

#### Freestanding Electric Range

#### **Installation Instructions**

for Models: HES232U, HES236UHES246U, HES247U, HES245U, HES242U, HES256U, HES255U, HES252U

PLEASE READ ENTIRE INSTRUCTIONS BEFORE PROCEEDING.					
IMPORTANT: Save these instructions for the local electrical					
	inspector's use.				
INSTALLER:	Please leave these Installation Instructions with this				
	unit for the owner.				
OWNER:	Please retain these instructions for future reference.				

#### Household Appliances



#### **IMPORTANT SAFETY INSTRUCTIONS**

#### Please read all instructions before using this appliance.

Table of Contents	
Safety Instructions and Applicable Codes	
Ventilation and Cabinet Preparation	
Range Cord Connection	
Anti-Tip Bracket Installation	e
Final Install	

• Remove all tape and packaging before using the range. Destroy the carton and plastic bags after unpacking the range. Never allow children to play with packaging material.

• **Proper Installation** - Be sure your appliance is properly installed and grounded by a qualified technician in accordance with the National Electrical Code ANSI/NFPA No. 7 latest edition and local electrical code requirements.

Important: Local codes vary. Installation, electrical connections and grounding must comply with all applicable codes.

Install only per installation instructions provided in the literature package for this range.

Ask your dealer to recommend a qualified technician and an authorized repair service. Know how to disconnect the power to the range at the circuit breaker or fuse box in case of an emergency.

• **User servicing** - Do not repair or replace any part of the appliance unless specifically recommended in the manuals. All other servicing should be done by a qualified technician. This may reduce the risk of personal injury and damage to the range.

• Never modify or alter the construction of a range by removing leveling legs, panels, wire covers, anti-tip brackets/screws, or any other part of the product.

• Notice: DO NOT LIFT RANGE BY DOOR HANDLE. Remove the door for easier handling and installation. See Section 'Removing Oven Door' on next page.

> WARNING IF THE INFORMATION IN THIS MANUAL IS NOT FOLLOWED EXACTLY, A FIRE OR EXPLOSION MAY RESULT CAUSING PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.

#### IMPORTANT:

LOCAL CODES VARY. INSTALLATION, ELECTRICAL CONNECTIONS AND GROUNDING MUST COMPLY WITH ALL APPLICABLE CODES.

#### PARTSPROVIDED

Anti-Tip Bracket

#### PARTSNEEDED:

Power Supply Cord Kit (50 Amps) Standard Measuring Tape Phillips head Screwdriver 1-1/4" Wrench Pencil

#### WARNING

Before installing, turn power OFF at the service panel. Lock service panel to prevent power from being turned ON accidentally.

#### 

Unitisheavyandrequiresatleasttwo persons or proper equipment to move.

#### 

Stepping, leaning or sitting on the doors or drawers of this range can result in serious injuries and also cause damage to the range. Do not allow children to climb or play around the range. The weight of a child on an open door may cause the range to tip, resulting in serious burns or other injury.

#### 

Do not use the oven or warmer drawer (if equipped) for storage.

#### A WARNING

Do not store items of interest to children in the cabinets above the range or on the backguard of a range. Children climbing on the range to reach items could be seriously injured.

#### WARNING RANGE TIPPING HAZARD

• All ranges can tip and injury could result. To prevent accidental tipping of the range, attach it to the wall, floor or cabinet by installing the Anti-Tip Device supplied.

• A risk of tip-over may exist if the appliance is not installed in accordance with these instructions.

• If the range is pulled away from the wall for cleaning, service, or any other reason, ensure that the Anti-Tip Device is properly reengaged when the range is pushed back against the wall. In the event of abnormal usage (such as a person standing, sitting, or leaning on an open door), failure to take this precaution could result in tipping of the range. Personal injury might result from spilled hot liquids or from the range itself.

# WARNING ALL RANGES CAN TIP INJURY TO PERSONS COULD RESULT INSTALL ANTI-TIP DEVICE PACKED WITH RANGE SEE INSTALLATION INSTRUCTIONS

#### WARNING - TO REDUCE THE RISK OF A RANGE TOP GREASE FIRE:

a) Never leave surface units unattended at high settings. Boilovers cause smoking and greasy spillovers that may ignite. Heat oils slowly on low or medium settings.

b) Always turn hood ON when cooking at high heat or when cooking flaming foods.

c) Clean ventilating fans frequently. Grease should not be allowed to accumulate on fan or filter.

d) Use proper pan size. Always use cookware appropriate for the size of the surface element.

**IMPORTANT** - Do not attempt to operate the range during power failure. If the power fails, always turn off the range. If the range is not turned off and the power resumes, the range will begin to operate again. Once the power resumes, reset the clock and oven function.

#### **Removing the Door**



• Make sure oven is cool and power to the oven has been turned off before removing the door. Failure to do so could result in electrical shock or burns.

• The oven door is heavy and fragile. Use both hands to remove the oven door. The door front is glass. Handle carefully to avoid breakage.

• Grasp only the sides of the oven door. Do not grasp the handle as it may swing in your hand and cause damage or injury.

• Failure to grasp the oven door firmly and properly could result in personal injury or product damage.

- 1. Be sure to read the above **WARNING** before attempting to remove oven door.
- 2. Open the door completely.
- 3. Flip lever on hinge toward you. (see Figure A).
- 4. Close the door to approximately halfway open.
- 5. Holding the door firmly on both sides using both hands, pull the door straight out of the hinge slots. Hold firmly, the dooris heavy (See Figure B).

6. Place the door in a convenient and stable location for cleaning.











## 1

#### INSTALL VENTILATION

It is strongly recommended to install a hood above this range. For most kitchens with a wall mounted hood, a certified hood rating of not less than 350 CFM is recommended. Bosch hoods rated at 350 CFM or more when operated on High meet the above requirement and are recommended for this purpose. The range hood must be installed according to instructions furnished with the hood.



#### PREPARE CABINETS

This unit is designed for installation in a countertop near adjacent walls and projecting surfaces constructed of combustible materials. There must be a minimum clearance of 30 inches between the top of the cooking surface and the bottom of an unprotected wood or metal cabinet; or 24 inches when bottom of wood or metal cabinet is protected by not less than 1/4" of flame retardant material covered with not less than No. 28 MSG sheet metal, 0.015 inch stainless steel' or 0.024 inch aluminum or copper. (See Figure I). The minimum horizontal distance(s) from the side and back edge of the unit to adjacent vertical combustible walls are as follows: Zero clearance is permitted on rear, right and left walls.

For the cabinets over the cooking surface and the adjacent cabinets, the maximum cabinet depth from back wall is 13 inches.

Instructions were determined using Standard American base cabinets measuring 36" high x 24" deep (see Figures 2 & 3).

If nonstandard cabinets are used, care should be taken to alter dimensions accordingly.

**NOTICE**: Some cabinet finishes cannot survive the temperatures allowed by U.L., particularly self-cleaning ovens; the cabinets may discolor or stain. This is most noticeable with laminated cabinets.



Figure 1



Figure 2





## 3

#### CONNECT RANGE CORD

Ranges are dual rated for use on either 120/240 VAC or 120/208 VAC. See table for power ratings and circuit breaker sizes based upon the supply voltage for each mode (See chart at left).

This appliance may be connected to the power supply by installing flexible conduit or a power cord set. The electrical rating of the power cord set (not supplied) must be 120/240 volt, 50 amperes minimum for models HES. The power cord set shall be marked "For Use with Ranges."

The power supply shall be connected to the range terminal block compartment located in the lower left rear corner, accessible by removing the storage drawer below the oven.

Remove the terminal box cover by removing the cover screw. Install the proper connector in knockout(s) provided. The electrical supply, including connectors or power cord, can lie anywhere within the shaded area (See Figure 2.)

#### **MODEL HES23**

	VOLTS	ΗZ	RATING	CIRCUIT			
	A.C.		ΚW	BREAKER			
	120/240	60	12.1	50 AMPS			
	120/208	60	9.1	45 AMPS			

#### MODEL HES24, HES25

VOLTS	HZ	RATING	CIRCUIT				
A.C.		KW	BREAKER				
120/240	60	12.6	50 AMPS				
120/208	60	9.5	50 AMPS				
	VOLTS A.C. 120/240	VOLTS     HZ       A.C.     120/240     60	VOLTS     HZ     RATING       A.C.     KW     120/240     60     12.6				

#### **Electrical Connection Procedures**

Refer to Figure 4 and Figures A, B, C, D & E (next page) for further explanation.



#### **Power Supply Connections**

#### **Three Wire Connection**

The Four Wire Connection is preferred, but where local codes and ordinances permit grounding through neutral and/or conversion to four wire is impractical, unit may be connected to the power supply via a three wire connection.

- 1. Disconnect electrical power at breaker box.
- 2. Remove the terminal block cover to expose the junction box (See Figure A).
- 3. Remove top nut, star washer, and round washer from each post.

Note: DO NOT remove last round washer, last nut or internal wiring leads.

- 4. Attach white wire, round washer, star washer and nut IN THIS ORDER on top of ground strap on center post.
- 5. Attach red wire, round washer, star washer and nut IN THIS ORDER to left post.
- 6. Attach black wire, round washer, star washer and nut IN THIS ORDER to right post (See Figure B).
- 7. Tighten all connections securely and replace terminal block cover (See Figure C).

#### Four Wire Connection (Preferred Method)

- 1. Disconnect electrical power at breaker box.
- 2. Remove the terminal block cover to expose the junction box (See Figure A).
- Remove top nut, star washer, and round washer from each post.
  Note: DO NOT remove last round washer, last nut or

note: DO NOT remove last round washer, last nut or internal wiring leads.

- 4. Remove screw from bottom end of ground strap.
- 5. Remove ground strap from center post, rotate so that wide end is at top and attach wide end to range through hole below junction box. Attach green wire on top of ground strap. Tighten Screw (See Figure D).
- 6. Attach red wire, round washer, star washer and nut IN THIS ORDER to left post.
- 7. Attach white wire, round washer, star washer and nut IN THIS ORDER to center post.
- 8. Attach black wire, round washer, star washer and nut IN THIS ORDER to right post (See Figure E).
- 9. Tighten all connections securely and replace terminal block cover.



Figure A



Figure B



Figure C



Figure D



### Note: DO NOT plug in range at this time. Proceed to steps 4 and 5.

Figure E

#### STEPS 4 AND 5: INSTALL ANTI-TIP BRACKET AND FINAL INSTALL



Figure 6



#### **INSTALL ANTI-TIP BRACKET:**

- 1. Adjust height of range and level by rotating the adjustable leg supports, (see Figure 6) using 1-1/4" wrench.
- 2. Measure to locate bracket position as shown in Figure 7.
- 3. Secure bracket with 2 screws.



Figure 7



Figure 8

Screw



#### FINAL INSTALL:

- 1. Move range close enough to the opening to plug into the receptacle.
- 2. Slide range into position insuring that the left back leg slides under the anti-tip bracket. Range will sit 3/4" away from back wall when properly installed.
- 3. Carefully tip range forward to insure that the anti-tip bracket engages the range back brace and prevents tip-over.
- 4. Turn on electrical power. Check range for proper operation as described in Use and Care Manual.

**Note:** if LCD screen flashes and beeps, the wiring is incorrectly installed. Immediately disconnect power at breaker and return to step 3: CONNECT RANGE CORD.

#### WARNING



INJURY TO PERSONS COULD RESULT INSTALL ANTI-TIP DEVICE PACKAGED WITH RANGE.

ALL RANGES CAN TIP.

SEE INSTALLATION INSTRUCTIONS



DO NOT USE HAND TRUCK OR APPLIANCE DOLLY ON THE BACK OR FRONT OF THIS UNIT. HANDLE FROM SIDE ONLY!

Figure 9



WARNING

 $\bigcirc$ 

ELECTRICAL SHOCK HAZARD - DISCONNECT POWER BEFORE SERVICING. FAILURE TO DO SO CAN RESULT IN DEATH OR ELECTRICAL SHOCK.

Screw

CAUTION

BSH reserves the right to change specifications or design without notice. Some models are certified for use in Canada. BSH is not responsible for products which are transported from the United States for use in Canada. Check with your local Canadian distributor or dealer. BSH Home Appliances, Corporation, 5551 McFadden Avenue, Huntington Beach, CA 92649.

For the most up to date critical installation dimensions by fax, use your fax handset and call 702/833-3600. Use code #8030.

5551 McFadden Avenue, Huntington Beach, CA 92649 • 800/944-2904 5060003398 Rev. A • © BSH Home Appliances Corporation 2003 • Litho U. S. A. 6/03