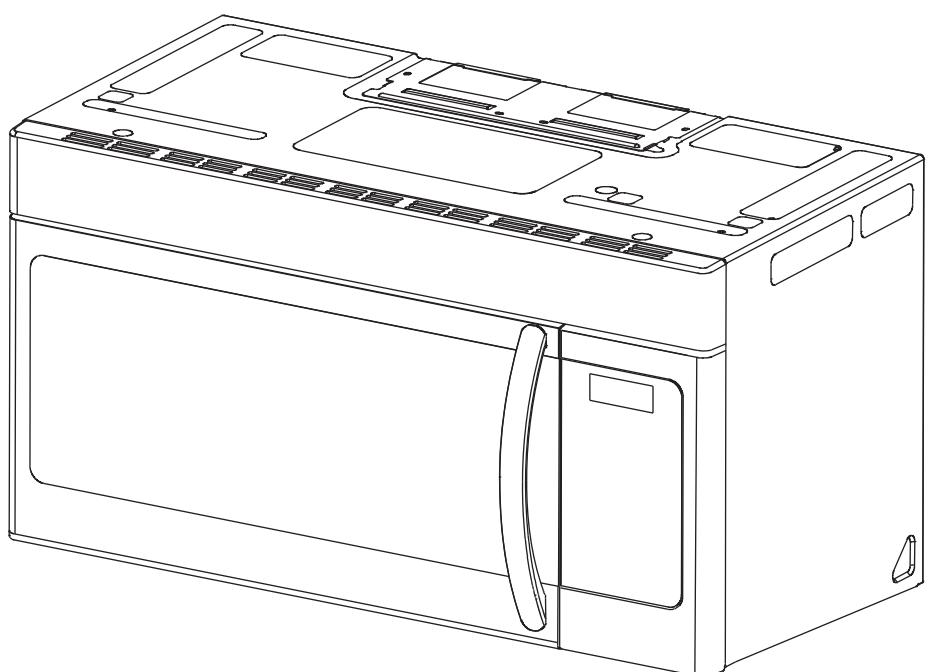


INSIGNIA™

1.5 Cu. Ft. Over-the-Range Convection Microwave

NS-OTRC15SS9



Before using your new product, please read these instructions to prevent any damage.

Contents

Introduction	3
BEFORE YOU BEGIN	3
IMPORTANT SAFETY INSTRUCTIONS	3
ELECTRICAL REQUIREMENTS	3
Package contents	4
Parts	4
Hardware	4
Before you install	5
Tools and materials needed	5
Mounting requirements	6
Exhaust requirements	7
Removing your microwave	9
Installing your microwave	9
Step 1: Find the wall studs	9
Step 2: Align the rear wall template	10
Step 3: Select a ventilation type	12
Step 4: Option A - Attach the mounting plate to the wall	13
Step 5: Option A - Preparing the top cabinet	15
Step 6: Option A - Adapt the microwave blower for outside top exhaust	17
Step 7: Option A - Mount the microwave	19
Step 8: Option A - Connecting ductwork	21
Step 4: Option B - Cutting a vent opening	22
Step 5: Option B - Attach the mounting plate to the wall	23
Step 6: Option B - Preparing the top cabinet	25
Step 7: Option B - Adapt the microwave blower for outside back exhaust	27
Step 8: Option B - Mount the microwave	30
Step 4: Option C - Attach the mounting plate to the wall	32
Step 5: Option C - Preparing the top cabinet	34
Step 6: Option C - Mount the microwave	36
Before using your microwave	38
Template dimensions	39
Rear wall template dimensions	39
Top cabinet template dimensions	40
Obtaining replacement parts	41
Specifications	41
Legal notices	41
ONE-YEAR LIMITED WARRANTY	41

1.5 Cu. Ft. Over-the-Range Convection Microwave

Introduction

Congratulations on your purchase of a high-quality Insignia product. Your NS-OTRC15SS9 represents the state of the art in microwave design and is designed for reliable and trouble-free performance.

This installation guide will show you how to install your new over-the-range microwave.

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.

IMPORTANT SAFETY INSTRUCTIONS

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

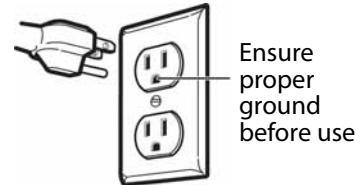
This product requires a three-prong, properly grounded outlet for safe operation. If not properly grounded, or if the outlet box does not meet the electrical requirements noted (under ELECTRICAL REQUIREMENTS), a qualified electrician should be employed to correct any deficiencies.

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 that 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.



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

Caution

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

For personal safety, the mounting surface must be capable of supporting a total weight of 113–135 pounds (51.3–61.2 kg). This includes the cabinet load, weight of the microwave, and additional oven loads.

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.



ELECTRICAL REQUIREMENTS

The product rating of your microwave 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.

Package contents

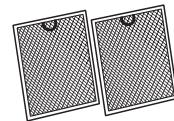
- 1.5 cu. ft. over-the-range convection microwave
- Turntable (with ring)
- Installation parts (see “Parts” below)
- Installation hardware (see “Hardware” below)
- Mounting templates (2)
- *Installation Guide*
- *User Guide*

Parts

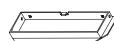
Make sure that you have all the parts necessary to install your new microwave.



Mounting plate
(ships attached to microwave)



Grease filters (Qty. 2)

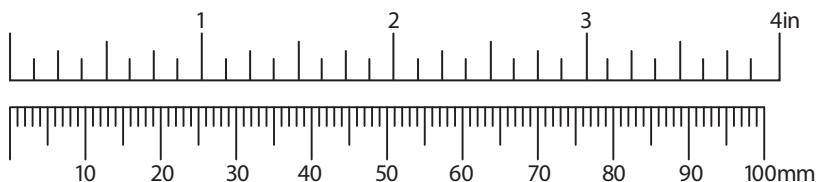


Exhaust adapter

Hardware

Hardware	Qty.
A single wood screw with a flat head and a pointed tip.	2
A toggle bolt with a wing nut, used for mounting through drywall. It has a threaded shaft and a flared base.	2

Hardware	Qty.
A self-aligning machine screw with a flat head and a pointed tip.	3
A flexible, ribbed plastic grommet used for mounting through metal cabinets.	1



Before you install

Read these instructions completely before installing your microwave. Make sure that your space meets the mounting requirements and that you've gathered all needed tools and materials.

Tools and materials needed



Ducts (if venting outside)
See ["Exhaust requirements" on page 7](#)



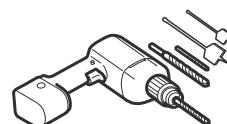
Level



Duct tape



Filler blocks or scrap wood pieces
(for top cabinet spacing in recessed
bottom cabinet installations, if needed)



Electric drill with 3/16", 1/2", and 5/8" bits



#1 Phillips screwdriver



Pencil



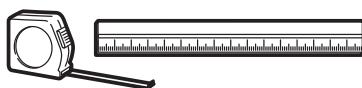
Saw
(saber, hole, or keyhole)



Edge-to-edge stud finder



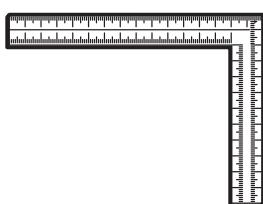
Tin snips
(to cut damper, if needed)



Ruler or tape measure



Scissors
(to cut template, if needed)



Carpenter square
(optional)



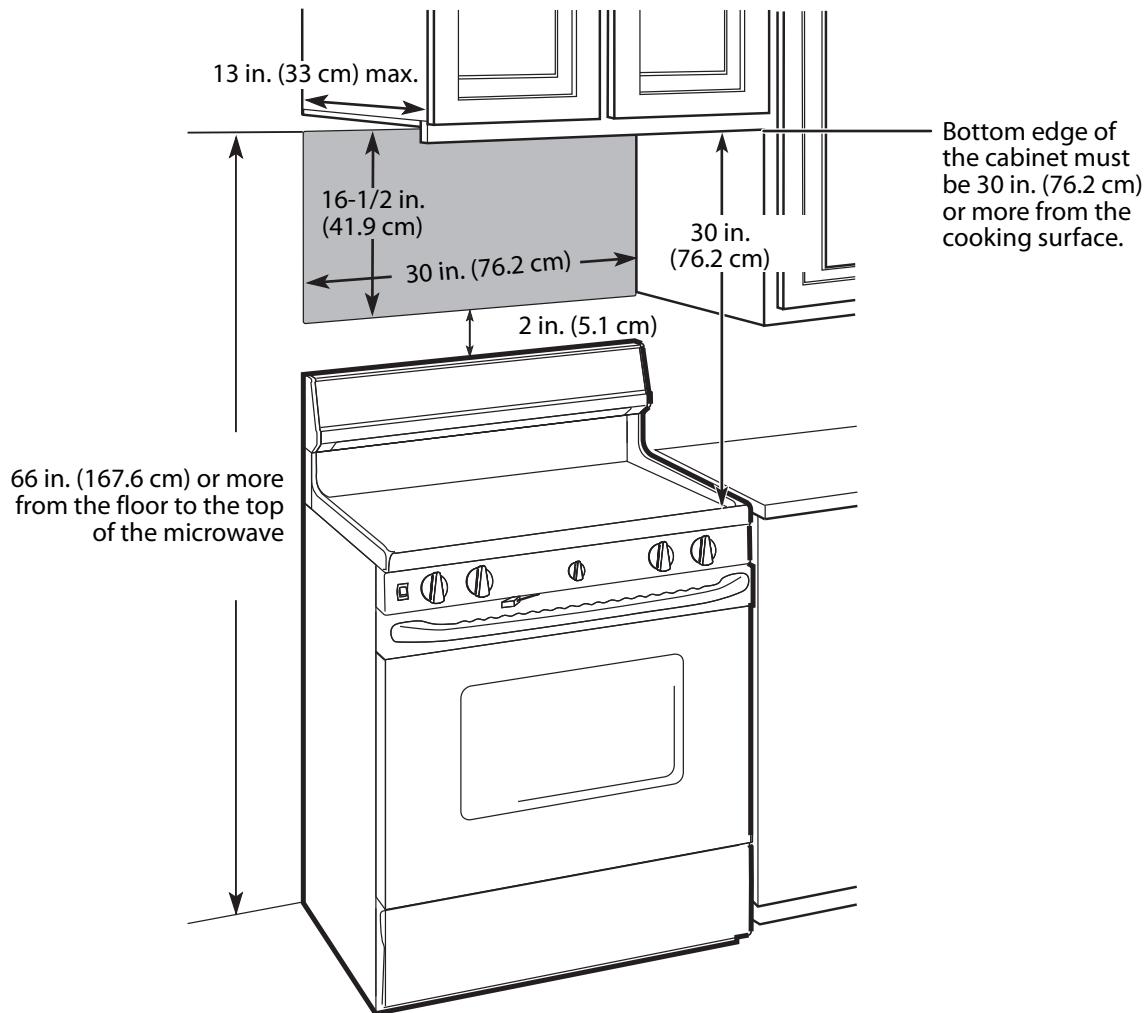
Gloves



Safety goggles

Mounting requirements

- The space between the cabinets must be 30 in. (76.2 cm) wide. If the space between the cabinets is more than 30 in. (76.2 cm), you'll need filler material to fill the gap between the microwave and cabinets.
- This microwave is for installation over ranges up to 36 in. (91.4 cm) wide.
- If installing the microwave beneath smooth, flat cabinets, make sure that you leave enough space for the power cord.
- If you are going to vent your exhaust to the outside, see ["Exhaust requirements" on page 7](#) for exhaust duct preparation.



Exhaust requirements

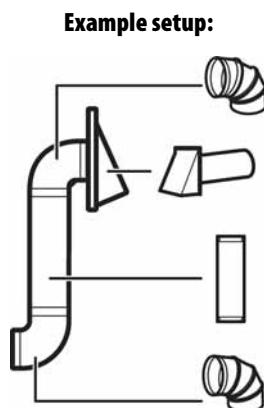
Use this section if you plan to vent your microwave outside (top or back exhaust). If you plan to recirculate the air back into the room, skip to ["Removing your microwave" on page 9](#).

When installing exhaust vents:

- Use the most direct route with as few elbows/transitions as possible. This helps prevent blockages and ensures that the exhaust is being vented correctly.
- Your microwave is designed to mate with a standard 3-1/4" x 10" rectangular duct. If a round duct is required, a rectangular-to-round transition adapter must be used with 6" (15.2 cm) or 5" (12.7 cm) diameter round ducts.

Note: If a rectangular-to-round transition adapter is used, you must cut the bottom corners of the damper with tin snips to let the damper have free movement.

- Elbows, transitions, and wall/roof caps add resistance to airflow. Each of these pieces are equivalent to a section of straight duct that is longer than their actual physical size. When calculating your duct length, add the equivalent lengths of all the pieces together. For proper airflow, the equivalent airflow should not exceed 120 ft. For example:



Duct Pieces	Equivalent Length	×	Number Used	=	Total Equivalent Length
Roof cap	40 ft.	×	(1)	=	40 ft.
90° elbow	10 ft.	×	(2)	=	20 ft.
Straight duct 6" round OR 3-1/4" x 10" rectangular	3 ft.	×	(1)	=	3 ft.
Total ductwork =					63 ft.

For proper airflow, this number should not exceed 120 ft.

Use the ["Equivalent duct length table" on page 8](#) to calculate the equivalent ductwork length for your setup.

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

Equivalent duct length table

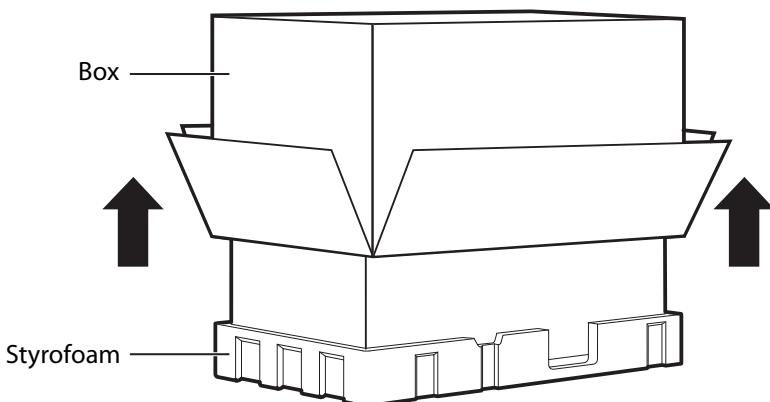
To calculate your equivalent duct length:

- 1 Write the number of sections used for each of the duct pieces.
- 2 Multiply the number used by the equivalent length for each duct piece.
- 3 Add the total equivalent lengths together. This number must be less than 120 ft.

Duct Pieces	Equivalent Length	×	Number Used	=	Total Equivalent Length
 Rectangular-to-round transition adapter	5 ft.	×	()	=	ft.
 Wall cap	40 ft.	×	()	=	ft.
 90° elbow	10 ft.	×	()	=	ft.
 45° elbow	5 ft.	×	()	=	ft.
 90° elbow	25 ft.	×	()	=	ft.
 45° elbow	5 ft.	×	()	=	ft.
 Roof cap	24 ft.	×	()	=	ft.
 Straight duct 6" round OR 3-1/4" x 10" rectangular	1 ft.	×	()	=	ft.
Total ductwork				=	ft.
					(For proper airflow, this number should not exceed 120 ft.)

Removing your microwave

- 1 Remove the instructions, filters, glass turntable, and the hardware bag. Do not remove the Styrofoam protecting the front of the microwave.
- 2 Fold back all four carton flaps against the sides of the box, then carefully roll the oven and carton over onto the top side.



- 3 Pull the box off the microwave.

Installing your microwave

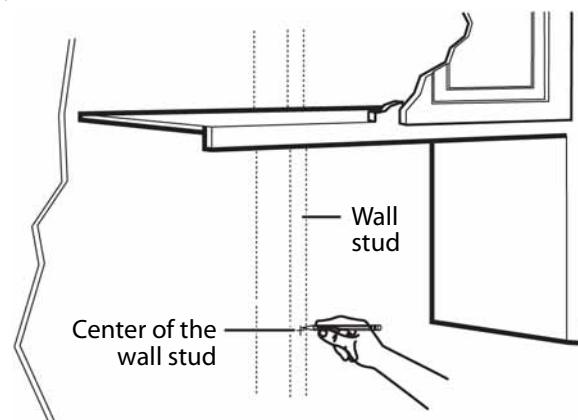
Step 1: Find the wall studs

Warning: Your microwave must be connected to at least one wall stud.

- 1 Using an edge-to-edge stud finder, locate the edges of the wall stud(s) within the opening.

Note: The center of any adjacent wall studs should be 16" or 24" from this mark.

- 2 Mark the center of each stud, and then draw a vertical line down the center of each stud.



You'll need:



Edge-to-edge stud finder



Ruler or tape measure

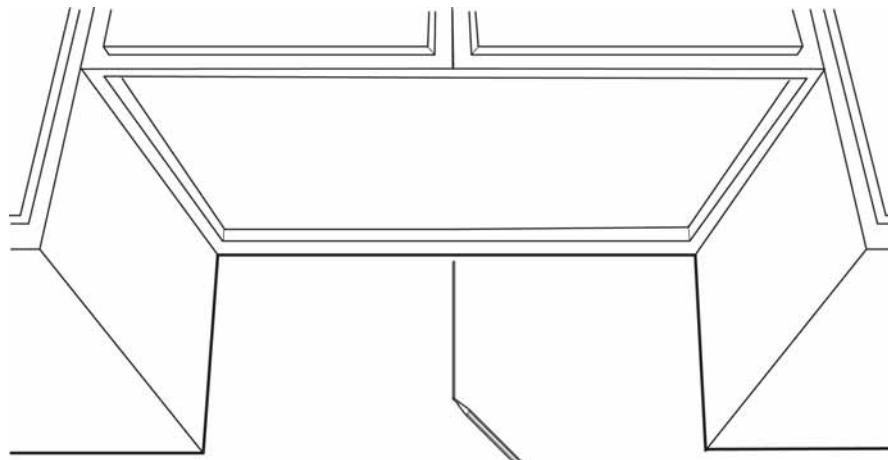


Pencil

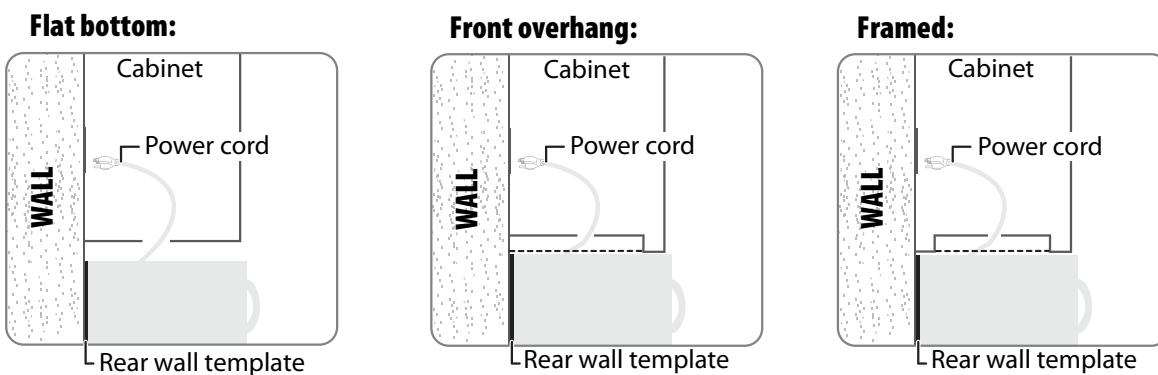
Step 2: Align the rear wall template

Note: If the rear wall template is damaged or unusable, measure and mark the wall with the dimensions at the end of this step.

- 1 Use a level to make sure that the bottom of the cabinet is level.
- 2 Draw a vertical line down the center of the wall in the mounting space. This is where the center of your template will be.

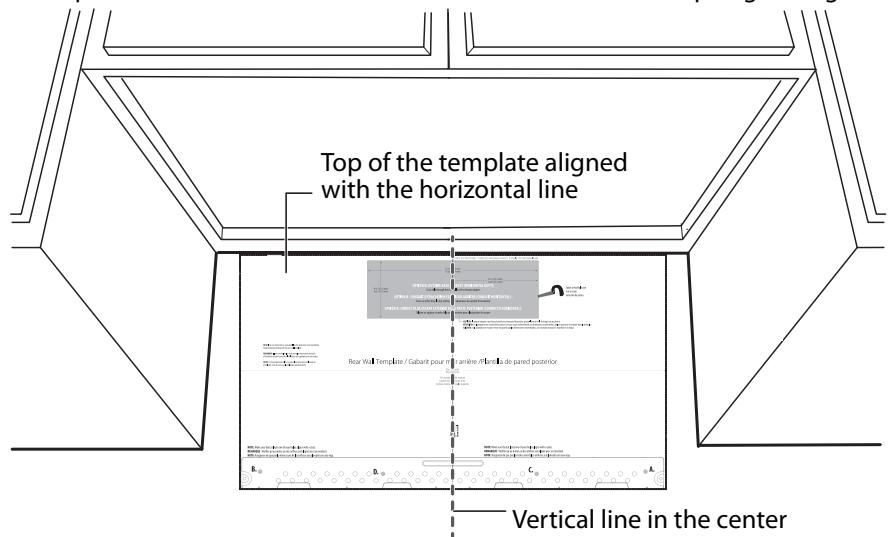


- 3 Draw a horizontal line at the height of the front of your cabinet. This is where the top of your template will be. If the bottom of your cabinet is flat, make sure that you leave space for the power cord.

**Notes:**

- If installing the microwave beneath smooth, flat cabinets, make sure that you leave enough space for the power cord.
- If cabinets have decorative trim that interferes with the microwave installation, remove the trim to install the microwave properly and to make sure that it is level.

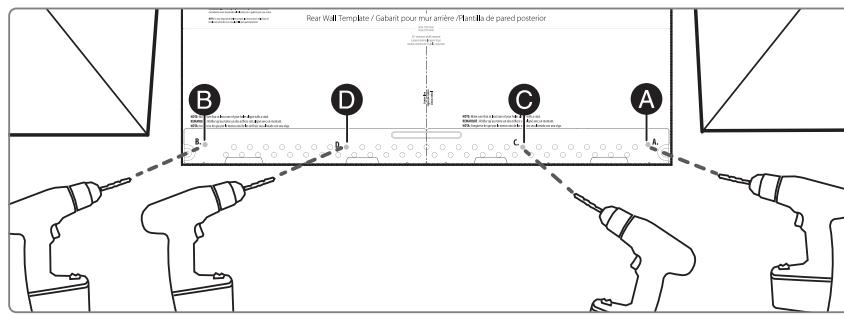
- 4 Trim the rear wall template along the dotted line.
- 5 Tape the template in place so that it is centered on the vertical line and the top edge is aligned with the horizontal line.



- 6 Find a hole that aligns with a stud (this is C or D on the template).

Warning: You must mount to at least one stud.

7 Drill holes through the template at points A, B, and C or D. If the hole lines up with a stud, drill a 3/16" hole. Otherwise, drill a 5/8" hole for the toggle bolts. You must use at least three holes for mounting.



Note: Depending on your stud locations, your installation may look different. You must mount to at least one stud.

You'll need:



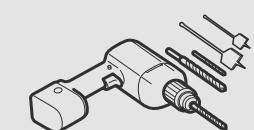
Ruler or tape measure



Level



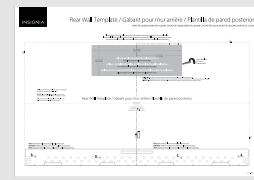
Pencil



Electric drill with 3/16" and 5/8" bits



Duct tape

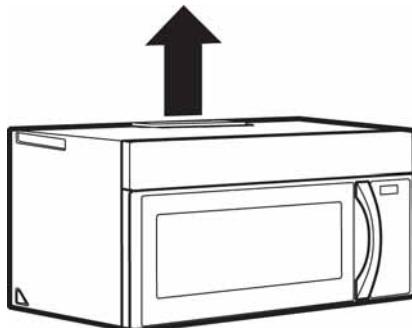


Rear wall template

Step 3: Select a ventilation type

This microwave is designed for three types of ventilation. Select the type of ventilation you want to use, then go to the corresponding page.

Note: This microwave is shipped assembled for recirculation.

Option A - Outside top exhaust (vertical duct): See page 13***Option B - Outside back exhaust (horizontal duct): See page 22***

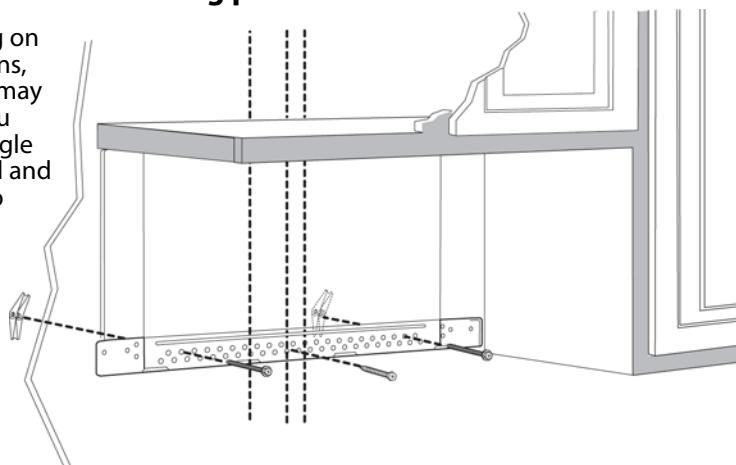
Note: If a wall stud is within 6 in. (15.2 cm) of the vertical center line, you cannot use this installation option.

Option C - Recirculating (non-vented/ductless): See page 32

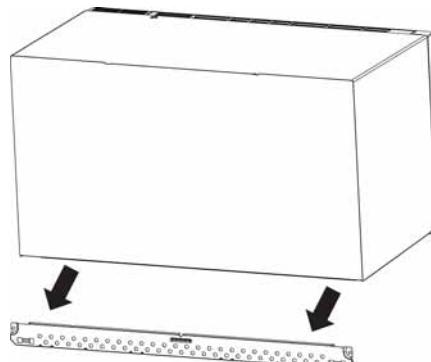
Note: Requires a charcoal filter (included)

Step 4: Option A - Attach the mounting plate to the wall

Note: Depending on your stud locations, your installation may look different. You should insert toggle bolts into drywall and wood screws into studs.

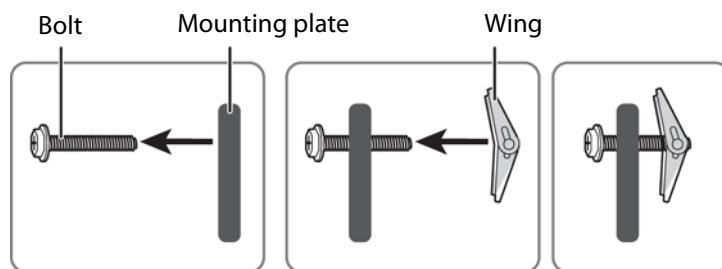


- 1 Remove the rear wall template.
- 2 Remove the mounting plate from the back of your microwave using a #1 Phillips screwdriver. Replace the two screws back into the microwave after removing the mounting plate.



- 3 Insert the toggle bolt(s) through the front of the mounting plate into the hole(s) that are not going into a stud, and then attach the toggle wings $\frac{3}{4}$ " (1.9 cm) onto each bolt. Hold your mounting plate up to the holes in your wall to identify the correct position.

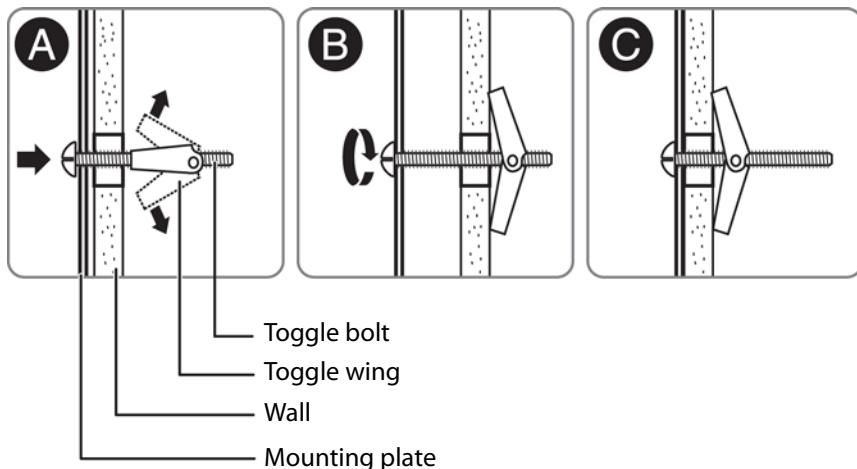
Note: The top of the mounting plate is indicated with an arrow. The mounting plate's hooks are on the front.



- 4 Place the mounting plate against the wall and insert the toggle wings into the holes you drilled in the drywall. Pull the mounting plate away from the wall to help tighten the toggle wings.

5 Insert wood screw(s) through the mounting plate and into the hole(s) drilled in the stud(s), then tighten both the wood screw(s) and toggle bolt(s) with a Phillips screwdriver to mount the plate. Make sure that the plate is centered before tightening fully.

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



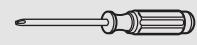
You'll need:



Toggle bolts



Wood screws



Phillips screwdrivers



Mounting plate
(ships attached to microwave)

Step 5: Option A - Preparing the 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 adapter.

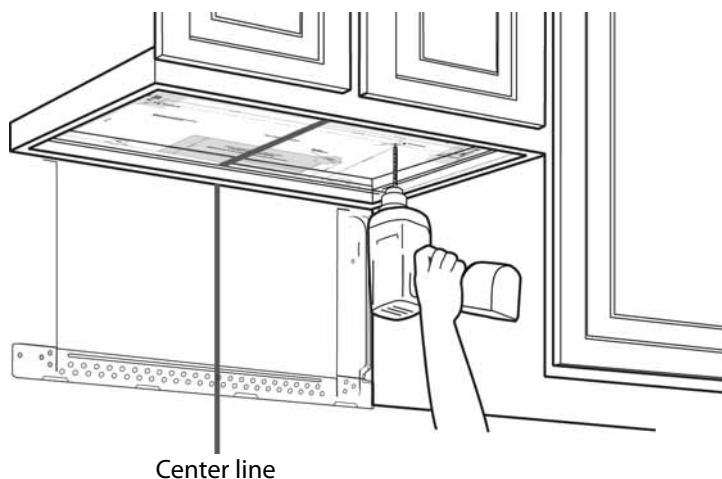
- 1 Turn off the power to the outlet in the cabinet.
- 2 Remove everything from the cabinet.
- 3 Trim the *Top Cabinet Template* along the dotted line.
- 4 If the bottom of your cabinet is recessed and the template is too large, trim the edges to fit. Your template should fit snugly inside the space with no overhang.

Notes:

- Make sure that you keep the left and right sides even. For example, if you need to trim the sides by 1" (2.5 cm), cut 1/2" (1.25 cm) from the left side and 1/2" (1.25 cm) from the right side.
- Some cabinets have a small bracket or glue block between the overhang and the underside of the cabinet bottom. Cut the template to fit around these so it lies flat on the bottom of the cabinet.

- 5 To position the *Top Cabinet Template*:

- Align the center line on the template with the center line that you drew on the wall.
- Align the back edge of the template to the rear wall (smooth or flat bottom cabinets) or to the back of the recess (recessed cabinets) to make sure that the holes cut into the upper cabinet align with the holes in the top of the microwave.



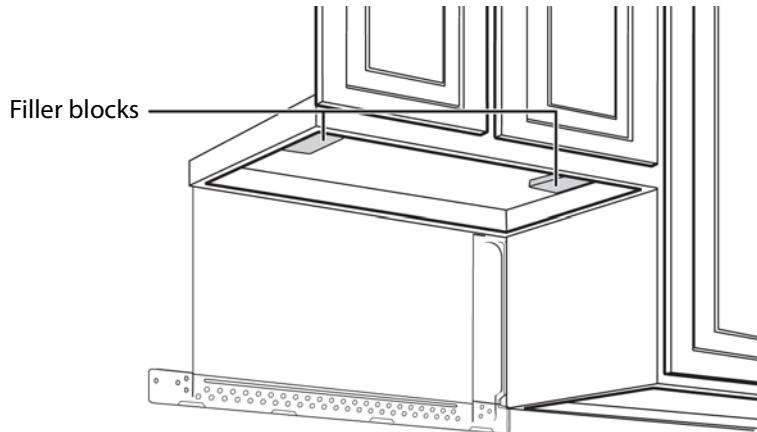
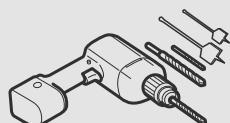
- 6 Tape the template to the bottom of the cabinet.
- 7 Drill 3/8" holes through the template at points **A**, **B**, and **C**.

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

- 8 Cut a 2" (5 cm) diameter hole at point **D** for the power cord.
- 9 Cut out the shaded area **E** through the cabinet bottom.

10 If you have recessed cabinets:

- Make two filler blocks out of scrap wood pieces the size of shaded areas **H** (about 2.25×4.125 in. or 5.7×10.5 cm). They must be as thick as the depth of the cabinet recess.
- Drill $5/8"$ holes in the filler blocks to align with points **A** and **B**.
- Align the blocks with the corresponding holes in the cabinet. They should be at the same level as the bottom edge of the cabinet frame.

**11** Remove the template.**You'll need:**

Electric drill with $1/2"$ and $5/8"$ bits



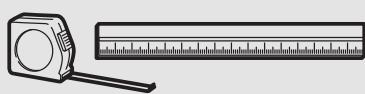
Duct tape



Scissors
(recessed cabinets only)



Safety goggles



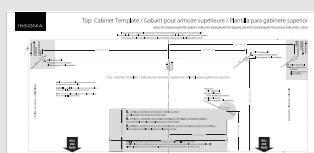
Ruler or tape measure



Saw
(saber, hole, or keyhole)



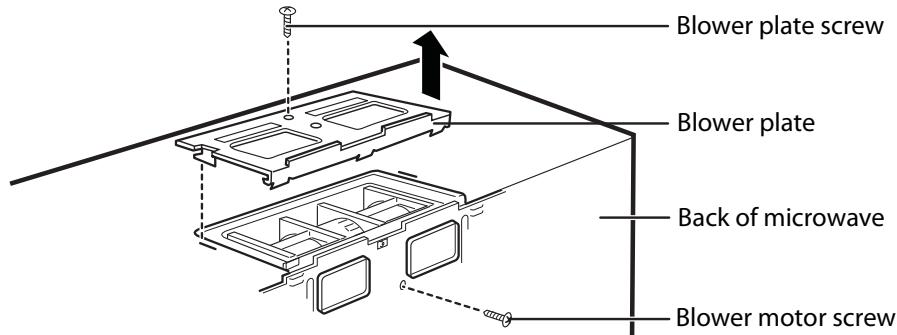
Filler blocks or scrap wood pieces
(for recessed cabinets only)



Top Cabinet Template

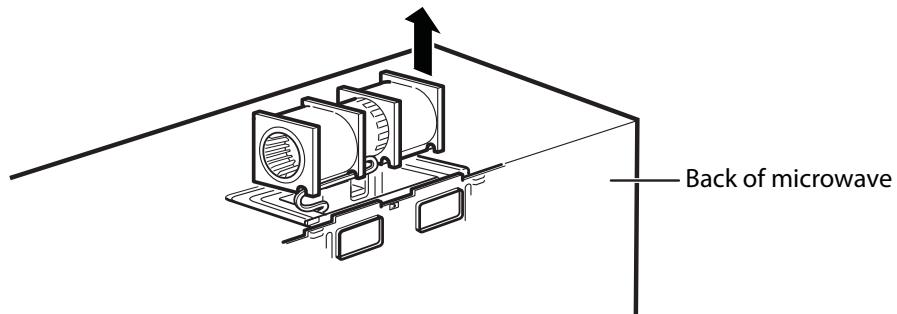
Step 6: Option A - Adapt the microwave blower for outside top exhaust

- 1 Remove and save the two screws that hold the blower plate and blower motor to the microwave.

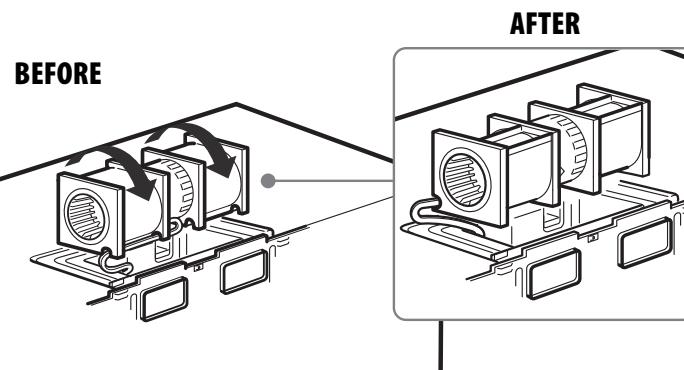


- 2 Carefully pull out the blower motor. The wires will extend far enough to let you adjust the blower unit. Do not disconnect the wires.

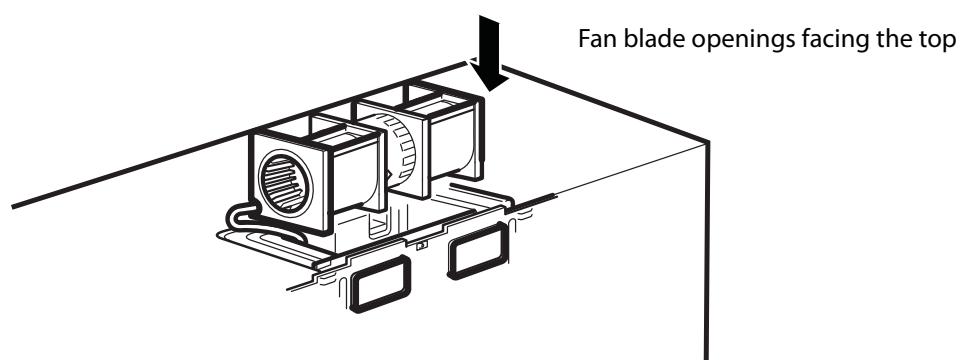
Caution: Do not pull or stretch the blower unit wiring. Make sure that the wires are not pinched.



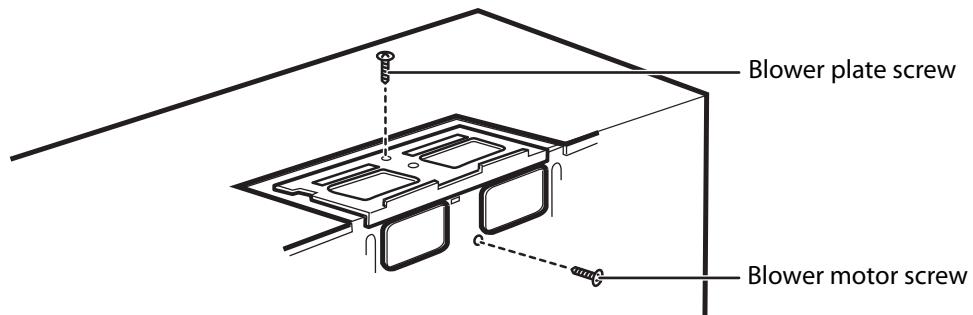
- 3 Turn the blower unit 90° so that the fan blade openings are facing out the top of the microwave.



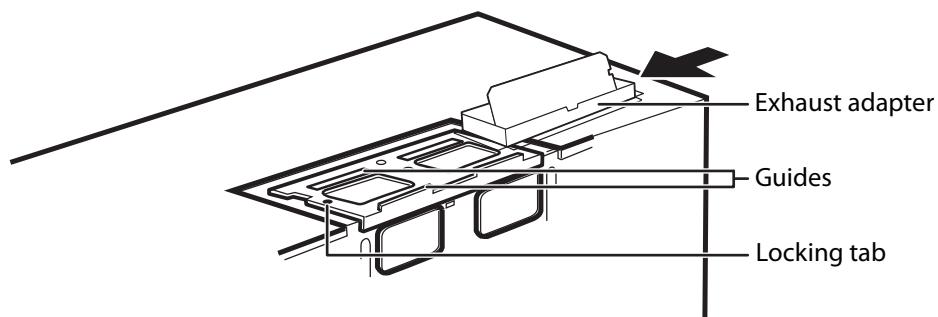
- 4 Place the blower motor back into the opening. The blower unit exhaust openings should match the exhaust openings on the top of the microwave.



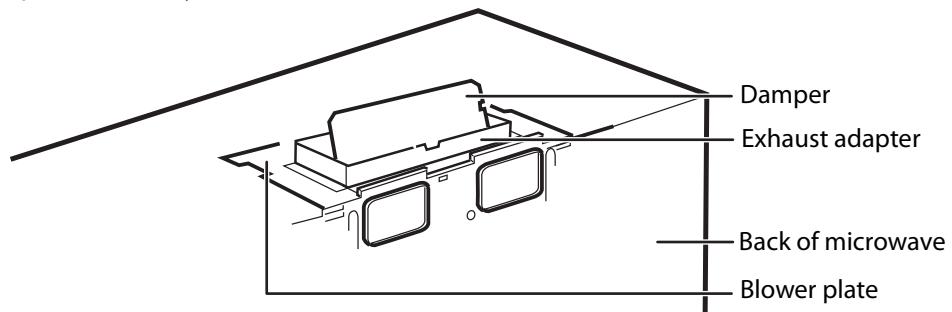
5 Secure the blower motor and blower plate to the microwave with the two screws that you previously removed.



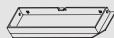
6 Slide the exhaust adapter into the guides on the top of the blower plate and push in until it is secure in the locking tabs.



7 Remove any tape securing the damper and make sure that the damper pivots easily. You may need to adjust the exhaust adapter to fit with your house's exhaust duct after the microwave is installed.

**You'll need:**

Phillips screwdrivers



Exhaust adapter

Step 7: Option A - Mount the microwave

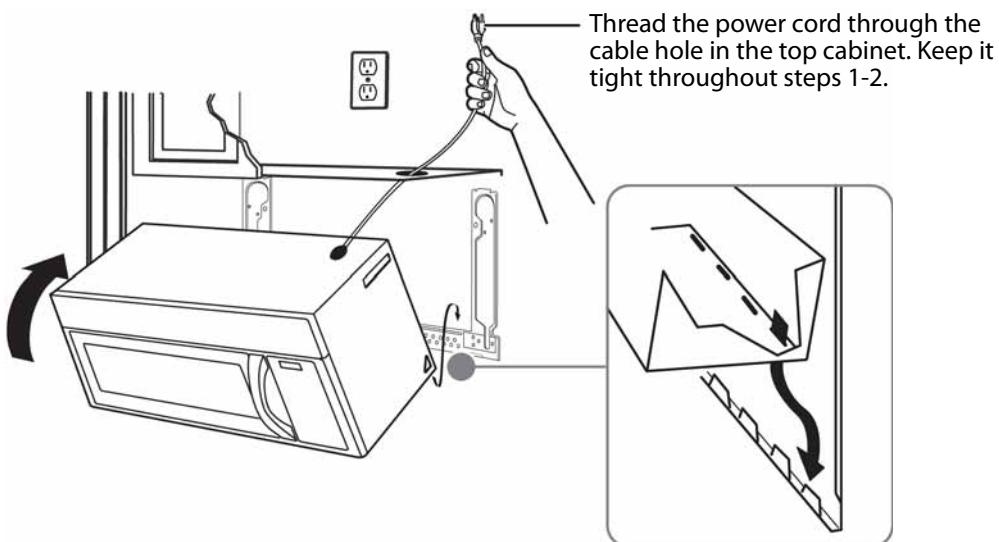
Caution:

- For easier installation and personal safety, we recommend that two people install this microwave oven.
- Do not grip or use the handle during installation.
- To keep the power cord tight while mounting the microwave oven, thread the power cord through the hole in the bottom of the cabinet.

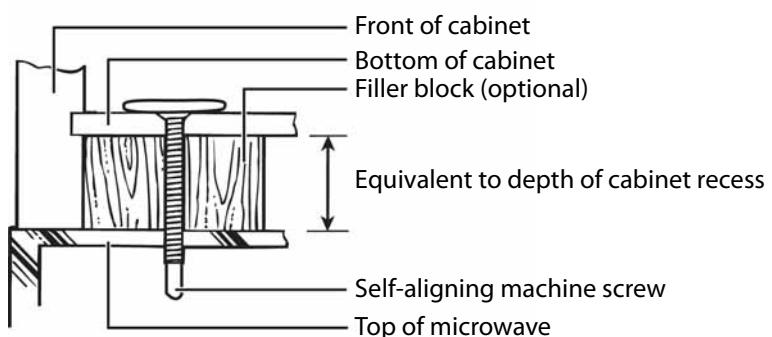
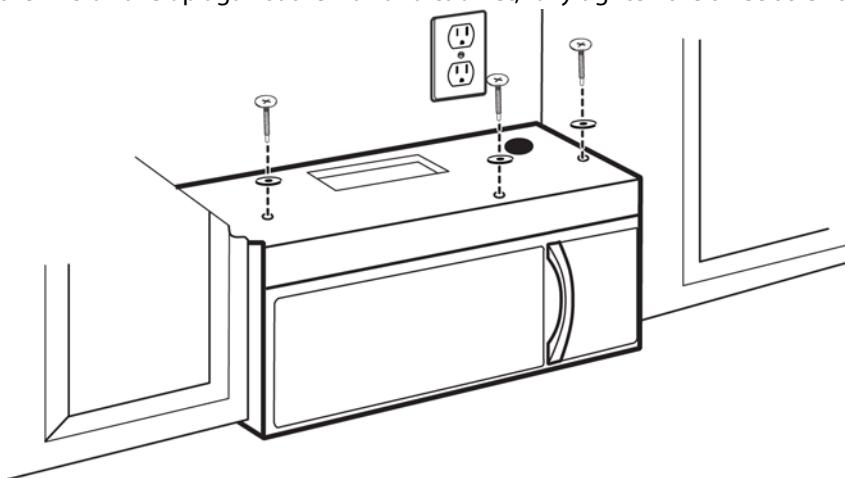
- 1 If your cabinet is metal, insert the nylon grommet into the power cord hole to prevent cutting the cord.
- 2 Lift the microwave, tilt it forward, and hook the slots on the back bottom edge onto the four lower tabs of the mounting plate. Rotate the front of the microwave up against the bottom of the cabinet.

Notes:

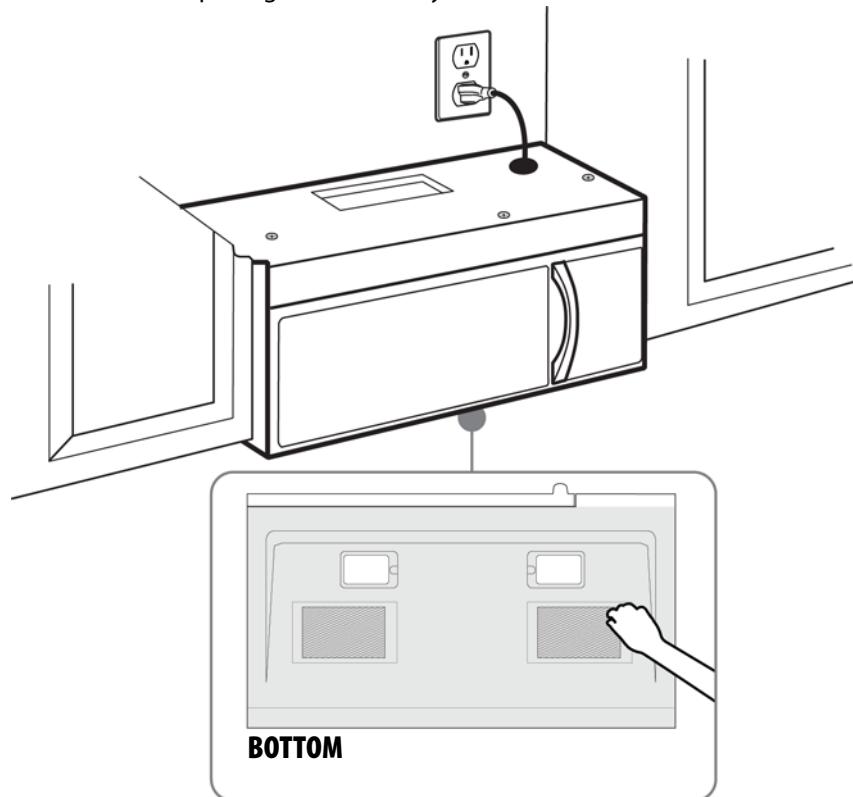
- We recommend using filler blocks if the front of the cabinet hangs below the cabinet's bottom shelf.
- If filler blocks are not used, damage may occur from over-tightening the screws.
- Be sure to keep the power cord tight.
- Do not pinch the cord, especially when mounting flush to the bottom of the cabinet.



- 3 Insert a self-aligning screw through the top, center cabinet hole and temporarily secure the microwave by turning the screw at least two full turns (it will be fully tightened later).
- 4 Insert two self-aligning screws through the outer top cabinet holes, securing each screw with at least two full turns.
- 5 While holding the microwave up against the wall and cabinet, fully tighten the three screws.



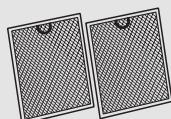
6 Fit the two grease filters into the openings underneath your microwave.

**You'll need:**

Nylon grommet
(for metal cabinets)



Self-aligning machine
screws



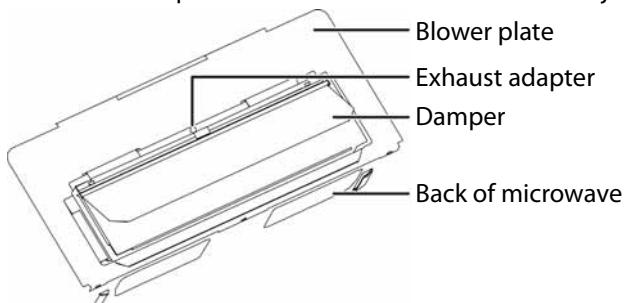
Grease filters



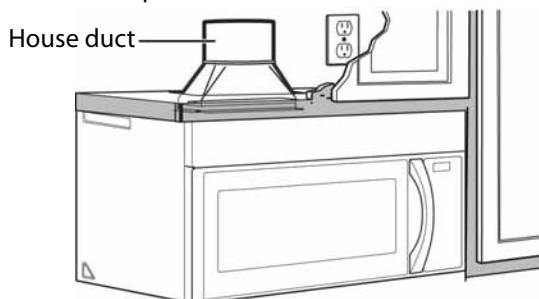
Phillips screwdrivers

Step 8: Option A - Connecting ductwork

- 1 Open the cabinet and slide the exhaust adapter front-to-back or side-to-side to adjust.



- 2 Extend the house duct down to connect to the exhaust adapter.
- 3 Seal the exhaust duct joints with duct tape.



- 4 You're finished! Skip to ["Before using your microwave" on page 38](#).

You'll need:

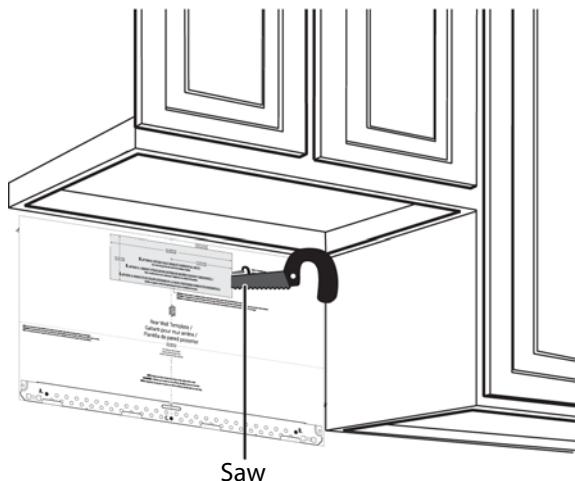


Duct tape

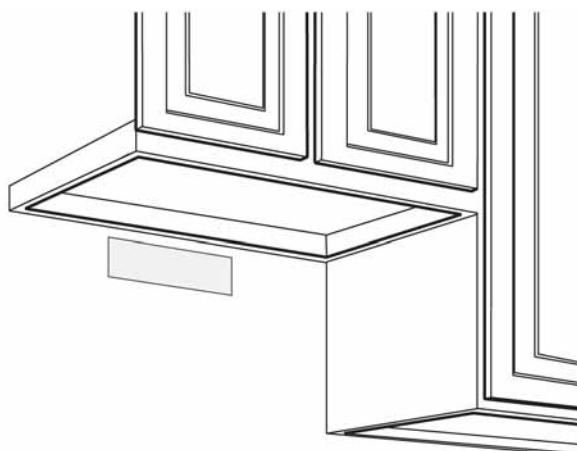
Step 4: Option B - Cutting a vent opening

- 1 Use a saber or keyhole saw to cut out the shaded area **K** through the rear wall.

Note: If a wall stud is within 6 in. (15.2 cm) of the vertical center line, you cannot use this installation option.



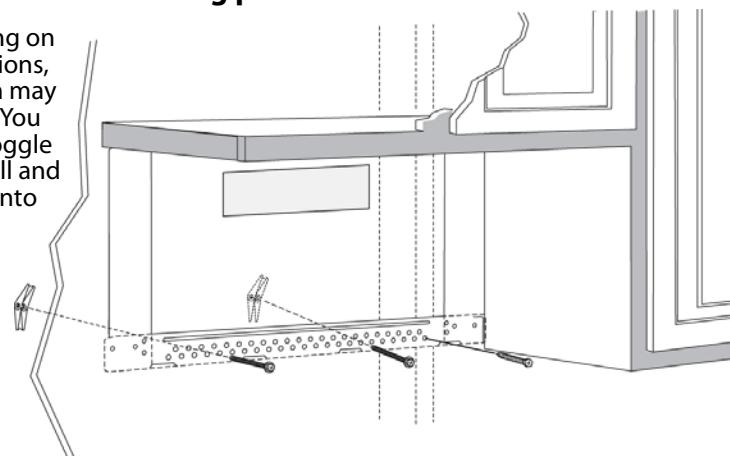
- 2 Remove the rear wall template.

**You'll need:**

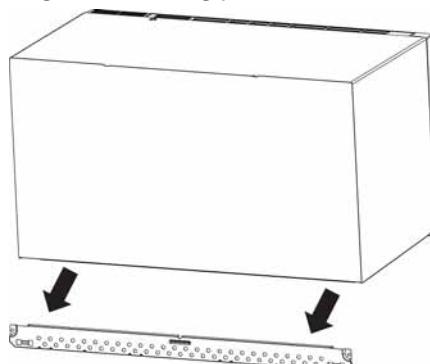
Saw
(saber, hole, or keyhole)

Step 5: Option B - Attach the mounting plate to the wall

Note: Depending on your stud locations, your installation may look different. You should insert toggle bolts into drywall and wood screws into studs.

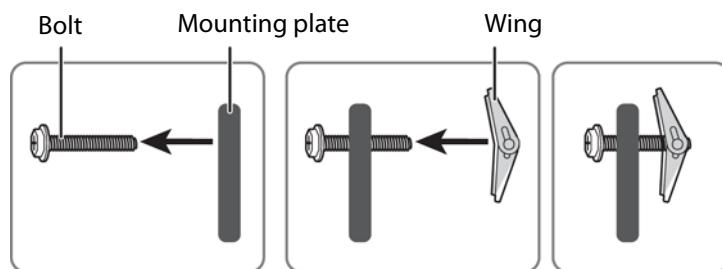


- 1 Remove the rear wall template.
- 2 Remove the mounting plate from the back of your microwave using a #1 Phillips screwdriver. Replace the two screws back into the microwave after removing the mounting plate.



- 3 Insert the bolt(s) through the front of the mounting plate into the hole(s) that are not going into a stud, and then reattach the toggle wings $\frac{3}{4}$ " (1.9 cm) onto each bolt. Hold your mounting plate up to the holes in your wall to identify the correct position.

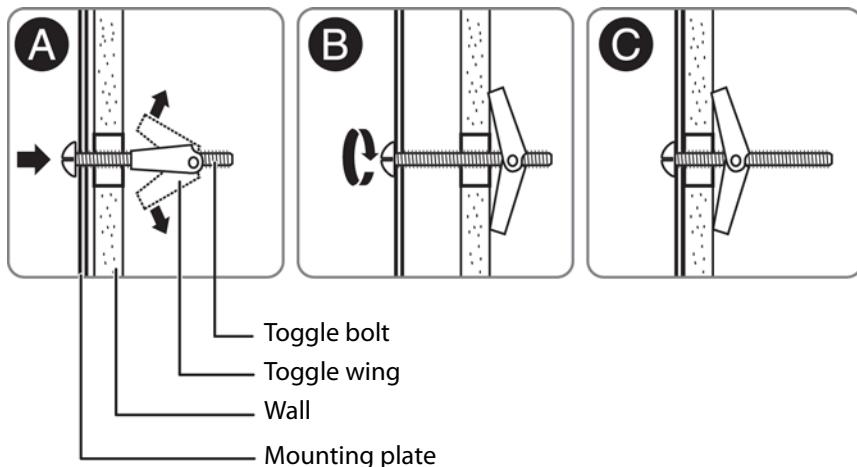
Note: The top of the mounting plate is indicated with an arrow. The mounting plate's hooks are on the front.



- 4 Place the mounting plate against the wall and insert the toggle wings into the holes you drilled in the drywall. Pull the mounting plate away from the wall to help tighten the toggle wings.

5 Insert wood screw(s) through the mounting plate and into the hole(s) drilled in the stud(s), then tighten both the wood screw(s) and toggle bolt(s) with a Phillips screwdriver to mount the plate. Make sure that the plate is centered before tightening fully.

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



You'll need:



Toggle bolts



Wood screws



Phillips screwdrivers



Mounting plate
(ships attached to microwave)

Step 6: Option B - Preparing the top cabinet

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

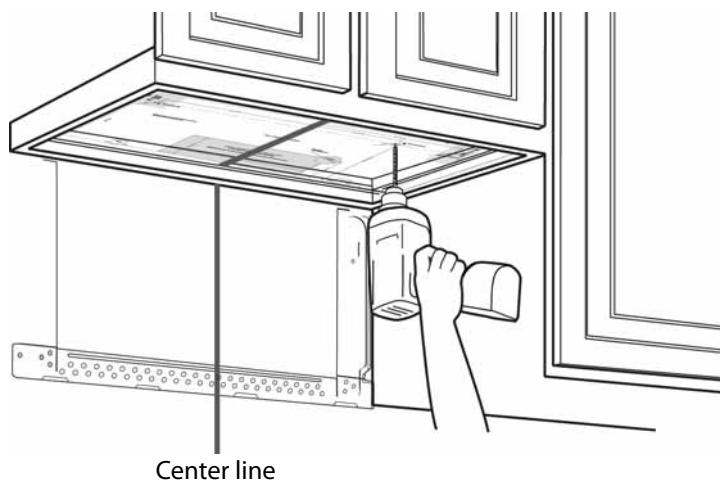
- 1 Turn off the power to the outlet in the cabinet.
- 2 Remove everything from the cabinet.
- 3 Trim the *Top Cabinet Template* along the dotted line.
- 4 If the bottom of your cabinet is recessed and the template is too large, trim the edges to fit. Your template should fit snugly inside the space with no overhang.

Notes:

- Make sure that you keep the left and right sides even. For example, if you need to trim the sides by 1" (2.5 cm), cut 1/2" (1.25 cm) from the left side and 1/2" (1.25 cm) from the right side.
- Some cabinets have a small bracket or glue block between the overhang and the underside of the cabinet bottom. Cut the template to fit around these so it lies flat on the bottom of the cabinet.

5 To position the *Top Cabinet Template*:

- Align the center line on the template with the center line that you drew on the wall.
- Align the back edge of the template to the rear wall (smooth or flat bottom cabinets) or to the back of the recess (recessed cabinets) to make sure that the holes cut into the upper cabinet align with the holes in the top of the microwave.



6 Tape the template to the bottom of the cabinet.

7 Drill 3/8" holes through the template at points **A**, **B**, and **C**.

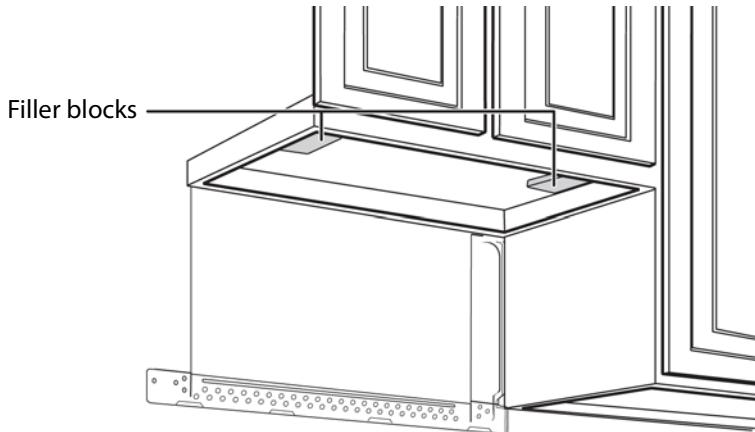
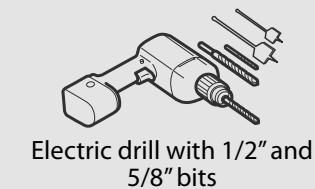
Caution: Wear safety goggles when drilling holes in the cabinet bottom.

8 Cut a 2" (5 cm) diameter hole at point **D** for the power cord.

9 Cut out the shaded area **G** through the cabinet bottom.

10 If you have recessed cabinets:

- Make two filler blocks out of scrap wood pieces the size of shaded areas **H** (about 2.25×4.125 in. or 5.7×10.5 cm). They must be as thick as the depth of the cabinet recess.
- Drill $5/8$ " holes in the filler blocks to align with points **A** and **B**.
- Align the blocks with the corresponding holes in the cabinet. They should be at the same level as the bottom edge of the cabinet frame.

**11** Remove the template.**You'll need:**

Electric drill with $1/2$ " and $5/8$ " bits



Duct tape



Scissors
(recessed cabinets only)



Safety goggles



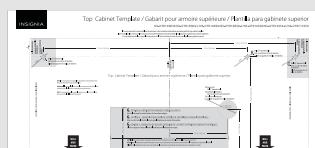
Ruler or tape measure



Saw
(saber, hole, or keyhole)



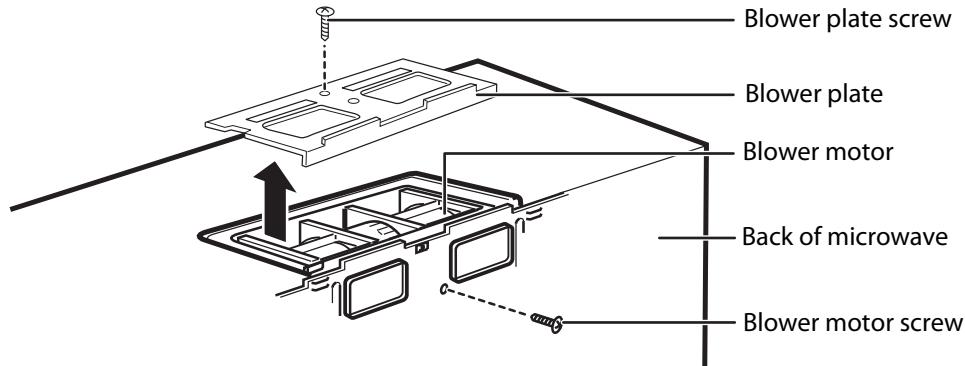
Filler blocks or scrap wood pieces
(for recessed cabinets only)



Top Cabinet Template

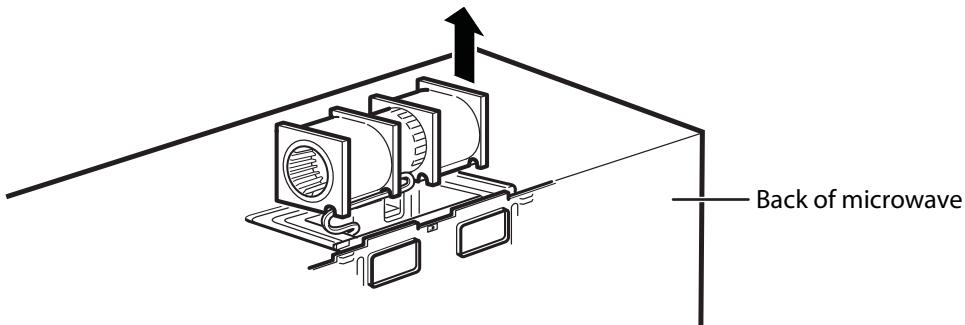
Step 7: Option B - Adapt the microwave blower for outside back exhaust

- 1 Remove and save the two screws that hold the blower plate and blower motor to the microwave.

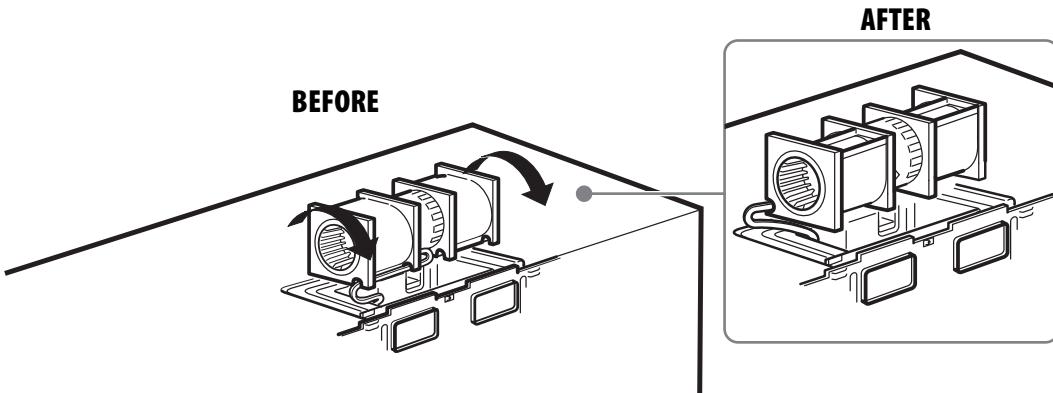


- 2 Carefully pull out the blower motor. The wires will extend far enough to let you adjust the blower unit. Do not disconnect the wires.

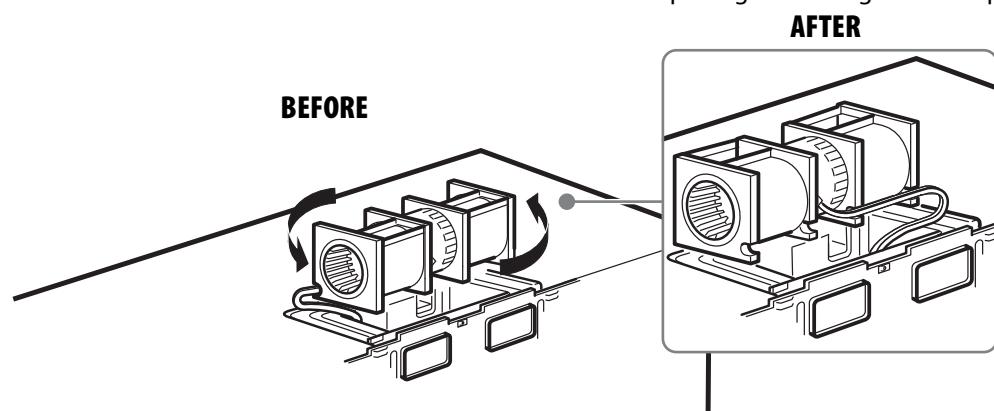
Caution: Do not pull or stretch the blower unit wiring. Make sure that the wires are not pinched.



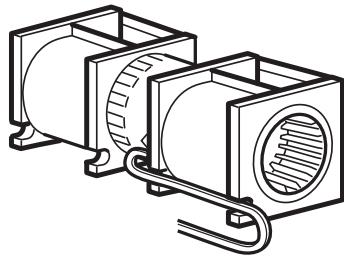
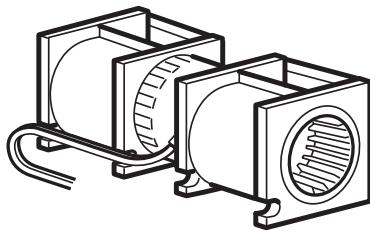
- 3 Roll the blower motor 90° so that the fan blade openings are facing out the top of the microwave.



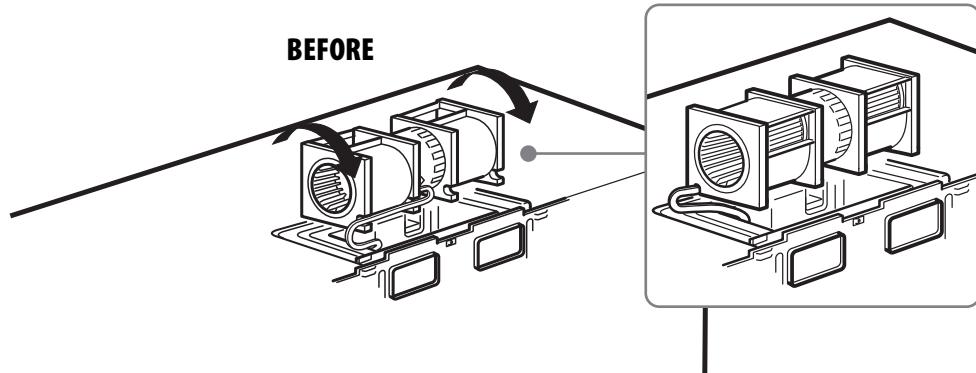
- 4 Rotate the blower motor 180° counterclockwise so that the fan blade openings are facing out the top of the microwave.



5 Gently remove the wires from the grooves and reroute them through the grooves on the other side of the blower motor.

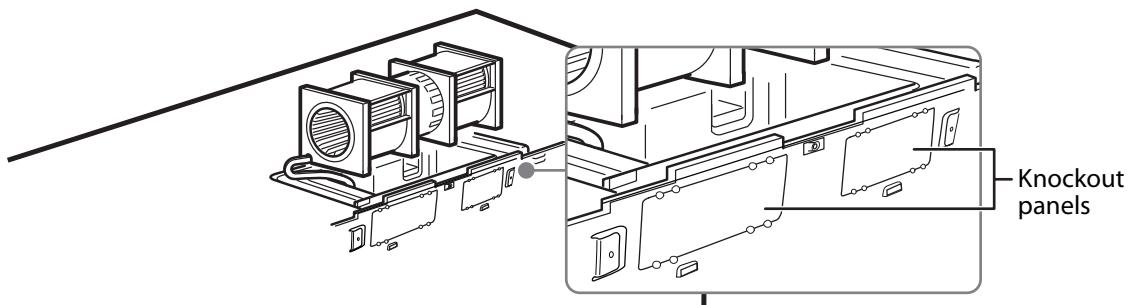
BEFORE**AFTER**

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

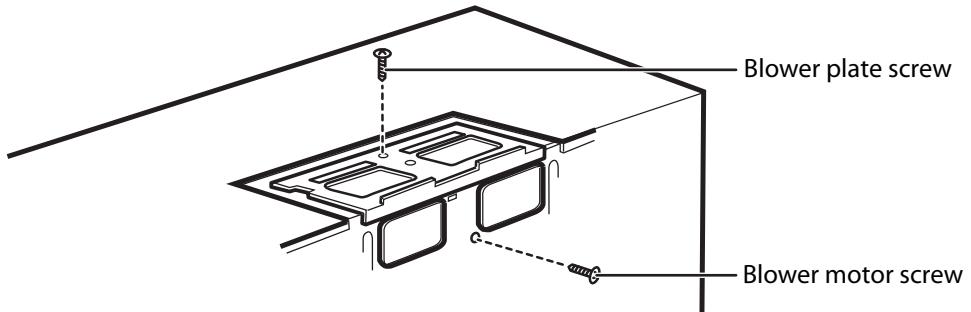
AFTER

7 Cut the four webs on each knockout panel with tin snips to remove the panels.

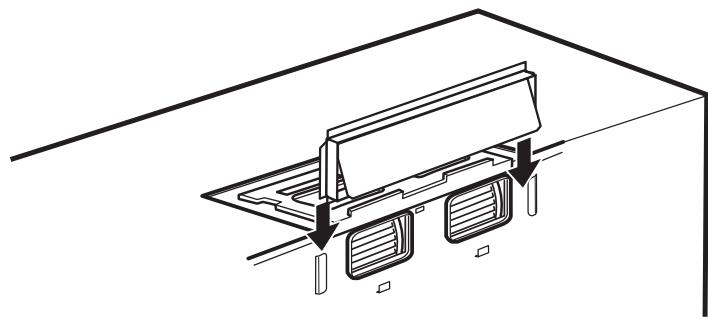
Caution: Edges may be sharp after removing the knockout panels. Carefully trim any sharp edges with your tin snips.



8 Secure the blower motor and blower plate to the microwave with the two screws that you previously removed.



9 Slide the exhaust adapter into the guides on the blower plate and push in until it is secured in the locking tabs.



10 Remove any tape securing the damper and make sure that the damper pivots easily. You may need to adjust the exhaust adapter to fit with your house's exhaust duct after the microwave is installed.

You'll need:



Phillips screwdrivers



Exhaust adapter

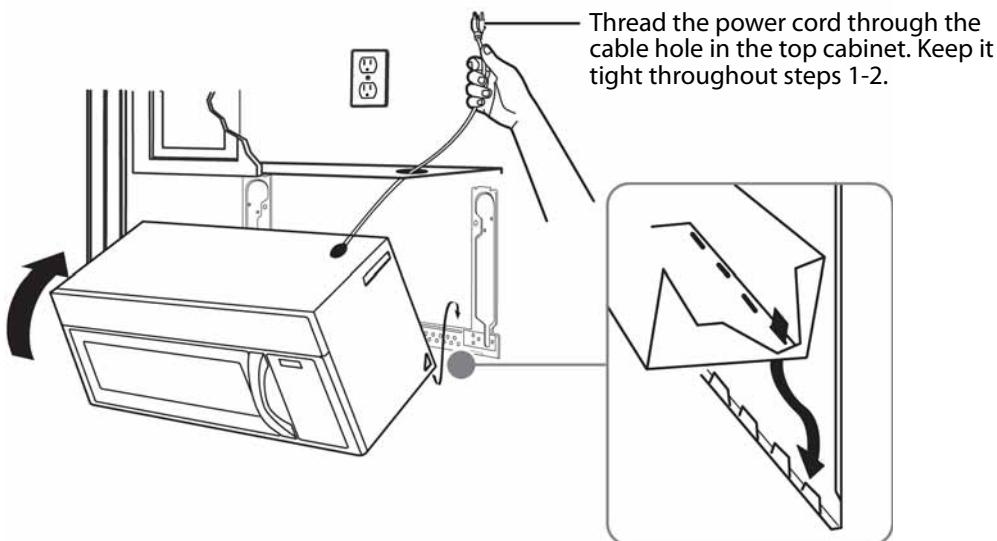
Step 8: Option B - Mount the microwave**Caution:**

- For easier installation and personal safety, we recommend that two people install this microwave oven.
- Do not grip or use the handle during installation.
- To keep the power cord tight while mounting the microwave oven, thread the power cord through the hole in the bottom of the top cabinet.

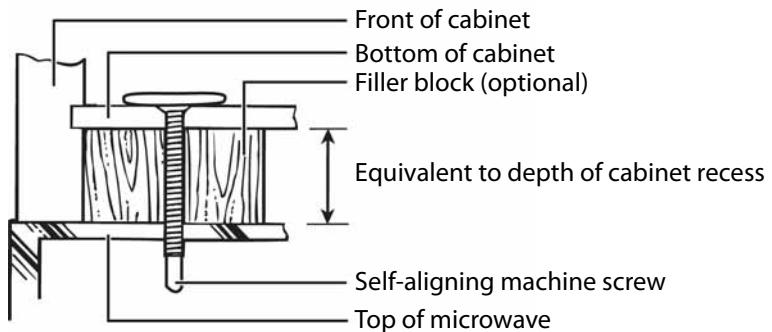
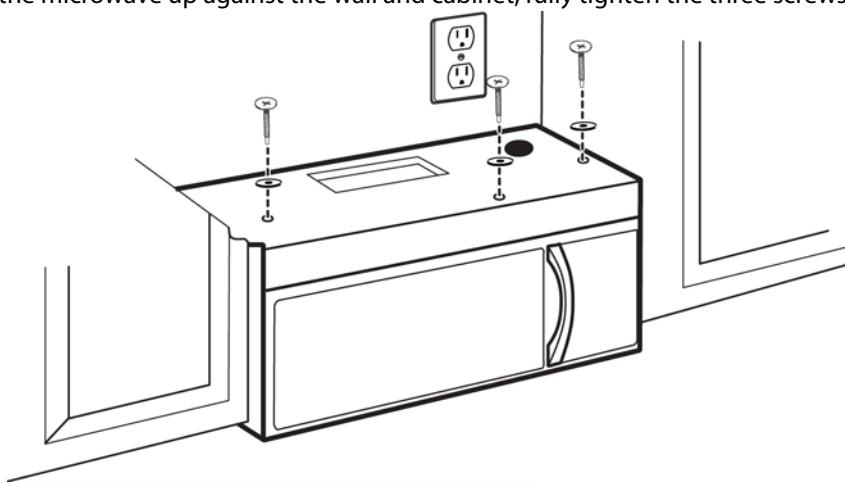
- 1 If your cabinet is metal, insert the nylon grommet into the power cord hole to prevent cutting the cord.
- 2 Lift the microwave, tilt it forward, and hook the slots on the back bottom edge onto the four lower tabs of the mounting plate. Rotate the front of the microwave up against the bottom of the cabinet.

Notes:

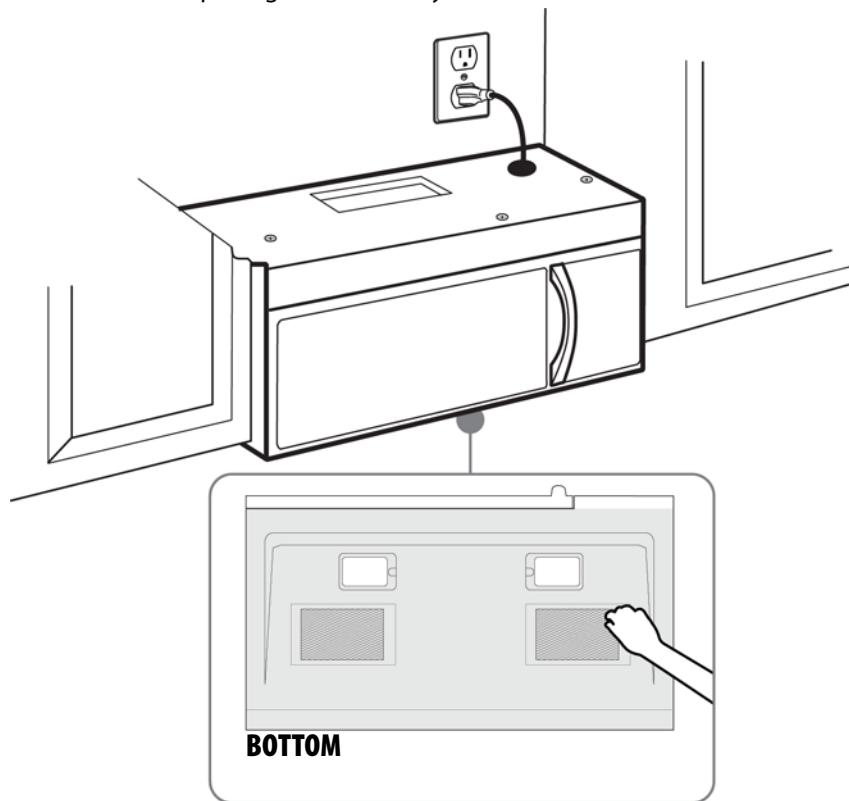
- We recommend using filler blocks if the front of the cabinet hangs below the cabinet's bottom shelf.
- If filler blocks are not used, damage may occur from over-tightening the screws.
- Be sure to keep the power cord tight.
- Do not pinch the cord, especially when mounting flush to the bottom of the cabinet.



- 3 Insert a self-aligning screw through the top, center cabinet hole and temporarily secure the microwave by turning the screw at least two full turns (it will be fully tightened later).
- 4 Insert two self-aligning screws through the outer top cabinet holes, securing each screw with at least two full turns.
- 5 While holding the microwave up against the wall and cabinet, fully tighten the three screws.



6 Fit the two grease filters into the openings underneath your microwave.



7 You're finished! See ["Before using your microwave" on page 38](#)

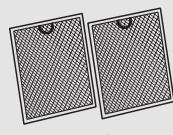
You'll need:



Nylon grommet
(for metal cabinets)



Self-aligning machine
screws



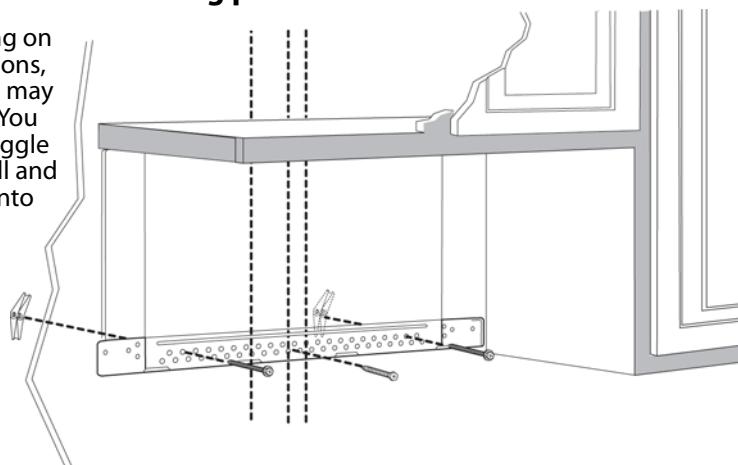
Grease filters



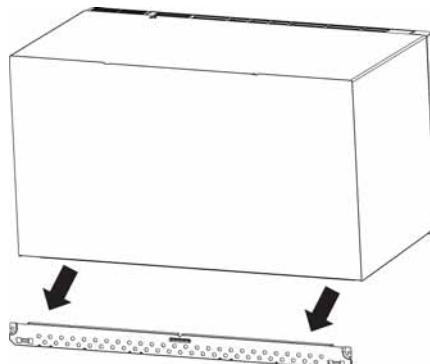
Phillips screwdrivers

Step 4: Option C - Attach the mounting plate to the wall

Note: Depending on your stud locations, your installation may look different. You should insert toggle bolts into drywall and wood screws into studs.

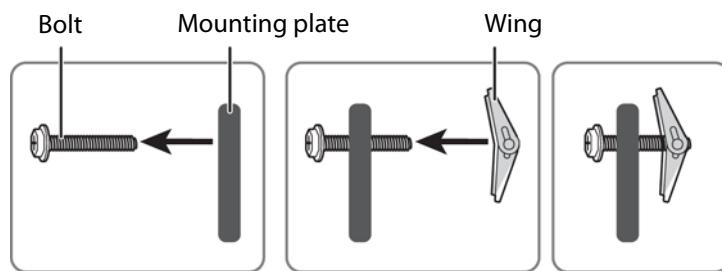


- 1 Remove the rear wall template.
- 2 Remove the mounting plate from the back of your microwave using a #1 Phillips screwdriver. Replace the two screws back into the microwave after removing the mounting plate.



- 3 Insert the bolt(s) through the front of the mounting plate into the hole(s) that are not going into a stud, and then reattach the toggle wings $\frac{3}{4}$ " (1.9 cm) onto each bolt. Hold your mounting plate up to the holes in your wall to identify the correct position.

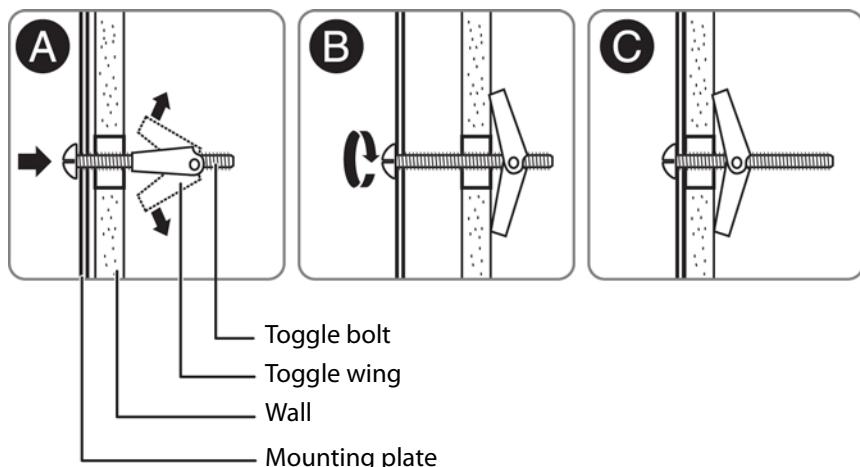
Note: The top of the mounting plate is indicated with an arrow. The mounting plate's hooks are on the front.



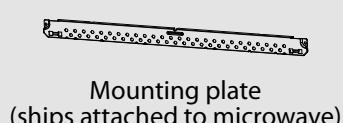
- 4 Place the mounting plate against the wall and insert the toggle wings into the holes you drilled in the drywall. Pull the mounting plate away from the wall to help tighten the toggle wings.

5 Insert wood screw(s) through the mounting plate and into the hole(s) drilled in the stud(s), then tighten both the wood screw(s) and toggle bolt(s) with a Phillips screwdriver to mount the plate. Make sure that the plate is centered before tightening fully.

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



You'll need:



Step 5: Option C - Preparing the top cabinet

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

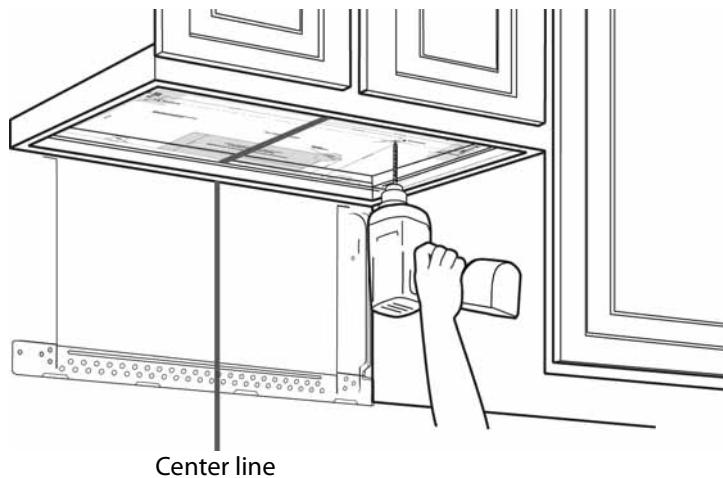
- 1 Turn off the power to the outlet in the cabinet.
- 2 Remove everything from the cabinet.
- 3 Trim the *Top Cabinet Template* along the dotted line.
- 4 If the bottom of your cabinet is recessed and the template is too large, trim the edges to fit. Your template should fit snugly inside the space with no overhang.

Notes:

- Make sure that you keep the left and right sides even. For example, if you need to trim the sides by 1" (2.5 cm), cut 1/2" (1.25 cm) from the left side and 1/2" (1.25 cm) from the right side.
- Some cabinets have a small bracket or glue block between the overhang and the underside of the cabinet bottom. Cut the template to fit around these so it lies flat on the bottom of the cabinet.

5 To position the *Top Cabinet Template*:

- Align the center line on the template with the center line that you drew on the wall.
- Align the back edge of the template to the rear wall (smooth or flat bottom cabinets) or to the back of the recess (recessed cabinets) to make sure that the holes cut into the upper cabinet align with the holes in the top of the microwave.

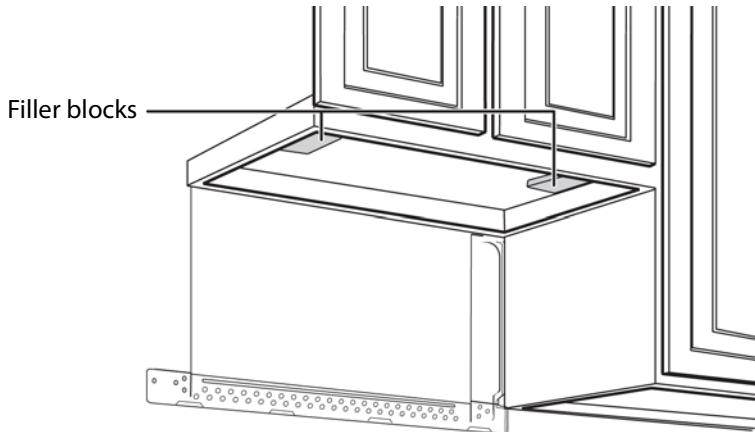
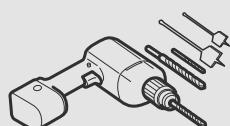
**6 Tape the template to the bottom of the cabinet.****7 Drill 3/8" holes through the template at points **A**, **B**, and **C**.**

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

8 Cut a 2" (5 cm) diameter hole at point **D for the power cord.****9 Cut out the shaded area **G** through the cabinet bottom.**

10 If you have recessed cabinets:

- Make two filler blocks out of scrap wood pieces the size of shaded areas **H** (about 2.25×4.125 in. or 5.7×10.5 cm). They must be as thick as the depth of the cabinet recess.
- Drill $5/8"$ holes in the filler blocks to align with points **A** and **B**.
- Align the blocks with the corresponding holes in the cabinet. They should be at the same level as the bottom edge of the cabinet frame.

**11** Remove the template.**You'll need:**

Electric drill with $1/2"$ and $5/8"$ bits



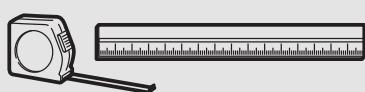
Duct tape



Scissors
(recessed cabinets only)



Safety goggles



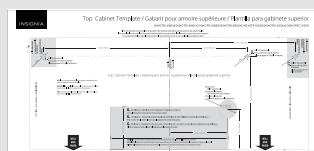
Ruler or tape measure



Saw
(saber, hole, or keyhole)



Filler blocks or scrap wood pieces
(for recessed cabinets only)



Top Cabinet Template

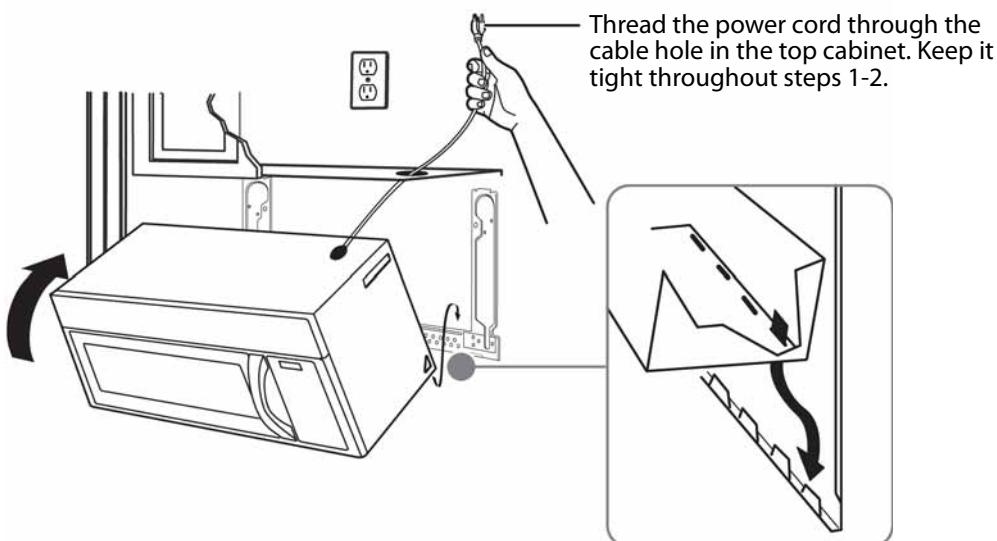
Step 6: Option C - Mount the microwave**Caution:**

- For easier installation and personal safety, we recommend that two people install this microwave oven.
- Do not grip or use the handle during installation.
- To keep the power cord tight while mounting the microwave oven, thread the power cord through the hole in bottom of the top cabinet.

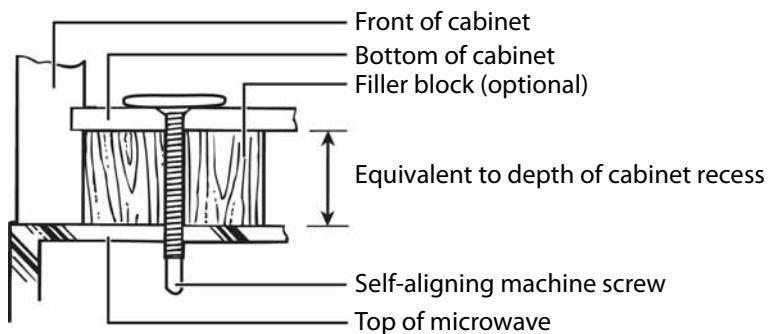
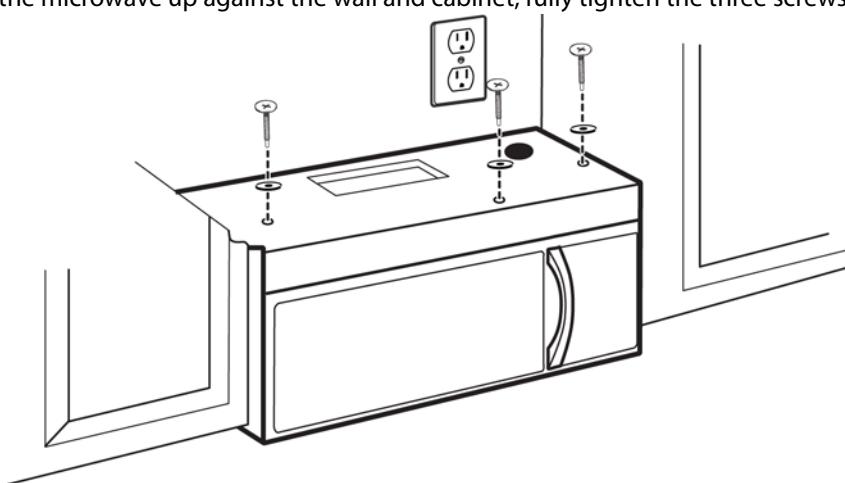
- 1 If your cabinet is metal, insert the nylon grommet into the power cord hole to prevent cutting the cord.
- 2 Lift the microwave, tilt it forward, and hook the slots on the back bottom edge onto the four lower tabs of the mounting plate. Rotate the front of the microwave up against the bottom of the cabinet.

Notes:

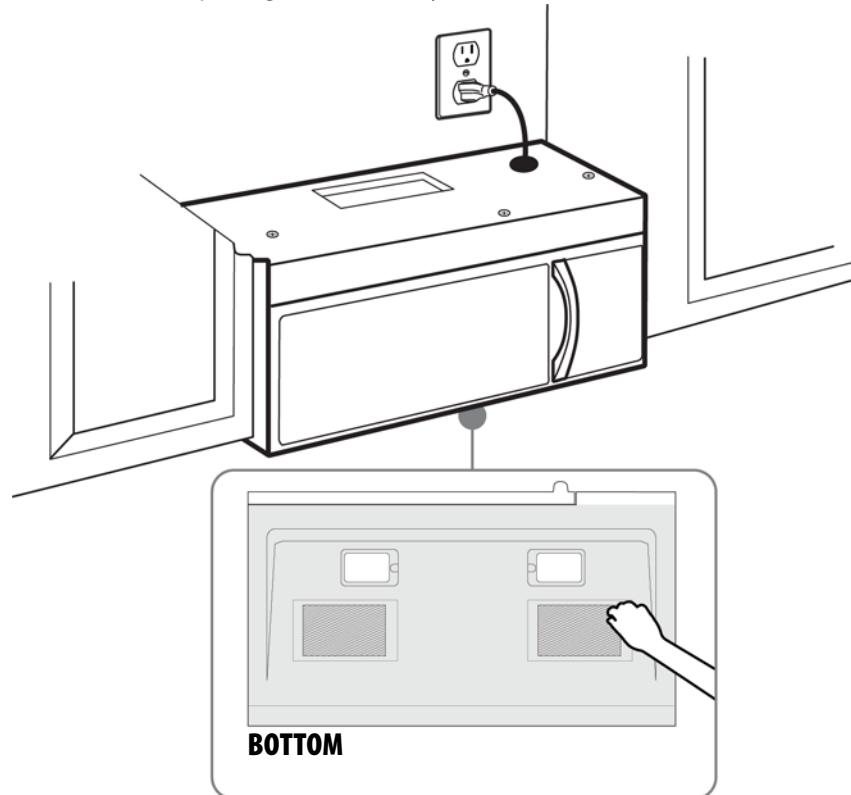
- We recommend using filler blocks if the front of the cabinet hangs below the cabinet's bottom shelf.
- If filler blocks are not used, damage may occur from over-tightening the screws.
- Be sure to keep the power cord tight.
- Do not pinch the cord, especially when mounting flush to the bottom of the cabinet.



- 3 Insert a self-aligning screw through the top, center cabinet hole and temporarily secure the microwave by turning the screw at least two full turns (it will be fully tightened later).
- 4 Insert two self-aligning screws through the outer top cabinet holes, securing each screw with at least two full turns.
- 5 While holding the microwave up against the wall and cabinet, fully tighten the three screws.



6 Fit the two grease filters into the openings underneath your microwave.



7 You're finished! Skip to "Before using your microwave" on page 38.

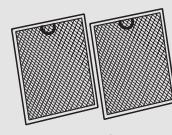
You'll need:



Nylon grommet
(for metal cabinets)



Self-aligning machine
screws



Grease filters



Phillips screwdrivers

Before using your microwave

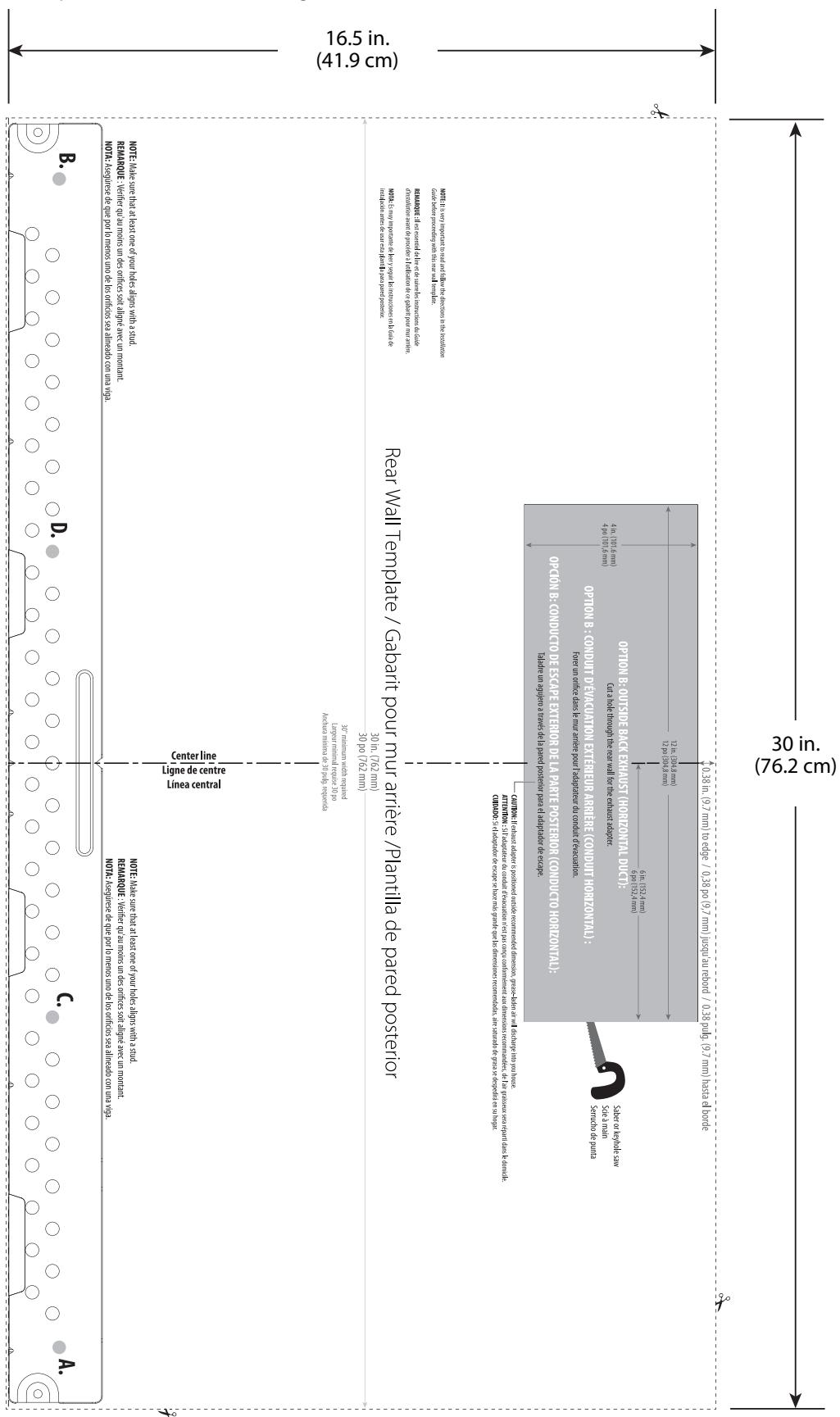
Note: Keep these installation instructions for the local inspector's use.

- 1 Make sure that all packing material has been removed from the microwave.
- 2 Install the turntable and ring inside your microwave. See your *User Guide* for more information.
- 3 Plug the power cord into a dedicated 20 amp electrical outlet.
- 4 Turn your circuit breaker back on.

Template dimensions

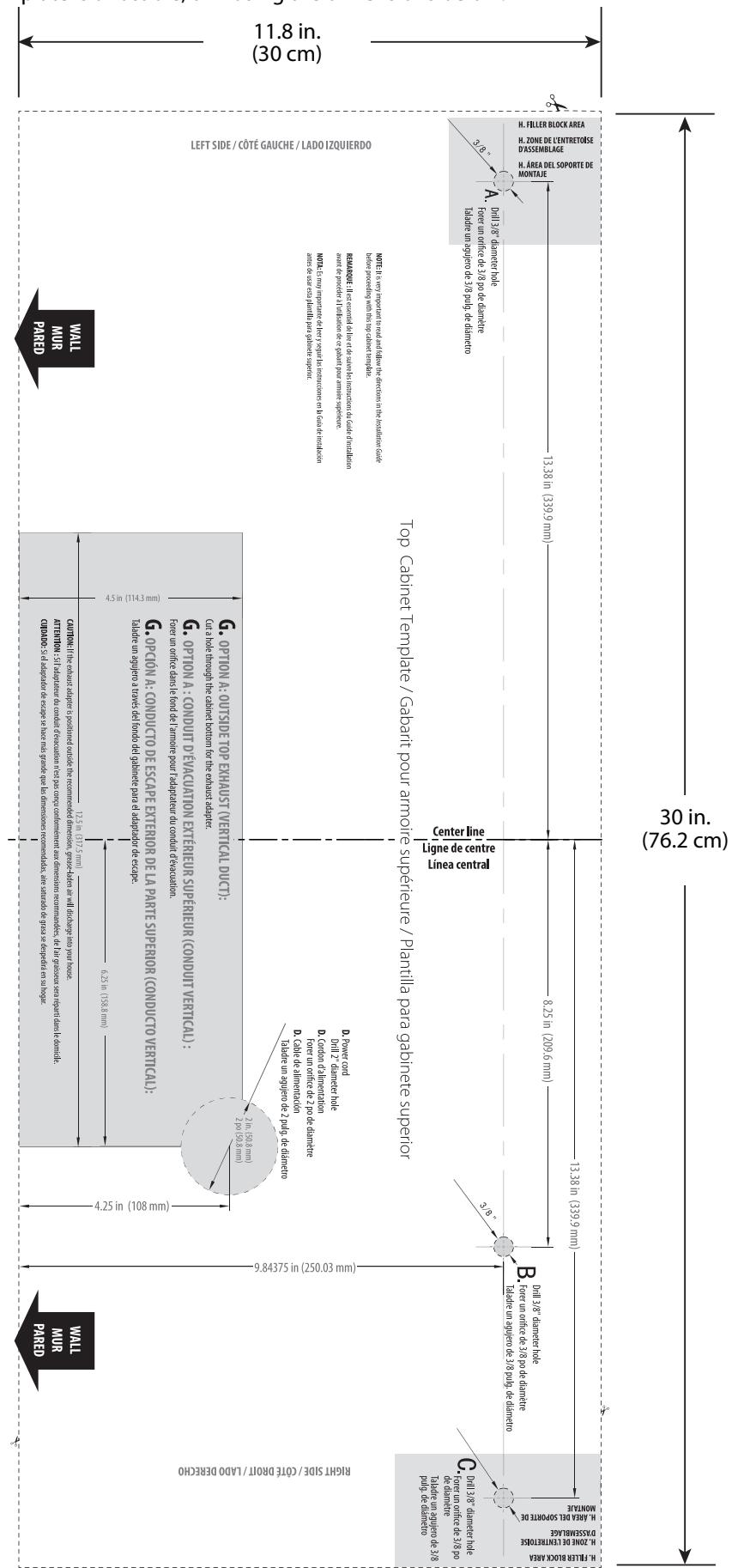
Rear wall template dimensions

If your rear wall template is unusable, drill using the dimensions below:



Top cabinet template dimensions

If your top cabinet template is unusable, drill using the dimensions below:



Obtaining replacement parts

Call Insignia Customer Service at 1-877-467-4289.

Specifications

Model	NS-OTRC15SS9
Rated voltage	120V / 60 Hz
Rated input power	1500W
Rated output power	Microwave: 900W Convection: 1450W
Microwave capacity	1.5 cu. ft.
Turntable diameter	13.5 in. (34.5 cm)
External dimensions (H x W x D)	16.4 x 29.9 x 15 in. (41.7 x 75.9 x 38.1 cm)
Internal dimensions (H x W x D)	8.9 x 20.2 x 14 in. (22.7 x 51.4 x 35.6 cm)
Certifications	UL and CUL approved
Power cord length	3.3 ft. (1 m)
Net weight	62.2 lbs. (28.2 kg)

Legal notices

Copyright

IN SIGNIA is a trademark of Best Buy and its affiliated companies. Registered in some countries. Distributed by Best Buy Purchasing, LLC 7601 Penn Ave South, Richfield, MN 55423 U.S.A. ©2018 Best Buy. All rights reserved. Made in China

ONE-YEAR LIMITED WARRANTY

Definitions:

The Distributor* of Insignia branded products warrants to you, the original purchaser of this new Insignia-branded product ("Product"), that the Product shall be free of defects in the original manufacturer of the material or workmanship for a period of one (1) year from the date of your purchase of the Product ("Warranty Period").

For this warranty to apply, your Product must be purchased in the United States or Canada from a Best Buy branded retail store or online at www.bestbuy.com or www.bestbuy.ca, and is packaged with this warranty statement.

How long does the coverage last?

The Warranty Period lasts for 1 year (365 days) from the date you purchased the Product. Your purchase date is printed on the receipt you received with the Product.

What does this warranty cover?

During the Warranty Period, if the original manufacture of the material or workmanship of the Product is determined to be defective by an authorized Insignia repair center or store personnel, Insignia will (at its sole option): (1) repair the Product with new or rebuilt parts; or (2) replace the Product at no charge with new or rebuilt comparable products or parts. Products and parts replaced under this warranty become the property of Insignia and are not returned to you. If service of Products or parts are required after the Warranty Period expires, you must pay all labor and parts charges. This warranty lasts as long as you own your Insignia Product during the Warranty Period. Warranty coverage terminates if you sell or otherwise transfer the Product.

How to obtain warranty service?

If you purchased the Product at a Best Buy retail store location, please take your original receipt and the Product to any Best Buy store. Make sure that you place the Product in its original packaging or packaging that provides the same amount of protection as the original packaging. If you purchased the Product from a Best Buy online web site (www.bestbuy.com or www.bestbuy.ca), mail your original receipt and the Product to the address listed on the web site. Make sure that you put the Product in its original packaging or packaging that provides the same amount of protection as the original packaging.

To obtain warranty service, in the United States call 1-888-BESTBUY, Canada call 1-866-BESTBUY. Call agents may diagnose and correct the issue over the phone.

Where is the warranty valid?

This warranty is valid only in the United States and Canada at Best Buy branded retail stores or websites to the original purchaser of the product in the county where the original purchase was made.

What does the warranty not cover?

This warranty does not cover:

- Food loss/spoilage due to failure of refrigerator or freezer
- Customer instruction/education
- Installation
- Set up adjustments
- Cosmetic damage
- Damage due to weather, lightning, and other acts of God, such as power surges
- Accidental damage

- Misuse
- Abuse
- Negligence
- Commercial purposes/use, including but not limited to use in a place of business or in communal areas of a multiple dwelling condominium or apartment complex, or otherwise used in a place of other than a private home.
- Modification of any part of the Product, including the antenna
- Display panel damaged by static (non-moving) images applied for lengthy periods (burn-in).
- Damage due to incorrect operation or maintenance
- Connection to an incorrect voltage or power supply
- Attempted repair by any person not authorized by Insignia to service the Product
- Products sold "as is" or "with all faults"
- Consumables, including but not limited to batteries (i.e. AA, AAA, C etc.)
- Products where the factory applied serial number has been altered or removed
- Loss or Theft of this product or any part of the product
- Display panels containing up to three (3) pixel failures (dots that are dark or incorrectly illuminated) grouped in an area smaller than one tenth (1/10) of the display size or up to five (5) pixel failures throughout the display. (Pixel based displays may contain a limited number of pixels that may not function normally.)
- Failures or Damage caused by any contact including but not limited to liquids, gels or pastes.

REPAIR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS YOUR EXCLUSIVE REMEDY FOR BREACH OF WARRANTY. INSIGNIA SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR THE BREACH OF ANY EXPRESS OR IMPLIED WARRANTY ON THIS PRODUCT, INCLUDING, BUT NOT LIMITED TO, LOST DATA, LOSS OF USE OF YOUR PRODUCT, LOST BUSINESS OR LOST PROFITS. INSIGNIA PRODUCTS MAKES NO OTHER EXPRESS WARRANTIES WITH RESPECT TO THE PRODUCT, ALL EXPRESS AND IMPLIED WARRANTIES FOR THE PRODUCT, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF AND CONDITIONS OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE WARRANTY PERIOD SET FORTH ABOVE AND NO WARRANTIES, WHETHER EXPRESS OR IMPLIED, WILL APPLY AFTER THE WARRANTY PERIOD. SOME STATES, PROVINCES AND JURISDICTIONS DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS, WHICH VARY FROM STATE TO STATE OR PROVINCE TO PROVINCE.

Contact Insignia:

For customer service please call 1-877-467-4289

www.insigniaproducts.com

INSIGNIA is a trademark of Best Buy and its affiliated companies.

Distributed by Best Buy Purchasing, LLC

7601 Penn Ave South, Richfield, MN 55423 U.S.A.

©2018 Best Buy. All rights reserved.

Made in China

INSIGNIA™

For product inquiries, please contact us with the information below:

1-877-467-4289

www.insigniaproducts.com

INSIGNIA is a trademark of Best Buy and its affiliated companies.

Distributed by Best Buy Purchasing, LLC

7601 Penn Ave South, Richfield, MN 55423 U.S.A.

©2018 Best Buy. All rights reserved.

Made in China

V3 ENGLISH
18-0336