Installation Instructions Notice d'installation



To avoid possible injury or property damage, OBSERVE ALL WARNINGS AND CAUTIONS.

These instructions are intended for use by qualified installers only. The dishwasher must be installed by a qualified service technician or installer.

 In addition to these instructions, the dishwasher shall be installed to meet all electrical and plumbing codes and ordinances (both national and local).

Read these installation instructions completely and follow them carefully. They will save you time and effort and help to ensure safety and optimum dishwasher performance.

### IMPORTANT

- The dishwasher drain hose must be installed with a portion of it at least 20" (508 mm) off the cabinet floor; otherwise the dishwasher may not drain properly.
- This dishwasher is intended for indoor residential use only, and should not be used in commercial food service establishments.

- NEW INSTALLATION If the dishwasher is a new installation, most of the work must be done before the dishwasher is moved into place.
- REPLACEMENT If the dishwasher is replacing another dishwasher, check the existing dishwasher connections for compatibility with the new dishwasher, and replace parts as necessary.
- This appliance has been found to be in compliance with CAN/CSA-C22.2 No. 167/UL 749. It is the responsibility of the owner and the installer to determine if additional requirements and standards apply in specific installations.
- Not for outdoor use.

# **A WARNING**

### Avoiding General Hazards

Do not use the dishwasher until it is completely installed. When opening the door on an uninstalled dishwasher, carefully open the door while supporting the rear of the unit. Failure to follow this warning can cause the dishwasher to tip over and result in serious injury.

Before installing the "L"-shaped supplied countertop mounting brackets (select models), decide which method will be used to secure the dishwasher into its opening. Once these mounting brackets are installed on the dishwasher, removing them is difficult and will damage the mounting brackets and the dishwasher.

In some conditions, hydrogen gas can form in a hot water system that has not been used for weeks. Hydrogen gas is explosive.

Before filling a dishwasher from a system that has been off for weeks, run the water from a nearby faucet in a well ventilated area until there is no sound or evidence of gas.

Temperatures required for soldering and sweating will damage the dishwasher's base and water inlet valve. If plumbing lines are to be soldered or sweated, keep the heat source at least 6" (152.4 mm) away from the dishwasher's base and water inlet valve.

Removing any cover or pulling the dishwasher from the cabinet can expose hot water connections, electrical power and sharp edges or points. Handle with care.



Do not allow the electrical and water supply lines to touch. Separate channels are provided under the dishwasher.

Do not work on an energized circuit. Doing so could result in serious injury or death. Only qualified electricians should perform electrical work. Do not attempt any work on the dishwasher electric supply circuit until you are certain the circuit is de-energized. Make sure electrical work is properly installed. There should be no loose electrical connections. Ensure all electrical connections are properly made.

The customer has the responsibility of ensuring that the dishwasher electrical installation is in compliance with all national and local electrical codes and ordinances. The dishwasher is designed for an electrical supply of 120V, 60 Hz, AC, connected to a dishwasher-dedicated, properly grounded electrical circuit with a fuse or breaker rated for 15 amps. Electrical supply conductors shall be a minimum #14 AWG copper only wire rated at 75°C (167°F) or higher.

This appliance must be connected to a grounded metal, permanent wiring system, or an equipment-grounding conductor must be run with the circuit conductors and connected to the equipment-grounding terminal or lead on the appliance. Do not use extension cords.



### **Avoiding Plumbing/Scalding Hazards**

Do not perform any work on a charged hot water line. Serious injury could result. Only qualified plumbershould perform plumbing work. Do not attempt any work on the dishwasher hot water supply plumbing until you are certain the hot water supply is shut off.

Do not over tighten the 90° elbow. Doing so may damage the water inlet valve and cause a water leak.

Temperatures required for soldering and sweating will damage the dishwasher's water inlet valve. If plumbing lines are to be soldered or sweated, keep the heat source at least 6" (152.4 mm) away from the dishwasher's water inlet valve.

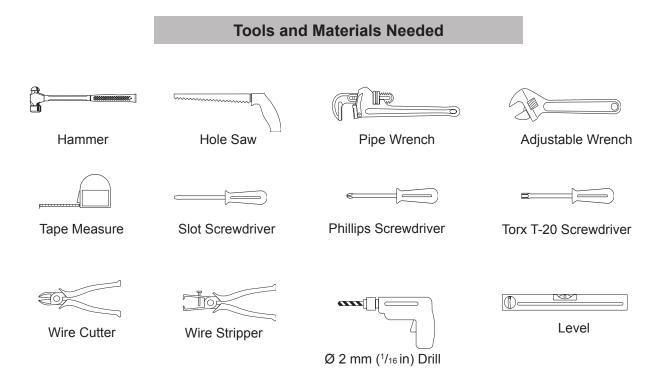
Check local plumbing codes for approved plumbing procedures and accessories. All plumbing should be done in accordance with national and local codes.

These instructions depict an installation method for stainless steel braided hose or PEX hot water supply lines. If using copper tubing or other material for water supply, defer to a licensed plumber for proper installation.

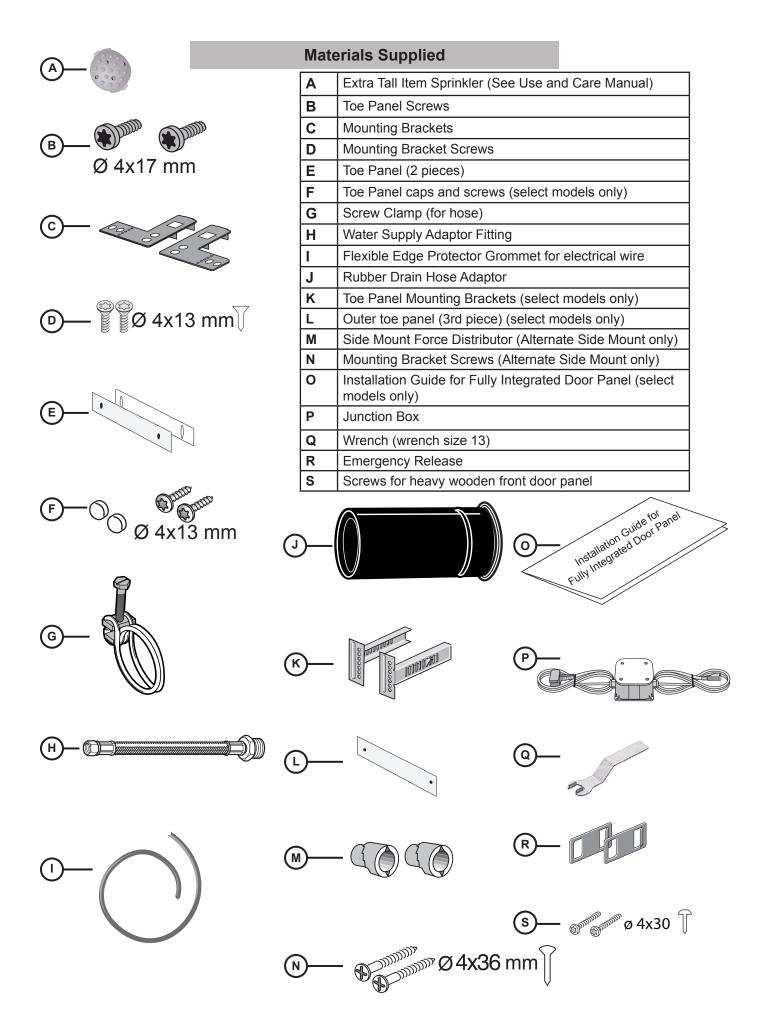
### Inspect the Dishwasher

After unpacking the dishwasher and prior to installation, thoroughly inspect the dishwasher for possible freight or cosmetic damage. Report any damage immediately. Cosmetic defects must be reported within 30 days of installation.

**NOTE**: Do not discard any bags or items that come with the original package until after the entire installation has been completed.



Electrical Supply Cable - Minimum #14 AWG, 2 conductor, 1 ground, insulated copper conductors rated 75°C or higher
Hot Water Supply Line - Minimum <sup>3</sup> /8" O.D. copper tubing or metal braided dishwasher supply line
Shut-off valve and fittings appropriate for hot water supply line (copper tubing/compression fitting, or braided hose)
UL listed conduit connector or strain relief is required if you attach the field wiring directly to the terminal block



### **Enclosure Requirements**

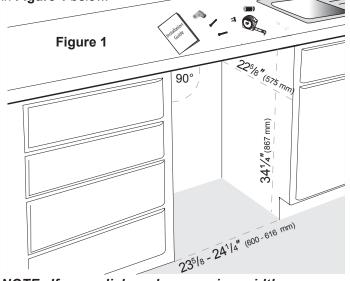
### **A WARNING**

Avoid Scalding or Electrical Shock Hazard! Make sure the water supply and electrical supply are shut off before installation or service.

NOTE: This dishwasher is designed to be enclosed on the top and both sides by standard residential kitchen cabinetry.

Select a location as close to the sink as possible for easy access to water supply and drain lines.

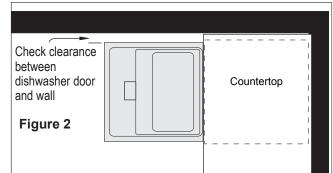
For proper dishwasher operation and appearance, ensure that the enclosure is square and has the dimensions shown in **Figure 1** below.



NOTE: If your dishwasher opening width measures >23<sup>5</sup>/<sup>s</sup>" (600mm) use the TOP or SIDE MOUNT mounting methods.

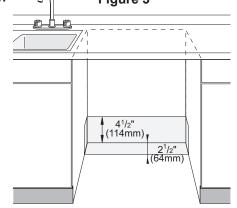
If your dishwasher opening width measures 23<sup>5</sup>/<sup>8</sup>" (600mm) use the ALTERNATE SIDE MOUNT mounting method.

If the dishwasher is to be installed in a corner, make sure that there is adequate clearance to open the door. See **Figure 2** below.



### **WARNING**

Avoid Electrical Shock/Fire Hazard Do not allow the electrical and water supply lines to touch. After locating the proper place for your new dishwasher, you will need to create any required openings to allow for passage of the water, drain and electrical line. In order to avoid interference with the dishwasher when sliding it into the cabinet, place your openings within the dimensions shown in **Figure 3** below. **Figure 3** 



### **Required Openings:**

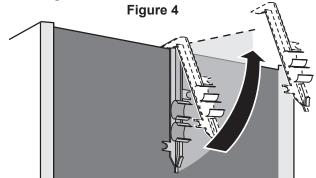
 $4^{3}/4'' \times 2^{3}/8''$  (120 x 60 mm) - To pass the included electrical supply junction box through to adjacent cabinet.

Note: If the incoming electric supply, water supply and drain connections are all in the same cabinet, the one  $4^{3}/_{4}$ " x  $2^{3}/_{8}$ " (120 x 60 mm) hole will be large enough for all three to pass through.

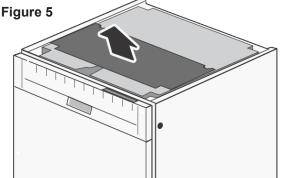
4" x 2"  $(100 \times 50 \text{ mm})$  - To pass the included water supply line toward the water supply

 $1^{1}\!/\!4''$   $_{(32\mbox{ mm})}$  diameter - To pass the dishwasher drain hose toward the drain connection

Before sliding the dishwasher into the cabinet, remove the hose clip at the back of the dishwasher as shown in **Figure 4**. The hose clip may be used later to hold the drain hose as shown in **Figure 10**.



In select models, remove the rubber apron on top of the dishwasher and set aside for later use. See **Figure 5**.



### **Electrical Preparation**

### **Electrical Preparation**

### A WARNING

#### **Avoid Electrical Shock Hazard**

Do not work on an energized circuit. Doing so could result in serious injury or death. Only qualified electricians should perform electrical work. Do not attempt any work on the dishwasher electric supply circuit until you are certain the circuit is de-energized.

### **A WARNING**

Avoid Fire Hazard Make sure electrical work is properly installed. Only qualified electricians should perform electrical work.

### **Electrical Supply**

The customer has the responsibility of ensuring that the dishwasher electrical installation is in compliance with all national and local electrical codes and ordinances. The dishwasher is designed for an electrical supply of 120V, 60 Hz, AC, connected to a dishwasher-dedicated, properly grounded electrical circuit with a fuse or breaker rated for 15 amps. Electrical supply conductors shall be a minimum #14 AWG copper wire rated at 75°C (167°F) or higher.

### A WARNING

Avoid Fire Hazard Make sure there are no loose electrical connections. Make sure all electrical connections are properly made.

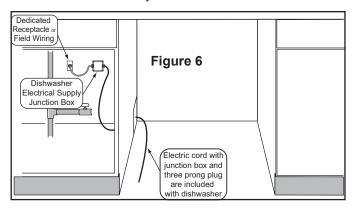
### **Grounding Instructions**

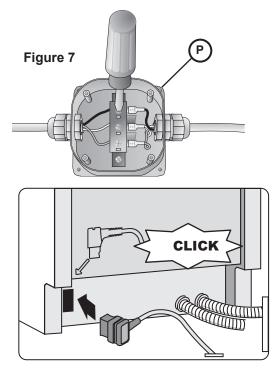
The dishwasher must be properly grounded before operating. This appliance must be connected to a grounded metal permanent wiring system, or an equipment grounding conductor must be run with the circuit conductors and connected to the equipment grounding terminal or lead on the dishwasher. Make sure that the dishwasher is connected to a suitable ground in compliance with all local codes or, in the absence of a local code, with the NATIONAL ELECTRICAL CODE in the United States or the CANADIAN ELECTRIC CODE C22.1-latest edition in Canada as well as any provincial/state or municipal or local codes that apply.

Volts	Hertz	Amperes	Watts	+
120	60	12	1,300 (max)	

### **Electrical Connection**

The dishwasher electrical supply junction box (P) and dedicated receptacle must be mounted in an accessible cabinet adjacent to the dishwasher (do not mount the junction box or receptacle behind the dishwasher). You will need a  $4^{3}/4^{"} \times 2^{3}/8^{"}$  (120 x 60 mm) opening through the cabinet in order to pass the junction box through (see **Figure 6**). If the opening is made through wood, sand it smooth. If the opening is made through metal, use the included protective grommet (I) or other approved method to protect wiring from damage. Use the four screws included (or appropriate fastener) in the parts bag to securely mount the junction box so that it can be easily accessed (see **Figure 6**). The electrical supply can be connected in two ways:



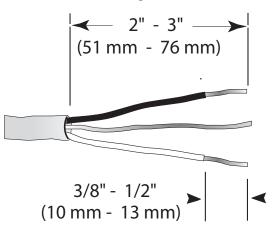


#### Method A - Three prong plug and receptacle

Use the included three-prong plug and junction box to connect to a dedicated household receptacle. Make sure the household receptacle meets the electrical supply requirements as well as national and local codes.

# Method B - To permanently connect to household or field wiring:

- 1. Remove the dishwasher electrical supply junction box cover and connect to the power supply cord from the house installation. See **Figure 7**.
- Remove 2" to 3" (51 76 mm) of the outer casing of the household or field supply wiring as shown in Figure 8. Remove <sup>3</sup>/<sub>8</sub>" to <sup>1</sup>/<sub>2</sub>" (10 13 mm) of the insulation from each wire as shown in Figure 8.



### Figure 8

- Insert the bare copper or green wire(ground) to the "G" ground connection "\_\_\_\_\_" of the terminal block and securely tighten the terminal block screw (see Figure 7).
- 4. Insert the white (neutral) wire to the "N" connection of the terminal block and securely tighten the terminal block screw.
- Insert the black(hot) wire to the "L" connection of the terminal block and securely tighten the terminal block screw.
- Check all electrical connections to make sure they are secure and then attach the junction box cover with the 4 screws.

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Avoid Electrical Shock Hazard To avoid possible injury or property damage, care should be exercised when the dishwasher is installed or removed to reduce the likelihood of damage to the power cord.

### **Inlet Water Connections**

### Hot Water Supply

The hot water heater should be set to deliver approximately 120° F (49° C) water to the dishwasher. Water that is too hot can cause some detergents to lose effectiveness. Lower water temperatures will increase run times. The hot water supply pressure must be between 15 - 145 psi (1 - 10 bar).

### **IMPORTANT NOTES:**

- If using a solder joint instead of a compression fitting, be sure to make all solder connections before connecting the water supply line to the dishwasher.
- Make sure there are no sharp bends or kinks in the water line that might restrict water flow.
- Always use the appropriate seal when making plumbing connections.
- Before connecting the water supply line to the dishwasher, flush the incoming water line for approximately 5 minutes to clear any foreign material.
- Turn on the water supply and check for leaks after connections are made.

### A WARNING

#### Avoid Scald Hazard!

Do not perform any work on a charged hot water line. Serious injury could result. Only qualified plumbers should perform plumbing work. Do not attempt any work on the dishwasher hot water supply plumbing until you are certain the hot water supply is shut off.

# CAUTION

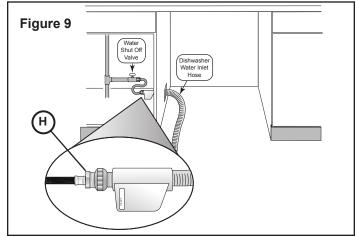
Temperatures required for soldering and sweating will damage the dishwasher. If plumbing lines are to be soldered or sweated, keep the heat source at least 6 inches (152.4 mm) away from the dishwasher.

### Water Supply Shut Off Valve

Install an easily accessible shut-off valve (not supplied) in the hot water supply line, as shown in **Figure 9.** All solder connections must be made before the water line is connected to the dishwasher.

### **Connecting the Hot Water Supply**

There are two plastic corrugated hoses that exit the back of the dishwasher. The larger hose, with the brass fitting on the end, is the water supply hose to the dishwasher (the other hose is the dishwasher drain hose). You will need a 3" x 13/," (76 x 45 mm) opening through the cabinet to pass the dishwasher water supply line through toward the shut off valve.



#### To connect the hot water supply:

- 1. Assemble the water supply adaptor fitting (H) from the parts bag onto the dishwasher water supply hose. This connection does not require Teflon brand tape.
- 2. Pass the dishwasher water supply line with attached adaptor through the opening toward the water shut off valve. Take care not to allow the hose to kink or twist behind the dishwasher.
- 3. Connect the dishwasher water supply line with adaptor to the water shut off valve. You will need to use an approved dishwasher water supply line with the correct fittings for this connection. Always use the appropriate seal when making plumbing connections.

NOTE: The end of the dishwasher water inlet hose is heavy and will need to be supported. It is best to lay the end on the cabinet floor as shown in Figure 9.

4. After all connections are made, turn on the hot water and check for leaks.

### **Drain Connections**

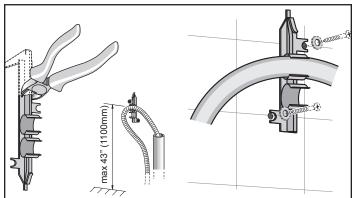
The dishwasher drain hose may be connected to the household or field drain plumbing in one of four ways. You will need a 1¼" diameter hole in order to pass the drain hose through the cabinet.

- 1 Directly under the sink dishwasher drain connection, as shown in Figure 11.
- 2 Directly to a disposer dishwasher drain connection, as shown in Figure 12.
- 3 To the under sink dishwasher drain connection through an air gap, as shown in Figure 13.
- To a disposer dishwasher drain connection through an air 4 gap, as shown on Figure 14.

#### **IMPORTANT NOTES:**

- If local ordinance require an air gap, install it according to the manufacturer's instructions.
- If the dishwasher drain hose is to be connected to a disposer dishwasher drain connection, remove the plug from the disposer's dishwasher drain connection.
- The dishwasher drain hose must have one place along its length that is securely attached 20" (508 mm) above the cabinet floor.
- The drain hose length can be extended if necessary. The maximum length of the drain hose, including the hose leading to the air gap, is 150" (3800 mm).





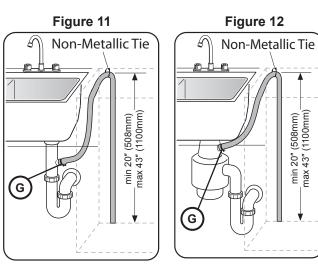


Figure 13

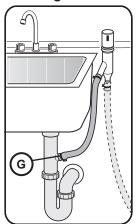
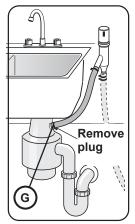


Figure 14

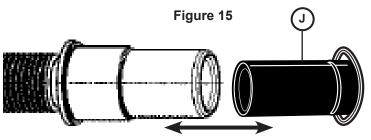
min 20" (508mm) max 43" (1100mm)



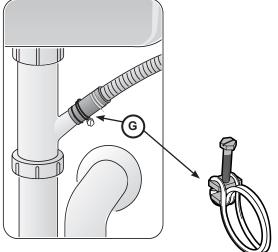
### Installation of Rubber Drain Hose Adaptor

For a large port, use the drain hose as it is.

- 1. For a small port, insert the rubber drain hose adaptor into the drain hose end.
- 2. Obtain the Rubber Drain Hose Adaptor (J) spring clamp from the Dishwasher Installation Kit (do not substitute).
- Insert the dishwasher drain hose into the end of the drain hose (see Figure 15). Be sure to fully insert the drain hose.
- 4. Use the clamp provided to attach the Rubber Drain Hose Adaptor to the house plumbing as shown in **Figure 16**.







Installation of Mounting Brackets

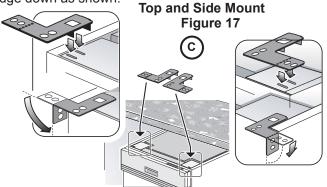
### CAUTION

Before installing the supplied countertop mounting brackets, decide which method of securing the dishwasher into its enclosure will be used. Once the mounting brackets are installed on the dishwasher, removing them is difficult and will damage the mounting brackets and the dishwasher.

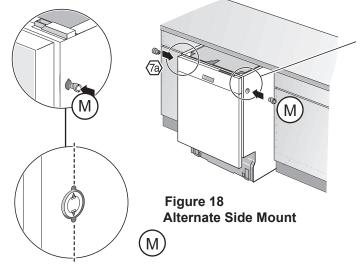
The dishwasher can be secured into its enclosure in 3 ways:

NOTE: If your dishwasher opening width measures >23<sup>5</sup>/<sub>8</sub>" (600 mm) use the TOP or SIDE MOUNT mounting methods. If your dishwasher opening width measures 23<sup>5</sup>/<sub>8</sub>" (600 mm) use the ALTERNATE SIDE MOUNT mounting method. **Top Mount** is used for countertops made of wood or other materials that can be easily drilled. Orient the mounting brackets as shown in **Figure 17** and position the two small tabs on the mounting brackets over the two slots on the dishwasher's front corners. Push the mounting brackets down firmly to insert the tabs into the slots. The difference in Top Mount and Side Mount is the screw will be placed and secured in different holes of the mounting bracket (refer to "Securing the Dishwasher" section on the next page).

**Side Mount** is used for countertops made of marble, granite, or other very hard materials that cannot be easily drilled. Bend the mounting brackets along the small holes and in the same direction as the two small tabs. Orient the mounting brackets as shown in **Figure 17**, and position the two small tabs on the mounting brackets over the two slots on the dishwasher's front corners. Push the mounting brackets down firmly to insert the tabs into the slots. Bend perforated edge down as shown.



Alternate Side Mount for opening  $23^{5}/_{8}$ " (600 mm). Insert a side mount force distributor (M) in each side as shown in Figure 18.



# A WARNING

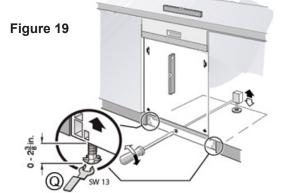
Avoid Tip Over Hazard! Do not use the dishwasher until it is completely installed. When opening the door on an uninstalled dishwasher, carefully open the door while supporting the rear of the unit. Failure to follow this warning can result in serious injury.

### LEVELING THE DISHWASHER

The unit should now be ready to slide into the cabinet opening. To avoid scratching the floor, use floor protection and caution when sliding the dishwasher into the cabinet. Make sure that the hoses and cords do not bunch up behind the unit or kink as you slide the unit back. Make certain to slide the unit into place before raising the leg levelers.

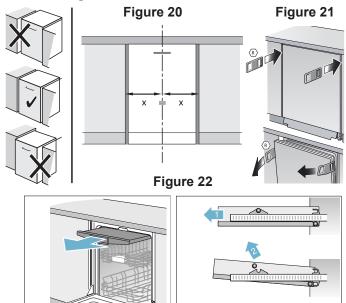
Level the dishwasher horizontally by turning feet clockwise to raise or counter-clockwise to lower front of the unit.

Level the dishwasher vertically by turning center screw to raise or lower the back.



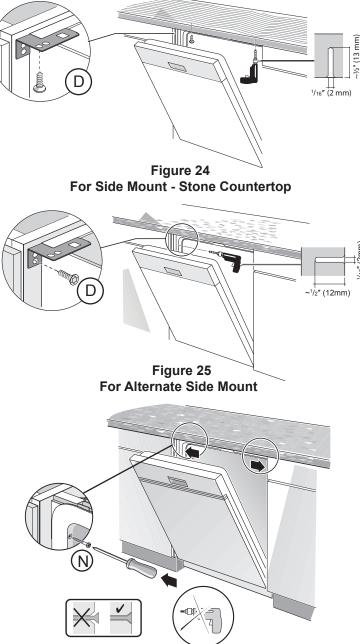
### SECURING THE DISHWASHER

Center the dishwasher in the opening before securing it to your cabinet or countertop as shown in **Figure 20**. Use the supplied emergency release tools (R) to open the appliance as shown in **Figure 21**. Remove the top cutlery rack as shown in **Figure 22**.

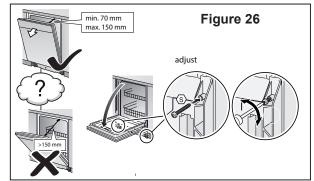


Drive the mounting screws through the holes in the mounting brackets as shown for Top Mount (**Figure 23**), Side Mount (**Figure 24**), and Alternative Side Mount (**Figure 25**).

Figure 23 For Top Mount - Wooden Countertop



When installing a heavy wooden door panel, adjust as shown in **Figure 26**.

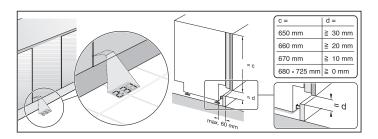


### **Attaching the Toe Panel**

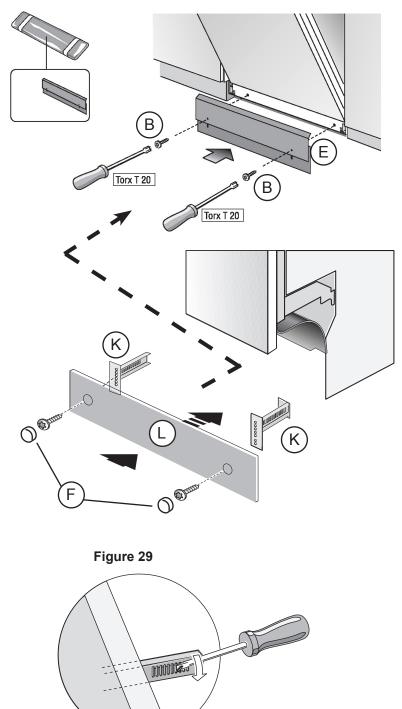
Your dishwasher comes with either a two-piece or threepiece toe panel (model dependent) to allow height adjustment.

- 1. Ensure the time projector is visible (depending on the model). Also when attaching the toe panel, ensure the distances are in the correct ranges. See **Figure 27**.
- 2. Position the slotted rear toe panel (part of E) on the dishwasher first. Allow it to rest on the floor.
- 3. Position the mating front toe panel (part of E) on top of the rear toe panel allowing the angled edge to rest on the mating edge of the dishwasher.
- 4. Drive the two black screws (B) through the holes in the toe panel to secure. Use the supplied screws to avoid damaging the dishwasher. See **Figure 28**.
- 5. For models with a three-piece toe panel, the rubber apron removed earlier may now be attached and should remain behind the outermost toe panel.
- For models with outer toe panel (3rd piece L) slide the brackets (K) provided, into the slots of the toe panel you just attached.
- Once you determine the correct position for the brackets, remove the bracket and bend the metal tab. See Figure 29. This ensures that the toe panel will not slide in further than you need.
- 8. Re-insert the brackets.
- Attach the outer toe panel (L) onto the brackets and drive the screws provided (F) in place to secure the toe panel ensuring that the rubber apron is completely hidden behind the outer toe panel.

Figure 27







### **Customer Service**

Your dishwasher requires no special care other than that described in the Care and Maintenance section of the Use and Care Manual. If you are having a problem with your dishwasher, before calling for service please refer to the Self Help section in the Use and Care Manual. If service is necessary, contact your dealer or installer or an authorized service center.

Do not attempt to repair the appliance yourself. Any work performed by unauthorized personnel may void the warranty. If you are having a problem with your dishwasher and are not pleased with the service you have received, please take the following steps (in the order listed below) until the problem is corrected to your satisfaction:

- 1. Contact your installer or the Authorized Service Contractor in your area.
- 2. E-mail us. See your Use and Care Manual for instructions.
- Write us at the address below: BSH Home Appliances, Corp. 1901 Main Street, Suite 600 Irvine, CA 92614
- 4. Call us at the Customer Service phone number : 1-800-944-2904

Please be sure to include (if you are writing), or have available (if you are calling), the following information:

- Model number
- Serial number
- Date of original purchase
- Date the problem originated
- Explanation of the problem
- Daytime phone number where you can be reached.

Please make a copy of your invoice and keep it with this manual. The customer must show proof of purchase to obtain warranty service.