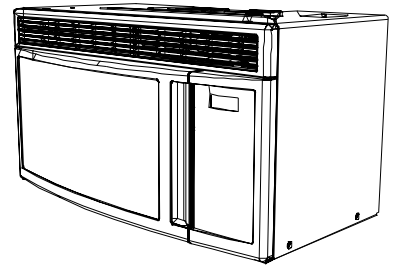


# Microwave Oven

## Installation Manual



### IMPORTANT SAFETY INSTRUCTION

Never operate the oven when it is empty or without the glass turntable.

### Introduction

Your Over-the-Range microwave oven comes complete with an installation instruction kit which contains the following three pieces of information required to install it.

- I. This installation instruction booklet, complete with diagrams on preparing your cabinets and microwave oven for installation.
- II. The Top Cabinet Template, used to locate the power cord clearance hole, cabinet mounting holes and the vertical exhaust location.
- III. Instead of The Wall Mount Template, Wall Mounting Plate, used to locate the mounting plate holes and to locate the horizontal exhaust location. Please read all of the instructions thoroughly before installing your microwave oven.

**NOTE:**  
IT IS RECOMMENDED THAT TWO PEOPLE INSTALL THIS PRODUCT.

**IMPORTANT:**  
KEEP INSTRUCTIONS FOR LOCAL ELECTRICAL INSPECTOR'S USE.

### Important Safety Information

#### Grounding Instructions

This appliance must be grounded. In the event of an electrical short circuit, grounding reduces the risk of the 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.

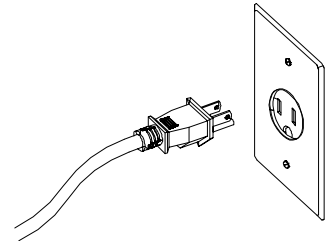
Consult a qualified electrician or serviceman if the grounding instructions are not completely understood, or if doubt exists as to whether the appliance is properly grounded, and either:

- 1) If it is necessary to use an extension cord, use only a 3-wire extension

cord that has a 3-blade grounding plug, and a 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, or Do not use an extension cord.

- 2) If the power supply cord is too short, have a qualified electrician or serviceman install an outlet near the appliance.



#### Safety Instructions

This product requires a three prong grounded receptacle. The installer must perform a ground continuity check on the power outlet box before beginning the installation to insure that the outlet box is properly grounded. If not properly grounded, or if the outlet box does not meet the 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 85 POUND PRODUCT, PLUS ADDITIONAL OVEN LOADS OF UP TO 50 POUNDS OR A TOTAL WEIGHT OF 135 POUNDS.**

**CAUTION: FOR PERSONAL SAFETY THIS PRODUCT CANNOT BE INSTALLED TO CABINET ARRANGEMENT'S SUCH AS AN ISLAND OR A PENINSULA. IT MUST BE MOUNTED TO BOTH A TOP CABINET AND A WALL.**

#### Electrical Requirements

Product rating is 120 volts AC, 60Hertz, 15 amps, and 1600 ~1700 watts. 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 Electric Code or the prevailing local code for this kilowatt rating. The power supply cord and plug should be brought to a separate 20ampere branch circuit single grounded receptacle. The outlet box should be located near the cord entry point. The outlet box and supply circuit should be installed by a qualified electrician and conform to the National Electric Code or the prevailing local code.

Power supply cord













- a) A short power-supply cord is provided to reduce the risks resulting from becoming entangled in or tripping over a longer cord.
- b) Longer cord sets or extension cords are available and may be used if care is exercised in their use.
- c) 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, and
- 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.

**This over-the-range oven was designed for use over ranges no wider than 30 inches. It may be installed over both gas and electric cooking equipment.**

## Installation Hardware

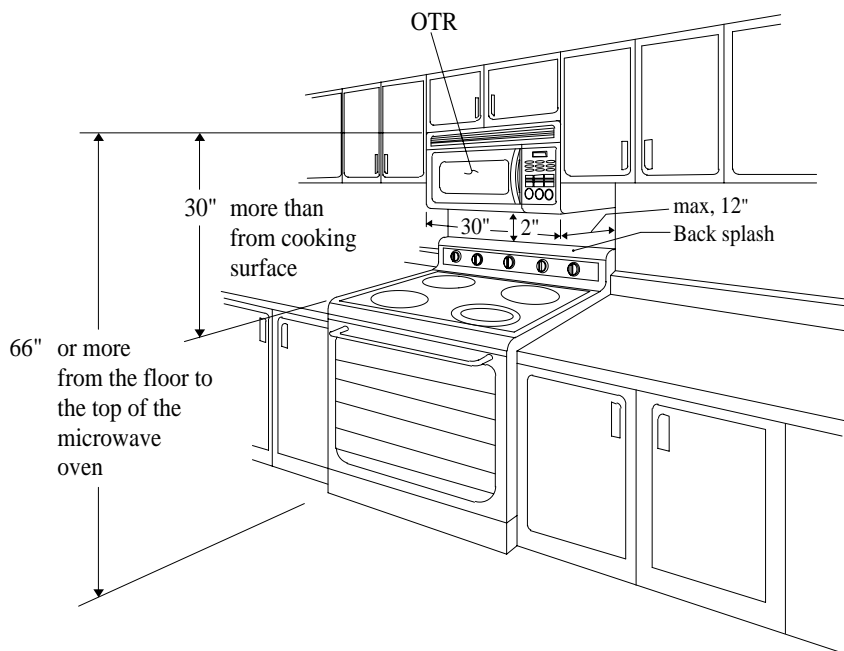
The following is a list of parts you may need for installing your Over-the-Range microwave oven. You will find the installation hardware contained in a packet with the unit. Check to make sure you have all these parts. Use this time to become familiar with each piece.

Image	Part & Description	Q'ty	Image	Part & Description	Q'ty
	Lag screws (1/4" x 2")	3		Top Cabinet Template	1
	Toggle Bolts and Nuts 3/16 x 3"	3		Rear Wall Template	1
	Cabinet Mounting Bolts 1/4" x 3-1/8	3		Installation Manual	1
	Washer (3/4")	3		Use and Care Manual	1
	Nylon Grommet (for metal cabinets)	2		Roller Guide	1
	Damper	1		Grease Filters	2

## Tools

The following tools may be needed for installation of your microwave oven. Phillips screwdrivers, Electric Drill Motor, 1/2" & 5/8" Wood Bits & 3/16" Drill Bit, Saw to cut exhaust opening, (if needed) or Jig Saw, Tin Snips (if needed), Pencil, Tape Measure, Paper Tape & Duct Tape.

## Mounting Space



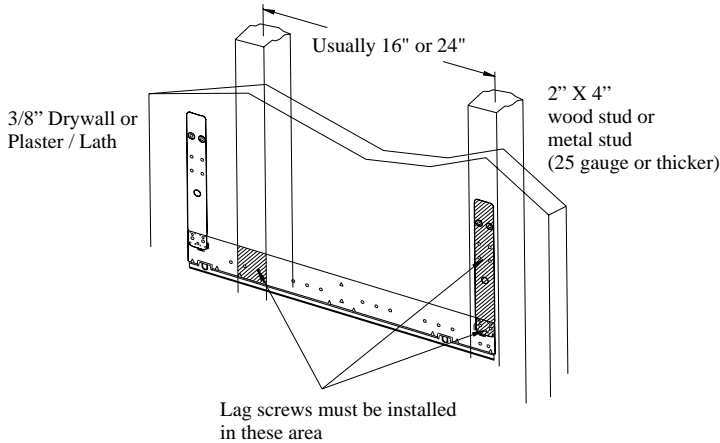
Your Over-the-Range microwave oven requires mounting space on a wall as shown.

1. A minimum of 30" between wall hung side cabinets is required for installation. Make sure the bottom edge of the top cabinet is at least 66" from the floor and 30" from the cooking surface. And the depth of the cabinet is required less than 12 inch. (max.12inch)
2. For easier access to the hood lamp, the bottom of the microwave oven should be at least 2" above the range back splash.
3. If you are going to vent your microwave oven to the outside, see exhaust duct preparation.
4. Designed to be installed in 30" wide cabinet opening.

# Wall Construction

Your Over-the-Range microwave oven should be mounted against and supported by a flat, vertical wall. Wall construction should be a minimum of 2" x 4" wall studding and 3/8" or more, thick drywall or plaster/lath. The oven must be attached to a minimum of one 2" x 4" wall stud.

For proper installation the wall must be capable of supporting the cabinet load plus a minimum of 135 pounds, (the 85 pound weight of the microwave oven and load weight allowance of 50 pounds.) To find studs, use one of the following methods:



- I. Stud finder-a magnetic device which locates nails.
- II. Using a hammer, tap lightly across the mounting surface to find a solid sound. This will indicate a stud installation. After locating the stud(s), the center can be found by: Probing the wall with a small nail to find the edges of the stud and then placing a mark half way between the edges. The center of any adjacent studs should be 16" or 24" from this mark.
- III. Draw a line down the center of the studs.

# Hood Exhaust Duct

Outside ventilation requires HOOD EXHAUST DUCT. Read the following carefully.

**EXHAUST CONNECTION:** The hood exhaust has been designed to mate with a standard 3-1/4" x 10" rectangular duct.

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

**REAR EXHAUST:** If rear or horizontal

exhaust is to be used, 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 wall studs to accommodate exhaust.

**MAXIMUM DUCT LENGTH:** For satisfactory air movement, the total duct length of 3-1/4" x 10" rectangular or 6" diameter round duct should not exceed 140 feet of equivalent duct run.

ELBOWS, TRANSITIONS, WALL AND ROOF CAPS, etc., present additional resistance to air flow 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 lengths of all straight duct sections. The diagram below shows the approximate feet of equivalent length of some typical ducts.

Roof Cap (24Ft)	90° Elbow (10Ft)	45° Elbow (5Ft)	Rectangular-to-Round Transition Adaptor (5Ft)
Wall Cap (40Ft)	90° Elbow (25Ft)		

# Ventilation system Instructions

Your Over-the-Range microwave oven is designed for adaptation to the following three types of ventilation. Select the type of ventilation required for your installation and proceed to the appropriate section.

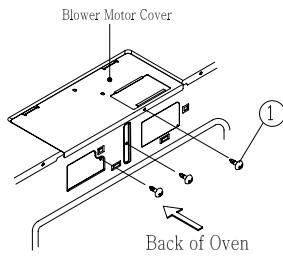
## A. Horizontal Ventilation System

### A-1. Ventilation motor

This blower motor has a damper and your microwave oven is shipped assembled for a Recirculation Application.

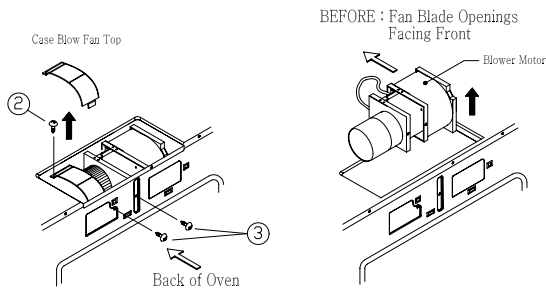
#### Step.1

- \* Remove the screws (①) for opening the blower motor cover and save screw. Remove cover.



#### Step.2

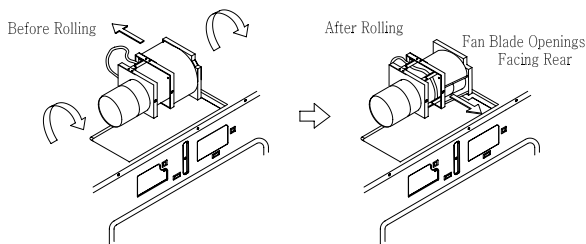
- \* Remove the screws (② and ③) for Case Blow Fan Top and Blower attachment and save screws.
  - \* Remove Case Blow Fan Top.
  - \* Lift blower unit out of mounting location.
- CAUTION:** Do not pull or stretch blower wiring.



#### Step.3

- Roll the blower unit so that the fan blade openings are facing back ( rear of unit ).
- \* If you want VERTICAL, roll the blower unit so that the fan blade openings are facing upward.

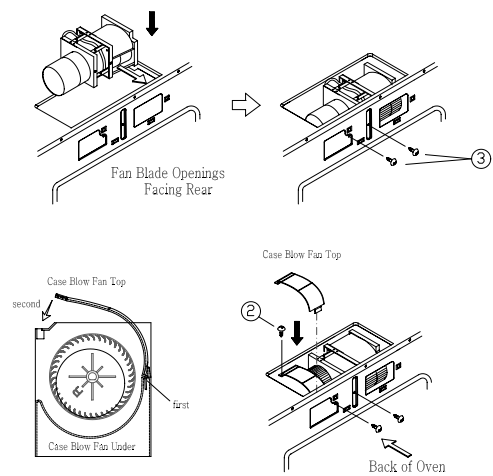
**CAUTION:** Wires to blower unit must be routed avoid to pinching, before reinstallation of cover plate.



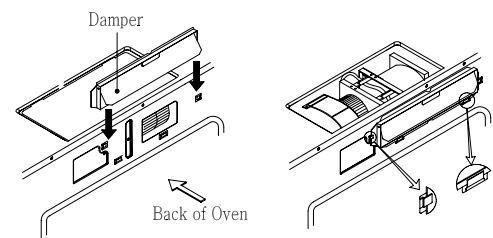
Roll the blower motor clockwise 180°

#### Step.4

- Place the blower unit into the opening and secure it to the oven with the screw(③) from step 2.
- Secure the Case Blow Fan Top to the Case Blow Fan under with the screw(②) from step 2.

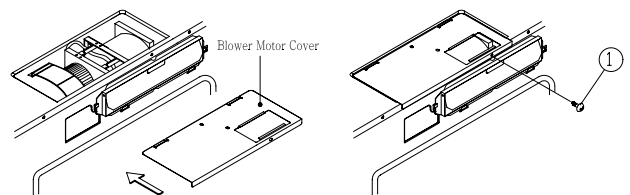


Carefully match the exhaust opening location of the microwave and attach the damper to the rear plate by sliding it into the guides at the rear plate.



After adjust the damper, reinstall the blower motor cover with the screw (①).

**Be sure that the damper hinge is on the top and the damper swings free into the wall outlet.**



## A-2. Install the Mounting Plate

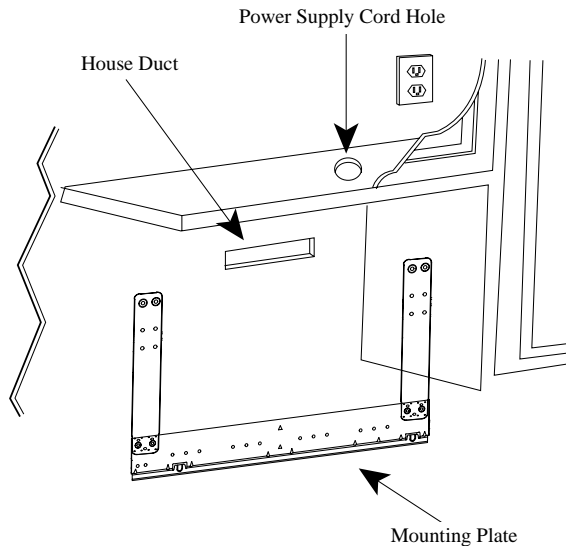
### Step. 1 Setup position

- Draw a line down the middle of the studs(See the Wall Construction, page 3)
- Draw a vertical line on the wall at the center of the 30" wide space.

**NOTE: Use the wall template for the rear wall.  
Reference Wall Template prior to proceeding.  
Installation of this product require 2 persons.**

### Step. 2 Drilling

Reference the Wall Template.



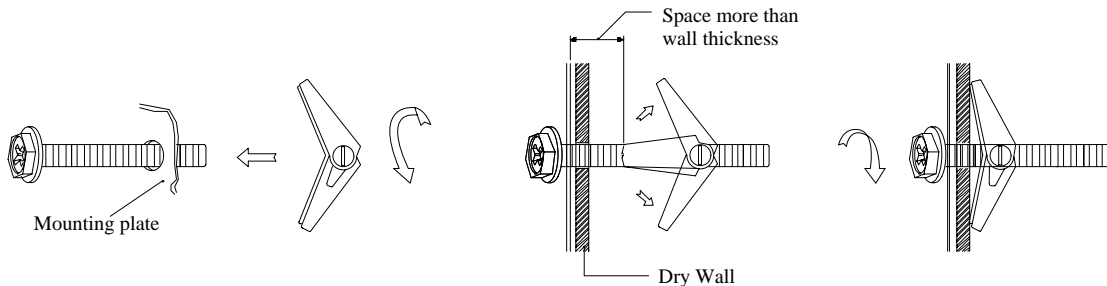
### Step. 3 Tightening the screws

To Attach the mounting plate to the wall using the toggle bolt assemblies and/or lag screws:

- Insert toggle bolts through mounting plate at required locations and add the spring loaded toggles.

Be sure you leave space at least the thickness of the wall between the mounting plate and the end of the toggle nut, (in closed position). If you do not leave this space, the toggle nut will not open on the other side of the wall.

- Position mounting plate on wall and insert toggle bolt assemblies through the drywall holes or start the lag-screw(s) through the wall stud(s).
- Next, secure mounting plate to the wall by tightening toggle bolt assemblies or lag screw(s).



- Drill 3/16" diameter lag screw hole(s), into one or more wall studs.  
(Remember, you must have at least one lag screw into a wall stud.)For stud location refer to WALL CONSTRUCTION see page 3

- Tighten the lag screw(S) into wall stud(S)

### A-3. Mounting microwave oven

**NOTE: IT IS VERY IMPORTANT THAT THIS OVEN BE INSTALLED BY TWO PEOPLE.  
IMPORTANT: DO NOT GRIP OR USE HANDLE DURING INSTALLATION.**

#### PREPARATION OF TOP CABINET

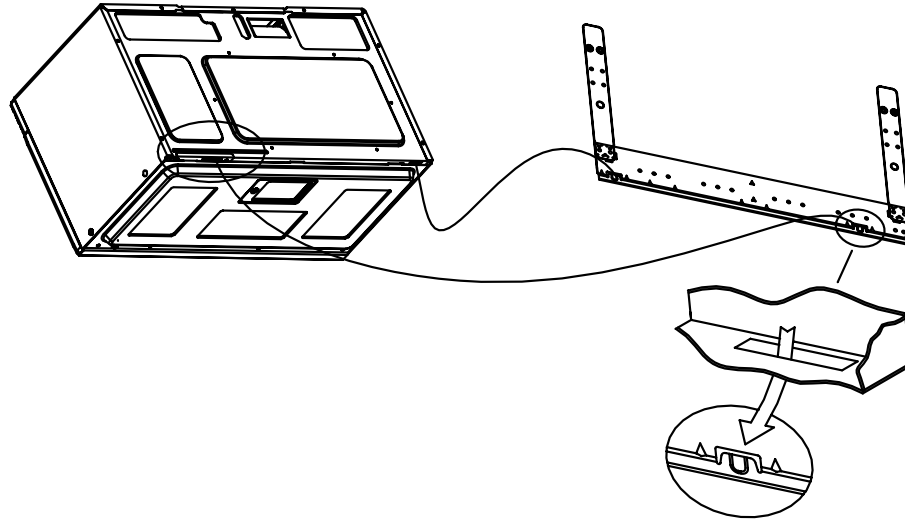
You need to drill holes for the top support screws and a hole large enough for the power cord to fit through.

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

**NOTE: TOP CABINET TEMPLATE instruction must be installed to proceed.**

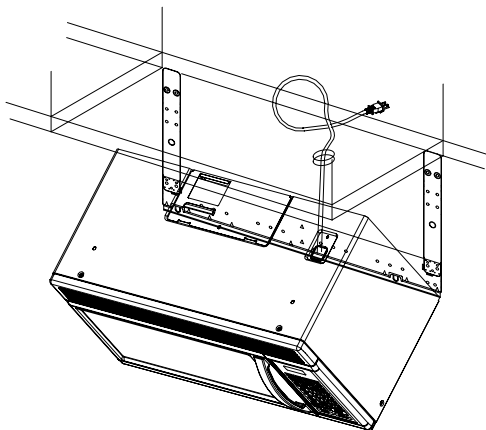
#### Step. 1

Protect the top of your range by placing a portion of the carton or some other heavy material over the cooking surface before mounting your oven.



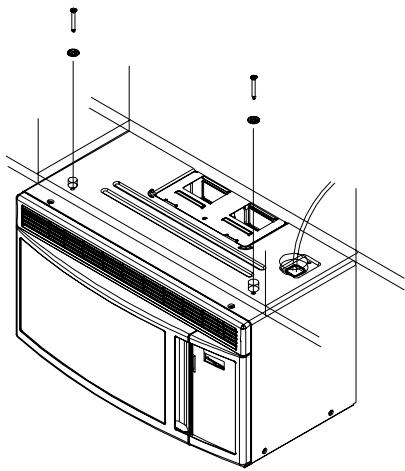
#### Step. 2

Lift the microwave oven and tilt it forward.  
Hang the unit on two tabs at the bottom of the mounting plate.



#### Step. 3

Thread power cord through the hole at the bottom of the top cabinet.  
Swing the unit upward to meet the top of the mounting plate and hold it securely.



### Step. 4

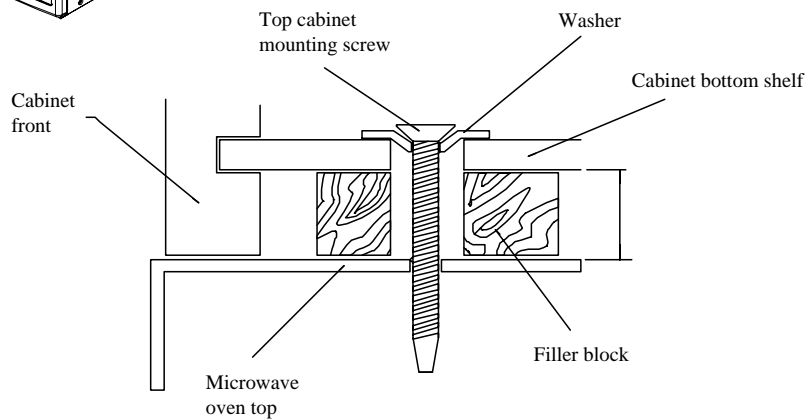
Insert 2 bolts through 2 flat washers into holes on top cabinet floor. Tighten screws to close the gap between top cabinet and the microwave oven.

**NOTE: MICROWAVE OVEN MUST BE SECURED WITH TWO MOUNTING BOLTS.**

Dress power cord neatly in top cabinet.

Install the grease filters.

\* Using filler block for recessed bottom cabinet, insert a bolt with a 3/4" washer into one of the holes drilled previously in the top cabinet floor. (D & E on Top Cabinet Template.)



## B. Vertical Ventilation System

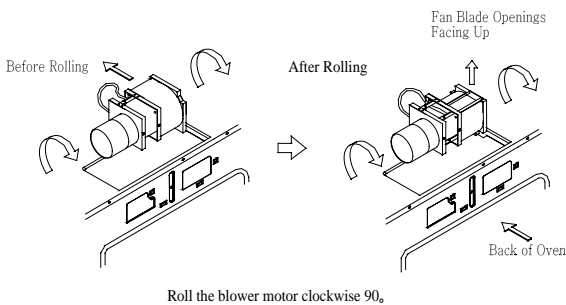
### B-1. Ventilation motor

#### Step. 1 and 2

See the page 4, A-1 Ventilation motor.

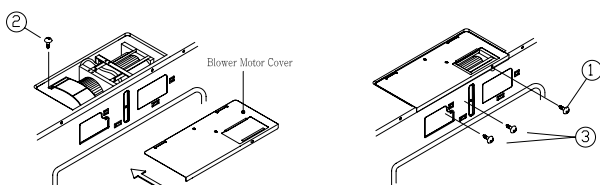
#### Step. 3

Roll the blower unit so that the fan blade openings are facing upward.



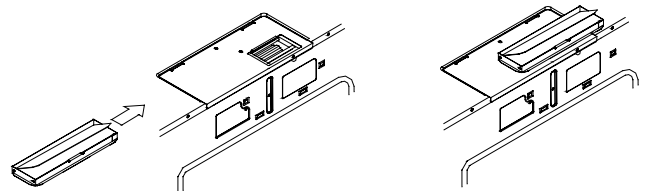
#### Step. 4

Place the blower unit into the opening. Secure the Case Blow Fan Top, the blower motor and cover to the microwave oven with the screw (1), (2) and (3) from step 1 and 2.



Carefully match the exhaust opening location of the microwave and attach the damper to blower motor cover by sliding it into the guides at the blower motor cover.

**Be sure that the damper hinge is on the front and the damper swings free into the wall outlet.**



### B-2. Install the mounting plate

See the page 5, A-2. Install the mounting plate.

### B-3. Mounting Microwave oven

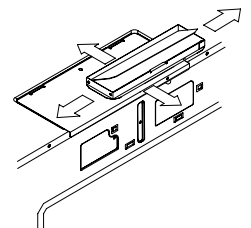
See the page 6, A-3. Mounting the Microwave oven.

### B-4. Adjust the Damper

For the vertical exhaust open the top cabinet and adjust the damper to the microwave through the cabinet bottom. For front to back or side to side adjustment, slide the damper as needed.

With the damper out, twist the damper to fit under the flaps of the blower plate.

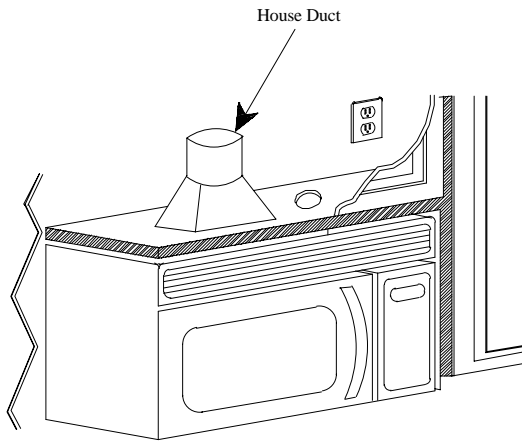
Replace the damper and make sure it will move easily by the force of the exhaust air.



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## B-5. Connecting Ductwork

Extend the house duct down to connect to the exhaust adapter.  
Seal exhaust duct joints using duct tape.



**Install the grease filters**

## C. Recirculation Ventilation System

Your over the range microwave oven has been provided with a charcoal filter for a recirculation venting application on some models. If replacement of the charcoal filter is required, contact your DAEWOO authorized dealer.

### C-1. Ventilation motor

This ventilation motor has been assembled for Recirculation exhaust.

### C-2. Install the Mounting plate

See the page 5, A-2. Install the mounting plate.

### C-3. Mounting Microwave oven

See the page 6, A-3. Mounting the Microwave oven.

\* You need not use damper for recirculation.

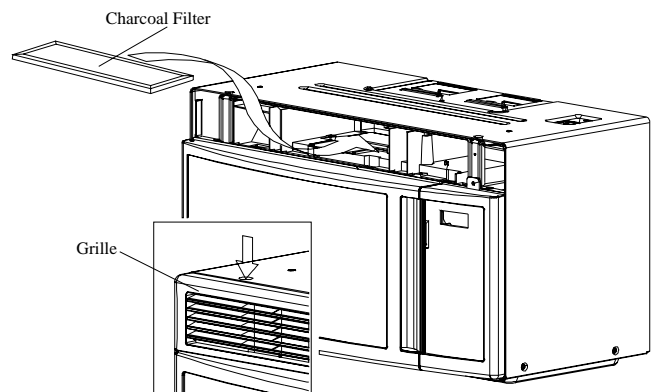
### C-4. Install the Charcoal filter

\* To remove the charcoal filter, disconnect power at the main fuse or circuit breaker panel or pull the plug.

\* Remove the screws on the front of the grille and remove the grille.

\* Install the charcoal filter.

\* Replace the grille and screws.



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## Checklist for Installation

1. Make sure oven has been installed according to these instructions and top cabinet template.
2. Remove all packing material from the oven.
3. Plug in power cord.
4. Read Use and Care manual.
5. Keep installation instructions and template for the local electrical inspector's use.

MCO160UW/B/Q/S