



OVER THE RANGE MICROWAVE OVEN/HOOD SYSTEM

INSTALLATION INSTRUCTIONS

Please read all instructions thoroughly before installing the Microwave Oven/Hood System. Two people are recommended to install this product.

If a new electrical outlet is required, its installation should be completed by a qualified electrician before the Microwave Oven/Hood is installed. See 3 ELECTRICAL GROUNDING INSTRUCTIONS on page 2.

1 MOUNTING SPACE

This Microwave Oven/Hood requires a mounting space on a wall as shown in Figure 1. It is designed to be used with standard 12-inch wall cabinets.

If the space between the wall cabinets is 36 or 42 inches, a Filler Panel Kit can be used to fill the gap. The metal filler panels come in 3-inch wide pairs. One set is needed for a 36-inch opening and 2 sets for a 42-inch opening. White and black are available. See page 8 for ordering information. The Filler Panel Kit should be installed before the Microwave Oven/Hood is installed.

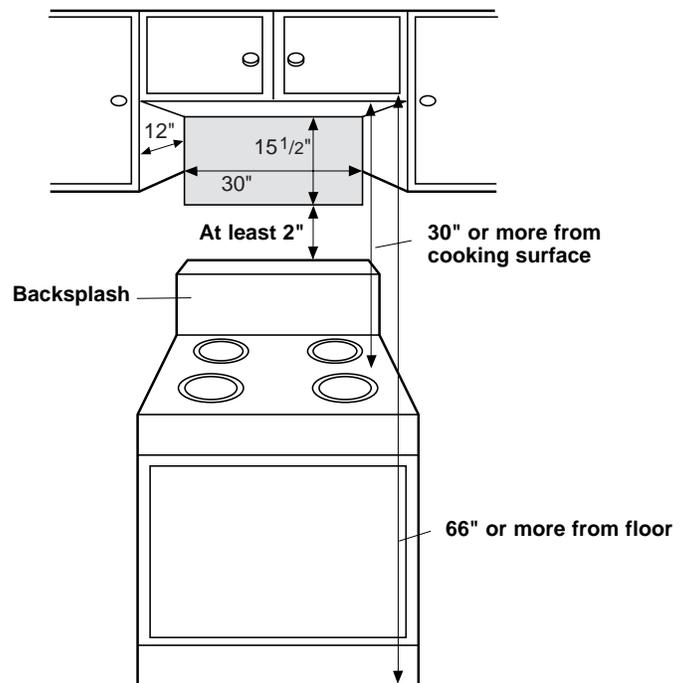


Figure 1

2 WALL CONSTRUCTION

This Microwave Oven/Hood should be mounted against and supported by a flat vertical wall. The wall must be flat for proper installation. If the wall is not flat, use spacers to fill in the gaps. Wall construction should be a minimum of 2" x 4" wood studding and 3/8" or more thick dry wall or plaster/lath. The mounting surfaces must be capable of supporting weight of 110 pounds—the oven and contents—AND the weight of all items which would normally be stored in the top cabinet above the unit.

The unit should be attached to a minimum of one 2" x 4" wall stud.

To find the location of the studs, one of the following methods may be used:

- A. Use a stud finder, a magnetic device which locates the nails in the stud.
- B. Use a hammer to tap lightly across the mounting surface to find a solid sound. This will indicate stud location.

The center of the stud can be located by probing the wall with a small nail to find the edges of the stud and then placing a mark halfway between the edges. The center of any adjacent studs will normally be 16" or 24" to either side of this mark.

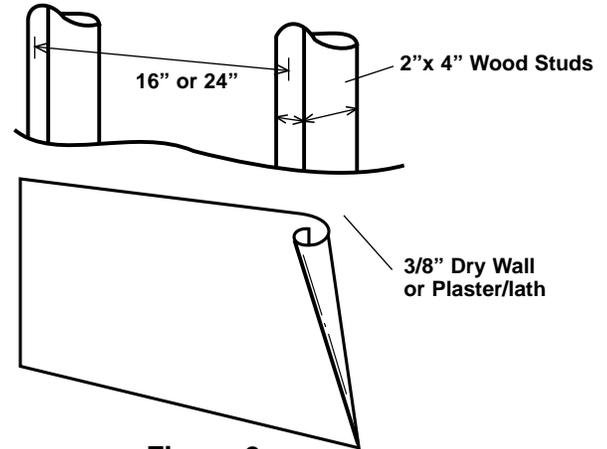


Figure 2

3 ELECTRICAL GROUNDING INSTRUCTIONS

This appliance must be grounded. This oven is equipped with a cord having a grounding wire with a grounding plug. It must be plugged into a wall receptacle that is properly installed and grounded in accordance with the National Electrical Code and local codes and ordinances. In the event of an electrical short circuit, grounding reduces risk of electric shock by providing an escape wire for the electric current.

WARNING - Improper use of the grounding plug can result in a risk of electric shock.

The oven is equipped with a 3-prong grounding plug. **DO NOT UNDER ANY CIRCUMSTANCES CUT OR REMOVE THE GROUNDING PIN FROM THE PLUG.**

The power supply cord and plug must be connected to a separate 120 Volt AC, 60 Hz, 15 Amp, or more branch circuit, single grounded receptacle. The receptacle should be located inside the cabinet directly above the Microwave Oven/Hood mounting location.

NOTE:

1. If you have any questions about the grounding or electrical instructions, consult a qualified electrician or serviceperson.
2. Neither Sharp nor the dealer can accept any liability for damage to the oven or personal injury resulting from failure to observe the correct electrical connection procedures.

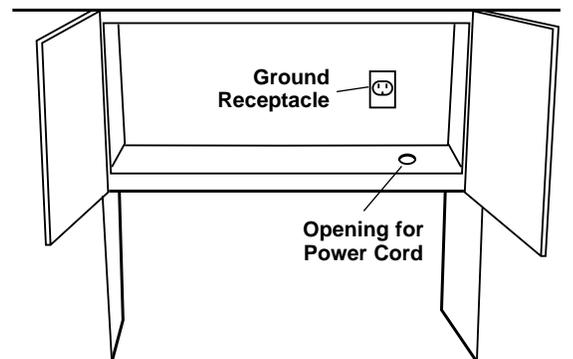


Figure 3

4 HOOD EXHAUST DUCT

When the hood is vented to the outside, a hood exhaust duct is required. All ductwork must be metal; absolutely do not use plastic duct. Check that all connections are made securely. Please read the following carefully:

Exhaust connection: The hood exhaust has been designed to connect to a standard 3-1/4" x 10" rectangular duct. If round duct is required, a rectangular-to-round adaptor must be used.

Rear exhaust: If a rear or horizontal exhaust is to be used, care should be taken to align the exhaust with the space between the 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.

Elbows, adapters, wall, 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 length, add the equivalent lengths of all transitions and adapters plus the length of all straight duct sections. Figure 4 shows the approximate feet of equivalent length of some typical ductwork parts. Use the values in parentheses for calculating air flow resistance equivalent, which should total less than 140 feet.

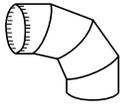
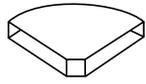
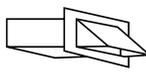
 90° ELBOW (10 FT.)	 45° ELBOW (5 FT.)	 ADAPTOR (5 FT.)	 10" WIDE ELBOW (10 FT.)
 90° ELBOW (25 FT.)	 45° ELBOW (5 FT.)	 WALL CAP (40 FT.)	 ROOF CAP (24 FT.)

Figure 4

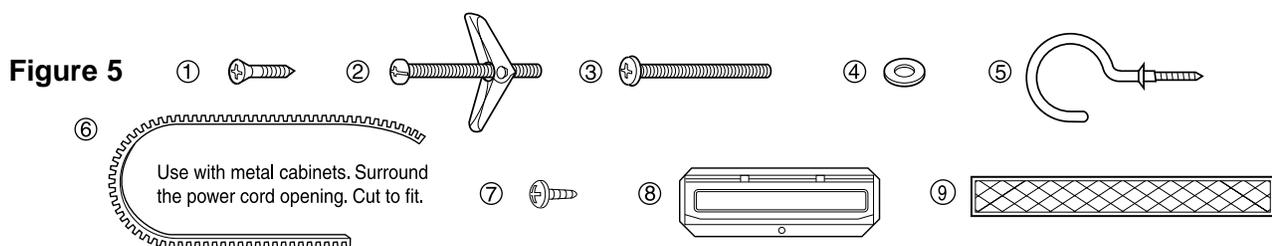
5 TOOLS RECOMMENDED FOR INSTALLATION

- Phillips Screwdriver • Electric Drill • 1/2", 5/8" and 3/32" Drill Bits
- 1-1/2" Wood Bit or Metal Hole Cutter (if metal cabinet is used) • Saw to cut exhaust opening (if needed)
- Protective Drop Cloth for product and range -you may also use carton for protection
- Scissors • Pencil • Measure • Tape

6 INSTALLATION HARDWARE

The INSTALLATION HARDWARE items ①-⑦ are in a small bag. Items ⑧ and ⑨ are packed separately. All items are in a small carton packed below the oven.

ITEM	NAME	QUANTITY	PART CODE
①	Wood Screw 5 X 30 mm	6	XTSSD50P35000
②	Toggle Bolt #10 - 24 X 50 mm	4	LX-BZ0195WRE0
③	Top Cabinet Screw 5 X 60 mm	2	XBRSD50P60000
④	Flat Washer 5 mm diameter	2	XWHSD50-16300
⑤	Cord Holder	1	LX-MZB001MRE0
⑥	Grommet	1	LBSHC0040MRE0
⑦	Tapping Screw 4 x 12 mm	1	XOTSD40P12000
⑧	Exhaust Damper Assembly	1	FFTA-B003MRK0 / FFTA-B005MRK0
⑨	Charcoal Filter	1	PFIL-B004MRE0



7 PREPARATION OF THE OVEN

1. Open the bottom of the carton, bend the carton flaps back and tilt the oven over to rest on plastic foam pad. Lift carton off oven and remove all packing materials, Installation Instructions, Wall Template, Top Template, Charcoal Filter, Turntable and Turntable Support; however, **DO NOT REMOVE THE WAVEGUIDE COVER**, which is located on the ceiling in the oven cavity. **SAVE THE CARTON AS IT MAY MAKE INSTALLATION EASIER.**
2. **CHECK THE OVEN.**
Check the oven for any damage, such as misaligned or bent door, damaged door seals and sealing surfaces, broken or loose door hinges and latches and dents inside the cavity or on the door. If there is any damage, do not operate the oven and contact your dealer or SHARP AUTHORIZED SERVICER.
3. Remove and save Screw (A) as shown in Figure 6.
4. If your oven comes with the louver installed, push down carefully on the tabs (B) and (C) at the ends of the louver to disengage it. Pull the louver away from the unit and set aside.
5. Loosen the two Mounting Screws (D) which secure the Mounting Plate to the rear side of the oven. Remove the Mounting Plate. See Figure 7.

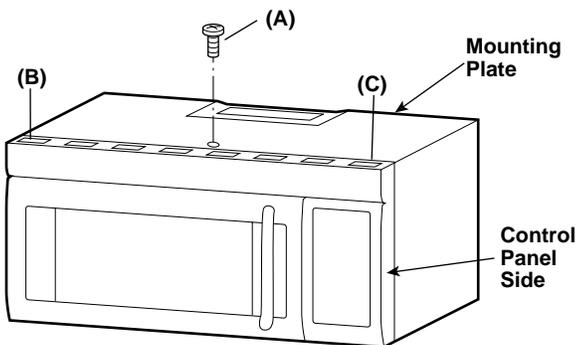


Figure 6

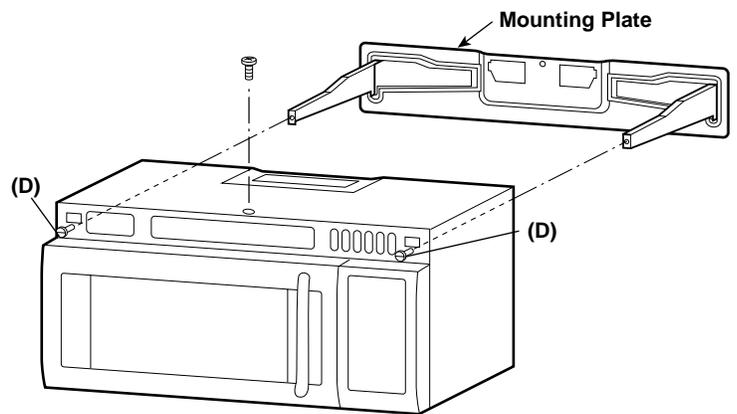


Figure 7

8 VENTILATION SYSTEM

This Microwave Oven/Hood is designed for adaptation to three types of hood ventilation systems. Select the type required for your installation.

- A. Recirculating — non-vented, ductless. Follow installation procedure A. Recirculating requires the use of the Charcoal Filter ⑨ (previously installed or is packed in the packing foam).
- B. Horizontal Exhaust — outside ventilation. Follow installation procedure B.
- C. Vertical Exhaust — outside ventilation. Follow installation procedure C.

(A) RECIRCULATING: Non-Vented, Ductless Operation

The unit is shipped assembled for recirculating. Attach the Charcoal Filter to the upper side of the oven by sliding into the tabs. See Figure 8.

NOTE:

1. The Exhaust Damper Assembly ⑧ is not required for recirculating operation.
2. The Charcoal Filter should be replaced every 6 to 12 months, depending on use.
3. The Charcoal Filter RK-230 is also sold as an accessory . See page 8 for ordering information.

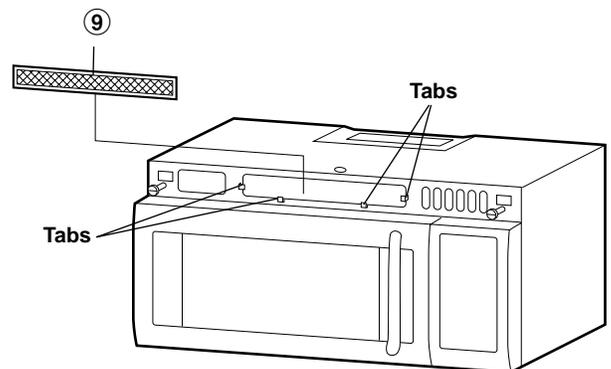


Figure 8

(B) HORIZONTAL EXHAUST: Outside Ventilation

1. Remove and save 2 screws from back edge and 1 screw from the top center of Fan Cover Bracket. Remove Fan Cover Bracket by sliding it in the opposite direction of the arrow on the Fan Cover Bracket, as shown in Figure 9.
2. Withdraw Hood Fan Unit carefully and slip wires out of Wire Box. See Figure 10. CAUTION: Do not pull or stretch hood fan wiring.
3. Rotate the Hood Fan Unit and turn end-over-end so that the fan blade openings are facing the back of the oven. Replace Hood Fan Unit into the oven. Be careful not to pinch the lead wire between the inner bracket and the Hood Fan Unit. See Figure 11.
4. Put the lead wire into Wire Box. See Figure 12.
5. Replace the Fan Cover Bracket by sliding it into the slits in the same direction as the arrow on the Fan Cover Bracket. Make sure the fan blades are visible through the rear openings in the oven before proceeding. Attach Fan Cover Bracket to unit with 3 screws, which were removed in Step 1 above. See Figure 12. The Hood Fan Unit is now rotated for horizontal exhaust operation.
6. Attach the Exhaust Damper Assembly ⑧ to the back of the Mounting Plate by sliding it into the slits in the same direction as the arrow. See Figure 13. Use Tapping Screw 4 X 12 ⑦ from the INSTALLATION HARDWARE and tighten into place.

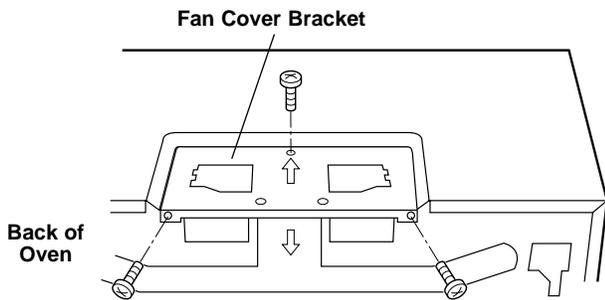


Figure 9

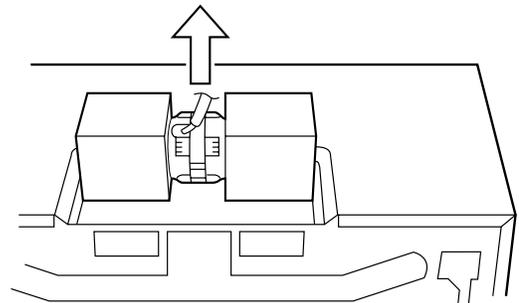


Figure 10

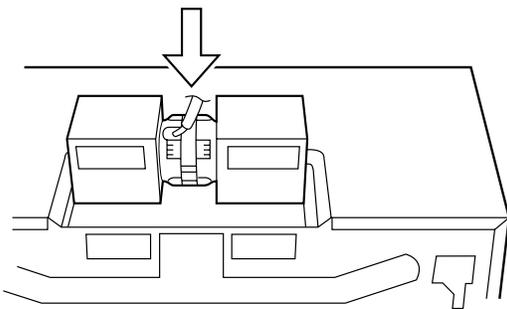


Figure 11

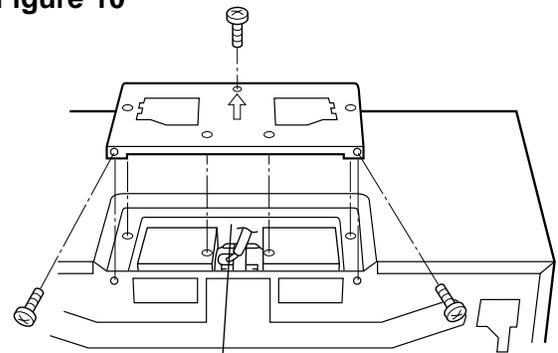


Figure 12 Wire Box

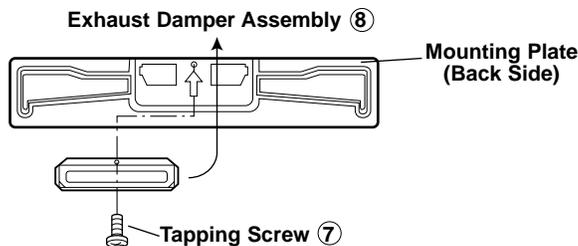


Figure 13

(C) VERTICAL EXHAUST: Outside Ventilation

1. Remove and save 2 screws from back edge and 1 screw from the top center of the Fan Cover Bracket. Remove Fan Cover Bracket by sliding it in the opposite direction of the arrow on the Fan Cover Bracket as shown in Figure 9 on page 5.
2. Withdraw Hood Fan Unit carefully and slip wires out of Wire Box. See Figure 10 on page 5.
CAUTION: Do not pull or stretch hood fan wiring.
3. Turn the Hood Fan Unit end-over-end. Rotate the Hood Fan Unit 90 degrees so that the fan blade openings are facing upward. Replace Hood Fan Unit into the oven. Be careful not to pinch the lead wire between the inner bracket and the Hood Fan Unit. See Figure 14.
4. Put the lead wire into Wire Box. See Figure 14.
5. Replace the Fan Cover Bracket by sliding it into the slits in the same direction as the arrow on the Fan Cover Bracket. Make sure the fan blades are visible through the top openings in the oven before proceeding. Attach the Fan Cover Bracket to unit with 3 screws, which were removed in Step 1 above. See Figure 12 on page 5. The Hood Fan Unit is now rotated for vertical exhaust operation.
6. Attach the Exhaust Damper Assembly ⑧ to the fan cover on the top of the outercase cabinet after mounting the oven. To attach the Exhaust Damper Assembly, refer to MOUNTING OVEN TO THE WALL, Step 7 on page 7.

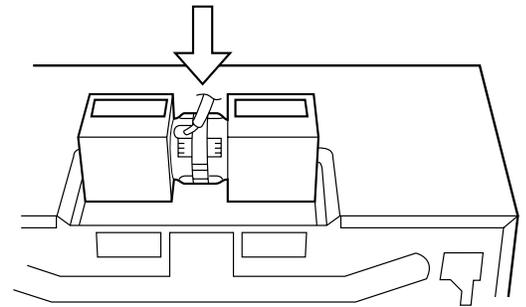


Figure 14

9 OVEN INSTALLATION

THIS OVEN CANNOT BE PROPERLY INSTALLED WITHOUT REFERRING TO THE MOUNTING INSTRUCTIONS FOUND ON BOTH TEMPLATES.

THE NEXT STEP IS TO READ AND FOLLOW MOUNTING INFORMATION ON BOTH TOP CABINET AND WALL TEMPLATES.

NOTE: THIS OVEN SHOULD BE ATTACHED TO AT LEAST ONE WALL STUD. See WALL CONSTRUCTION on page 2.

MOUNTING PLATE

1. Separate 4 Toggle Bolts ②, packed in the INSTALLATION HARDWARE, from the Toggle Nuts.
2. Use Wood Screws ① to attach Mounting Plate to the stud or studs. Use Toggle Bolts to attach Mounting Plate through the holes at A, B, C and D; UNLESS THOSE HOLES ARE LOCATED ON THE STUD. Insert one Toggle Bolt into A, B, C and D where appropriate (these correspond to the holes of the Wall Template) and put the Toggle Nuts onto the Toggle Bolts. Figure 15.

Refer to instructions in Wall Template.

3. Position the Mounting Plate with the Toggle Bolts attached at the wall location and insert Toggle Nuts and Bolts through the holes in the wall with the Toggle Nuts closed. Figure 16. Use Wood Screws ① to attach the Mounting Plate to studs.

NOTE: Before insertion, be sure you leave a space more than the thickness of the wall between the Mounting Plate and the end of each of the Toggle Nuts (in the closed position). If you do not leave enough space, the Toggle Nut will not be able to open on the other side of the wall. Also, once a Toggle Nut opens, it cannot be withdrawn from the hole; therefore make sure all of the Toggles are in the correct position before insertion.

4. Align the Mounting Plate carefully and hold in position while tightening Toggle Bolts. Pull Toggle Bolt toward you and turn clockwise to tighten. Figure 17.

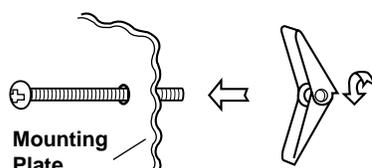


Figure 15

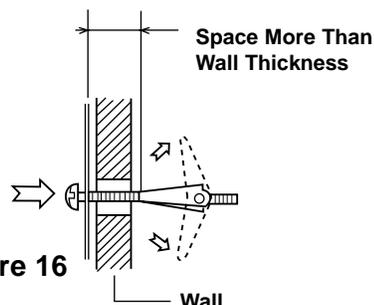


Figure 16

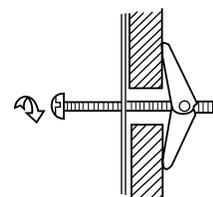


Figure 17

MOUNTING OVEN TO THE WALL

Two people are recommended to attach the Microwave Oven/Hood to the Mounting Plate.

1. Thread the power supply cord through the hole made in the bottom of the top cabinet.
2. Install the oven by sliding it onto the arms of the Mounting Plate. Push it all the way to the wall. See Figure 18.
3. Tighten two Mounting Screws (D) located in the oven faceplate. See Figure 18.

For Louver E (some models)

4. Hook the three lower tabs of Louver E into the slits of the oven faceplate. Then insert three upper tabs of Louver E into the slits of the oven faceplate. See Figure 19.

NOTE: The upper middle tab should be inserted between the oven faceplate and the outercase cabinet.

Or

Louver F (some models)

4. Insert the top tabs of hood Louver F into the 3 openings on the cavity faceplate holding Louver F at a slightly outward tilt. Rotate Louver F so the top tabs are positioned in the cavity faceplate openings. Push in the bottom of Louver F to ensure that the three bottom clips snap into the cavity faceplate. Check for proper engagement. See Figure 19.

5. Replace and tighten one screw (A) (removed in Section 7 on page 4) to the outercase cabinet. See Figure 20.

6. Use the two Top Cabinet Screws (3) and two Flat Washers (4), supplied in the INSTALLATION HARDWARE, to attach the unit to the top cabinet. See Figure 21.

7. (For Vertical Exhaust Only)

Attach the Exhaust Damper Assembly (8) to the fan cover on the top of the outercase cabinet by sliding it into the slits in the same direction as the arrow. Use Tapping Screw 4 X12 mm (7) from the INSTALLATION HARDWARE and tighten into place. See Figure 21.

8. Make a bundle of the power supply cord and attach it to the inside of the cabinet using the Power Cord Hanger (5). See Figure 21.

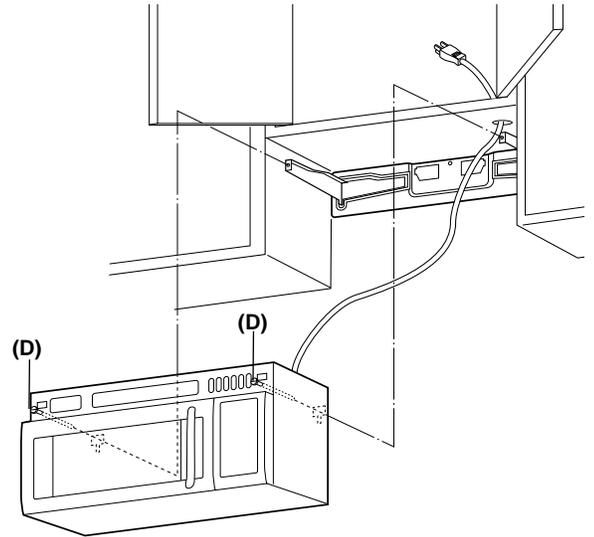


Figure 18

Louver (cross section)

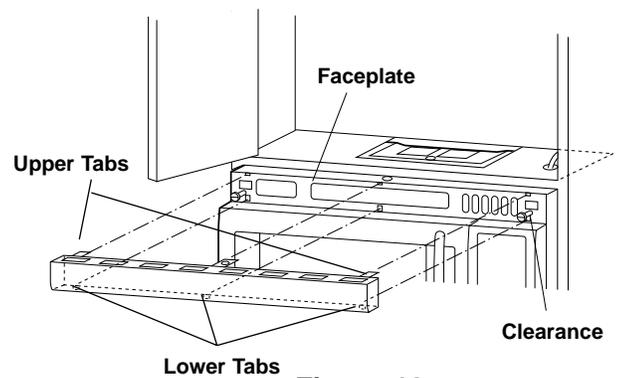
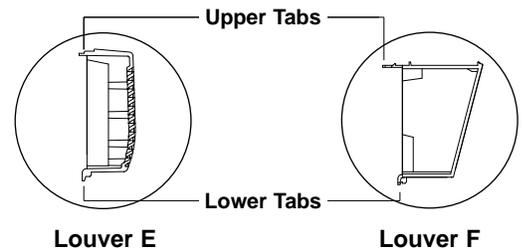


Figure 19

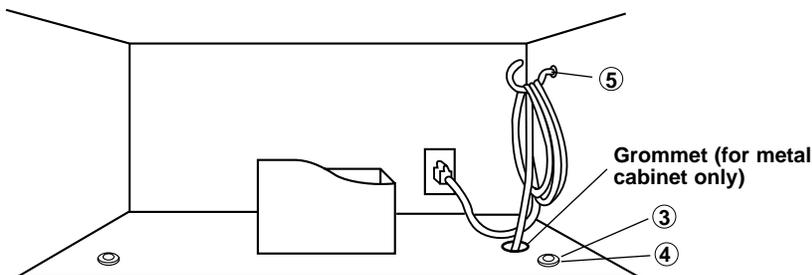


Figure 21

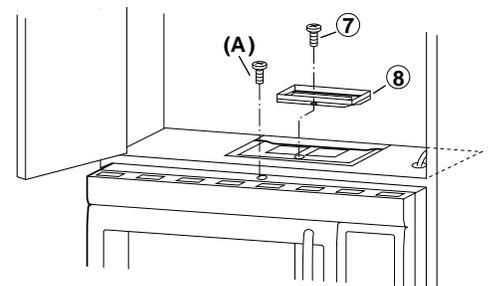


Figure 20

OPTIONAL TIP:

After removing oven from carton, flip carton upside down, cut along indicated dotted line as shown below. This will assist in positioning the oven before placing oven on the Mounting Plate. See Figure 22.

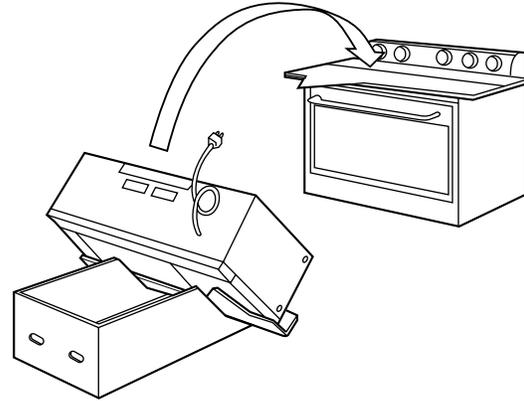
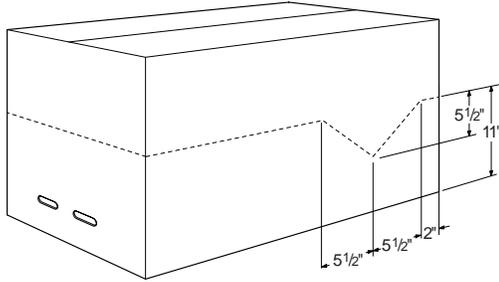


Figure 22

CHECK LIST FOR INSTALLATION

1. Make sure the unit has been installed according to all of the Installation Instructions, the Top Template and Wall Template.
2. Remove all packing material from the oven.
3. Plug in the power cord.
4. Read the Operation Manual.
5. Keep the Installation Instructions for the local electrical inspector's use.

ACCESSORIES

1. CHARCOAL FILTER (RK-230). Filter is used when hood exhaust is recirculated only. Check with your dealer or order directly from the SHARP Accessories and Supplies Center. Call toll-free 1-800-642-2122.
2. FILLER PANEL KIT. This is available for use when the oven is installed in a 36" or 42" wide opening. The metal filler panels come in pairs, each either 3 or 6 inches wide. For information and to purchase contact:

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