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 **Fi** 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. See page 8 for ordering information. The Filler Panel Kit should be installed before the Microwave Oven/ Hood is installed.



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.

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.

Figure 2

Ground Receptacle

Opening for

Power Cord

O

 \sim

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.

4 HOOD EXHAUST DUCT



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 adapter 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 caps, 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 3 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.

Figure 3



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)-(1) are packed separately. All items are in a small carton packed below the oven.

ITE	M NAME	QUANTITY	PART CODE
1	Wood Screw 5 X 30 mm	6	XTSSD50P35000
2	Toggle Bolt with nuts #10 - 24 X 50 mm	4	LX-BZ0195WRE0
3	Top Cabinet Screw 5 X 60 mm	2	XBRSD50P60000
4	Power Cord Hanger	1	LX-MZB001MRE0
5	Tapping Screw 4 x 12 mm	3	XOTSD40P12000
6	Flat Washer 30 mm diameter	2	XWHSD50-16300
7	Grommet	1	LBSHC0040MRE0
8	Rear Cushion	1	PCUSUB059MRP0
9	Exhaust Damper Assembly	1	FFTA-B003MRK0
10	Scale Plate	2	LANG-B002MRP0
11	Grease Filter	2	PFIL-B002MRE0

Figure 4

Parts shown not to common scale.



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 plasticfoam pad. Lift carton off oven and remove all packing materials, INSTALLATION INSTRUCTIONS, WALL TEMPLATE, TOP TEMPLATE, Turntable and Turntable Support. DO NOT REMOVE THE WAVEGUIDE COVER, which is located on the right side wall of the oven cavity.
- 2. 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. Turn oven on the side. See Figure 5.
- 4. Follow steps (A)-(D) to remove mounting plate from the back of the oven as shown in Figure 5.
 - (A) Release mounting plate by pulling out the lever that is on the bottom of the oven. See Figure 6.
 - (B) When lever is out, pull that side of the mounting plate away from the oven. See Figure 5.
 - (C) Repeat step (A) on other side.
 - (D) Repeat step (B) on other side.



8 VENTILATION SYSTEM (PREPARING OVEN FOR INSTALLATION)

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

Recirculating — non-vented, ductless. Follow installation procedure (A). Recirculating requires the use of the Charcoal Filter, which has already been installed in the oven.

Horizontal Exhaust — outside ventilation. Follow installation procedure (B).

Vertical Exhaust — outside ventilation. Follow installation procedure (C).

(A) RECIRCULATING: Non-Vented, Ductless Operation

The unit is shipped assembled for recirculating.

NOTE: 1. The Exhaust Damper Assembly (9) 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-240 is also sold as an accessory. See Page 8 for ordering information.

(B) HORIZONTAL EXHAUST: Outside Ventilation

- 1. Remove 2 screws from back edge and 3 screws from the top center of Fan Cover Bracket. Save 2 screws to be used later and discard remaining 3. Remove Fan Cover Bracket by sliding it in the opposite direction of the arrow on the Fan Cover Bracket, as shown in Figure 7.
- 2. Lift Hood Fan Unit carefully and slip wires out of cavity. See Figure 8. CAUTION: Do not pull or stretch hood fan wiring.
- 3. Rotate the Hood Fan Unit 180° so that the fan blade openings are facing the back of the oven. See Figure 9 (A). Replace Hood Fan Unit into the oven. Be careful not to pinch the wire and the Hood Fan Unit. See Figure 9 (B).
- 4. Put the wire back into the cavity. See Figure 10.







Save fan cover bracket for future instructions.



(C) VERTICAL EXHAUST: Outside Ventilation

- 1. Remove and save 2 screws from back edge and 3 screws 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 11.
- 2. Lift Hood Fan Unit carefully and slip wires out of cavity. See Figure 12. CAUTION: Do not pull or stretch hood fan wiring.
- 3. Rotate the Hood Fan Unit 90° so that the fan blade openings are facing the top of the oven. See Figure 13 (A). Replace Hood Fan Unit into the oven. Be careful not to pinch the lead wire between the inner bracket and the Hood Fan Unit. Put the lead wire into Wire Box. See Figure 13 (B).
- 4. 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.
- 5. Attach the Fan Cover Bracket to unit with the 2 screws from back edge and 3 screws from the top center of the Fan Cover Bracket, which were removed in Step 1 above. See Figure 14. The Hood Fan Unit is now rotated for vertical exhaust operation.
- Attach the Exhaust Damper Assembly (9) 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 1 Tapping Screw 4 X12 mm (5) from the INSTALLATION HARDWARE and tighten into place. See Figure 15.

Figure 11











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 1.

MOUNTING SCALE PLATE

Attached 2 Scale Plates 10, with tape (not included). See Figure 16 and WALL TEMPLATE for locations.

Figure 16



MOUNTING PLATE

- 1. Separate 4 Toggle Bolts (2), packed in the INSTALLATION HARDWARE, from the Toggle Nuts.
- 2. Match 5/8" holes (not in stud/s), drilled through WALL TEMPLATE into wall to corresponding holes on Mounting Plate.
- 3. Insert Toggle Bolts into matched openings on Mounting Plate. Put Toggle Nuts on Toggle Bolts. See Figure 17.
- 4. 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 18. 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 19.



10 PREPARATION AND USE OF THE CARTON TO ASSIST IN THE INSTALLATION OF THE MICROWAVE OVEN

Utilization of the carton may make installation easier.

- 1. Place carton upside down. See Figure 20.
- 2. Using cutting line around the carton, cut into two pieces (A) and (B). See Figure 21.
- 3. Position oven to assist in mounting to the wall. See Figure 22.





MOUNTING OVEN TO THE WALL

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

Figure 23

- Thread the Power Supply Cord through the hole made in the bottom of the top cabinet. Install the oven by snapping it onto the Mounting Plate. See Figure 23.
- 2. Use two Tapping Screws (5) to secure the levers that are on the bottom of the oven. See Figure 24.
- 3. Use two Top Cabinet Screws (3) and two Flat Washers (6), supplied in the INSTALLATION HARDWARE, to attach the unit to the top cabinet. See Figure 25.
- Make a bundle of the Power Supply Cord and attach it to the inside of the cabinet using the Power Cord Hanger ④. See Figure 25.

Figure 24





Figure 25



CHECKLIST FOR INSTALLATION

- 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

Check with your dealer or order directly from the SHARP Accessories and Supplies Center. Call toll-free 1-800-642-2122.

- 1. CHARCOAL FILTER (RK-240). Filter is used when hood exhaust is recirculated only.
- 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 3-inch wide pairs. One set is needed for a 36-inch opening and 2 sets for a 42-inch opening. For information and to purchase contact:

MODERN-AIRE VENTILATING CORPORATION 7319 Lankershim Blvd. North Hollywood, CA 91605 Phone: (818) 765-9870 • Fax: (818) 765-4916



SHARP ELECTRONICS CORPORATION Sharp Plaza, Mahwah, New Jersey 07430-2135