# 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.

horizontal exhaust location.

microwave oven.

- This installation instruction booklet, I. 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.

## **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 with a 3-prong grounding plug. The plug must be plugged into a 3-slot receptacle that is properly installed and grounded.

WARNING: Improper use of grounding plug can result in electrical shock.

- DO NOT cut, bend or remove any prongs from the plug.

- DO NOT use the plug with an extension cord. If the power supply

#### **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

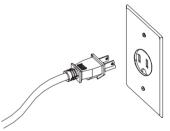
Power supply cord

- 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.

cord is too short, have a qualified electrician or serviceman install an outlet near the appliance.

ELECTRICAL INSPECTOR'S USE.

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.



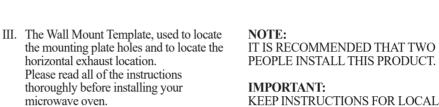
CAUTION: FOR PERSONAL SAFETY THIS PRODUCT CANNOT BE INSTALLED TO CABINET ARRANGEMENT'S SUCH AS AN ISLAND OR A PENINSULA. IT MUST BE MOUNTED TO BOTH A TOP CABINET AND A WALL.

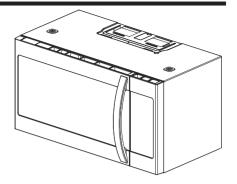
#### **Electrical Requirements**

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.

- 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 30inches. It may be installed over both gas and electric cooking equipment.





## **Installation Hardware**

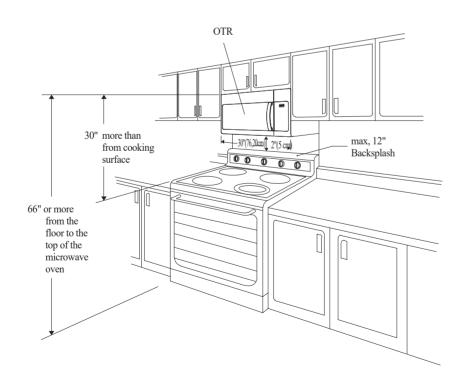
The following is a list of parts you may need for installing your Over-the-Range microwave oven. You will find the installation hardware contained in a packet with the unit. Check to make sure you have all these parts. Use this time to become familiar with each piece.

Image	Part & Description	Q'ty	Image	Part & Description	Q'ty
	Lag screws (1/4" x 1.8")	2	Top Cabinet Template	Top Cabinet Template	1
	Toggle Bolts and Nuts 3/16 x 2.7"	2	Wall Template	Rear Wall Template	1
	Cabinet Mounting Bolts 1/4" x 3-1/8	2	Installation Manual	Installation Manul	1
Ø	Washer (3/4")	2	Use and Care Manual	Use and Care Manual	1
	Nylon Grommet (for metal cabinets)	1	$\bigcirc$	Roller Guide	1
	Damper	1		Grease Filters	2
	Mounting plate	1		Turn table	1

#### 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**



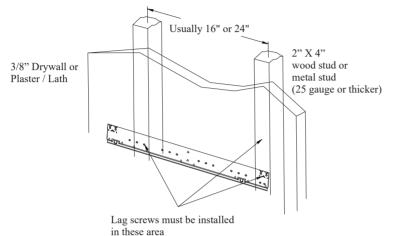
Your Over-the-Range microwave oven requires mounting space on a wall as shown.

- 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. The cabinet depth must be no less than 11 inches to secure top bolts, and no more than 12 inches for sufficient microwave door and control panel access.
- 2. For easier access to the hood lamp, the bottom of the microwave oven should be at least 2" above the range backsplash.
- 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.

I. 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-toround transition adapter 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)
		A CONTRACT OF CONTRACT.	
Wall Cap (40Ft)	90° Elbow (25Ft)		
	A		

## **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.

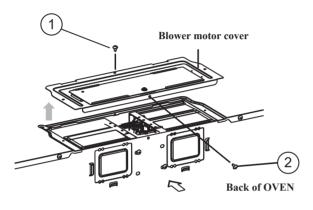
### A. Horizontal Ventilation System

#### A-1. Ventilation motor

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

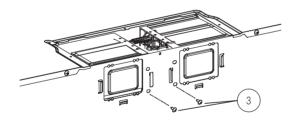
#### Step 1.

\* Remove the screws (1) and (2) for opening the blower motor cover and save screws. Remove cover.

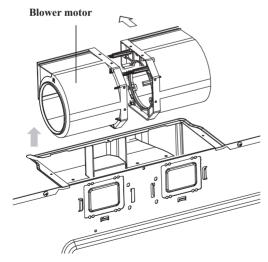


#### Step 2.

- \* Remove the screws (3) for Blower attachment and save screws.
- \* Lift blower unit out of mounting location.



Before : Fan blade openings facing Front

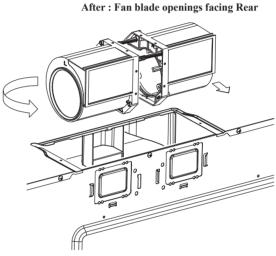


**CAUTION:** Do not pull or stretch blower wiring.

#### Step 3.

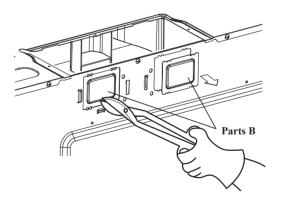
Turn the blower unit so that the fan blade openings are facing back ( rear of unit ).

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



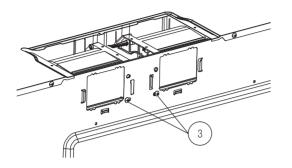
Turn the blower motor clockwise 180°

Use side cutters or tin snips to cut and remove parts B from back plate. be careful not to distort the plate.

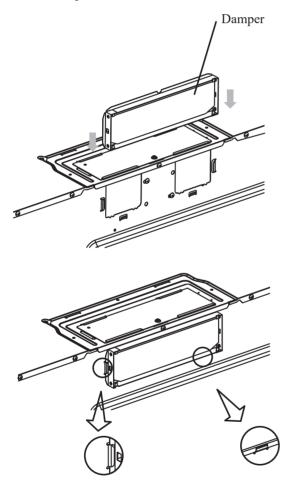


#### Step 4.

Place the blower unit into the opening and secure it to the oven with the screws(3) 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.



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**

a. Draw a line down the middle of the studs(See the Wall Construction, page 3)b. 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.

#### Reference wan remplate prior to proce

#### Step 2. Drilling

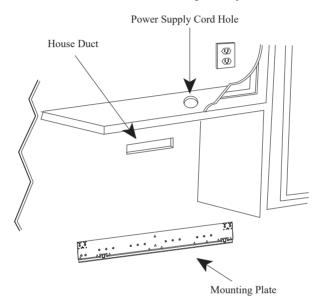
WARNING: Electrical shock hazard! To avoid serious injury from electrical shock:

- Locate and disconnect any electrical circuits that could be affected by installation of this product.

- Be careful when drilling holes. Electrical wires may be concealed behind wall and contact with wires can result in electrical shock.

## Reference the MOUNTING PLATE INSTALLATION instructions in the Wall Template to perform the wall plate installation procedure.

**IMPORTANT:** Once the plate is installed, use a level to ensure that it is perfectly horizontal.



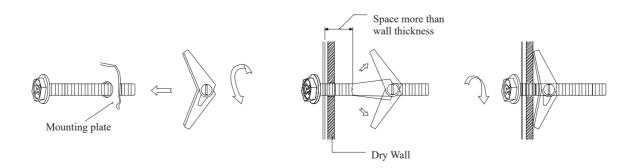
#### Using Toggle Screws.

a. 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.

b. Position mounting plate on wall and insert toggle bolt assemblies through the drywall holes.

c. Next, secure mounting plate to the wall by tightening toggle bolt assemblies.



#### 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.

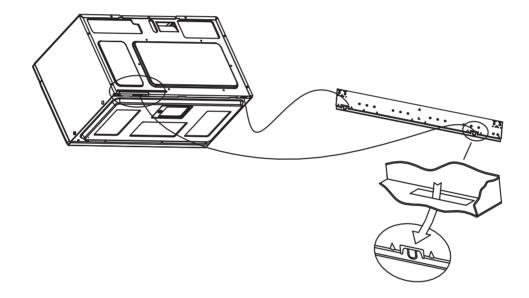
- Read the instructions on the TOP CABINET TEMPLATE
- Tape the template to the underside of the top cabinet
- Drill the holes, following the instructions on the template

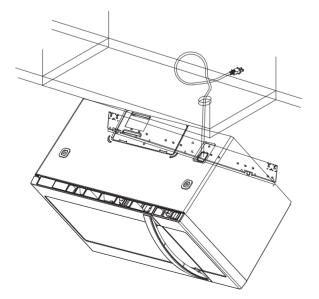
#### Step 1.

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.

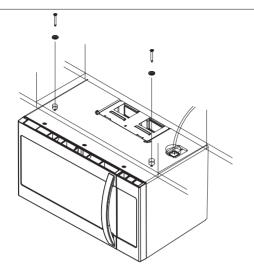
Lift the microwave oven and tilt it forward. Hang the two slots in the bottom back of the unit onto the two tabs on the bottom of the mounting plate.





#### Step 3.

With the aid of an assistant, swing the unit upward until it is vertical against the wall. Have your assistant steady the unit in place while you insert and tighten the top bolts as instructed in Step 4 on the next page.



#### Step 4.

Obtain the aid of an assistant to steady the unit in place while you insert and tighten bolts as follows:

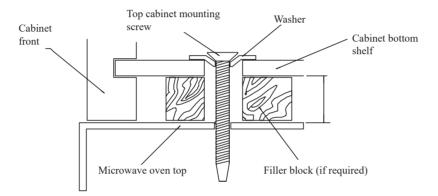
Place the 2 supplied washers onto the 2 supplied bolts. Insert the bolts through the drilled holes in the cabinet and screw them into the attachment holes in the top of the microwave oven. Tighten the screws to close the gap between the gap between the cabinet bottom and top of microwave oven.

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

Dress power cord nearly 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

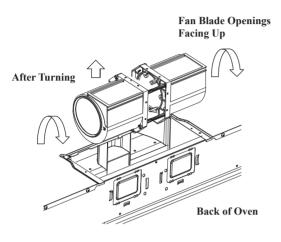
#### **B-1.** Ventilation motor

#### Step 1 and 2.

A-1 Ventilation motor.

#### Step 3.

Turn the blower unit so that the fun blade openings are facing upward.



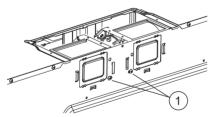
#### Step 4.

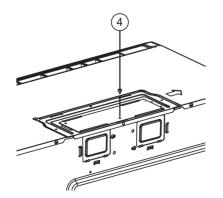
Place the blower unit into the opening.

Secure the Blower Motor Cover to the microwave oven with the screw(1, 2 and 3) from step 1 and2.

Remove the screw (4) for the Blower Motor Cover and save screws.

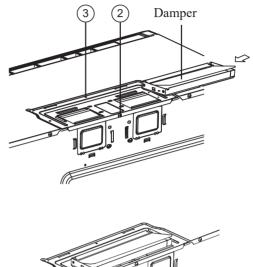
Remove the Cover Motor Hole from Blower Motor Cover.





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.

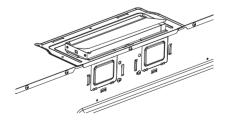
**B-3. Mounting Microwave oven** See the page 6, A-3. Mounting the Microwave oven.

#### **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.

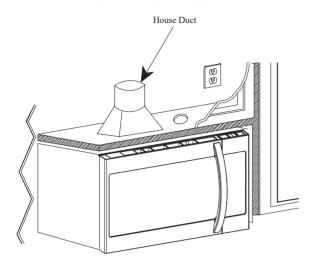
With the damper out, twist the damper to fit under the flaps of the blower plate.

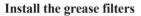
Replace the damper and make sure it will move easily by the force of the exhaust air.



#### **B-5.** Connecting Ductwork

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





#### 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

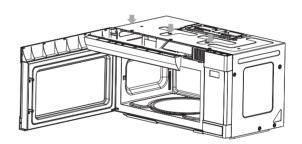
See the page 5, A-2. Install the mounting plate.

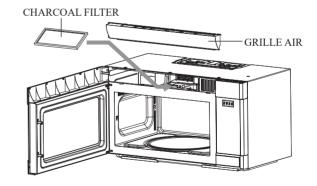
#### C-3. Mounting Microwave oven

See the page 6, A-3. Mounting the Microwave oven. \* You need not use damper for recirculation.

#### How to replace the Charcoal filter

- 1. Unplug the oven or turn off the power at the main power supply.
- 2. Remove the grille air mounting 3 screws and open the door.
- 3. Slide the grille air to the left, then pull it straight out.
- 4. Push the charcoal filter backwards and remove it.
- 5. Slide a new charcoal filter into place. The filter should rest at the angle.
- 6. Replace the grille air and 3 screws and close the door.
- 7. Plug the oven in or turn on the power at the main power supply.





## **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.