

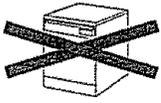
Installation instructions for your new

Built-In Dishwasher



CAUTION:

- Before you begin—Read these instructions completely and carefully.
- **IMPORTANT**—Save these instructions for local inspector's use.
- **IMPORTANT**—OBSERVE ALL GOVERNING CODES AND ORDINANCES.
- Note to Installer—Be sure to leave these instructions with the Consumer.
- Note to Consumer—Keep these instructions with your Owners Manual for future reference.



If you received a damaged dishwasher, you should immediately contact your dealer or builder.

The dishwasher MUST be installed to allow for future removal from the enclosure if service is required. Installation of this dishwasher requires basic mechanical and electrical skills. Proper installation is the responsibility of the installer.

PARTS SUPPLIED FOR INSTALLATION:

- Two Phillips head countertop mounting screws taped to dishwasher

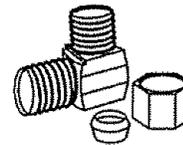
MATERIALS YOU WILL NEED:

Materials required:

- 90° elbow (3/8" NPT external thread on one end and opposite end sized to fit water supply)
- Thread seal tape
- UL Listed Wire nuts (3)



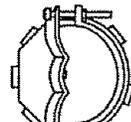
Electrical Cable or Power Cord



90° Elbow



Screw Type Clamps



Strain Relief



Thread Seal Tape



Wire Nuts



Hot Water Line

For new installations only:

- Air gap for drain hose, if required
- Waste tee for house plumbing, if applicable
- Electrical cable or power cord, if applicable
- Screw type hose clamps
- Strain relief for electrical connection
- Hand shut-off valve (recommended)
- Water line 3/8" min. copper or 1/2" min. plastic
- Coupler for extending drain line, if applicable



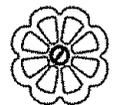
Air Gap



Waste Tee



Coupler



Shut-Off Valve

TOOLS YOU WILL NEED:

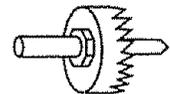
Tools required:

- Phillips head and flat blade screwdrivers
- Adjustable wrench (6")
- Level
- Carpenters square
- Measuring tape
- Safety glasses
- Flashlight

Flat Blade Screwdriver



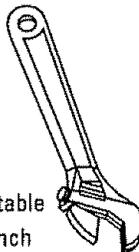
Flashlight



Hole Saw Set



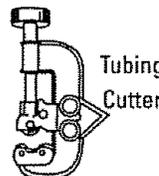
Safety Glasses



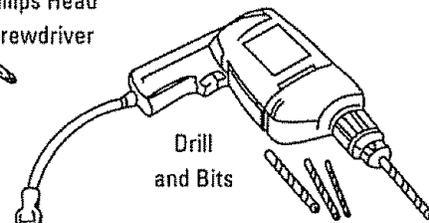
Adjustable Wrench



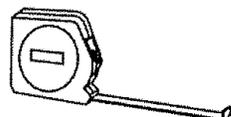
Phillips Head Screwdriver



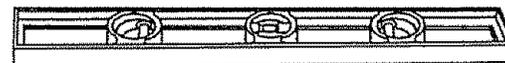
Tubing Cutter



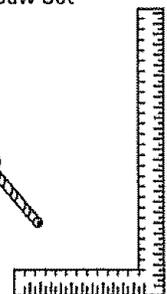
Drill and Bits



Measuring Tape



Level



Square

For new installations only:

- Tubing cutter
- Drill and appropriate bits
- Hole saw set

PREPARE DISHWASHER ENCLOSURE

- The rough cabinet opening must have a minimum width and depth of 24", and approximately 34-1/2" high from floor to underside of the countertop. Figure A
- The back wall should be free of pipes or wires. Figure A
- Adjacent cabinets should be square and plumb to ensure a good fit. Figure A
- For corner installation, allow 2" min. clearance between dishwasher and adjacent cabinet or wall or other appliances. Figure B

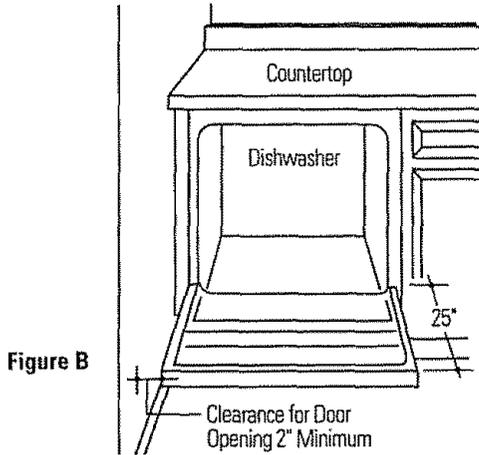


Figure B

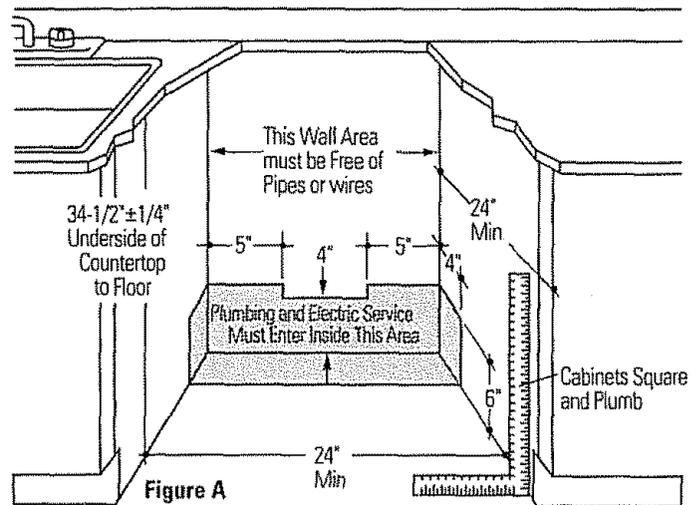


Figure A

- Make sure the floor is level inside the opening and even with the finished floor of the kitchen.
- The dishwasher must be installed no more than 10 feet from sink for proper drainage.
- This dishwasher must be fully enclosed on the top, sides and back.
- The dishwasher must not support any part of the enclosure.

PREPARE DRAIN PLUMBING

DRAIN REQUIREMENTS

- Follow local codes and ordinances.
- Dishwasher drain hose must not exceed 10 feet in length for proper drainage.
- Dishwasher must be connected to waste line with an air gap (not supplied) or 32" minimum, high drain loop depending on local codes and ordinances to prevent back flow into the dishwasher.
- Air gap must be used if waste tee or disposer connection is less than 18 inches above floor to prevent siphoning.

DRAIN PREPARATION

The type of drain installation depends on answers to the following questions:

- Do local codes or ordinances require an air gap?
- Will waste tee or disposer connection be less than 18" above floor?
- Will installation have a drain loop less than 32" above floor?

If the answer to **ANY** of the 3 questions above is **YES**, **Method 1 MUST be used**. Otherwise either Method 1 or Method 2 may be used. Figure C or Figure D.

CAUTION

An air gap **MUST BE USED** if the drain hose is connected to waste tee or disposer lower than 18" above the floor level.

Failure to provide the proper drain connection height with air gap or 32" minimum, high drain loop will result in improper draining of the dishwasher which may cause damage.

METHOD 1—Air Gap with Waste Tee or Disposer

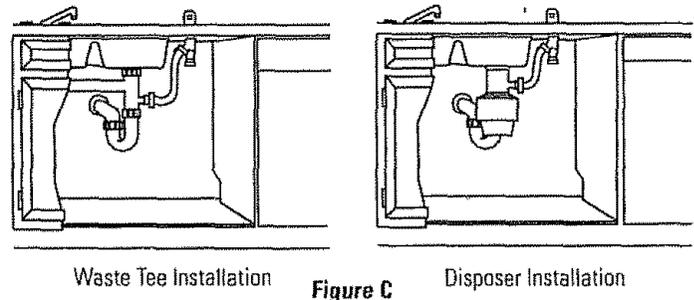


Figure C

METHOD 2—High Drain with Waste Tee or Disposer

Provide a method to attach drain hose to underside of countertop. Attachment will be made in a later step.

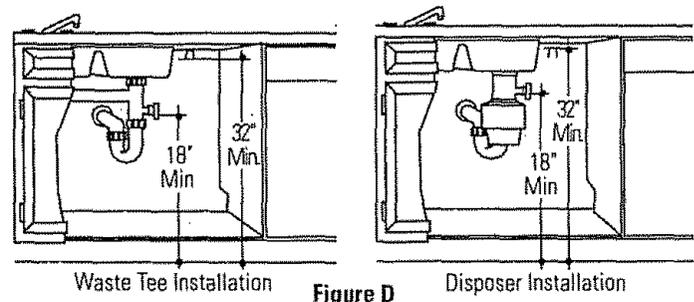


Figure D

Install waste tee or disposer and air gap according to manufacturer's instructions.

CABINET PREPARATION

Drill 1-1/2" inch diameter hole in the cabinet wall within the shaded area shown in Figure A for the drain hose. Make sure there are no sharp edges. Drain hose will be passed through this hole and connected to the drain in a later step.

PREPARE ELECTRICAL WIRING



WARNING

FOR PERSONAL SAFETY: REMOVE HOUSE FUSE OR OPEN CIRCUIT BREAKER BEFORE BEGINNING INSTALLATION.

DO NOT USE AN EXTENSION CORD OR ADAPTER PLUG WITH THIS APPLIANCE.

ELECTRICAL REQUIREMENTS:

- This appliance must be supplied with 120V, 60 Hz., and connected to an individual, properly grounded branch circuit, protected by a 15 or 20 ampere circuit breaker or time delay fuse.
- Wiring must be 2 wire with ground.
- If the electrical supply provided does not meet the above requirements, call a licensed electrician before proceeding.

GROUNDING INSTRUCTION

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 be connected to the equipment-grounding terminal or lead on the appliance.



WARNING

THE IMPROPER CONNECTION OF THE EQUIPMENT-GROUNDING CONDUCTOR CAN RESULT IN A RISK OF ELECTRIC SHOCK. CHECK WITH A QUALIFIED ELECTRICIAN OR SERVICE REPRESENTATIVE IF YOU ARE IN DOUBT WHETHER THE APPLIANCE IS PROPERLY GROUNDED.

PREPARE HOT WATER LINE

1. The hot water line may enter from either side, the rear or from the floor within the shaded area shown in Figure F.
2. Cut a hole approximately 1-1/2" dia. within the shaded area to admit the line.
3. Turn off the water supply.
4. Install a hand shut-off valve in the supply line in an accessible location, such as under the sink. (The shut-off valve is optional, but recommended and may be required by local codes.)
5. Water connection is on left side of dishwasher. Install the hot water inlet line, using no less than 3/8" O.D. copper tubing or 1/2" O.D. plastic tubing. Route line as shown in Figure F. Extend the water line forward at least 19" from rear wall.
6. Adjust the water heater to deliver water between the temperatures of 120°F and 150°F.
7. Flush water line to clean out debris.
8. The water pressure of the hot water supply line must be 20-120 PSI.

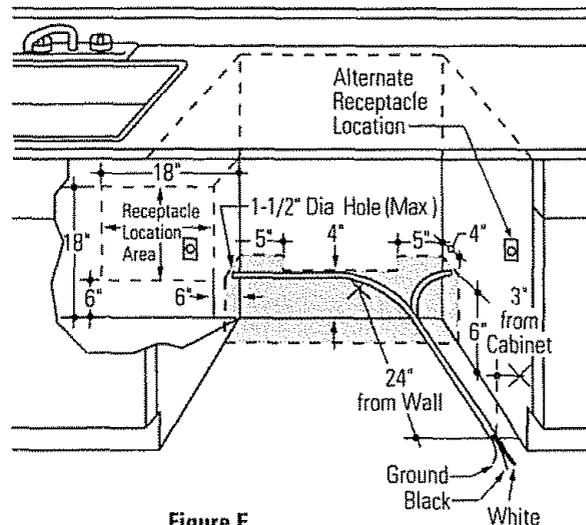


Figure E

CABINET PREPARATION & WIRE ROUTING

- Wiring may enter from either side, the rear, or from the floor within the shaded area shown in Figure E.
- Cut hole 1-1/2" max. dia. within the shaded area to admit the electrical cable or power cord. The hole must be free of sharp edges. If the cabinet wall partition is metal, the edge of the hole must be covered with a rubber protector.

ELECTRICAL CONNECTIONS TO DISHWASHER

Electrical connection is on right side of dishwasher.

- For cable direct connections the cable must be routed as shown in Figure E. Cable must extend a minimum of 24" from the rear wall.
- For power cord connections, install a 3-prong grounding type receptacle in the rear wall of sink cabinet next to the dishwasher. The receptacle should be installed at least 6", but not more than 18", from the cabinet opening for dishwasher.

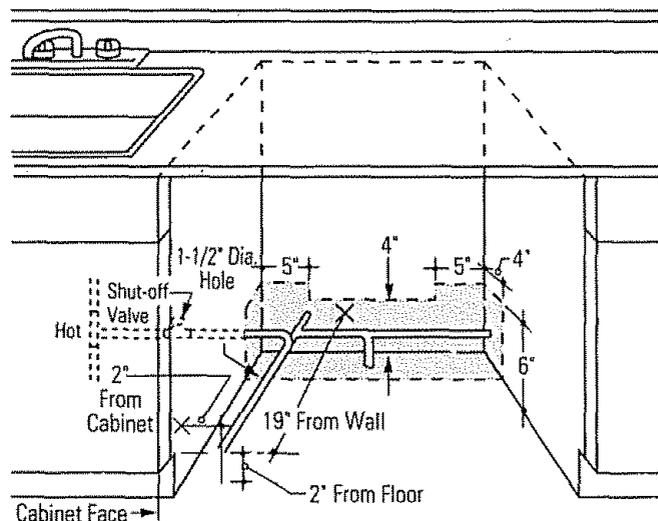


Figure F

INSTALLATION INSTRUCTIONS:

CAUTION

Do not remove the wood base until you are ready to install the dishwasher. The dishwasher will tip over when the door is opened.

Step 1 Check door balance before wood base is removed

Locate the 2 Phillips head countertop mounting screws wrapped with yellow tape and stuck to the top or side of the dishwasher. Set aside for use in Step 12.

Check door balance by opening and closing door. If necessary latch door and adjust one or both springs before the wood base is removed.

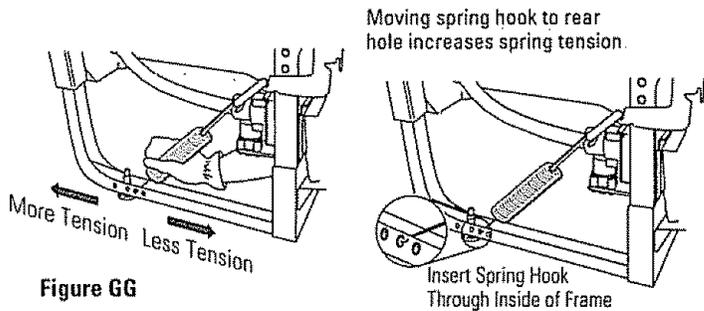


Figure GG

Step 2 Remove leveling legs and wood base.

Move the dishwasher close to the cabinet and lay it on its back. Remove the four leveling legs with an adjustable wrench. Remove and discard the wood base. **Do not "Kick" wood base off, damage will occur.**

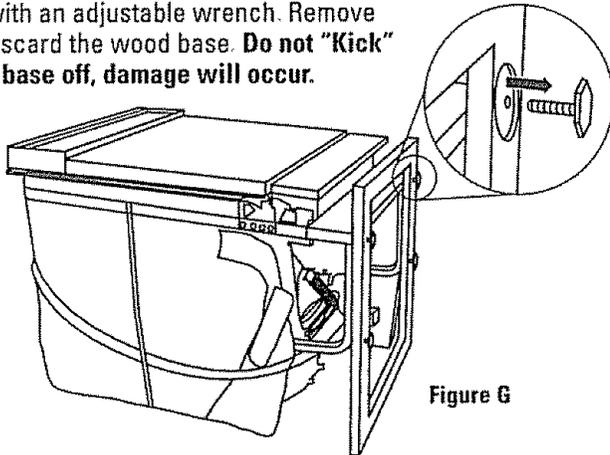


Figure G

Step 3 Install leveling legs

Screw leveling legs back into the dishwasher frame. The legs should extend approximately 3/4" away from the frame.

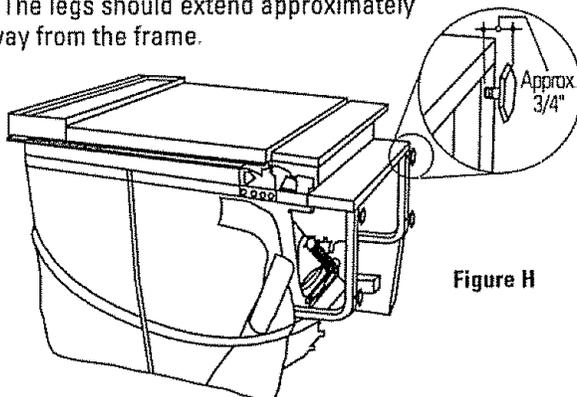


Figure H

Step 4 Remove access panel and toe kick

Remove the two screws below the access panel and set aside for reuse. Remove access panel by backing out the two screws located between the door and access panel. These screws are secured to access panel with plastic retainers.

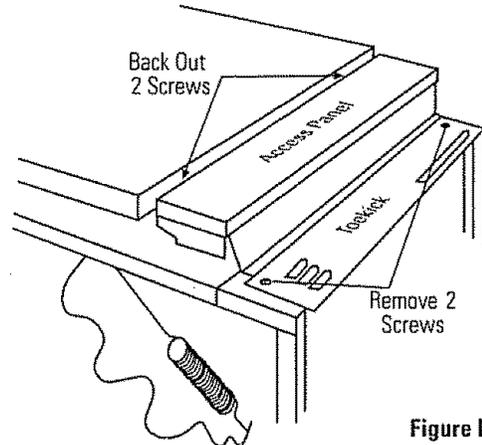


Figure I

Step 5 Install power cord (when used)

For power cord installation only. Skip this step if dishwasher will be directly wired.

Remove the junction box cover and install strain relief. The power cord and connections must comply with the National Electrical Code, Section 422 and/or local codes and ordinances. The cord must be no longer than 6 ft. from the junction box to the receptacle.

Note: Check That Harness Leads Are Threaded Thru Small Hole in Bracket

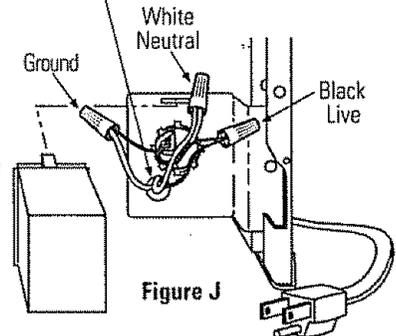


Figure J

Locate the three dishwasher wires (white, black and green) with the stripped ends. Using UL Listed wire nuts of appropriate size, connect incoming white to white, black to black, and incoming ground to green wire. Replace the junction box cover. Check that wires are not pinched under cover.

Step 6 Install 90° elbow

Install the 90° elbow fitting to the water valve using thread seal tape on the threads. The water valve requires 3/8" NPT fitting with external threads. The opposite end should fit water supply line. Position the end of the elbow to face the rear of the dishwasher

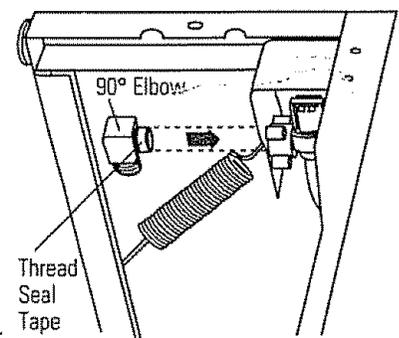


Figure K

Do not bend the dishwasher frame when installing the 90° elbow fitting to the water valve as this could cause the door spring to come in contact with the fill hose.

Step 7 Position water line and power supply

Position the water supply line and house wiring on the floor of the opening to avoid interference with base of dishwasher and components under dishwasher.

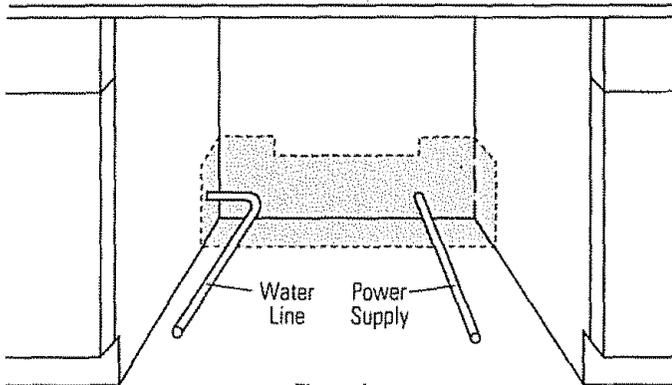


Figure L

Step 8 Insert drain hose through cabinet

Upright dishwasher and position in front of the cabinet opening. Insert the drain hose into the hole previously drilled in the cabinet wall. If a power cord is used, guide the end through a separate hole cut for the electrical cord.

Power cord should be routed directly to the rear of junction box avoiding contact with spring or other dishwasher components.

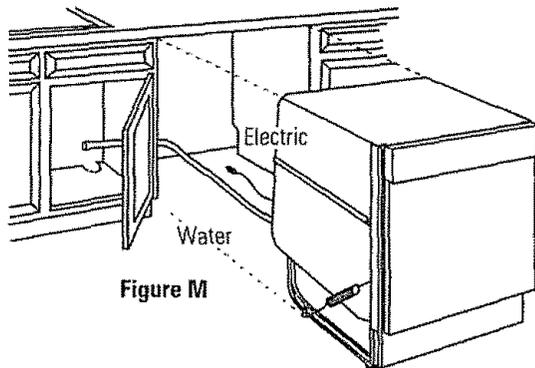


Figure M

Step 9 Slide dishwasher into cabinet

Slide the dishwasher into the opening a few inches at a time. As you proceed, pull the drain hose through the opening and under the sink. Make sure drain hose is not kinked under dishwasher. Check to be sure there is no interference with water line and wiring.

DO NOT PUSH AGAINST FRONT DOOR PANEL WITH YOUR KNEE. Damage to the door panel will occur.

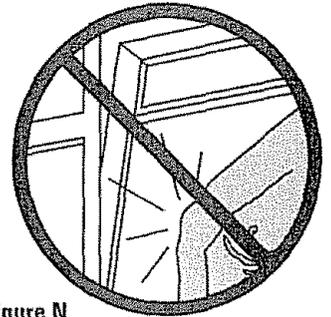
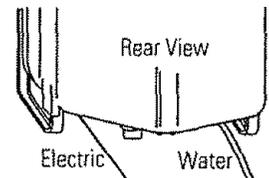


Figure N

Step 10 Align water and electrical lines

Route the water line and electrical supply to their connection locations under the dishwasher. Do not connect water and electrical in this step.



Rear View

Electric Water

Step 11 Level dishwasher

Level the dishwasher by adjusting the four leveling legs individually for correct alignment. See Figure O

Dishwasher should be level left to right and front to back for proper dish rack operation and dishwasher performance. Dishwasher door should be in alignment with adjacent cabinets. See Figure P.

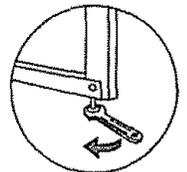


Figure O

Step 12 Position dishwasher and fasten to cabinet

Open the door and position the dishwasher tub flange 3/4" from the cabinet opening. Fasten the dishwasher to the underside of the countertop, using the 2 Phillips screws provided in Step 1. Be sure screws are driven straight and flush to avoid interference with door operation. See Figure P.

Important:

Make sure that dishwasher is centered in the opening and there is no interference with cabinets when opening or closing the door. Interference may cause a water leak when dishwasher is in operation.

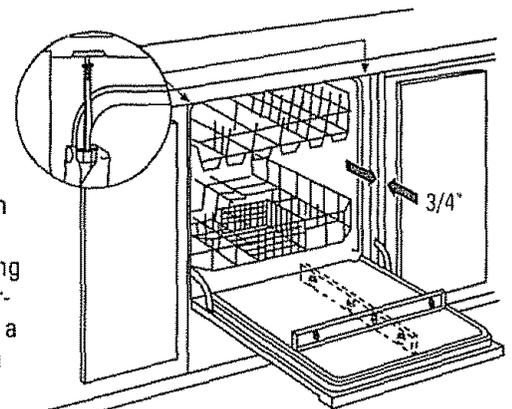
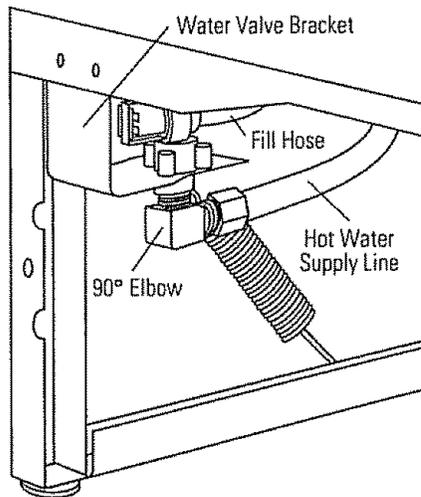


Figure P

Step 13 Connect water supply

Connect water supply line to 90° elbow installed in Step 6. Open and close the door. Check to be sure door spring does not rub against fill hose or water supply line.



Important: When opening and closing the door, the door spring should not touch the fill hose. If it does, bend water valve bracket slightly to provide clearance between the spring and the fill hose.

Figure Q

Step 14 Connect drain line

Follow all local codes and ordinances.

DRAIN LINE PREPARATION

The molded end is designed to fit 5/8", 3/4" or 1" diameter connections to the air gap, waste tee or disposer. Cut on premarked line as required for your installation as illustrated in Figure R.

Note: DO NOT CUT CORRUGATED PORTION OF HOSE.

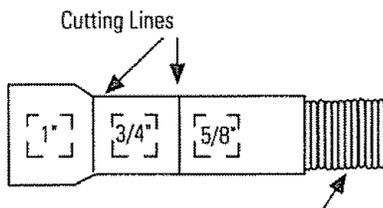


Figure R

Do not cut corrugated portion of hose

If the location requires a longer drain hose, add up to 42" of length to the factory installed hose. Use 5/8" or 7/8" inside diameter hose and a short section of copper water pipe of appropriate length and diameter to connect the two hose ends. Secure connection with appropriate clamps (not supplied).

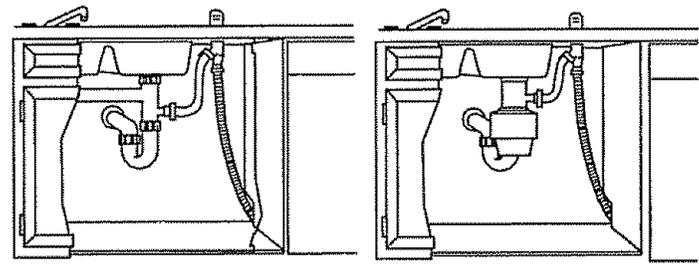
Note: TOTAL DRAIN HOSE LENGTH MUST NOT EXCEED 10 FEET FOR PROPER DRAIN OPERATION.

DRAIN LINE INSTALLATION

Connect drain line to air gap, waste tee or disposer using either Method 1 or Method 2 as previously determined. Refer to Figure S or Figure T.

Secure connection using appropriate clamps (not supplied). Make sure drain hose is not kinked.

Method 1—Air gap with waste tee or disposer

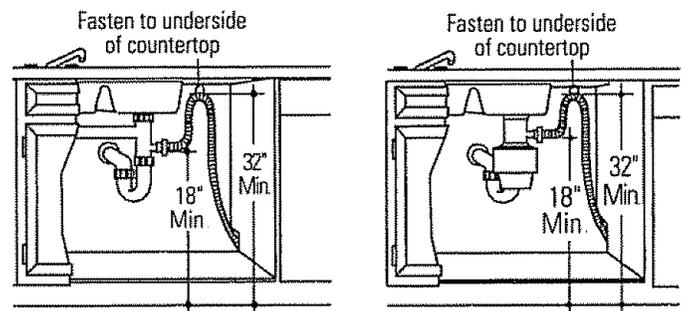


Waste tee installation

Disposer Installation

Figure S

Method 2—High drain loop with waste tee or disposer



Waste tee installation

Disposer Installation

Figure T

Note: BE SURE TO REMOVE DRAIN PLUG FROM DISPOSER BEFORE ATTACHING DRAIN LINE. DISHWASHER WILL NOT DRAIN IF PLUG IS LEFT IN PLACE.

Step 15 Connect power supply

Verify that power is turned off at source. If power cord is used, plug it into the wall outlet and go to Step 16. If dishwasher is to be directly wired to house wiring, continue with this step.

Remove junction box cover.

Secure the power supply cable to the back of the junction box with a strain relief (not supplied)

Locate the three dishwasher wires (white, black, and green) with the stripped ends. Insert the three wires through the small hole in the junction box bracket. Using wire nuts of appropriate size, connect incoming ground to green wire, white to white and black to black, as shown in Figure U. Replace the junction box cover. Check to make sure that wires are not pinched under junction box cover.



WARNING

If house wiring is not 2-wire with a ground wire, a ground must be provided by the installer.

When house wiring is aluminum, be sure to use U.L. Listed anti-oxidant compound and aluminum-to-copper connectors.

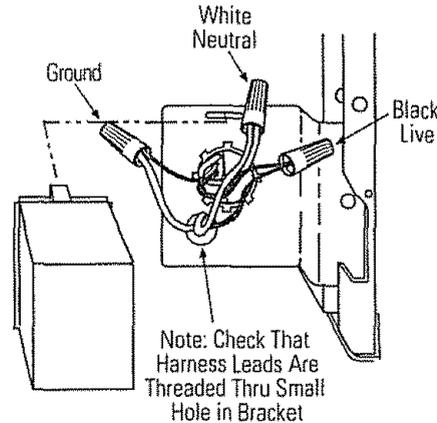


Figure U

Step 16 Pre-test check list

- Check to be sure power is off.
- Open dishwasher door and remove all foam and cardboard packaging.
- Remove literature package with Use & Care manual.
- Read the Use & Care manual to familiarize yourself with the operation of the dishwasher.
- Add two quarts of water to the bottom of the dishwasher to lubricate the pump seal.
- Remove the protective film if present from the control panel, access panel and door panel.
- Check to be sure that wiring is secure under the dishwasher, and not pinched or in contact with door springs or other dishwasher components.
- Pull lower rack about half way out. Check to be sure it does not roll back into dishwasher or further out. If it does, relevel dishwasher.
- Turn on water supply.
- Check for plumbing leaks. Tighten connections if necessary.
- Check that door spring does not contact water line, fill hose, wiring or dishwasher components.
- Turn on the hot water faucet at the sink and verify water temperature. Water going to dishwasher must be between the temperatures of 120°F and 150°F.

Step 17 Dishwasher wet test check list

- Turn on power supply.
- Latch door.
- Select normal cycle on push-button or electronic models.
- On dial models, turn control dial just enough to start dishwasher. Be careful not to turn the dial past the first water fill. On electronic models, push start pad.
- Check to be sure that water enters the dishwasher. This could take up to 4 minutes.
If water does not enter the dishwasher, check to be sure that water is turned on.
- Check for leaks under the dishwasher. If a leak is found, turn off power supply, tighten connections and restore power.
- Check for leaks around the door. A leak around the door could be caused by dishwasher door rubbing or hitting against adjacent cabinetry. Reposition the dishwasher if necessary.
- The dishwasher will drain about 5 minutes after the first fill. Check drain lines. If leaks are found, turn off power, correct as necessary and restore power.
- Open dishwasher door and make sure most of the water has drained. If not, check that disposer plug has been removed and/or air gap is not plugged.
- Let the dishwasher run through another fill and drain cycle. Check again to be sure there are no leaks.
- At the end of the second drain, push the reset pad on electronic models. On dial models, unlatch the door and rotate the dial to the "OFF" position.

Step 18 Replace access panel and toekick

Refer to Figure V. Place the toekick against the legs of the dishwasher. Align the access panel to the dishwasher and tighten the two access panel screws. Align the toekick and make sure the bottom edge is against the floor. Insert and tighten the two toekick attachment screws, making sure the bottom edge of the toekick stays in contact with the floor.

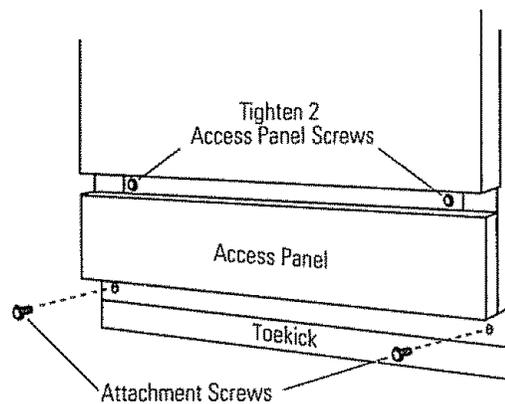


Figure V

Step 19 Literature

- Be sure to leave complete literature package and installation instructions with consumer.