# Installation Instructions Built-In Dishwasher

If you have questions, call 800.GE.CARES (800.432.2737) or visit our website at: www.ge.com

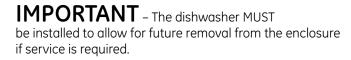


# **BEFORE YOU BEGIN**

Read these instructions completely and carefully.

**IMPORTANT** – Observe all governing codes and ordinances.

- Note to Installer Be sure to leave these instructions for the consumer's and local inspector's use.
- Note to Consumer Keep these instructions with your Owner's Manual for future reference.
- Skill Level Installation of this dishwasher requires basic mechanical, electrical and plumbing skills. Proper installation is the responsibility of the installer. Product failure due to improper installation is not covered under the GE Appliance Warranty. See warranty information.
- Completion Time 1 to 3 Hours. New installations require more time than replacement installations.

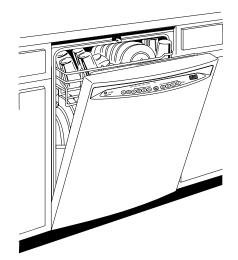


If you received a damaged dishwasher, you should immediately contact your dealer or builder.

Optional Accessories – See the Owner's Manual for available custom panel kits.

# FOR YOUR SAFETY

Read and observe all CAUTIONS and WARNINGS shown throughout these instructions. While performing installations described in this booklet, gloves and either safety glasses or goggles should be worn.



## READ CAREFULLY. KEEP THESE INSTRUCTIONS.

PDW8200 Series PDW8400 Series PDW8700 Series PDW8800 Series PDW8900 Series PDW9200 Series PDW9700 Series\* PDW9800 Series PDW9900 Series

\*For PDW9700 Series also refer to the Instructions provided on the template packed with that model. (WD35X1005)



# **Installation Preparation**

# PARTS SUPPLIED:

- ☐ Two #8-18 × 5/8" Phillips special head screws, to secure dishwasher to underside of countertop or sides of cabinets. (Screws located in user bag.)
- □ Side and top trim pieces
- Trim Panel Accessory Kit (not shown). Model PDW9700 only
- 🗖 Drain Hose, Drain Hose Hanger and Hose Clamp

## MATERIALS YOU WILL NEED:

- □ Ferrule, compression nut and 90° Elbow (3/8" NPT external thread on one end, opposite end sized to fit water supply)
- Thread seal tape
- UL Listed wire nuts (3)

# Materials For New Installations Only:

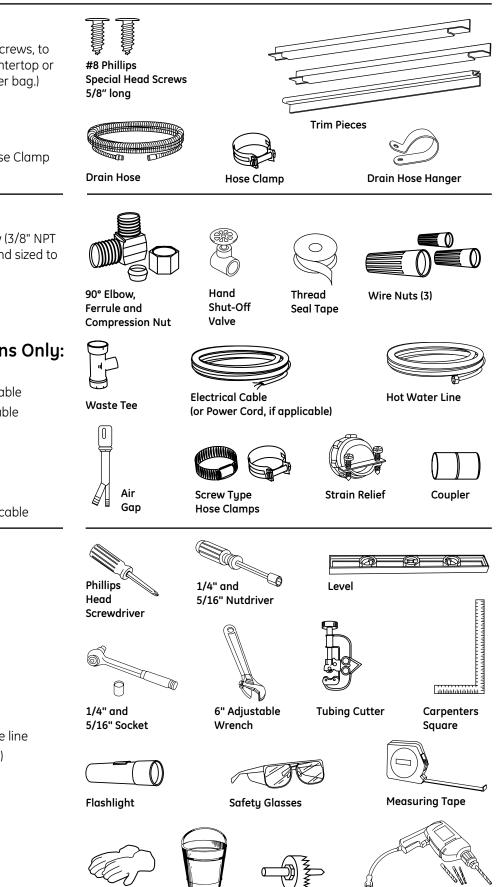
- Air gap for drain hose, if required
- 🔲 Waste tee for house plumbing, if applicable
- Electrical cable or power cord, if applicable
- □ Screw type hose clamps
- □ Strain relief for electrical connection
- □ Hand shut-off valve
- 🔲 Water line 3/8" min. copper
- Coupler for extending drain line, if applicable

# TOOLS YOU WILL NEED:

- Phillips head screwdriver
- □ 1/4" and 5/16" nutdriver
- 🗋 6" Adjustable wrench
- Level
- Carpenters square
- Measuring tape
- □ Safety glasses
- ☐ Flashlight
- □ Bucket to catch water when flushing the line
- □ 15/16" socket (optional for skid removal)
- □ Gloves

# For New Installations Only:

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



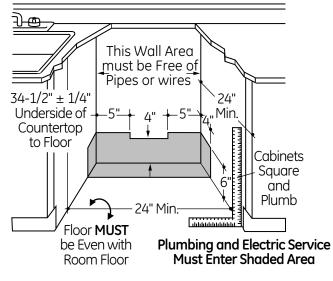
Gloves

Bucket

Hole Saw Set

Drill and Bits

# PREPARE DISHWASHER ENCLOSURE



• The rough cabinet opening must be at least 24" deep, 24" wide and approximately 34-1/2" high from floor to underside of the countertop.

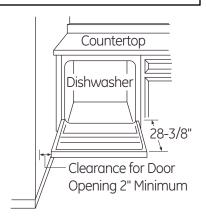
• The dishwasher must be installed so that drain hose is no more than 10' in length for proper drainage.



To reduce the risk of electric shock, fire, or injury to persons, the installer must ensure that the dishwasher is completely enclosed at the time of installation.

#### CLEARANCES: When

installed into a corner, allow 2" min. clearance between dishwasher and adjacent cabinet, wall or other appliances. Allow 28-3/8" min. clearance from the front of the dishwasher for door opening. Figure B



**DRAIN REQUIREMENTS** 

- Follow local codes and ordinances.
- Do not exceed 10' distance to drain.
- Do not connect drain lines from other devices to the dishwasher drain hose.

**NOTE:** Air gap must be used if waste tee or disposer connection is less than 18" above floor to prevent siphoning.

# DETERMINE DRAIN METHOD

The type of drain installation depends on the following questions.

Do local codes or ordinances require an air gap?

☐ Is waste tee less than 18" above floor?

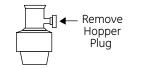
If the answer to either question is YES, Method 1 MUST be used.

• If the answers are NO, either method may be used.

## CABINET PREPARATION

• Drill a 1-1/2" diameter hole in the cabinet wall within the shaded areas shown in Figure A for the drain hose connection. The hole should be smooth with no sharp edges.

**IMPORTANT:** When connecting drain line to disposer, check to be sure that drain plug has been removed. DISHWASHER WILL NOT DRAIN IF PLUG IS LEFT IN PLACE.



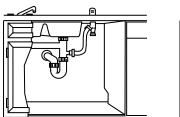
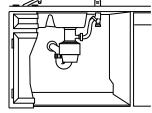


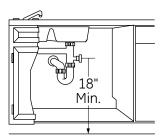
Figure B

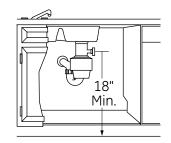




#### Method 1 – Air Gap with Waste Tee or Disposer

An air gap must be used when required by local codes and ordinances. The air gap must be installed according to manufacturer's instructions.







#### Method 2 – Drain Hose Routing

When not using an air gap, the drain hose must be routed to form a high loop of at least 32" to prevent siphoning. See Step 15 on page 10.

# PREPARE ELECTRICAL WIRING



#### 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, 60Hz., 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 and rated for 75°C (176°F).
- If the electrical supply does not meet the above requirements, call a licensed electrician before proceeding.

#### **Grounding Instructions-Cable Direct**

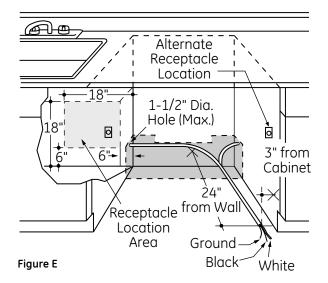
This appliance must be connected to a grounded metal, permanent wiring system, or an equipment grounding conductor must be run with the circuit conductors and be connected to the equipment grounding terminal or lead on the appliance.

#### Grounding Instructions-Power Cord Models

This appliance must be grounded. In the event of a malfunction or breakdown, grounding will reduce the risk of electric shock by providing a path of least resistance for electric current. This appliance is equipped with a cord having an equipment grounding conductor and a grounding plug. The plug must be plugged into an appropriate outlet that is installed and grounded in accordance with all local codes and ordinances.

# 

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 that the appliance is properly grounded.



**For models equipped with power cord:** Do not modify the plug provided with the appliance; if it will not fit the outlet, have a proper outlet installed by a qualified technician.

#### **Cabinet Preparation and Wire Routing**

- The wiring may enter the opening from either side, rear or the floor within the shaded area.
- Cut a 1-1/2" max. diameter hole to admit the electrical cable. Cable direct connections may pass through the same hole as the drain hose and hot water line, if convenient. If cabinet wall is metal, the hole edge must be covered with a bushing. **Note:** Power cords with plug must pass through a separate hole.

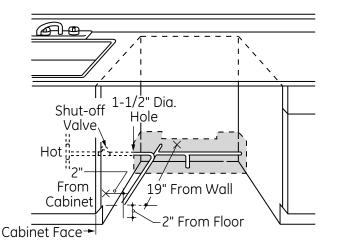
#### **Electrical Connection to Dishwasher**

Electrical connection is on the right front 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 sink cabinet rear wall, 6" min. or 18" max. from the opening, 6" to 18" above the floor.

# PREPARE HOT WATER LINE

- The line may enter from either side, rear or floor within the shaded area shown in Figure F.
- The line may pass through the same hole as the electrical cable and drain hose. Or, cut an additional 1-1/2" diameter hole to accommodate the water line. If power cord with plug is used, water line must not pass through power cord hole.



#### Figure F

# Water Line Connection

- Turn off the water supply.
- Install a hand shut-off valve in an accessible location, such as under the sink. (Optional, but strongly recommended and may be required by local codes.)
- Water connection is on the left side of the dishwasher. Install the hot water inlet line, using no less than 3/8" copper tubing. Route the line as shown in Figure F and extend forward at least 19" from rear wall.
- Adjust water heater to deliver water at 120°F to 150°F at the dishwasher.
- Flush water line to clean out debris.
- The hot water supply line pressure must be 20-120 PSI.

CAUTION:

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

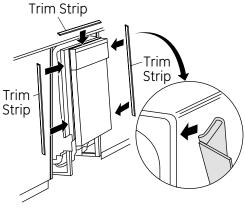


# **BEFORE YOU BEGIN**

Locate the 2 Phillips special head countertop bracket screws in the user bag. Set them aside for use in Step 13. Remove drain hose from upper rack, if it has not been pre-installed, and set aside for use in Step 9.

# **STEP 1 INSTALL TRIM PIECES**

- Locate trim strips inside dishwasher.
- Press trim onto the tub flange on each side. Start with the top edge, pressing on as you move towards the bottom.
- Press the two top trim pieces on each side of the latch.
- Open and close the door to check that trim does not bind and does not interfere with door latch.





# **STEP 2 CHECK DOOR BALANCE**

- With dishwasher on the wood skid, check the door balance by opening and closing the door.
- If the door drops when released, increase the spring tension. If the door rises when released, decrease the tension.
- Position the spring for increased or decreased tension as required.
- Model families have different spring mounting holes and tension adjustment methods. Refer to the appropriate figure for your model.

#### PDW8200-PDW8900 Series

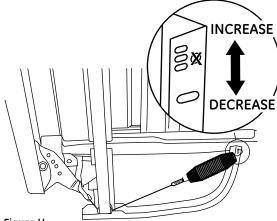
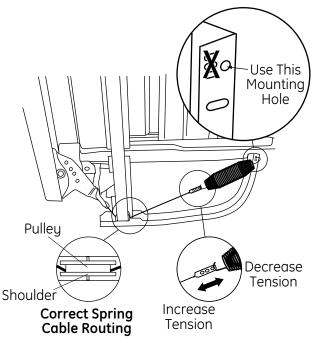


Figure H

#### PDW9200-PDW9900 Series



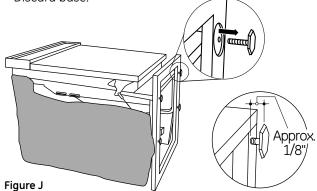
#### Figure I

Tip: If door does not open easily or falls too quickly, check the spring cable routing. Check that the cable is properly aligned on the pulley. See Figure I.

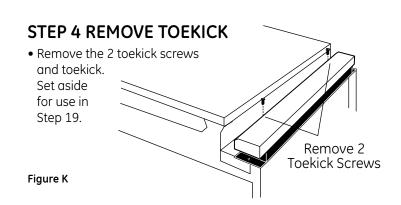
## STEP 3 REMOVE WOOD BASE, **INSTALL LEVELING LEGS**

#### **IMPORTANT** - Do not kick off wood base! Damage will occur.

- Move the dishwasher close to the installation location and lay it on its back.
- Remove the four leveling leas on the underside of the wood base with an adjustable wrench or 15/16" socket.
- Discard base.



- Screw leveling legs back into the dishwasher frame, approximately 1/8" from frame as shown.



# **STEP 5 REMOVE TOEKICK BRACE**

#### Only for PDW9700 series and PDW9900 series, otherwise proceed to Step 6.

Remove 2

Screws

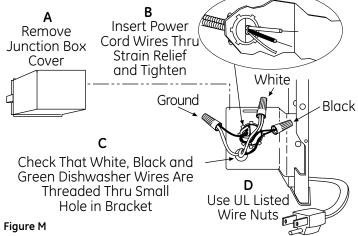
• Remove the 2 toekick brace screws (from the upper set of mounting holes) and toekick brace. Set aside for use in Step 19. **Toekick Brace** Figure L

# STEP 6 INSTALL POWER CORD

#### Skip this step if dishwasher will be direct wired or has a factory installed power cord.

Use Power Cord Kit WX09X70910, available for purchase from an authorized GE Appliance Dealer. The power cord and connections must comply with the National Electrical Code, Section 422 and/or local codes and ordinances.

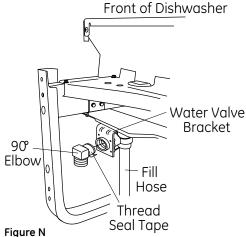
• Maximum power cord length is 6'.



- Connect incoming power cord white (or ribbed) to dishwasher white, black (or smooth) to black and ground to dishwasher green wire. Use UL listed wire nuts of appropriate size.
- Replace junction box cover. Be sure wires are not pinched under the cover.

# STEP 7 INSTALL 90° ELBOW

- Wrap 90° elbow with thread seal tape.
- Install a 90° elbow onto the water valve.



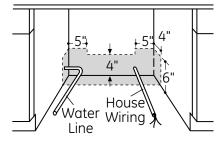
#### igure N

- Do not over tighten the 90° elbow, water valve bracket could bend or water valve fitting could break.
- Position the end of the elbow to face the rear of the dishwasher.

#### STEP 8 POSITION WATER LINE AND HOUSE WIRING

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

Figure O



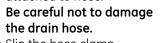
Hose

Clamp

Pump

## STEP 9 INSTALL DRAIN HOSE, GUIDE THROUGH CABINET

- Stand the dishwasher upright.
- Get the drain hose set aside earlier and remove hose clamp attached to hose.
  Be careful not to damage
  Drain

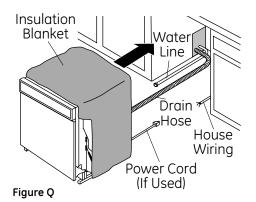


Drain

Outlet

• Slip the hose clamp over the pump end of the hose.

- Push hose over the drain outlet on the back side of the dishwasher. See Figure P. Push the hose over the outlet and against the shoulder stop.
- Tighten the hose clamp with a 1/4" nut driver.



• Position the dishwasher in front of the opening. Insert drain hose into the cabinet side. If power cord is used, guide the end through a separate hole.

#### STEP 10 SLIDE DISHWASHER PARTIALLY INTO CABINET

#### DO NOT PUSH AGAINST FRONT PANEL WITH KNEES. DAMAGE WILL OCCUR.

• Slide dishwasher into the opening a few inches at a time.



Do Not Push Against Front Door Panel With Knee. Damage to The Door Panel Will Occur.

#### Figure R

- As you proceed, pull the drain hose through the opening under the sink. Stop pushing when the dishwasher is a few inches forward of adjacent cabinets.
- Make sure drain hose is not kinked under the dishwasher and there is no interference with the water line and wiring or any other component.

#### STEP 11 POSITION DISHWASHER UNDER COUNTERTOP

- Push the dishwasher into the cabinet.
- Push the sides with your hands. Do not use your knee against the door since door damage will occur.
- Check that the tub insulation blanket does not get "bunched-up" or interfere with the springs as you slide it into the cabinet.
- Center the dishwasher in the opening.
- Front of door panel should be flush with face of cabinet.
- Carefully open and close the door to ensure that the door panel does not catch or rub on the cabinet frame.
- If the door catches or rubs on the frame, reposition and/or level the unit (see Step 12) until the door moves freely and does not contact the cabinet frame.

## Positioning for PDW9200-PDW9900 Series

The controls on these models are designed to be hidden by your countertop. Align the dishwasher as shown in Figure U. Leave a 1/2" minimum gap between the underside of the countertop and the top of the dishwasher door as shown in Figure X.

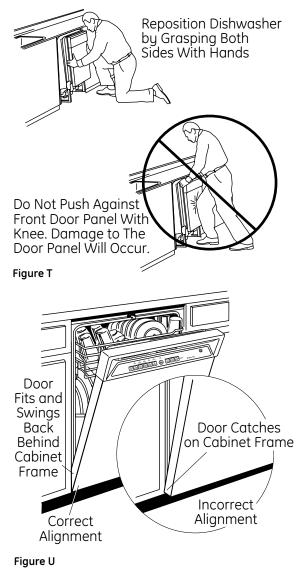
**Note:** For flush installations of the PDW9700 Series models, cut off the back panel of the tub insulation blanket so that the dishwasher door panel can be aligned with the kitchen cabinet panels.

**Note:** If the drain hose gets trapped behind the unit it can prevent the controls from being hidden by the countertop.

**Note:** If this dishwasher is replacing an existing dishwasher, the old countertop bracket screw holes may not be in the correct position to accept a top-control model. New holes may be required.

**Tip:** The leveling legs can be used to increase or decrease the amount of gap between the controls and the countertop affecting the visibility of the controls.

**IMPORTANT** – Leave a 1/2" minimum gap between the controls and the underside of the countertop to prevent condensation and damage to the control panel from screwheads.



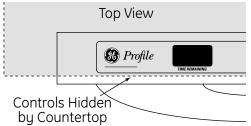
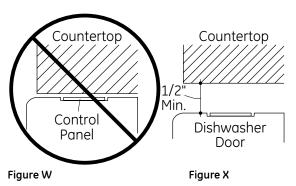


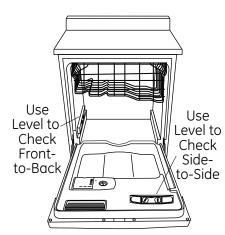
Figure V



# **STEP 12 LEVEL DISHWASHER**

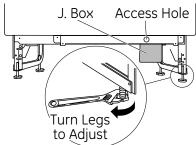
**IMPORTANT** – Dishwasher must be level for proper dish rack operation and wash performance.

- For PDW9200-PDW9900 Series: Make sure 1/2" minimum gap is maintained (see Figure X).
- Place level on door to check that the dishwasher is level sideto-side. Place level on rack track inside tub to check that the dishwasher is level front-to-back.



#### **Figure Y**

- If the dishwasher is not level, adjust the four leveling leas individually.
- If adjustment to the right rear leveling leg is required, access it by loosening junction box bracket screw (through the access hole) and rotate bracket clockwise.



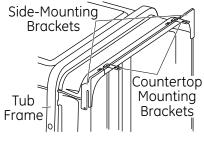
#### Figure Z

- Tip: Pull lower rack out, about halfway. Check to be sure the rack does not roll forward or back into dishwasher. If the rack rolls in either direction, the dishwasher must be leveled again.
- If door hits the tub, the dishwasher is not installed correctly. Adjust leveling legs to align door to tub.

IMPORTANT – After leveling, verify that the dishwasher is still in the correct position shown in Step 11.

# **STEP 13 SECURE DISHWASHER TO** COUNTERTOP OR CABINET

In this step you will need the 2 Phillips special head screws set aside prior to Step 1. The dishwasher must be secured to the countertop or the cabinet sides. When countertops are made of wood. use Method 1. When countertops are aranite or other materials that will not accept screws, use Method

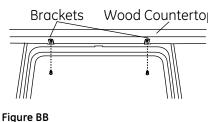


**Figure AA** 

2 to secure dishwasher at the sides.

# **IMPORTANT**

Drive screws straight and flush. Protruding screw heads will scratch the top or sides of the control panel and can interfere with door closing.



#### Method 1

#### Secure dishwasher to wood countertop

• Fasten the dishwasher to the underside of the countertop with the 2 Phillips special head screws provided.

#### Method 2

#### Secure dishwasher with side-mounting brackets

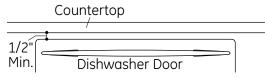
- Remove plug buttons (one on each side).
- Install screws through the dishwasher side mount bracket and into the adjacent cabinet on each side. Reinstall plug buttons.

# Granite Countertop Side-Mounting Brackets



**Figure CC** 

#### **Either Method**



#### Figure DD

For PDW9200-PDW9900 Series: When step is complete, close dishwasher door and verify that gap between countertop and top of dishwasher door is at least 1/2".

# **STEP 14 CONNECT WATER SUPPLY**

Connect water supplu line to the 90° elbow.

- Slide compression nut, then ferrule over end of water line.
- Insert water line into 90° elbow.
- Slide ferrule against elbow and secure with compression nut.

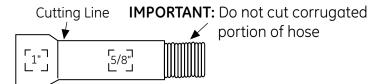
**IMPORTANT** – Check to be sure that door spring does not rub or contact the fill hose or water supply line. Test by opening and closing the door. Reroute the lines if a rubbing noise or interference occurs.

# **STEP 15 CONNECT DRAIN LINE**

#### FOLLOW ALL LOCAL CODES AND ORDINANCES.

The molded end of the drain hose will fit 5/8" through 1" diameter inlet ports on the air gap, waste tee or disposer.

- Determine size of inlet port
- Cut drain hose connector on the marked line, if required, to fit the inlet port.



#### Figure FF

• If a longer drain hose is required, add up to 42" of length for a total of 10' to the factory installed hose. Use 5/8" or 7/8"

connect the two hose ends. Secure the connection with hose clamps.

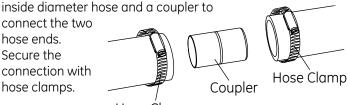


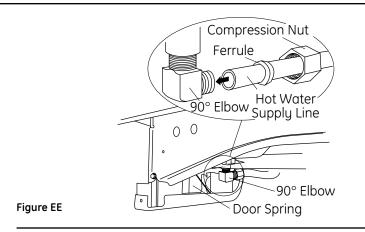
Figure GG

- Hose Clamp
- Secure the drain hose to the air gap, waste tee or disposer with clamps.

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

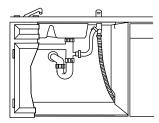
# DRAIN LINE INSTALLATION

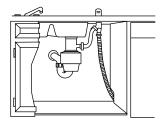
• Connect drain line to air gap, waste tee or disposer using either previously determined method.



#### Method 1 - Air gap with waste tee or disposer

Insert the drain hose to air gap as shown.



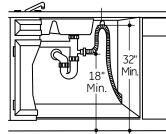


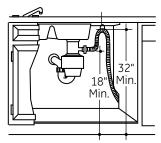
**Disposer Installation** 

Waste Tee Installation Figure HH

#### Method 2 – Drain Hose Routina

Route the drain hose of the dishwasher to a minimum height of 32" from the floor with the supplied hanger as shown.





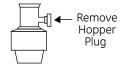
Waste Tee Installation Figure JJ

**Disposer Installation** 

**IMPORTANT** - Either one of the above methods must be used or dishwasher will not operate properly.

# **IMPORTANT** - When connecting

drain line to disposer, check to be sure that drain plug has been removed. DISHWASHER WILL NOT DRAIN IF PLUG IS LEFT IN PLACE.



Tip: Avoid unnecessary service call charges. Always be sure disposer drain plug has been removed before attaching dishwasher drain hose to the disposer.

# **STEP 16 CONNECT POWER SUPPLY**

#### Verify that power is turned off at the source.

- Remove junction box cover "A".
- Secure house wiring to the back of the junction box with a strain relief "B".
- Locate the three dishwasher wires, (white, black and green) with stripped ends. Insert dishwasher wires through the small hole in the junction box "C". Use wire nuts to connect incoming ground to green, white to white and black to black "D".
- Replace junction box cover "E". Check to be sure that wires are not pinched under the cover.

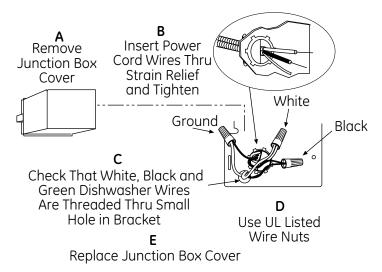


Figure KK

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If house wiring is not 2-wire with ground, a ground must be provided by the installer. When house wiring is aluminum, be sure to use UL Listed anti-oxidant compound and aluminum-to-copper connectors

# **STEP 17 PRETEST CHECK LIST**

Review this list after installing your dishwasher to avoid charges for a service call that is not covered by your warranty.

- Check to be sure power is OFF.
- Dpen door and remove all foam and paper packaging.
- □ Locate the Owner's Manual in the user bag.
- Read the Owner's Manual for operating instructions.
- □ Check door opening and closing. If door does not open and close freely, check for proper routing of spring cable over pulley. See Step 2, Figure H. If door drops or closes when released, adjust spring tension.
- ☐ Check to be sure that wiring is secure under the dishwasher, not pinched or in contact with door springs or other components. See Steps 9 and 10.
- Check door alignment with tub. If door hits tub, level dishwasher. See Step 12.
- Pull lower rack out, about halfway. Check to be sure it does not roll back or forward on the door. If the rack moves, adjust leveling legs. See Step 12.
- Check door alignment with cabinet. If door hits cabinet, reposition or relevel dishwasher. See Steps 11, 12 and 13.
- Check that door spring does not contact water line, fill hose, wiring or other components. See Step 14.
- Verify water supply and drain lines are not kinked or in contact with other components. Contact with motor or dishwasher frame could cause noise. See Steps 7 and 9.
- □ Turn on the sink hot water faucet and verify water temperature. Incoming water temperature must be between 120°F and 150°F. A minimum of 120°F temperature is required for best wash performance. See "Prepare Hot Water Line," page 5.
- Add 2 quarts of water to the bottom of the dishwasher to lubricate the pump seal.
- Turn on water supply. Check for leaks. Tighten connections if needed.
- Remove protective film if present from the control panel and door.
- Avoid service call charges by ensuring there is an air gap or drain hose routed through the required 32" minimum height.

# **STEP 18 DISHWASHER WET TEST**

- Turn on power supply (or plug power cord into outlet, if equipped).
- Start the unit to check for leaks. **PDW8200-PDW8900 Series:** 
  - Latch door
  - Push RINSE ONLY pad
  - Push START/RESET pad one time
  - PDW9200-PDW9900 Series:
  - Push RINSE ONLY pad
  - Push START/RESET pad one time
  - Close door
- □ Check to be sure that water enters the dishwasher. If water does not enter the dishwasher, check to be sure that water and power are turned on.
- Check for leaks under the dishwasher. If a leak is found, turn off power supply, then tighten connections. Restore power after leak is corrected.
- Check for leaks around the door. A leak around the door could be caused by door rubbing or hitting against adjacent cabinet. Reposition the dishwasher if necessary. See Step 11.
- ☐ The dishwasher will drain and turn off about 5 minutes after it was started. Check drain lines. If leaks are found, turn off power at the breaker and correct plumbing as necessary. Restore power after corrections are made. See Step 8 and 15.
- □ 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. See Step 15. Also check drain line for kinking.
- □ Run the dishwasher through another "Rinse Only" cycle. Check for leaks and correct if required.

# STEP 19 REPLACE TOEKICK BRACE AND TOEKICK

- Replace toekick brace and attach with screws set aside in Step 4 (the lower set of mounting holes may be used if desired). Only for PDW9700 series and PDW9900 series.
- Place toekick against the legs of the dishwasher.

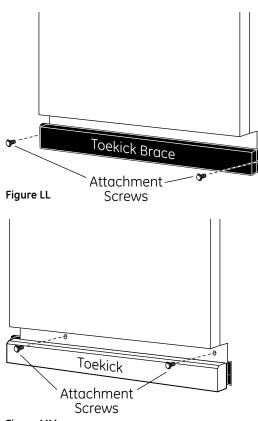


Figure MM

- Align the toekick with the bottom edge and make sure it is against the floor.
- Insert and tighten the 2 toekick attachment screws. The toekick should stay in contact with the floor.

Tip: Make sure toekick is against floor to minimize noise.

## **STEP 20 LITERATURE**

• Be sure to leave complete literature package and Installation Instructions with the consumer.

#### SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

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