

Dishwasher Installation Instructions for 18-inch Models

English/French/Spanish

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Read these installation instructions completely and follow them carefully.

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Important Safety Instructions

⚠ WARNING

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.

CAUTION

If the dishwasher is installed in a location that experiences freezing temperatures (e.g., in a holiday home), you must drain all the water from the dishwasher's interior. Water system ruptures that occur as a result of freezing are **NOT COVERED BY WARRANTY.**

IMPORTANT

- The dishwasher drain hose must be installed with a portion of it at least 20" (508mm) off the cabinet floor; otherwise the dishwasher may not drain properly.
- This dishwasher is intended for 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.

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.

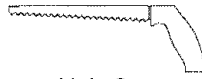
NOTE: Do not discard any bags or items that come with the original package until after the entire installation has been completed.

Tools and Materials Needed

TOOLS NEEDED



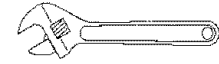
Hammer



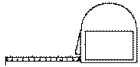
Hole Saw



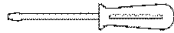
Pipe Wrench



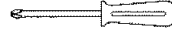
Adjustable Wrench



Tape Measure



Slot Screwdriver



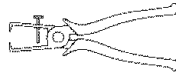
Phillips Screwdriver



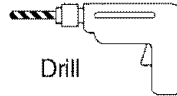
T-20 Screwdriver



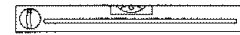
Wire Cutter



Wire Stripper



Drill



Level

MATERIALS NEEDED

(Additional materials may be required to comply with local codes.)



Electrical Supply Cable - Minimum #14 AWG, 2 conductor, 1 ground, insulated copper conductors rated 75°C or higher.



Hot Water Supply Line - Minimum 3/8" 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).



Teflon brand tape or other pipe thread compound to seal plumbing connections.



UL listed conduit connector or strain relief. Although a strain relief is included on the junction box, a separate strain relief may be required if you attach the field wiring directly to the terminal block.

Materials Supplied

MATERIALS SUPPLIED

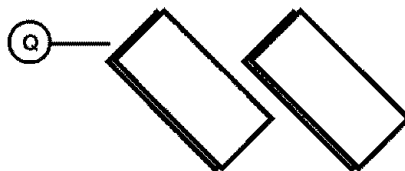
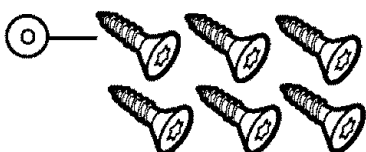
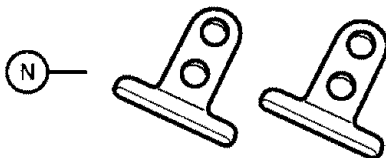
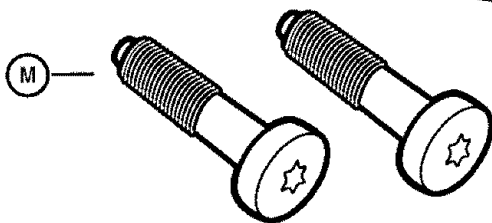
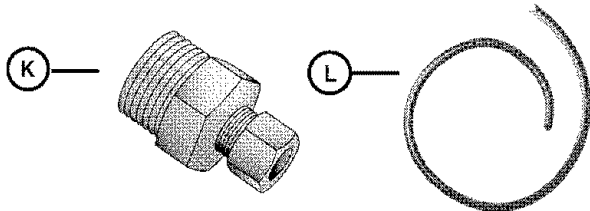
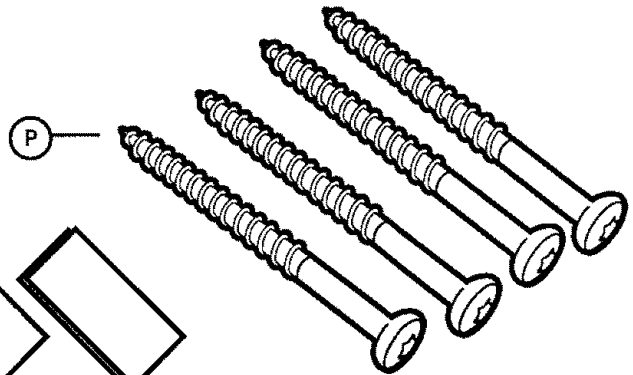
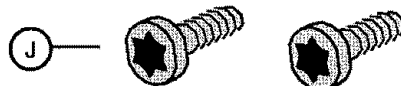
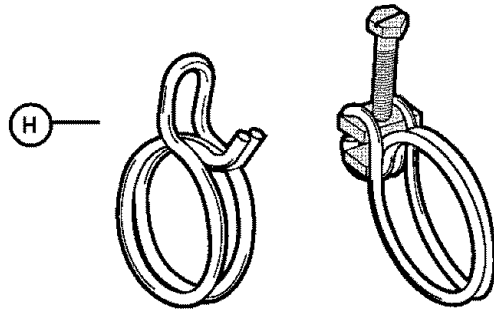
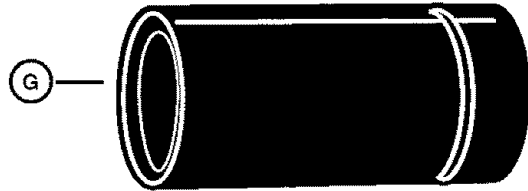
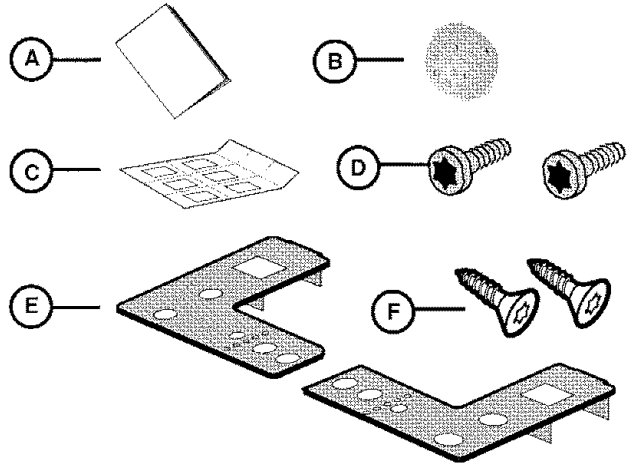
Accessory Parts Supplied

Accessory parts for your dishwasher come in one or more plastic bags that are outlined below.

NOTE: Make sure you save all the bags until you have completed your installation.

NOTE: Always use the supplied or recommended hardware.

- A Use & Care Manual and Installation Instructions
- B Extra Tall Item Sprinkler
- C Integrated Door Mount Template for Custom Door Panels (select models)
- D Toe Panel Screws (2 black screws)
- E Counter Top Mounting Brackets (2 "L" shaped metal brackets)
- F Mounting Bracket Screws (2 silver wood screws)
- G Rubber Drain Hose Adaptor (1 black rubber tube)
- H Hose Clamps (1 spring clamp to use to attach the rubber adaptor to the Drain Hose and 1 screw clamp to attach the rubber adaptor to the plumbing)
- I Electrical Junction Box Mounting Screws (4 screws)
- J Leg Leveler Locking Screws (2 silver coarse threaded screws)
- K Water Supply Adaptor Fitting
- L Flexible Edge Protector Grommet for the electrical wire
- M Spring Tension Screws (2 larger silver machine screws used to adjust the door springs to accommodate doors of different weights)
- N Door Mounting Brackets (2 metal brackets)
- O Door Mounting Bracket Screws (6 silver wood screws)
- P Door Mounting Screws (4 long silver screws used to attach the door)
- Q Hook and Loop Fastening Strips (2 adhesive-backed strips)



Enclosure Requirements

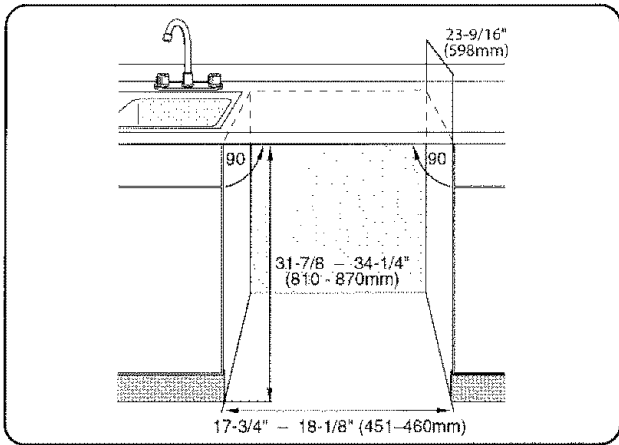


Figure 1

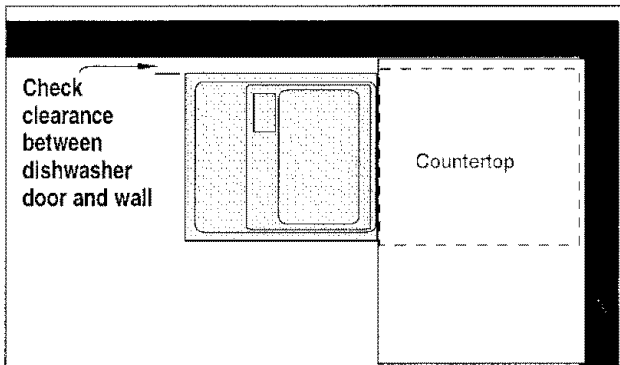


Figure 2

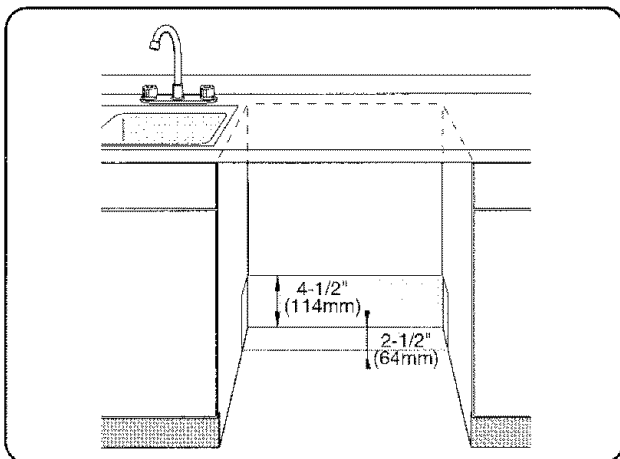


Figure 3

⚠ WARNING

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

ENCLOSURE PREPARATION

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**.

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

⚠ 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 make 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**.

Required Openings:

- 4¹/₄" x 2" (108 x 52mm) - To pass the included electrical supply junction box through to an adjacent cabinet
- 3" x 1³/₄" (76 x 45mm) - To pass the included water supply line toward the water supply
- 1¹/₄" (32mm) diameter - To pass the dishwasher drain hose toward the drain connection

NOTE: If the incoming electric supply, water supply and drain connections are all in the same cabinet, the one 4¹/₄" x 2" (108 x 52mm) hole will be large enough for all three to pass through.

Electrical Preparation

ELECTRICAL PREPARATION

⚠ 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.

⚠ WARNING

Avoid Fire Hazard

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

Dishwasher Electrical Rating

| Volts | Hertz | Amperes | Watts |
|--------------|--------------|----------------|----------------|
| 120 | 60 | 12 | 1,450 (max) |

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.

⚠ 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.

Electrical Preparation

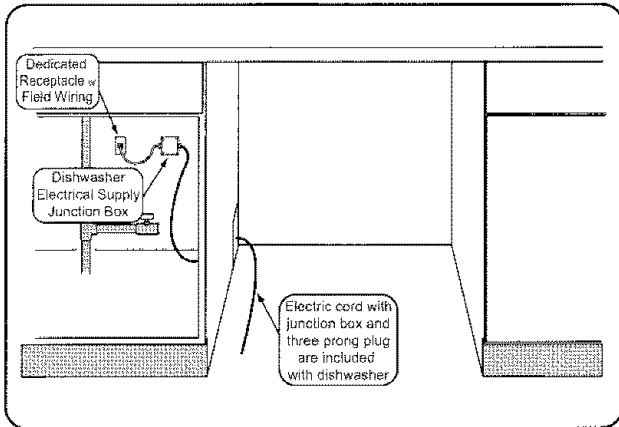


Figure 4

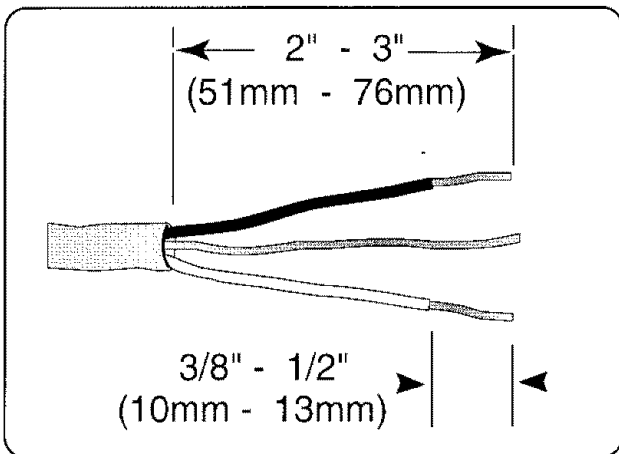


Figure 5

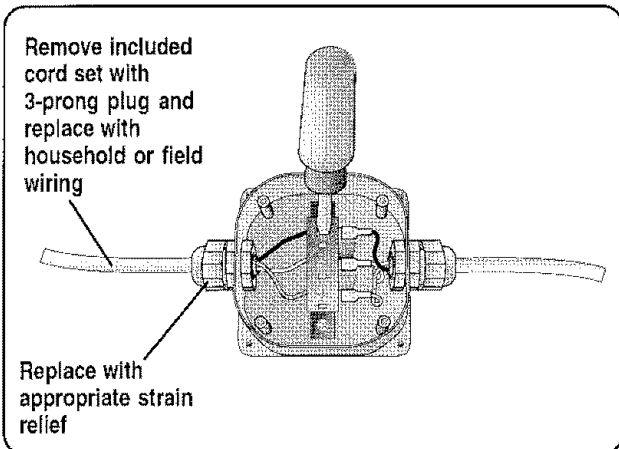


Figure 6

⚠ WARNING

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.

Electrical Connection

The dishwasher electrical supply junction box 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 $4\frac{1}{4}'' \times 2''$ (108 x 51mm) opening through the cabinet in order to pass the junction box through (see Figure 4). If the opening is made through wood, sand it smooth. If the opening is made through metal, use the included protective grommet 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 4). 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 (see Figure 4).

Method B - Permanent connection to household or field wiring

Remove the included cord set with three-prong plug and use the supplied junction box to connect directly to the household or field wiring. Make sure the household or field wiring meets the above electrical supply requirements as well as national and local codes (see Figure 6).

To permanently connect to household or field wiring:

1. Remove the dishwasher electrical supply junction box cover and disconnect the supplied cord set with three-prong plug from the terminal block by loosening the corresponding screws (see Figure 6).
2. Replace the included outgoing strain relief with one suitable for the household or field electrical supply wiring.
3. Remove 2" to 3" (51 - 76mm) of the outer casing of the household or field supply wiring as shown in Figure 5. Remove $\frac{3}{8}''$ to $\frac{1}{2}''$ (10 - 13mm) of the insulation from each wire as shown in Figure 5.
4. Insert the ground leg of the household or field wiring to the ground connection "G" of the terminal block and securely tighten the terminal block screw (see Figure 6).
5. Insert the neutral leg of the household or field wiring to the "N" connection of the terminal block and securely tighten the terminal block screw (see Figure 6).
6. Insert the line leg of the household or field wiring to the "L" connection of the terminal block and securely tighten the terminal block screw (see Figure 6).
7. Check all electrical connections to make sure they are secure and then attach the junction box cover with the 4 screws.

Plumbing Preparation

INLET WATER CONNECTIONS

⚠ 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.

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 it to clear any foreign material.
- Turn on the water supply and check for leaks after connections are made.
- Do not use pipe sealant on compression fittings.

Plumbing Preparation

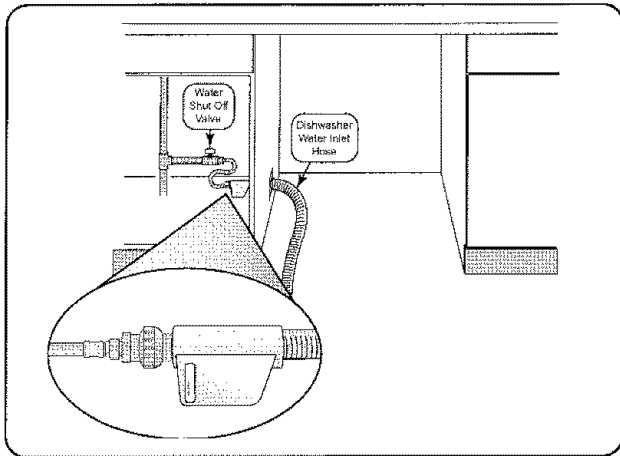


Figure 7

Water Supply Shut Off Valve

Install an easily accessible shut-off valve (not supplied) in the hot water supply line, as shown in Figure 7. 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 1³/₄" (76 x 45mm) 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 from the parts bag onto the dishwasher water supply hose (see Figure 7). 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 7.

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

Plumbing

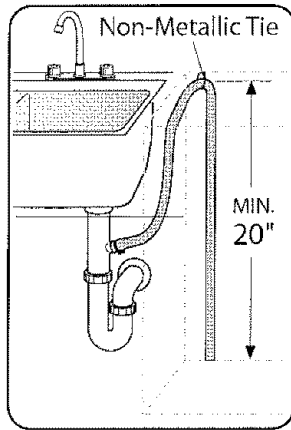


Figure 8

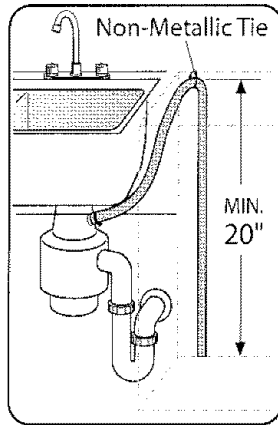


Figure 9

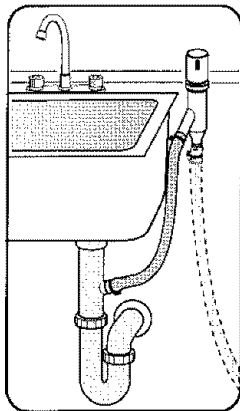


Figure 10

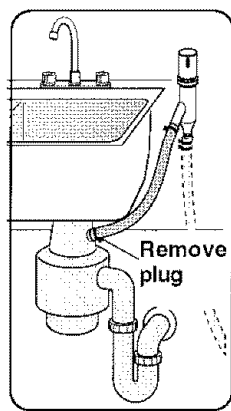


Figure 11

Drain Connections

Connecting the Drain Hose to the Household Plumbing

The dishwasher drain hose may be connected to the household or field drain plumbing in one of four ways. You will need a 1 1/4" diameter hole in order to pass the drain hose through the cabinet.

- 1 Directly to the undersink dishwasher drain connection, as shown in Figure 8.
- 2 Directly to a disposer dishwasher drain connection, as shown in Figure 9.
- 3 To the undersink dishwasher drain connection through an air gap, as shown in Figure 10.
- 4 To a disposer dishwasher drain connection through an air gap, as shown on Figure 11.

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 inches 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 inches.

Plumbing

Installation of the Rubber Drain Hose Adaptor

- 1 Obtain the Rubber Drain Hose Adaptor and the two hose clamps from the Dishwasher Installation Kit (**do not substitute**).
- 2 On one outside end of the Rubber Drain Hose Adapter is a raised rib. Insert the dishwasher drain hose into the **end without the raised rib** (see Figure 12). Be sure to fully insert the drain hose.
- 3 Secure the connection with the Spring Clamp (see Figure 13).
- 4 Use the Screw Clamp to attach the Rubber Drain Hose Adaptor to the house plumbing (see Figure 13).

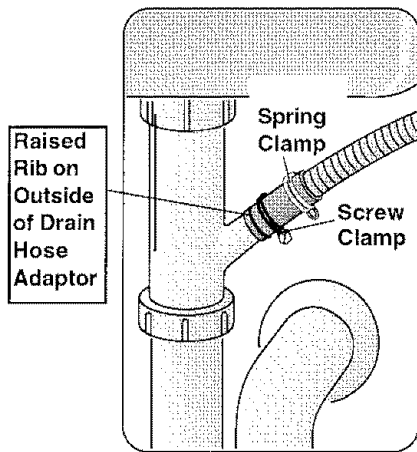
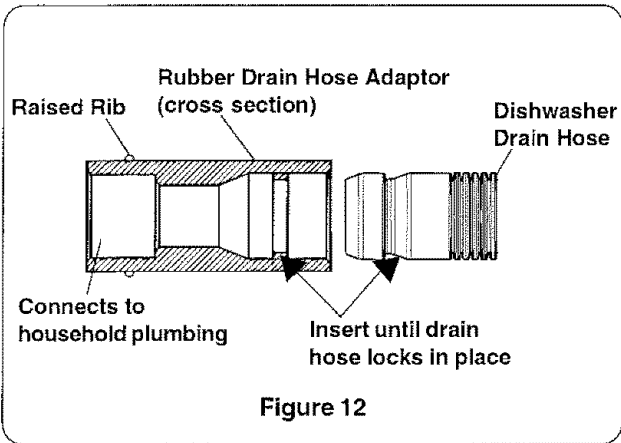


Figure 13

Dishwasher Placement

FINAL STEPS

- Installing the Mounting Brackets
- Sliding the dishwasher into place
- Leveling the dishwasher
- Securing the unit
- Attaching the toe panel

⚠ CAUTION

When any covers are removed or the dishwasher is out of the cabinet, electrical power and sharp edges or points may be exposed.

Installing the Countertop 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.

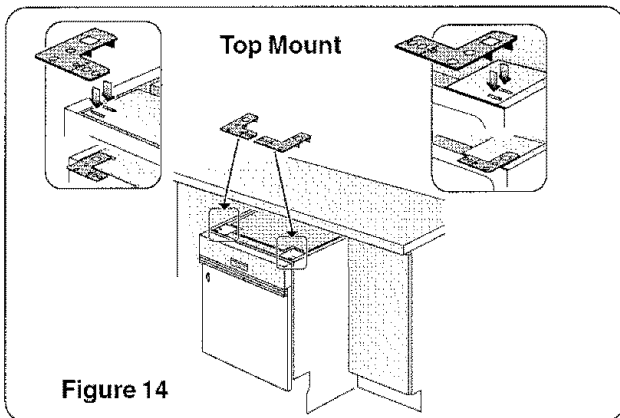


Figure 14

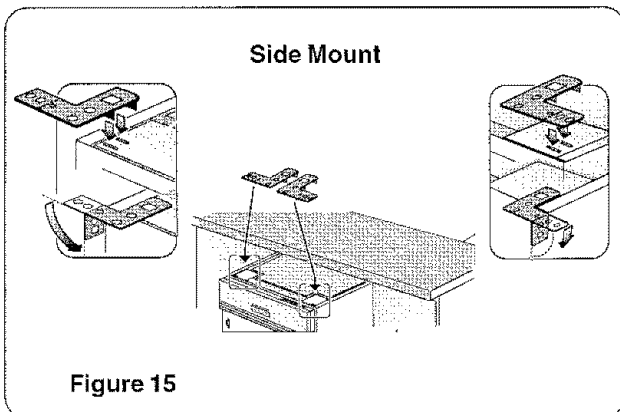


Figure 15

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

- 1 **Top Mount** is used for countertops made of wood or other materials that can easily drilled. Orient the mounting brackets as shown in Figure 14, 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.
- 2 **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 15, 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.

⚠ 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.

Dishwasher Placement

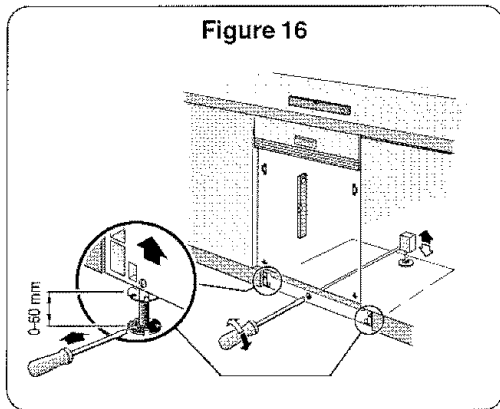


Figure 16

SLIDING THE DISHWASHER INTO PLACE

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.

LEVELING THE DISHWASHER

Make sure the dishwasher is level. Adjust the rear leveler by turning the center screw at the front of the dishwasher, as shown in Figure 16. Turning the screw clockwise raises the rear of the dishwasher. Adjust the front levelers as shown in Figure 16. Turning the levelers to the right raises the dishwasher.

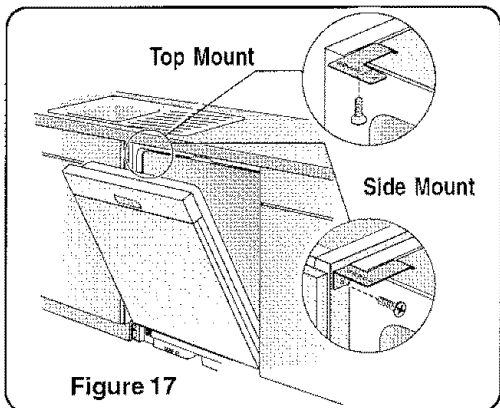


Figure 17

SECURING THE DISHWASHER

1. Drive the mounting screws through the holes in the mounting brackets as shown in Figure 17 for Top or Side Mount.
2. After the unit is installed in the enclosure, leveled and secured, lock the two front leg levelers in place by driving the enclosed leg leveler locking screws into each screw boss located in front of the levelers. See Figure 18.
3. Tighten screws until they are flush with the surface of the bosses.

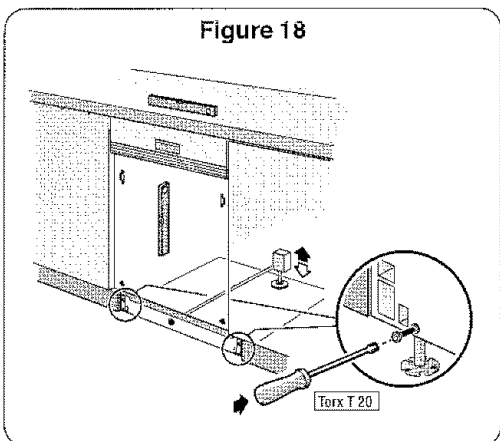


Figure 18

ATTACHING THE TOE PANEL

Your dishwasher comes with a two-piece toe panel to allow height adjustment.

1. Position the *slotted* rear toe panel on the dishwasher first. Allow it to rest on the floor.
2. Position the mating front toe panel on top of the rear toe panel allowing the angled edge to rest on the mating edge of the dishwasher.
3. Drive the two black screws (included) through the hole in the toe panel to secure. Use the supplied screws to avoid damaging the dishwasher. See Figure 19.

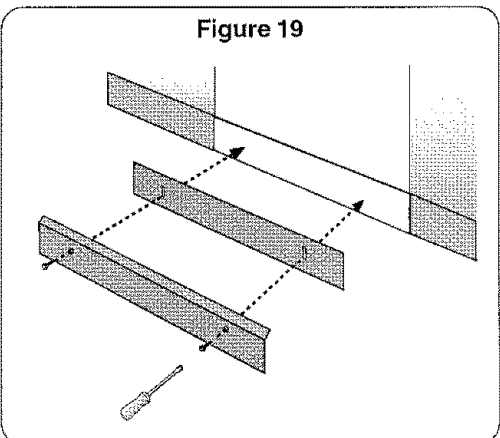


Figure 19

DOOR PANEL INSTALLATION

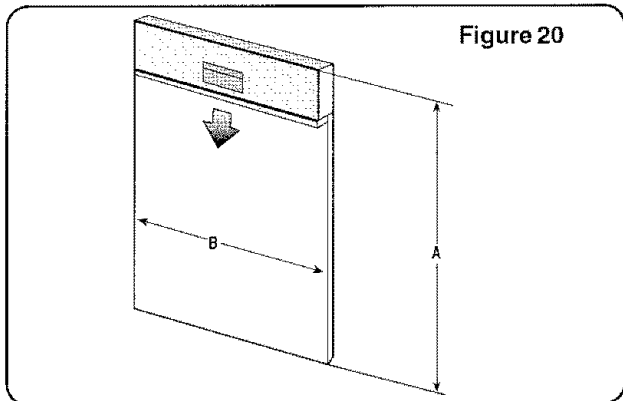


Figure 20

Fully Integrated Models

Fully integrated models allow you to have a custom door panel made to match your cabinetry. The custom door can be a two-piece configuration to look like a drawer at the top and a cabinet door at the bottom or like a single full-length door. A template is included with the fully integrated models to explain the mounting procedure.

| Fig. 20 Dimension | Integrated Panel Dimensions for Custom Door Panels |
|-------------------|--|
| A | 25 ⁵ / ₁₆ " - 28 ⁵ / ₁₆ " (640mm - 719mm) |
| B | 17 ⁵ / ₁₆ " - 17 ⁹ / ₁₆ " (440mm - 446mm) |

DOOR TENSION ADJUSTMENT (only on fully integrated models with custom door panels)

After the dishwasher and custom door panel are installed, open and close the door several times to make sure that it does so with ease. If the door falls open too quickly, the spring tension needs to be adjusted.

NOTE: The door tension springs that are included with this fully integrated dishwasher will provide proper function for custom door panels weighing between 5.5 and 16.5 pounds (2.5 - 7.5 kilos).

To Adjust the Spring Tension:

1. Obtain the provided Spring Tension Screws from the Integrated Door Panel Installation Kit.
2. Insert the screws as shown in Figure 21. Turning the screw clockwise increases the spring tension.

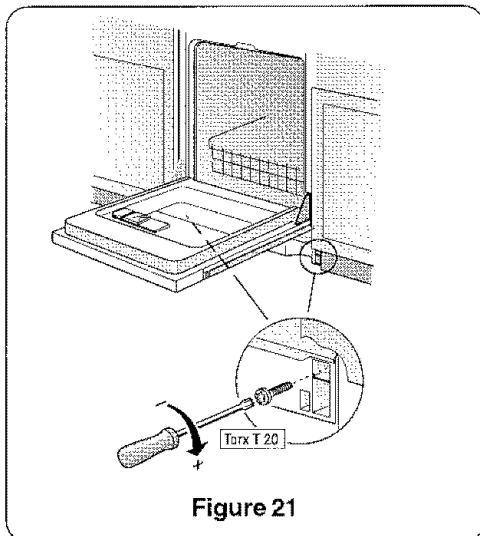


Figure 21

⚠ WARNING

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.

FINAL INSTRUCTIONS

1. Turn the water on. Always check for leaks.
2. Energize the dishwasher power supply circuit.
3. Consult the Dishwasher Use and Care Manual, and run the dishwasher through one complete cycle. If the dishwasher does not operate properly, refer to the Self-Help section of the Use and Care Manual. If the dishwasher still does not operate properly, refer to the Customer Service Section of the Use and Care Manual.

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.

⚠ CAUTION

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

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.
3. Write us at the address below:
BSH Home Appliances, Corp.
5551 McFadden Avenue
Huntington Beach, CA 92649

4. Call Customer Service at 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 (see Figure 22)
- Serial number (see Figure 22)
- Date of original purchase
- Date the problem originated
- Explanation of the problem

Also, if you are writing, please include a 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.

Figure 22

