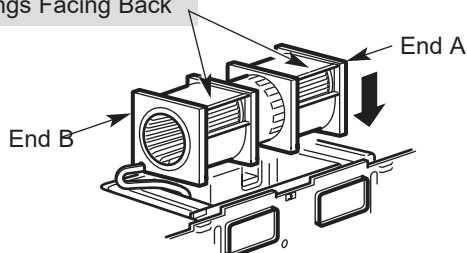
7. Remove the knockout plates in the back of the unit with snips. (For some models)



**Knockout Plates:**  
Snip all 4 webs on each knockout panel and remove the metal knockouts for rear airflow. Please take care to remove any sharp edges created from removing the knockout plates.

8. Place the blower unit back into the opening.

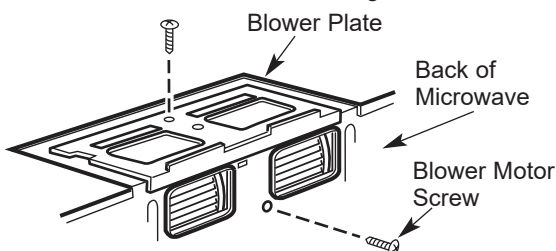
**AFTER: Fan Blade Openings Facing Back**



**CAUTION:** Do not pull or stretch the blower unit wiring. Make sure the wires are not pinched, and that they are properly secured.

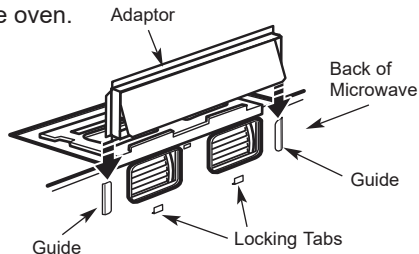
**NOTE:** The blower unit exhaust openings should match exhaust openings on rear of microwave oven.

9. Secure the blower unit to the microwave with the original screw.



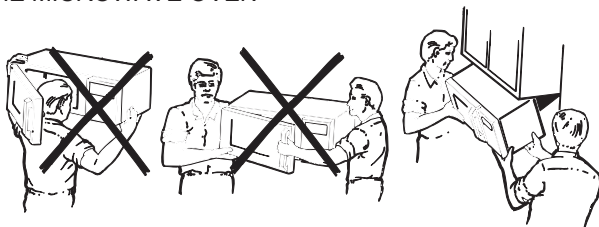
10. Replace the blower plate in the same position as before with the screw.  
Make sure the screw is tight.

11. Attach the exhaust adaptor to the rear of the oven by sliding it into the guides at the top center of the back of the oven.



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.

## B6. MOUNT THE MICROWAVE OVEN



FOR EASIER INSTALLATION AND PERSONAL SAFETY, WE RECOMMEND THAT TWO PEOPLE INSTALL THIS MICROWAVE OVEN.

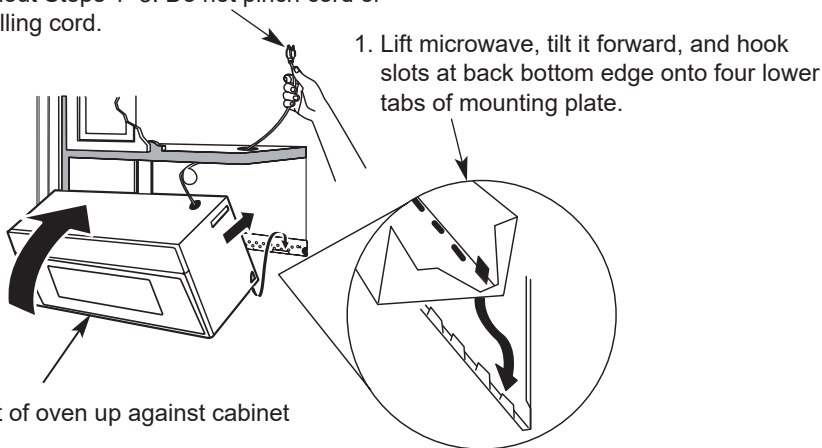
**IMPORTANT:** Do not grip or use the handle or heat shield during installation. Do not remove the cardboard spacers between the heat shield and door.

**NOTE:** If your cabinet is metal, use the nylon grommet around the power cord hole to prevent cutting of the cord.

**NOTE:** We recommend using filler blocks if the cabinet front hangs below the cabinet bottom shelf.

**IMPORTANT:** If filler blocks are not used, case damage may occur from overtightening screws.

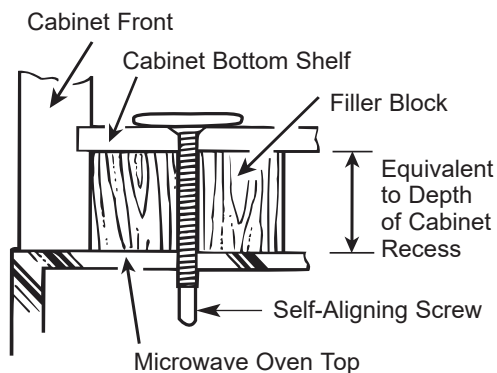
**NOTE:** When mounting the microwave oven, thread power cord through hole in bottom of top cabinet. Keep it tight throughout Steps 1–3. Do not pinch cord or lift oven by pulling cord.



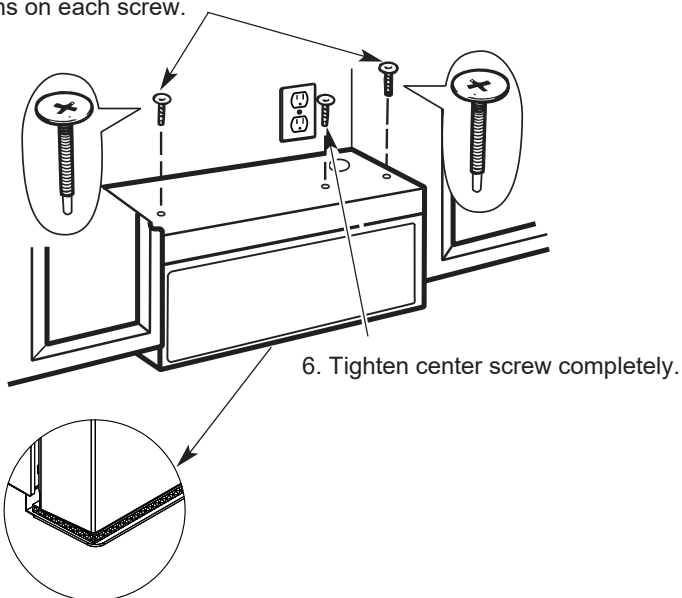
2. Rotate front of oven up against cabinet bottom.

3. Insert a self-aligning screw through top center cabinet hole. Temporarily secure the oven by turning the screw at least two full turns after the threads have engaged. (It will be completely tightened later.) Be sure to keep power cord tight. Be careful not to pinch the cord, especially when mounting flush to bottom of cabinet.

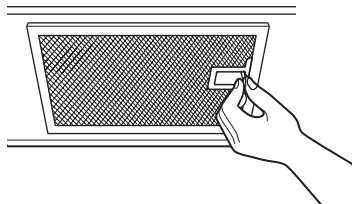




4. Attach the microwave oven to the top cabinet.
5. Insert 2 self-aligning screws through outer top cabinet holes.  
Turn two full turns on each screw.



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



8. Install grease filters. See the Use & Care packed with the microwave.  
**IMPORTANT:** Remove the cardboard spacers between heat shield and door.

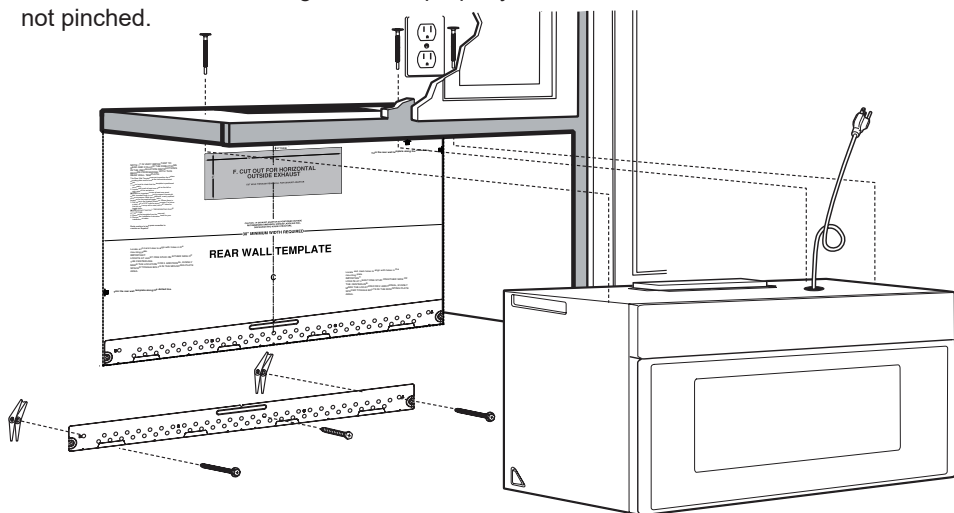
## C. OUTSIDE TOP EXHAUST (Vertical Duct)

### INSTALLATION OVERVIEW

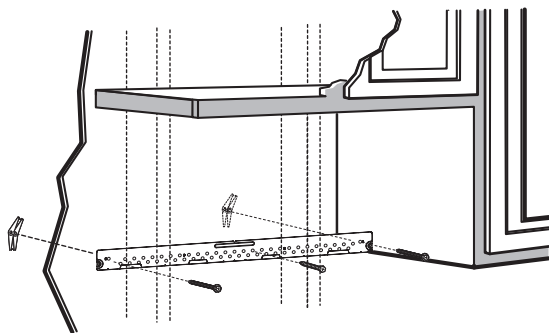
- C1. Attach Mounting Plate to Wall
- C2. Prepare Top Cabinet
- C3. Adapting Microwave Blower for Outside Top Exhaust
- C4. Check Damper Operation
- C5. Mount Microwave Oven
- C6. Adjust Exhaust Adaptor
- C7. Connect Ductwork

#### 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.



### C1. ATTACH THE MOUNTING PLATE TO THE WALL

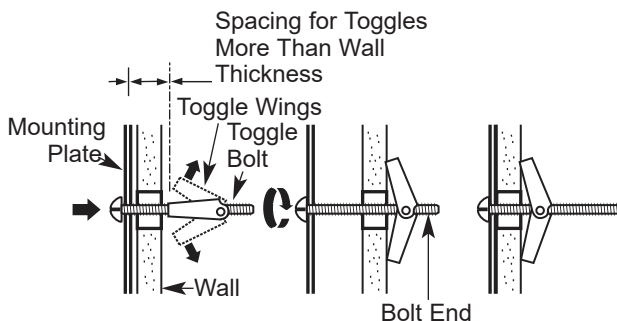


Attach the plate to the wall using toggle bolts.

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

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:



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

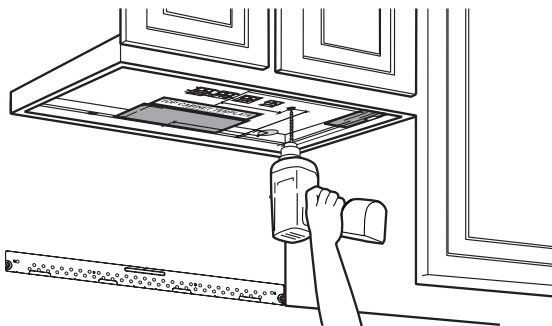
**NOTE:** Before tightening toggle bolts and wood screw, make sure the bottom of the mounting plate touch the bottom of the cabinet when pushed flush against the wall and that the plate is properly centered under the cabinet.

**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.

## C2. 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.

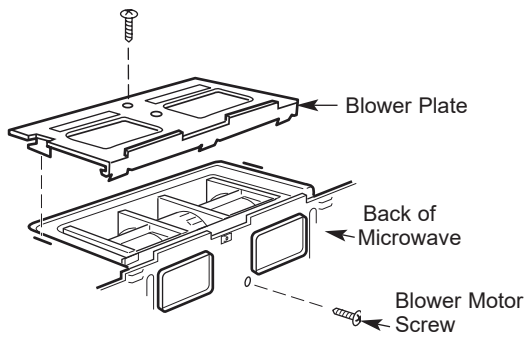


- Read the instructions on the TOP CABINET TEMPLATE.
- Tape it underneath the top cabinet.
- Drill the holes, following the instructions on the TOP CABINET TEMPLATE.

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

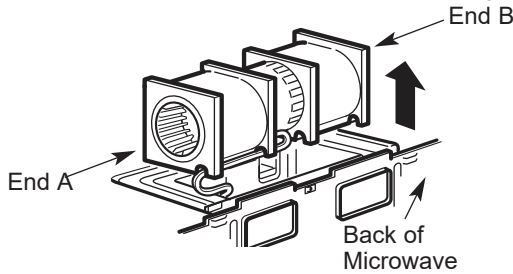
## C. ADAPTING MICROWAVE BLOWER FOR OUTSIDE TOP EXHAUST

1. Place the microwave in its upright position, with the top of the unit facing up.

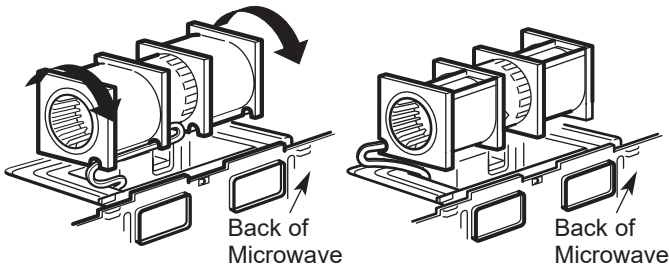


Remove the screw that holds the blower plate to the microwave.  
Remove and save the screw holding the blower motor to the microwave.

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

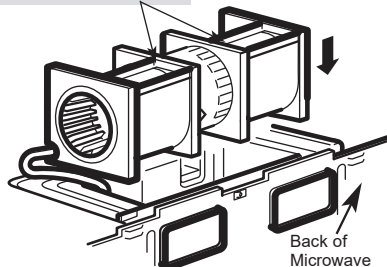


3. Roll the blower unit 90° so that fan blade openings are facing out the top of the microwave.  
After Rotation



4. Place the blower unit back into the opening.

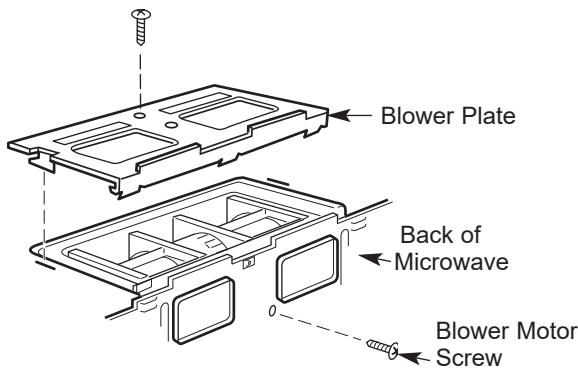
AFTER: Fan Blade  
Openings Facing Top



**CAUTION:** Do not pull or stretch the blower unit wiring. Make sure the wires are not pinched, and that they are properly secured.

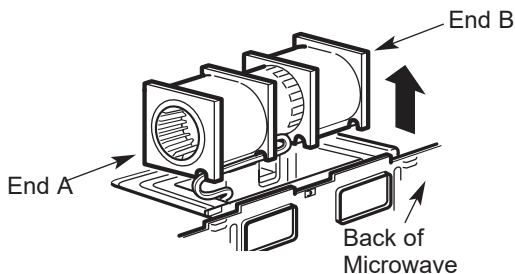
C3. ADAPTING MICROWAVE BLOWER FOR OUTSIDE

1. Place the microwave in its upright position, with the top of the unit facing up.

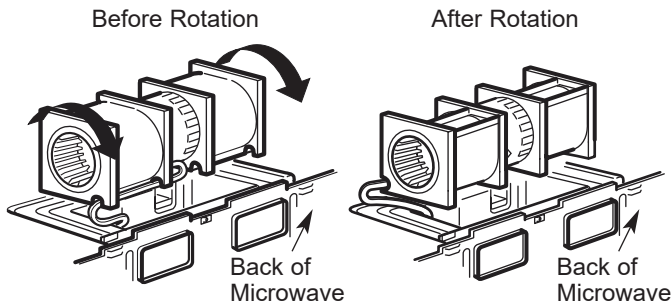


Remove the screw that holds the blower plate to the microwave.  
Remove and save the screw holding the blower motor to the microwave.

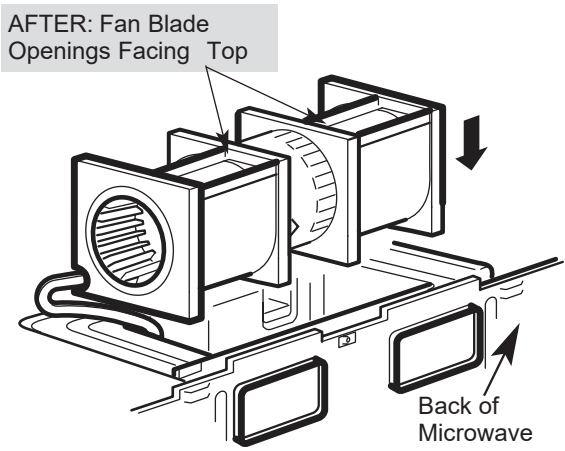
2. Carefully pull out the blower unit. The wires will extend far enough to allow you to adjust the blower unit.



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



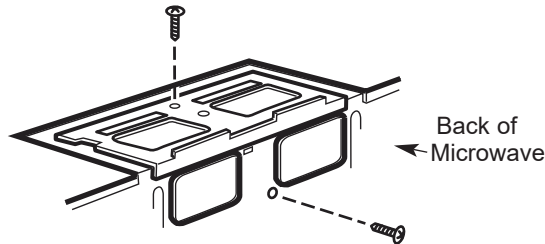
4. Place the blower unit back into the opening.



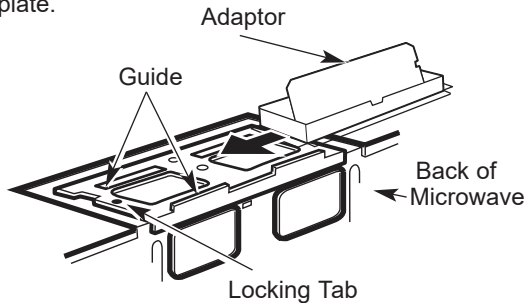
CAUTION: Do not pull or stretch the blower unit wiring. Make sure the wires are not pinched, and that they are properly secured.

C3. ADAPTING MICROWAVE BLOWER FOR OUTSIDE TOP EXHAUST (cont.)

- 5. Secure blower unit to microwave with the screw removed in Step 1. Make sure the screw is tight.
- 6. Replace blower plate with the screw removed in Step 1. Make sure the screw is tight.

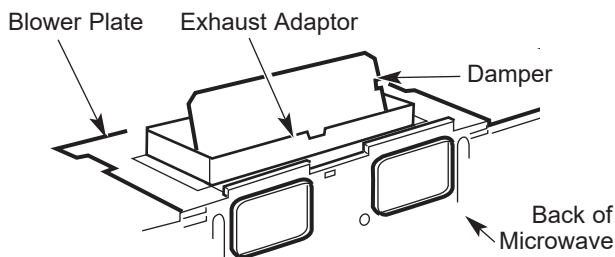


7. Attach the exhaust adaptor to the top of the blower plate by sliding it into the guides of the blower plate.



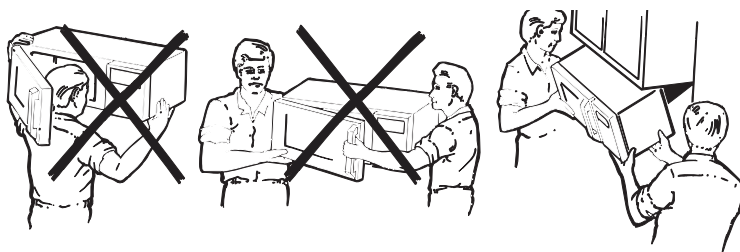
Push in securely until it is in the locking tabs.  
Take care to assure that the damper hinges is installed so that the damper swings freely.

#### C4. CHECK FOR PROPER DAMPER OPERATION



- 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.

#### C5. MOUNT THE MICROWAVE OVEN



FOR EASIER INSTALLATION AND PERSONAL SAFETY, WE RECOMMEND THAT TWO PEOPLE INSTALL THIS MICROWAVE OVEN.

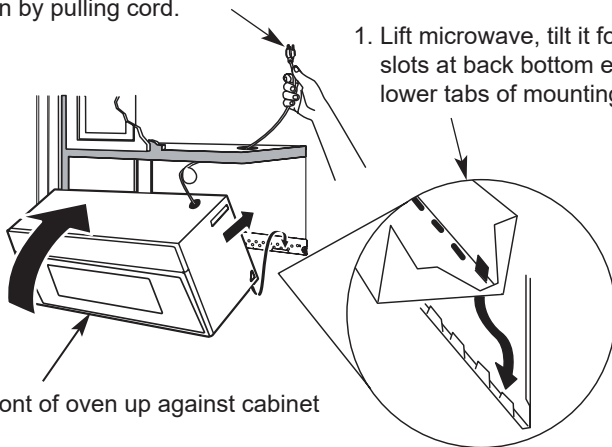
**IMPORTANT:** Do not grip or use the handle or heat shield during installation. Do not remove the cardboard spacers between the heat shield and door.

**NOTE:** If your cabinet is metal, use the nylon grommet around the power cord hole to prevent cutting of the cord.

**NOTE:** We recommend using filler blocks if the cabinet front hangs below the cabinet bottom shelf.

**IMPORTANT:** If filler blocks are not used, case damage may occur from overtightening screws.

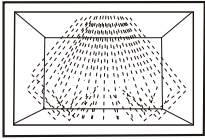
NOTE: When mounting the microwave oven, thread power cord through hole in bottom of top cabinet. Keep it tight throughout Steps 1–3. Do not pinch cord or lift oven by pulling cord.



1. Lift microwave, tilt it forward, and hook slots at back bottom edge onto four lower tabs of mounting plate.
2. Rotate front of oven up against cabinet bottom.
3. Insert a self-aligning screw through top center cabinet hole. Temporarily secure the oven by turning the screw at least two full turns after the threads have engaged. (It will be completely tightened later.) Be sure to keep power cord tight. Be careful not to pinch the cord, especially when mounting flush to bottom of cabinet.



# Available Cooking Options



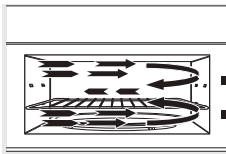
Do not use the shelves when microwave cooking.

## Microwave Cooking

Your oven uses microwave energy to cook by a set time or weight, or automatically by sensor.

**Sensor** microwave works by detecting the increasing humidity released during cooking. The oven automatically adjusts the cooking time to various types and amounts of food.

Cooking Method	Heat Source	Heat Conduction	Benefits
Microwave energy is distributed evenly throughout the oven for thorough, fast cooking of food.	Microwave energy.	Heat produced within food by instant energy penetration.	Fast, high efficiency cooking. Oven and surroundings do not get hot. Easy clean-up.

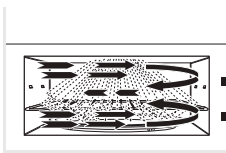


## Convection Baking and Convection Roasting

During baking or roasting, a heating element is used to raise the temperature of the air inside the oven. Any oven temperature from 225°F. to 425°F. may be programmed. A fan gently circulates this heated air throughout the oven, over and around the food, producing golden brown exteriors and rich moist interiors. This circulation of heated air is called convection. Because the heated air is kept constantly moving, not permitting a layer of cooler air to develop around the food, some foods cook faster than in regular oven cooking.

Cooking Method	Heat Source	Heat Conduction	Benefits
Hot air circulates around food to produce browned exteriors and seal in juices.	Circulating heated air (Convection).	Heat conducted from outside of food to inside.	Aids in browning and seals in flavor. Cooks some foods faster than regular ovens.

Always use the shelf when baking. For best results, use one shelf in the lower position.



## Combination Fast Cooking

Your oven also offers the option of Combination Fast Cook, using microwave energy along with convection cooking. You cook with speed and accuracy, while browning and crisping to perfection.

Cooking Method	Heat Source	Heat Conduction	Benefits
Microwave energy and convection heat combine to cook foods up to 25% faster than regular ovens, while browning and sealing in juices.	Microwave energy and circulating heated air.	Food heats from instant energy from penetration and heat conducted from outside of food.	Shortened cooking time from microwave energy, plus browning and crisping from convection heat.

Always use the shelf with Fast Bake. For best results, use one shelf in the lower position.

# Cookware Tips

## Convection Bake or Roast

**Metal Pans** are recommended for all types of baked products, but especially where browning is important.

Dark or dull finish metal pans are best for breads and pies because they absorb heat and produce crisper crust.

Shiny aluminum pans are better for cakes, cookies or muffins because they reflect heat and help produce a light tender crust.

**Glass or Glass-Ceramic** casserole or baking dishes are best suited for egg and cheese recipes due to the cleanability of glass.

## Combination Fast Bake

**Glass or Glass-Ceramic** baking containers are recommended. Be sure not to use items with metal trim as it may cause arcing (sparking) with oven wall or oven shelf. This can damage the cookware, the shelf or the oven.

**Heat-Resistant Plastic** microwave cookware (safe to 450°F) may be used, but it is not recommended for foods requiring all-around browning, because the plastic is a poor conductor of heat.

Cookware	Microwave	Convection Bake or Roast	Combination Fast Cook
Heat-Resistant Glass, Glass-Ceramic (Pyrex®, Fire King®, Corning Ware®, etc.)	Yes	Yes	Yes
Metal	No	No	Yes
Non Heat-Resistant Glass	No	No	No
Microwave-Safe Plastics	Yes	No	Yes*
Plastic Films and Wraps	Yes	No	No
Paper Products	Yes	No	No
Straw, Wicker and Wood	Yes	No	No

\* Use only microwave cookware that is safe to 450°F.

# Use Your Appliance with the MSmartLife App

Before you start, make sure that:

1. Your smartphone is connected to home wifi network, and you know the network password.
2. Make sure you are next to home appliances.
3. The 2.4GHz (preferable) or 5GHz band wireless signal is enabled on your wireless router.

## 1 Download MSmartLife App

Scan the QR code below, or search for "MSmartLife" in Google play(Android devices) or App Store(ios devices) to download the app.



## 2 Register or Login account

Open the App and create a user account, if you already have one, just login in.



## 3 Add your appliance

Tap the "+" icon to add home appliance to your MsmartLife account.




## 4 Connected to the network

Follow the instructions in the app to set up the WiFi connection. If the network connection fails, please refer to the App tips for operation.



## WiFi Status Light

	Slowly flashing	Waiting for connection
	Quickly Flashing	Connecting
	Quickly flashing solid	Connected to your wireless router

## ⚠ Notes on networking

- When networking the product, please make sure that the mobile phone is as close as possible to the product.
- According to the App tips, if the product only supports 2.4GHz wifi communication, please note that the 2.4GHz network is selected for connection.
- Midea recommends WiFi router SSID names contain only alphanumeric values. If special characters, punctuation marks or spaces are used it might prevent the SSID name from showing up in the available networks to join in the App. Try it and if the SSID shows up then it is ok to use, otherwise log into the router and change the SSID name.
- A large number of devices on the WiFi router can affect network stability, there is no way that Midea can advise a specific number limitation as this depends on router quality and many other factors.
- If the router or WiFi name and WiFi password change, please repeat the above process to reconnect to the network.
- As the product technology is updated, the content of MSmartLife may change, and the actual display in MSmartLifeApp shall prevail.

## OPERATION

### 1. Power up

After connecting the oven to the power, "12:00" "PRESS" "CLOCK" "ENTER" and "TIME" show on the display. Buzzer sounds. If you want to set clock, press number keys to enter time. Then press "START/Enter/+30sec." to confirm.

### 2. Setting the Kitchen Timer

- (1) Press "COOK TIME/TIMER" twice and then "ENTER" "TIME" will display.
- (2) Press number keys to enter the desired time. The maximum time value is "99:99".
- (3) Press "START/Enter/+30sec." to confirm. The timer starts counting down.

Note: During the working process of the Timer function, microwave and menu cooking can be set. After microwave or menu cooking is started, the Timer also works but the LED displays the microwave or menu cooking interface. In cooking process and pause state, you can press "COOK TIME/TIMER" to check Timer.

If microwave or menu cooking ends first, the screen displays "END".

If the Timer ends first, buzzer will sound. At the same time, the buzzer sounds twice every 30 seconds. When cooking finishes, it will stop sounding.

### 3. Microwave Cooking

11 power levels are available.

Level	10	9	8	7	6	5	4	3		1	0
Power	100%	90%	80%	70%	60%	50%	40%	30%	20%	10%	0%
Display	PL-HI	PL-90	PL-80	PL-70	PL-60	PL-50	PL-40	PL-30	PL-20	PL-10	PL-0

- (1) Press "COOK TIME/TIMER" once and then "ENTER" "COOK" "TIME" will display.
- (2) Press number keys to enter cooking time.
- (3) Press "POWER LEVEL" and then press number keys or "▲/▼" to adjust the power level.
- (4) Press "START/Enter/+30sec." to start cooking.

Example: to cook the food with PL50 for 15 minutes

- a. Press "COOK TIME/TIMER" once.
- b. Press "1", "5", "0", "0" in order.
- c. Press "POWER LEVEL" and then press "5" to select PL50.
- d. Press "START/Enter/+30sec." to start cooking.

#### 4. Defrost

Key	Food	Amount
DEFROST x 1	Meat	0.1-6.0 lbs
DEFROST x 2	Poultry	0.1-6.0 lbs
DEFROST x 3	Fish	0.1-6.0 lbs

Note: If the weight unit is set as kg, the weight range is 0.1-3.0kg.

- (1) Press "DEFROST" once, twice or three times to choose a defrost menu you need.
- (2) Press "START/Enter/+30sec." to confirm.
- (3) Press number keys to enter the weight of food.
- (4) Press "START/Enter/+30sec." to start defrosting.

#### 5. Popcorn

- (1) Press "POPCORN" once, twice or three times to select the weight of popcorn you want.  
"3.3" "3.0" and "1.75" Oz will display in order. You also can press "▲/▼" to adjust the weight.

Example: press "POPCORN" once and then "3.3" displays

- (b) Press "START/Enter/+30sec." to start cooking.

#### 6. Melt/Soften

Key	Food	Amount	Key
MELT/ SOFTEN x 1	Melt Butter	1 stick	1
		2 sticks	2
MELT/ SOFTEN x 2	Melt Chocolate	2 Oz	2
		4 Oz	4
		8 Oz	8
MELT/ SOFTEN x 3	Soften Ice Cream	Pint	1
		1.5 Quart	2
MELT/ SOFTEN x 4	Soften Cream Cheese	3 Oz	3
		8 Oz	8

- (1) Press "MELT/SOFTEN" repeatedly to select the food you want.
- (2) Press "START/Enter/+30sec." to confirm.
- (3) Press a number key to set amount. You also can press "▲/▼" to adjust it.
- (4) Press "START/Enter/+30sec." to start cooking.

## 7. Auto Cook

Key	Food	Amount
AUTO COOK x 1	Scrambled Eggs	1-6 Eggs
AUTO COOK x 2	Hot Cereal	1-3 Servings
AUTO COOK x 3	Frozen Pizza	12 Oz
AUTO COOK x 4	Fudge Brownies	18-19 Oz

- (1) Press "AUTO COOK" repeatedly to select the food you want.
- (2) Press "START/Enter/+30sec." to confirm.
- (3) Press a number key to set amount. You also can press "▲/▼" to adjust it.
- (4) Press "START/Enter/+30sec." to start cooking.

## 8. Sensor Cook

Key	Food	Amount
SENSOR COOK x 1	Bacon	1-6 Slices
SENSOR COOK x 2	Potato	1-4 pcs
SENSOR COOK x 3	Frozen Dinner	10 Oz/20 Oz
SENSOR COOK x 4	Rice	1-2 cups
SENSOR COOK x 5	Frozen Breakfast	8-12 Oz
SENSOR COOK x 6	Fresh Veggies	1-4 cups
SENSOR COOK x 7	Frozen Veggies	1-4 cups

## 9. Speedy Cooking

- (1) In waiting state, press "START/Enter/+30sec." to cook food with 100% power level for 30 seconds. Each press on the same key can increase 30 seconds and the maximum time value is "99:99". In addition to auto menu and defrost, you can press "START/Enter/+30sec." to increase cooking time during the cooking process.
- (2) In waiting state, pressing number keys 1 to 9 let you quickly select a cooking time from 1 to 9 minutes. If there is no operation with 2 seconds, the oven will start to cook food with 100% power level automatically.

Note: If you want to start this function, you need to open then close the oven door before 5 minutes. Otherwise, when you press number key to start speedy cooking, LED will display "FOOD". Open then close the door and press "START/Enter/+30sec." to start cooking.

## 10. Convection Cooking with Preheat Function

Degree F	100	200	250	300	325	350	375	400	425
Key	1	2	3	4	5	6	7	8	9

- (1) Press "COOK" once and then "PREHEAT" "ENTER" and "TEMP" will display.
- (2) Press number key to set temperature. You also can press "▲/▼" to adjust it.
- (3) Press "START/Enter/+30sec." to start.
- (5) When preheating is completed, the oven will beep. Open the door and place food in the oven.
- (6) Close the oven door.
- (7) Press number keys to enter cooking time.
- (8) Press "START/Enter/+30sec." to start cooking.

## 11. Convection Cooking without Preheat Function

- (1) Press "COOK" twice and then "BAKE" "ROAST" "ENTER" and "TEMP" will display.
- (2) Press number key to set temperature.(please see the chart above) You also can press "▲/▼" to adjust it.
- (3) Press "START/Enter/+30sec." to confirm.
- (4) Press number keys to enter cooking time.
- (5) Press "START/Enter/+30sec." to start cooking.

## 12. Combination Cooking (Bake)

Degree F	325	250	300	325	350	375	400	425
Key	Default	3	4	5	6	7	8	9

- (1) Press "BAKE" and then "BAKE" "325 F" will display.
- (2) Press number key to set temperature.(please see the chart above) You also can press "▲/▼" to adjust it.
- (3) Press "START/Enter/+30sec." to confirm.
- (4) Press number keys to enter cooking time.
- (5) Press "START/Enter/+30sec." to start cooking.

## 13. Combination Cooking (Roast)

Degree F	300	325	350	375	400	425
Key	4	5	6	7	8	9

- (1) Press "ROAST" and then "ROAST" "350 F" will display.
- (2) Press number key to set temperature.(please see the chart above) You also can press "▲/▼" to adjust it.
- (3) Press "START/Enter/+30sec." to confirm.
- (4) Press number keys to enter cooking time.
- (5) Press "START/Enter/+30sec." to start cooking.





## 14. Multi-Stage Cooking


- (1) Press "COOK TIME/TIMER" once and then "ENTER" "COOK" "TIME" will display.
- (2) Press number keys to enter cooking time.
- (3) Press "POWER LEVEL" and then press number keys or "▲/▼" to adjust the power level.
- (4) Follow steps (1)-(3) to set up another microwave cooking stage.
- (5) Press "START/Enter/+30sec." to start cooking.

Note: Only two microwave cooking stages can be set.




## 15. Vent

Key	 x 1	 x 2	 x 3	 x 4
Level	HIGH	MED	LOW	OFF

- (1) Press “” once and then “HIGH” will display. Press it repeatedly to choose other levels. Then the fan will start working.

## 16. Light

Key	 x 1	 x 2	 x 3
Level	HIGH	LOW	OFF

- (1) Press “” once and then “HIGH” will display. Press it repeatedly to choose other levels. Then the light will start working.

## 17. Clock Setting

- (1) Press “SETTINGS” once and then current time, “ENTER” and “TIME” will display.  
(2) Press number keys to set time.  
(3) Press “START/Enter/+30sec.” to confirm.

## 18. Volume Seeting

- (1) Press “SETTINGS” twice, “VOLUME”“LOW”→ “VOLUME”“MED”→ “VOLUME”“HIGH”  
→“VOLUME”“OFF” will display in order.  
(2) Press “START/Enter/+30sec.” to choose an option.

Note: If you choose “VOLUME OFF”, all sound is turned off.

# MAINTENANCE

## Troubleshooting

Check your problem by using the chart below and try the solutions for each problem. If the microwave oven still does not work properly, contact the nearest authorized service center.

TROUBLE	POSSIBLE CAUSE	POSSIBLE REMEDY
Oven will not start	a. Electrical cord for oven is not plugged in. b. Door is open. c. Wrong operation is set.	a. Plug into the outlet. b. Close the door and try again. c. Check instructions.
Arcing or sparking	a. Materials to be avoided in microwave oven were used. b. The oven is operated when empty. c. Spilled food remains in the cavity.	a. Use microwave-safe cookware only. b. Do not operate with oven empty. c. Clean cavity with wet towel.
Unevenly cooked foods	a. Materials to be avoided in microwave oven were used. b. Food is not defrosted completely. c. Cooking time, power level is not suitable. d. Food is not turned or stirred.	a. Use microwave-safe cookware only. b. Completely defrost food. c. Use correct cooking time, power level. d. Turn or stir food.
Overcooked foods	Cooking time, power level is not suitable.	Use correct cooking time, power level.
Undercooked foods	a. Materials to be avoided in microwave oven were used. b. Food is not defrosted completely. c. Oven ventilation ports are restricted. d. Cooking time, power level is not suitable.	a. Use microwave-safe cookware only. b. Completely defrost food. c. Check to see that oven ventilation ports are not restricted. d. Use correct cooking time, power level.
Improper defrosting	a. Materials to be avoided in microwave oven were used. b. Cooking time, power level is not suitable. c. Food is not turned or stirred.	a. Use microwave-safe cookware only. b. Use correct cooking time, power level. c. Turn or stir food.