

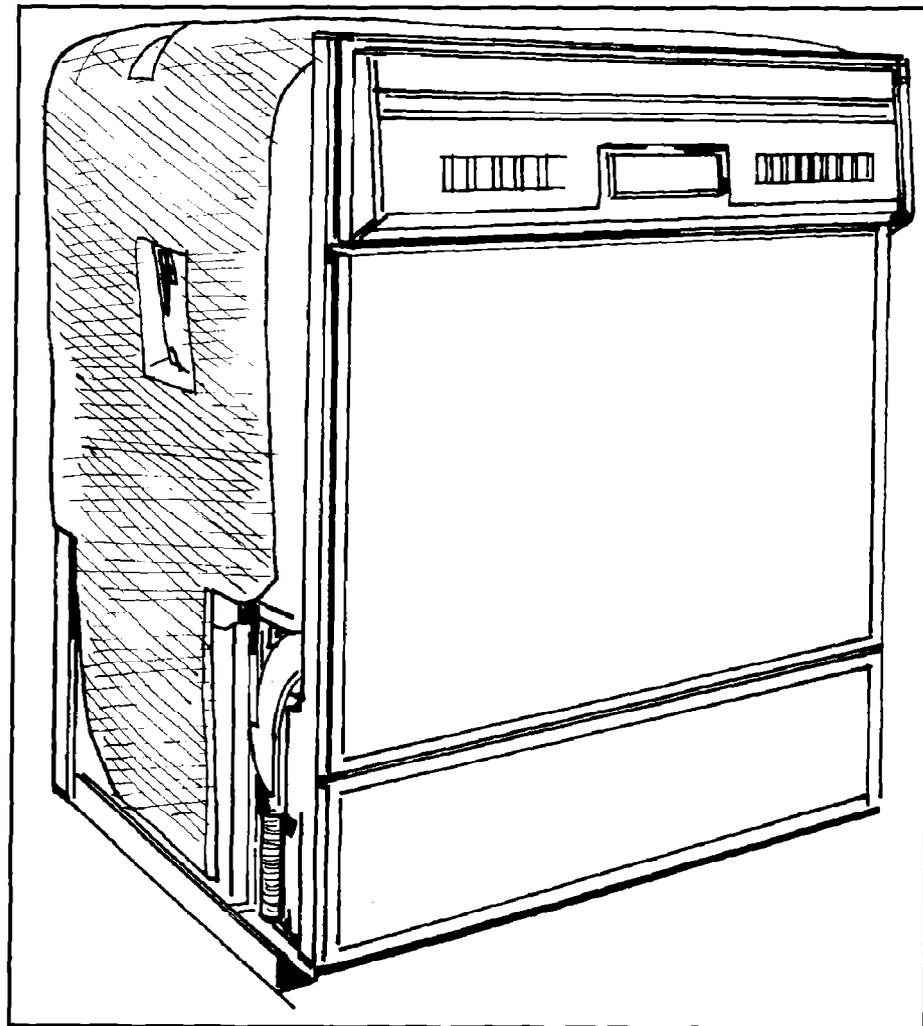
# Installation Instructions

## Undercounter Dishwasher

**Important:**  
Read and save  
these instructions.

**Important:**

- **Installer:** Leave Installation Instructions with the Homeowner.
- **Homeowner:** Keep Installation Instructions for future reference.
- **Save** Installation Instructions for local electrical inspector's use.



Part No. 9741514 Rev. D

**KitchenAid**<sup>®</sup>  
HOME APPLIANCES

1/94

## Before you start...

### ⚠ WARNING

#### Personal Injury/Product Damage Hazard

- Avoid opening dishwasher door before dishwasher is installed.
- If dishwasher is to be installed freestanding, not in a cabinet enclosure, dishwasher **must** be secured to the floor. (See appropriate installation step.) The dishwasher **must** be enclosed using the appropriate kit. Check with your local dealer for the kit required for your installation.

Failure to follow these instructions may result in personal injury or product damage.

### ⚠ CAUTION

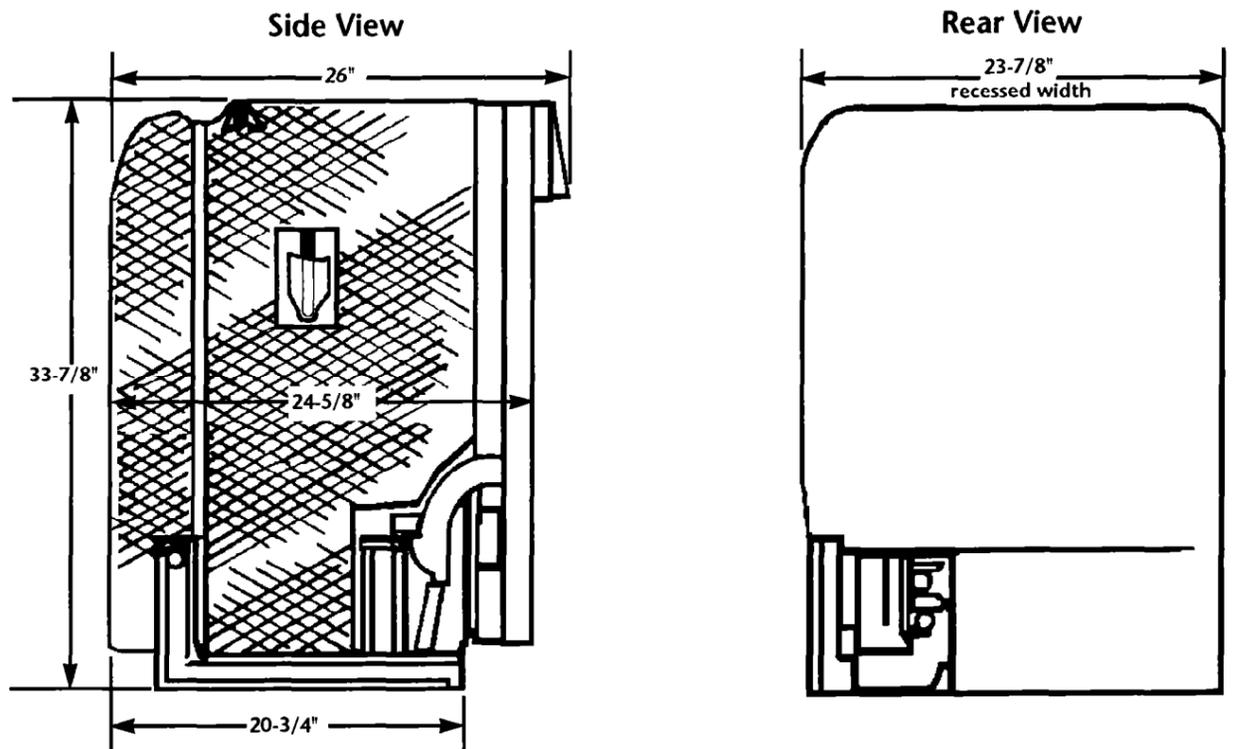
#### Floor Damage

Keep cardboard shipping base or plywood under dishwasher until it is installed or slide dishwasher onto cardboard or hardboard before moving across the floor.

Failure to do so may cause damage to floor covering.

**Important:**  
Observe all governing codes and ordinances.

## Product Dimensions



It is your responsibility to:

- Comply with the installation specifications and dimensions.
- Properly install dishwasher.
- Make sure you have everything necessary for proper installation.
- Contact a qualified installer to insure that the electrical and plumbing installations meet national and local codes and ordinances.
- Provide a properly grounded outlet.

## Built-in opening requirements

### ⚠ WARNING

#### Electrical Shock Hazard

- Electrical ground is required.
- Electrical wiring and components must not contact any plumbing materials or drain hose.
- Electrical wiring, water supply line, and drain line must not contact any exposed terminals of the dishwasher wiring.
- Plumbing and wiring should not cross in front of motor or dishwasher.

Failure to follow these instructions could result in electrical shock.

#### Fire Hazard

- Do Not install dishwasher over carpeted flooring.
- Do Not pinch power supply cord or kink power supply cable between dishwasher and cabinet.
- Cabinet opening must completely enclose sides, top and back of dishwasher. A side panel and wood top are available from your KitchenAid dealer for installing the dishwasher at the end of a cabinet.

Failure to do so may result in fire.

### ⚠ CAUTION

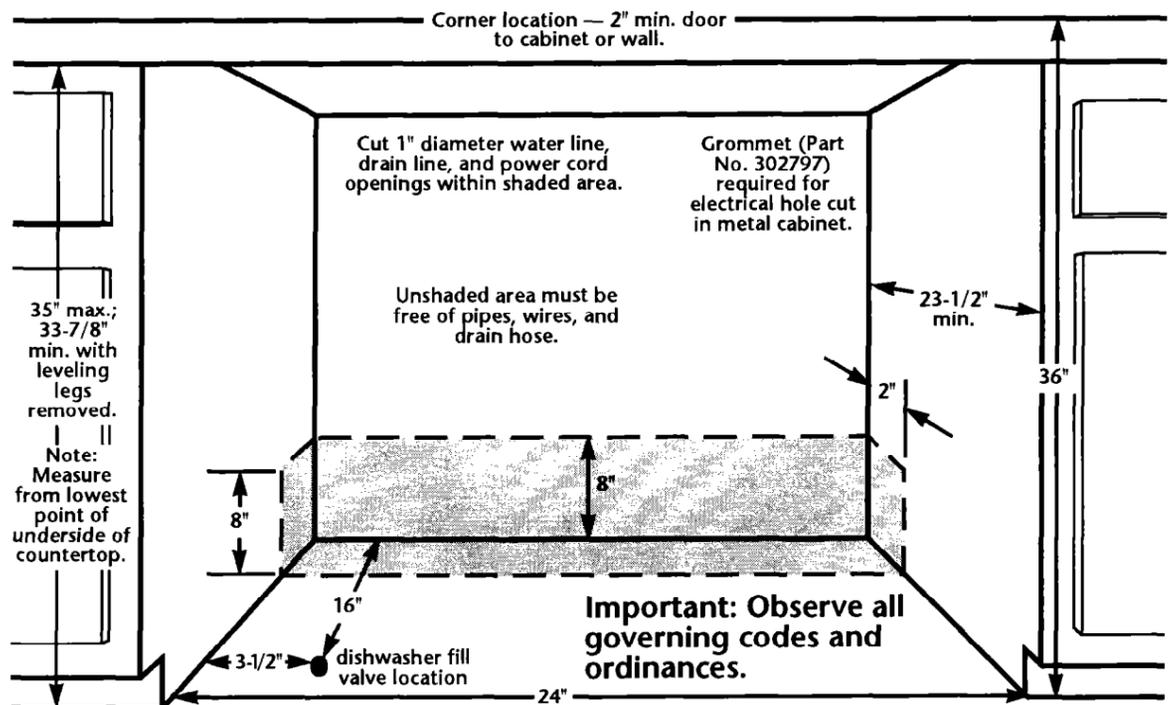
#### Product Damage

Protect dishwasher and water lines leading to dishwasher against freezing.

Failure to do so could cause inlet valve, water lines and drain hose to rupture. Such ruptures are not covered by the warranty.

Proper electrical, drain and water supply lines must be installed within shaded area to prevent interference with dishwasher cabinet or other components.

Panel A



It is recommended that the electrical, drain and water supply lines be located as close to the rear wall as possible.

**Check location** where dishwasher will be installed. Location must provide:

- Easy access to water, electricity and drainage lines.
- Convenient loading — the best position is to the right or left of a sink.
- Opening that is square for proper dishwasher operation and appearance.
- Cabinet front that is perpendicular to floor.
- Protection so that water inlet valve and drain cannot freeze.
- 1/4" minimum clearance between motor and flooring to prevent the motor from overheating.

For installations where dishwasher will be left unused and subjected to freezing temperatures, see "Winterizing" section of Use and Care Guide.

## Parts supplied for installation



2 screws

## Tools and materials required for installation

- 2 adjustable wrenches for fitting copper tubing; or 2 pipe wrenches for galvanized or iron fittings
- bushing
- 1/2" O.D. copper tubing; or 3/8" pipe
- 10" length of 5/8" O.D. soft copper tubing (if high loop drain is needed)
- 1" drill bit or hole saw
- electric drill
- electrical tape
- flat-blade screwdriver
- grommet (metal cabinets)
- 9/16" I.D. heat- and detergent-resistant hose and clamps; or 5/8" O.D. copper tubing and fittings
- 1/8" drill bit
- level
- measuring tape
- 3/4" nut driver or socket wrench
- Phillips screwdriver
- pipe-joint compound
- pliers
- shutoff valve
- square
- 1, 3/8" NPT street elbow or 90° compression elbow with 3/8" NPT at one end for copper line
- 3/4" strain relief
- supply line fittings
- tubing cutter
- twist-on wire connectors
- wire cutters
- drain hose
- 1 screw-type clamp, 7/8" min. to 1-1/4" max.

## Parts that must be custom made

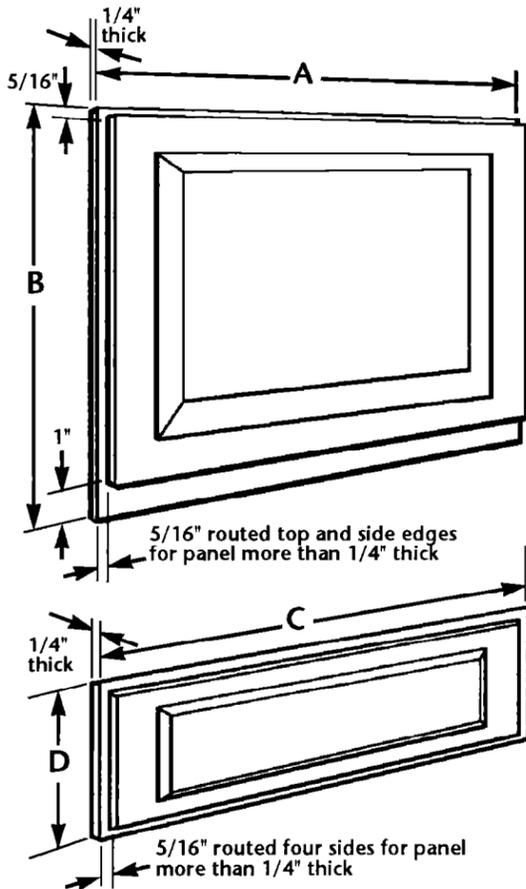
### CAUTION

#### Product Damage

- Heavy duty door springs must be used with custom panels that weigh more than 4 pounds. Heavy duty door springs are attached to the right mounting bracket located behind the toe panel or can be ordered from your dealer or authorized parts distributor. Order Door Spring Kit, Part Number 9741247.
  - Maximum door panel weight is 10 pounds.
- Failure to follow these instructions could cause product damage.

Dishwasher door panel and access panel can be customized to match wood cabinets. It is recommended that a cabinet-maker cut the customized panel pieces because of the precise dimensions needed.

- Cut wood panels so that wood grain matches direction of grain in cabinets.
- File or sand edges of wood panels.
- Apply moisture-resistant sealer on all sides of wood panels.

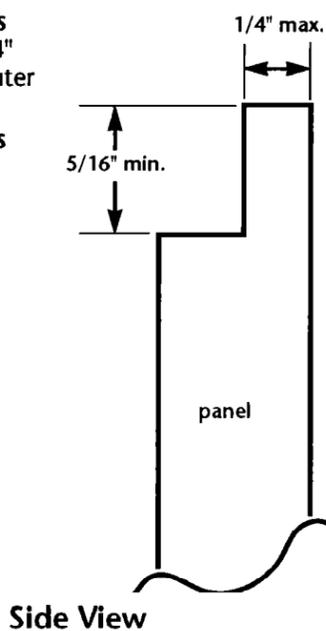


Model	A	B	C	D
KUDA230Y/ KUDA235Y	23-9/16"	17-7/16"	23-11/16"	6-5/8"
All other models	23-9/16"	18-13/16"	23-11/16"	6-5/8"

### Dimensions for routing panel edges

Custom panels more than 1/4" thick: Route outer edge.

Custom panels less than 1/4" thick: Install spacer behind panel.



Side View

Panel B

## Electrical, Water Supply, Drain Requirements and Connection

### Electrical Requirements

#### WARNING

##### Electrical Shock Hazard

- Electrical ground is required on this appliance.
- If cold water pipe is interrupted by plastic, non-metallic gaskets or other insulating materials, Do Not use for grounding.
- Do Not ground to a gas supply pipe.
- Do Not have a fuse in the neutral or grounding circuit. A fuse in the neutral or grounding circuit could result in an electrical shock.
- Do Not modify the power supply cord plug.
- Do Not use an extension cord with this appliance.
- Check with a qualified electrician if you are in doubt as to whether this appliance is properly grounded.

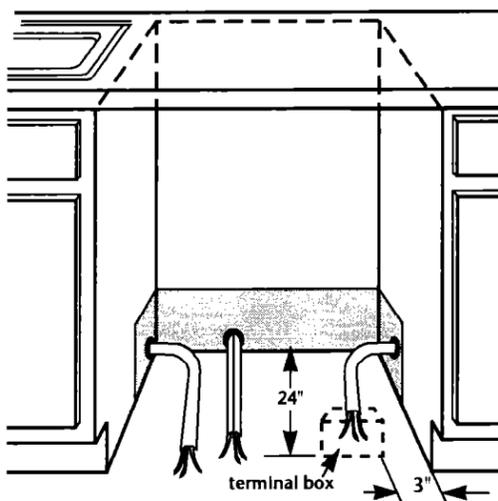
It is the customer's responsibility to:

- Contact a qualified electrical installer.
  - Assure that the electrical supply is adequate and in conformance with the National Electrical Code, ANSI/NFPA 70 — latest edition\*, and all local codes and ordinances.
- Failure to follow these instructions could result in serious injury or death.

If codes permit and a separate grounding wire is used, it is recommended that a qualified electrician determine that the grounding path is adequate.

A single-phase, 115-volt, 60-Hz, AC-only, 15- or 20-ampere, fused electrical supply is required. Time-delay fuse or circuit breaker is recommended. It is recommended that a separate circuit, serving only this appliance, be provided.

This appliance may be connected with flexible armored or non-metallic sheathed copper cable (with grounding wire). A conduit connector must be installed at the junction box. Wire sizes (COPPER WIRE ONLY) must conform with the rating of the dishwasher.



### Electrical connection

#### Direct wire connection

1. Cut a 1" hole in the cabinet for the electrical wiring to pass through. If this hole is cut in a wood cabinet, the hole should be sanded until smooth. If the hole is cut in a metal cabinet, the hole must be covered by a grommet (Part No. 302797). Run flexible cable from fused disconnect, circuit breaker or junction box through hole in cabinet. Cable should extend 24 inches minimum from back wall and easily connect to terminal box.

2. Disconnect power supply.

3. After dishwasher is installed in opening, remove terminal box cover.

4. Install conduit connector to box.

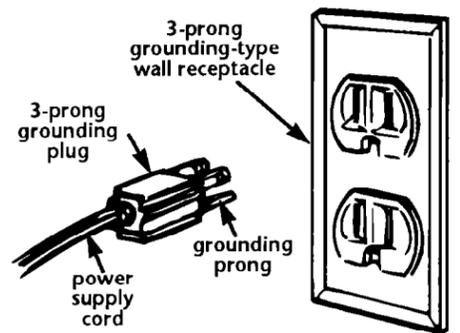
5. Insert power cable through conduit connector.

6. Using twist-on connectors, connect white wire power supply cable to white leads in terminal box. Connect black wire of power supply cable with black wire in terminal box.

7. Connect grounding wire of power supply cable to grounding screw on dishwasher frame.

8. Tighten conduit connector screws. Replace terminal box cover.

### Flexible power supply cord connection



Local codes may permit the use of a U.L.-listed, flexible, three-conductor, 16-gauge, power supply cord terminated with a three-prong, grounding-type plug.

It is recommended that cord kit, Part No. 675456, available from your KitchenAid dealer or parts supplier, be installed.

Follow Installation Instructions packaged with flexible power supply cord.

### The flexible power supply cord used must:

- Be less than 6 feet in length.
- Meet National Electrical Code, ANSI/NFPA 70 — latest edition\*, and all local codes and ordinances.
- Not touch the dishwasher motor or lower portion of the dishwasher tub.

A grommet, Part No. 302797, must cover the hole cut in a metal cabinet for the flexible power supply cord.

To minimize possible shock hazard, the cord must be plugged into a mating three-prong, grounding-type wall receptacle grounded in accordance with National Electrical Code 70 — latest edition\* and all local ordinances.

If a mating wall receptacle is not available, it is the personal responsibility and obligation of the customer to have a properly grounded 3-prong wall receptacle installed by a qualified electrician.

The receptacle should be installed on the rear or side wall of the cabinet next to the dishwasher opening.

\* Copies of the standard listed may be obtained from:

National Fire Protection Association  
Batterymarch Park  
Quincy, Massachusetts 02269

## Water requirements

### CAUTION

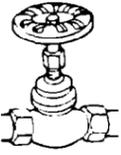
#### Product Damage

- All solder connections must be made before the water line is connected to the dishwasher to prevent damage to the inlet valve.
  - Do Not solder within 6 inches of the inlet valve. The plastic part of the water inlet valve could be damaged.
- Failure to follow these instructions may result in product damage.

Hot water line to dishwasher must provide 20-120 psi water pressure. For best results, the hot water heater should be set to deliver 120°F minimum temperature water (except as noted in your Use and Care Guide).

Use 1/2" O.D. copper tubing or 3/8" galvanized pipe inlet line. Dishwasher inlet valve has 3/8" internal pipe thread.

## Water line connection

1. Disconnect electrical supply.
2. Rough in water line through the 1" hole in cabinet rear wall or floor to dishwasher cabinet opening.
3. Install a shutoff valve in the water line where it can be easily used. 
4. Flush water line into a bucket to get rid of any particles that may clog the inlet valve. Turn shutoff valve to "OFF" position.
5. Check that there are no sharp bends or kinks in the water line that may restrict water flow.

## Drain requirements

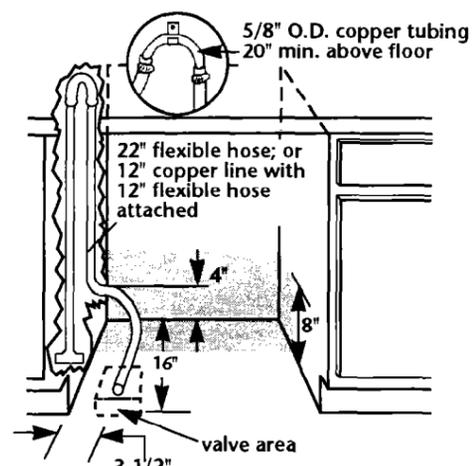
### CAUTION

#### Product Damage

- The drain line connection to the house plumbing must be a minimum of 20" above the floor. A lower drain connection may result in siphoning.
  - If drain line is routed to a connection point less than 20" above the floor, the drain line must form a loop 20" above the floor.
  - Do Not kink hose and copper tubing.
  - Do Not use a drain line or fittings that are less than 1/2" I.D.
- Failure to follow these instructions could result in poor drainage or damage to the product.

The drain hose should be 9/16" minimum I.D. flexible hose or 5/8" O.D. copper tubing. A minimum of 22" flexible drain hose, or a 12" length of copper drain line with a 12" length of flexible hose, is needed. Flexible hose must be resistant to heat and detergent. Do Not use a drain or fittings less than 1/2" I.D. Flexible hose is available through your local plumbing, hardware or automotive supply stores.

If drain line is copper, clamp a 12" length of 9/16" I.D. flexible, heat- and detergent-resistant hose to the end of the copper drain line to connect to dishwasher valve.



If drain line is routed to a connection point less than 20" above floor, use 5/8"

Panel C

O.D. copper tubing to form a loop 20" above the floor. Make sure there are no kinks in hose or copper tubing.

NOTE: An air gap must be used in the high drain loop if the drain line is connected to the house plumbing at a point lower than 20" above the floor.

If connection to an air gap is required, air gap kits are available from local plumbing supply sources.

- Install air gap according to kit instructions.
- Entry must be above trap and at least 20" above the floor.
- Remove disposer knockout or plug before connecting drain line.

Note: Most disposers have 7/8" connectors. Connectors that adapt from the drain line to disposer are available from local plumbing supply sources.

## Drain connection

### Important:

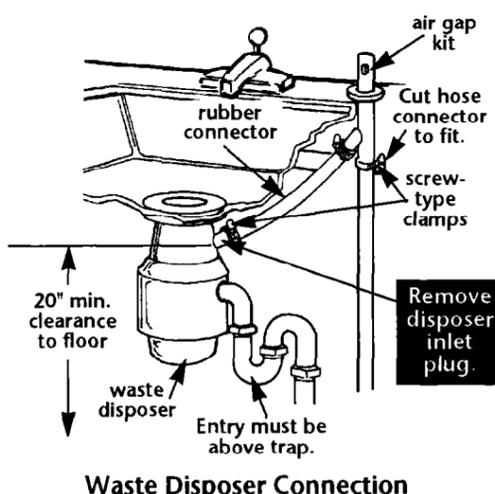
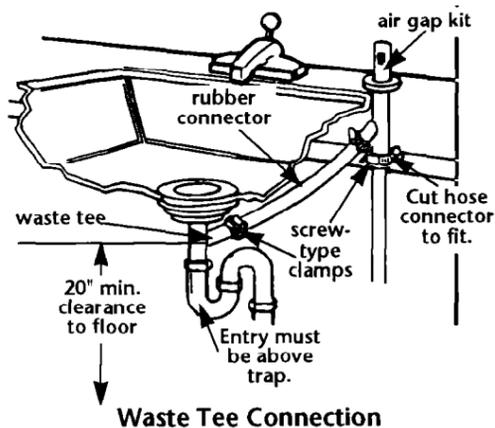
Remove the disposer knockout plug before connecting the drain hose.

1. Attach drain to waste tee or waste disposer. See "Recommended Methods" and "Alternate Methods".

2. Rough in drain line to cabinet opening through 1" hole in rear wall or floor.

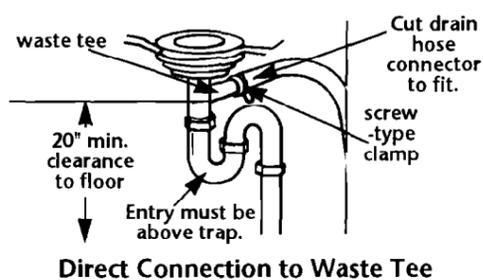
### Recommended methods:

Connect air gap to a waste tee or waste disposer using a rubber connector.



### Alternate methods:

If local plumbing codes permit, dishwasher drain line may be connected directly to waste tee or waste disposer. Do Not cut hose connector to fit when connecting directly to a disposer.



## Installation steps

With dishwasher in kitchen.

### WARNING

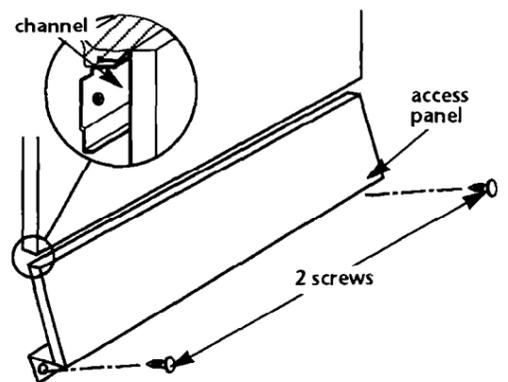
#### Electrical Shock Hazard

- Disconnect electrical power at the fuse box or circuit breaker box before installing dishwasher.
  - Make sure that water supply line, drain hose and wiring do not touch any exposed terminals of the dishwasher wiring.
- Failure to do so could result in serious injury or death.

### CAUTION

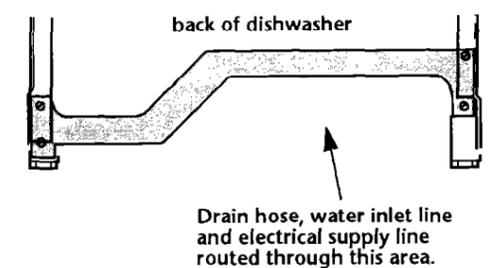
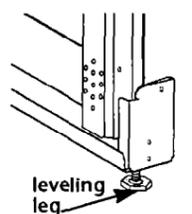
#### Floor Damage

Keep shipping base under dishwasher or slide dishwasher onto cardboard or hardboard before moving it across the floor. Failure to do so may cause damage to floor covering.



1. Remove the 2 screws below the access panel. Pull bottom of panel out and lift up and away from dishwasher. Set access panel aside on a protective covering.

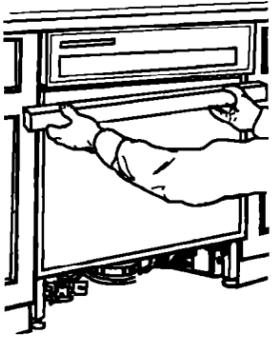
2. Measure height of cabinet opening from underside of countertop to floor. Adjust dishwasher leveling legs to fit opening height.



3. Place drain hose on left side of cabinet opening, between motor and frame. Check that rear cross channel does not contact drain, electrical, or water lines when dishwasher will be installed in its final location.

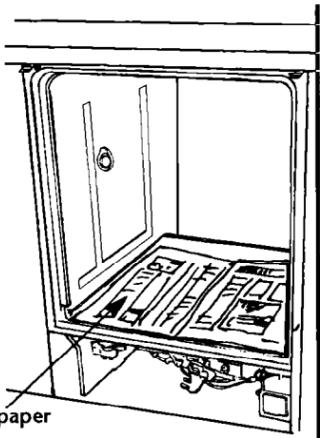
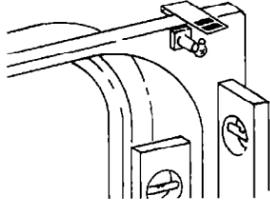
Do Not remove cross channel.

4. Latch dishwasher door shut. Grasp dishwasher door frame and slide dishwasher off of shipping base or cardboard and into cabinet opening. Do Not push on dishwasher door panels or console. Center dishwasher in opening. Check that front leveling legs are firmly against floor.



5. Align dishwasher door with cabinet front — not doors.

6. Place a level against interior flange in the positions shown above. Level dishwasher front to back and side to side by adjusting leveling legs.



Door and racks not shown for clarity.

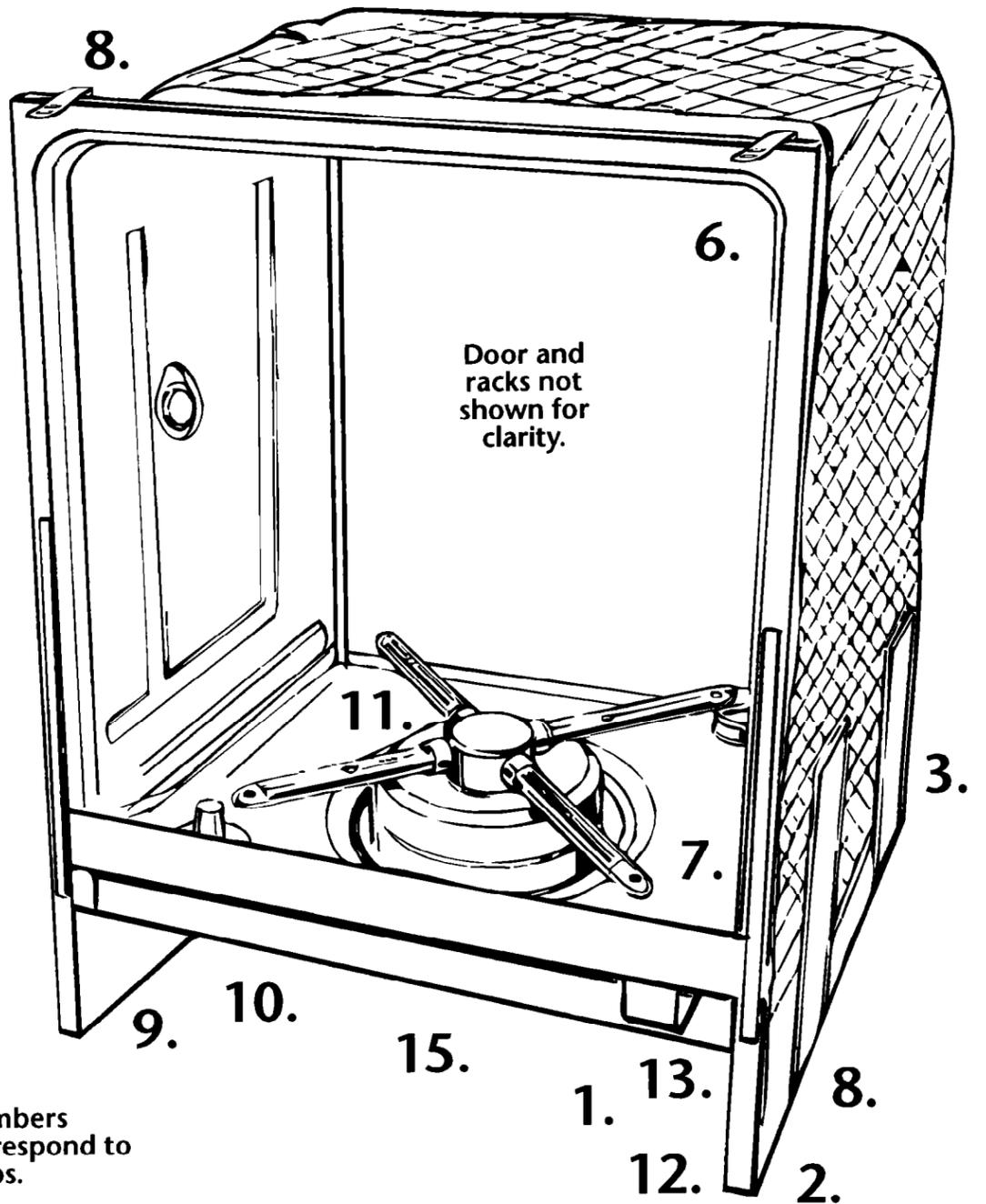
7. Open dishwasher door and remove bottom rack. Remove all shipping materials, including foam shipping pieces from upper corners of door. Do Not remove the white plastic plug buttons from the side of the door or the plastic bumpers from the front corners of the lower rack. Place a newspaper or large sheet of paper over bottom of dishwasher to protect pump area when securing dishwasher to countertop.

## WARNING

### Personal Injury/Product Damage Hazard

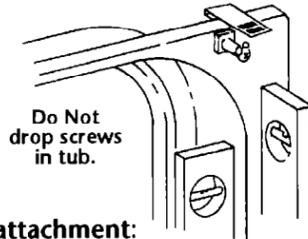
- The dishwasher must be secured to the countertop to keep it from tilting when the door is open.
- If dishwasher is to be installed freestanding, not in a cabinet enclosure, dishwasher must be secured to the floor. (See appropriate installation step.) The dishwasher must be enclosed using the appropriate kit. Check with your local dealer for the kit required for your installation.
- Do Not drop screws in dishwasher tub. If screws should fall into pump, pump and motor damage may occur.

Failure to follow these instructions may result in personal injury or product damage.



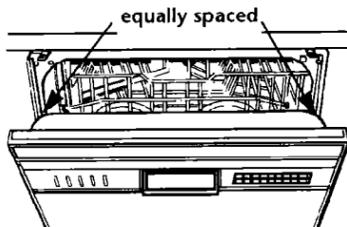
Numbers correspond to steps.

8. The dishwasher **must** be secured to the countertop or floor to prevent tipping when dishwasher door is opened.

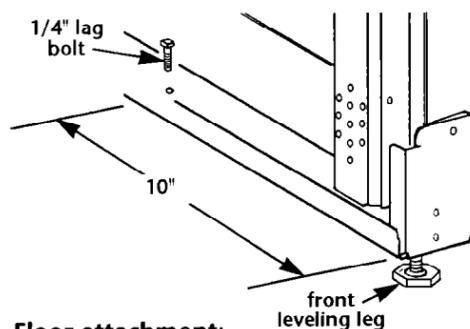


### Countertop attachment:

Disconnect brackets located at top corners of flange. Reattach brackets with bracket end facing away from dishwasher. Using a 1/8" drill bit, drill 3/4" deep starter holes through bracket holes into underside of countertop. Do Not exceed 3/4" depth. Attach brackets to underside of countertop using two screws from parts bag. Make sure screw heads do not interfere with door.

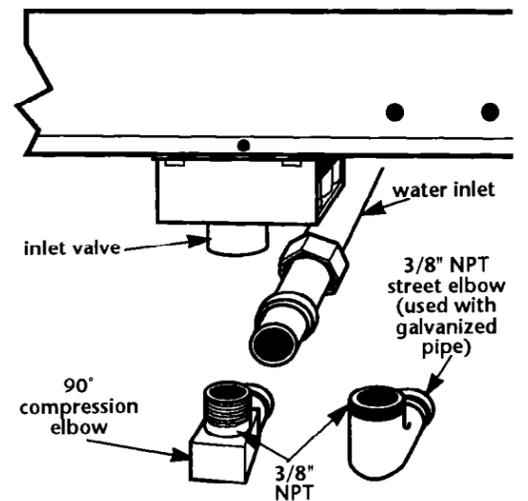


Open dishwasher door approximately 3" and check for equal spacing between inner door and tub sides. If space is unequal, loosen screws fastening dishwasher to countertop and shift tub. Check that dishwasher is level and reattach screws.



### Floor attachment:

Attach dishwasher to floor using 1/4" lag bolts through holes in each side of dishwasher frame, being careful to keep dishwasher level.



9. Water inlet valve has 3/8" internal pipe thread.

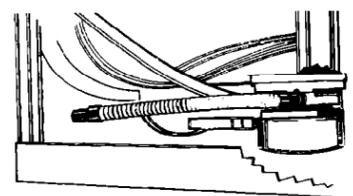
If galvanized pipe is used, connect a 3/8" NPT street elbow to water inlet valve using pipe-joint compound.

If 90° compression elbow is used, connect 3/8" end to water inlet valve. Use pipe-joint compound. Do Not use pipe-joint compound on the compression end.

Tighten connection.

Use pipe-joint compound to connect water line to street elbow. Do Not use pipe-joint compound to connect water line to compression elbow.

Tighten connection.



10. Place screw-type clamp over straight end of connector drain hose. Attach drain hose to connector drain hose with screw-type clamp. Check that drain hose and connector drain hose are not twisted or kinked and that the connection is secure.

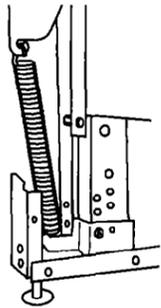
## ! WARNING

### Personal Injury/Property Damage Hazard

Wear gloves and handle metal edges of panels carefully.

Cut metal edges are sharp and may cause personal injury or damage to other materials.

**11** Remove the newspaper protecting the pump. If color of door panel is to be changed or custom panels installed, change panels now. See Use and Care Guide for instructions.



**12** Check dishwasher door for proper operation. Door should close easily without slamming and should not fall open or shut from its own weight.

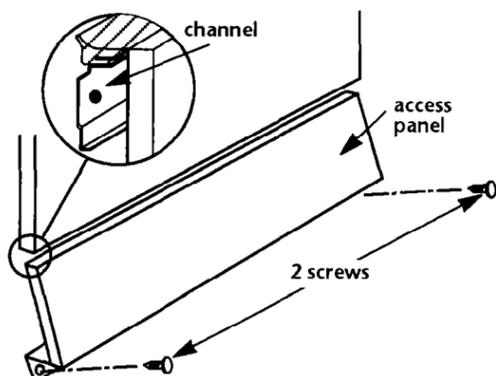
If door closes from an open position, adjust door spring brackets upward to a different hole.

If door falls open too quickly, move spring brackets downward.

If custom door panels weigh more than 4 pounds, install heavy-duty door springs.

**13** Make electrical connection. See "Electrical connection," Panel B. **CHECK ELECTRICAL REQUIREMENTS. BE SURE YOU HAVE CORRECT ELECTRICAL SUPPLY AND RECOMMENDED GROUNDING METHOD.** Check that all parts have been installed and no steps were skipped. Check that no screws have fallen into the tub. Reinstall rack in dishwasher. Turn on electrical and water supplies.

**14** Start dishwasher on the NORMAL wash cycle. Allow it to run 5 minutes. Check that there are no leaks. Open dishwasher door to stop cycle. Close dishwasher door and manually advance timer to final drain. When dishwasher stops, check that it has drained.



**15** Install top of access panel into channel and rotate panel towards dishwasher. Reattach the access panel with two screws. Check that the opening at the bottom of access panel is clear so air can circulate to cool motor.

To get the most efficient use from your new dishwasher, read your Use and Care Guide. Keep Installation Instructions and Guide close to dishwasher for easy reference.

### If dishwasher does not operate...

Check that:

- the circuit breaker is not tripped or the house fuse blown.
- dishwasher door is closed tightly and latched securely.
- dishwasher rack is in place.
- dishwasher cycle has been set correctly.
- water has been turned on.
- electrical power has not been interrupted.

Note: If the motor has stopped because of overload, it will automatically reset itself within a few minutes. A detailed troubleshooting checklist is provided in the Use and Care Guide.

### If you need assistance...

The KitchenAid Consumer Assistance Center will answer any questions about operating or maintaining your dishwasher not covered in the Installation Instructions. The KitchenAid Consumer Assistance Center is open 24 hours a day, 7 days a week. Just dial 1-800-422-1230 — the call is free.

When you call, you will need the dishwasher model number and serial number. Both numbers can be found on the serial/rating plate located on tub behind door.

### If you need service...

In the event that your KitchenAid appliance should need service, call the dealer from whom you purchased the appliance or a KitchenAid-authorized service company. A KitchenAid-authorized service company is listed in the Yellow Pages of your telephone directory under "Appliances — Household — Major — Service or Repair". You can also obtain the service company's name and telephone number by dialing, free, within the continental United States, the KitchenAid Consumer Assistance Center telephone number, 1-800-422-1230. A special operator will tell you the name and number of your nearest KitchenAid-authorized service company.

Maintain the quality built into your KitchenAid appliance — call a KitchenAid-authorized service company.



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50% recovered materials.

**KitchenAid®**  
HOME APPLIANCES

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Prepared by KitchenAid, St. Joseph, Michigan 49085

Printed in U.S.A.