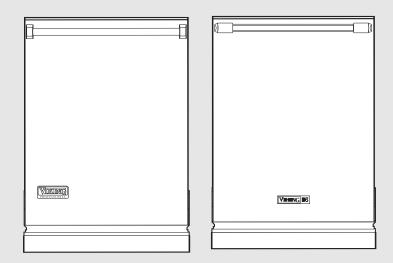
# Viking Installation Guide



100 Series Built-In Dishwasher

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# IMPORTANT - Please Read and Follow

- Please read this installation manual and particularly the safety instructions completely and carefully. They will save you time and effort and help to ensure optimum dishwasher performance.
- Be sure to observe all listed warnings and cautions. Look particularly for the icons with exclamation marks inside. The information icon also will provide important references.

#### WARNING

Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

#### **A** CAUTION

Indicates a potentially hazardous situation which, if not avoided, may result in injury. It may also be used to alert against unsafe practices.

#### **A** NOTICE

Indicates a potentially hazardous situation which, if not avoided, may result in damage to the dishwasher, the tableware, the equipment, or the environment.

**Site Preparation** 

It is recommended that a thorough site inspection be conducted PRIOR to unpacking and moving this appliance.

# IMPORTANT - Please Read and Follow

In addition to these instructions, the dishwasher shall be installed:

- In accordance with all local codes or, in absence of a local code,
- In the United States, with the national Electric Code,
- In Canada, with the Canadian Electric Code C22.1-latest edition/Provincial and Municipal codes and/or local codes.

## **A WARNING**

Read these installation instructions completely before installing and follow them carefully. Save these installation instructions and pass them on to any future user.

When installing the dishwasher, follow basic precautions, including the following:

- The dishwasher should only be converted from cord-connected to permanently connected by an authorized service representative.
- Installation and repair should be performed by a qualified installer. Work by unqualified persons could be dangerous and may void the warranty.

## IMPORTANT - Please Read and Follow

#### **A** NOTICE

Installation should be performed by an insured licensed plumber, contractor, or trained installer. Installation performed by persons other than this could result in improper installation and property damage.

- DO NOT operate the appliance if damaged, malfunctioning, partially disassembled, or if it has missing or broken parts.
- Also follow the safety instructions of the use and care guide.
- 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.
- Only connect the dishwasher to the power supply when all installation and plumbing work is complete.
- If the dishwasher is installed in a location that experiences freezing temperatures (e.g. in a vacation home, cabin, etc.), 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.
- Dishwasher must be secured to adjacent cabinetry using the brackets provided.
   Failure to do this may cause damage to property or bodily injury.
- Connect to a properly rated, protected, and sized power supply circuit to avoid electrical overload. The dishwasher is designed for an electrical supply of 120V (volts), 60Hz (hertz), AC, connected to a dishwasher-dedicated, properly grounded electrical circuit with a fuse or breakers rated for 15 amperes. Electrical supply conductors shall be a minimum of #16 AWG copper wire rated at 167°F (75°C) or higher. These requirements must be met to prevent injury and machine damage. Consult a qualified electrician if in doubt.

- DO NOT use any extension cord or portable outlet device to connect the dishwasher to a power supply.
- Ensure that any plastic wrappings, bags, small pieces, etc., are disposed of safely and kept out of the reach of children.
   Danger of suffocation!
- Remove the dishwasher door when removing an old dishwasher from service or discarding it. Ensure that the appliance presents no danger to children while being stored for disposal.
- Old appliances may contain materials that can be recycled. Please contact your local recycling authority about the possibility of recycling these materials.

#### A NOTICE

- The dishwasher drain hose must be installed with a drain loop at least 28" (710mm) 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 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.

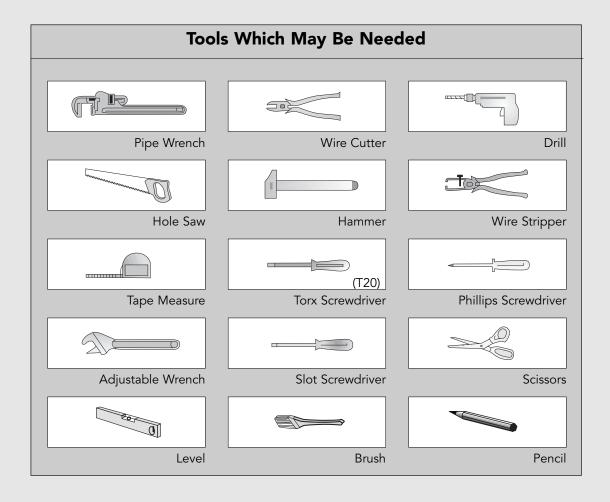
# IMPORTANT— Please Read and Follow

 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.

#### **A** NOTICE

 Do not discard any bags or items that come with the original package until after the entire installation has been completed. To contact us, you may either call our toll-free number at 1-888-VIKING1 (845-4641) or contact us via the website at www.vikingrange.com.

# General Information



## General Information

# **Materials Which May Be Needed** Hot Water Supply Line – Minimum 3/8" O.D. copper tubing or metal braided dishwasher supply line. 90° elbow with 3/8" N.P.T. male threads on one leg, and sized to fit your water supply line (copper tubing/compression fitting, or braided hose) on the other leg. UL listed conduit connector or strain relief. Teflon tape or other pipe thread compound to seal plumbing connections. Shut-off valve and fittings appropriate for hot water supply line (copper tubing/compression fitting, or braided hose). Silicone. Glue.

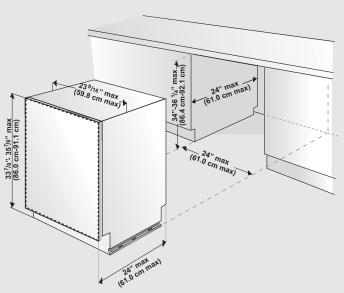
## General Information

#### **Parts Supplied**

Parts for your dishwasher will come in several plastic bags. Check your parts bags to make sure you have all the parts as listed below

#### **Materials Supplied** Dishwasher Parts Bag 2 Dishwasher Parts Bag 1 This dishwasher bag comes with v. Screws Ø 1/8"x5/8" (Ø 3.5mmx14mm) the following parts: a. Side Trim Strips – Left y. Screws Ø 3/16"x1-3/4" b. Side Trim Strips – Right (Ø 4mmx43mm) c. Adjusting Wrench d. Screws Ø 1/8"x5/8" d. Parts Attached to the Rear (Ø 3.5mmx14mm) of the Dishwasher e. Mounting Bracket - Left a. Side Trim Strips – Left f. Mounting Bracket - Right b. Side Trim Strips - Right g. Spring Clamph. Screw Clamp o. Kickplate (Kickplate without slots) g. Rubber Connector p. Kickplate h. k. Kickplate Bracket – Left I. Kickplate Bracket – Right j. m. Edge Protector n. Clips k. o. Kickplate (kickplate without slots) p. Kickplate Screws Ø 1/8"x3/8" (Ø 3.9mmx9mm) s. Plastic Caps t. Screws Ø 3/16"x1/4" (Ø 4mmx6mm) z. Steam Protection Foil x2

Specifications



Built-In Dishwasher		
FDW100/FDW100WS		
Overall Width	23-9/16" (59.8 cm)	
Overall Height from Floor	33-7/8 (86.0 cm) min. to 35-7/8" (91.1 cm) max.	
Overall Depth from Rear	without door panel – 21 5/8" (54.9 cm) with door panel – 22 3/16" (156.4 cm)	
Cutout Width	24" (61.0 cm)	
Cutout Height	34" (86.4 cm) min. to 36" (91.4 cm) max.	
Cutout Depth	24" (61.0 cm)	
Electrical Requirements	12.0 amps, 120V/60 Hz; 4' (1.2 m) electrical cord supplied with unit	
Water-Heating Element Rating	1240 watts	
Inlet Water Temperature	120°F (49°C) required	
Inlet Water Pressure	4.35 to 145 psi (.3 - 10 bar)	
Operating Range		
Inlet Water Hose	Minimum 3/8" OD copper tubing or braided metal water line required.	
Drain Hose	6.4' (1.9 m) drain hose provided	
Drain Hose High Loop Required	Height from floor – 28" (71.1 cm)	
Approximate Shipping Weight	97 lbs. (44 kg)	

## **A** NOTICE

Because we continually strive to improve our products, we may change our specifications and design without prior notice. This device corresponds to the following directives: UL 749 Household Dishwasher Directive.

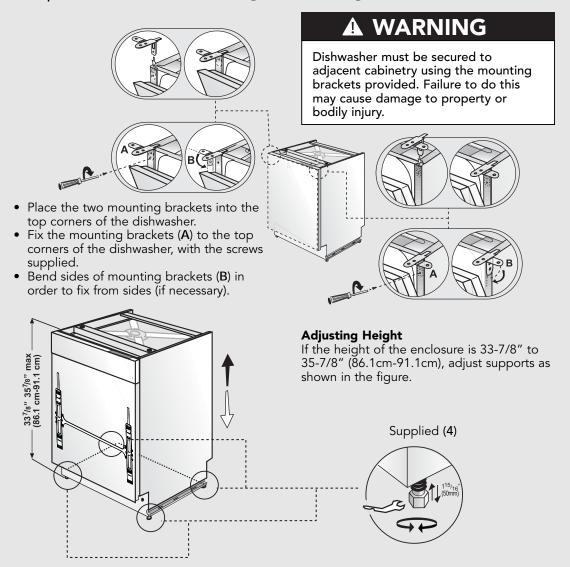
# **Enclosure Preparation**

## **Electrical Preparation**

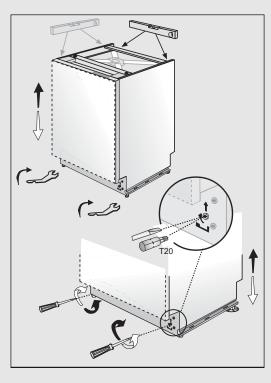
#### **A** WARNING

The dishwasher is designed for an electrical supply of 120V, 60Hz, AC, connected to a dishwasher-dedicated, properly grounded electrical circuit with a fuse or breaker rated for 15 amperes.

## Preparation for Installing Mounting Brackets



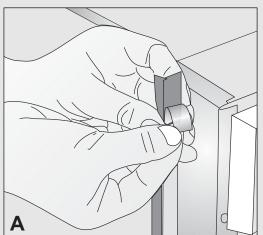
# **Enclosure Preparation**

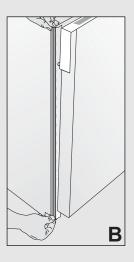


- Adjust the front foot level with the adjusting wrench to balance and raise the dishwasher to the enclosure height.
- Adjust the rear foot level with a screwdriver to balance and raise the dishwasher to the enclosure height.

## **A** NOTICE

- Make sure the dishwasher is plumb and notice dishwasher can be placed with a small clearance under the counter top.
- Turning the screwdriver in the direction of the black arrows will bring the dishwasher back feet up.
- Turning the screwdriver in the direction of the white arrows will take the dishwasher rear feet down.





#### Installing the Side Trim Strips

- Remove the adhesive tape (Figure A).
- Place the trim strips on the front edge of the side walls (Figure B).

## **A** NOTICE

Make sure you use the correct trim strip since there is a left and a right side strip. The flexible material should be facing forward (Figure B).

# Installation Preparation

## Preparing the Water Connection (A)

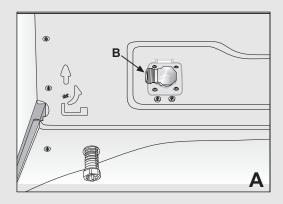
- Install an easily accessible shut-off valve (not supplied) in the water supply line. All solder connections must be made before the water line is connected to the dishwasher's water inlet valve. Water can also be supplied to the dishwasher by using a flexible braided hose line.
- Check with your plumbing supply sources for the proper hose and 90° elbow and necessary fittings for the water supply line. This material is not supplied and must be purchased separately.

#### WARNING

Installation should be performed by a qualified installer. Work by unqualified persons could be dangerous and may void the warranty.

If the dishwasher is installed in a location that experiences freezing temperatures (e.g. in a vacation home, cabin, etc.), 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.

## Installing the 90° Elbow Fitting (B)



## **A** CAUTION

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

If the water supply line is to be copper tubing, make certain that the elbow has a compression fitting. Apply Teflon tape or other pipe sealant when required. Orient the water supply connection downwards as shown in the figure so the water line can be easily pulled underneath or on the side of the dishwasher.

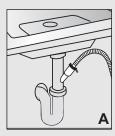
# Installation Preparation

## **Drain Preparation**

The dishwasher drain hose may be connected to the drain plumbing in one of three ways, (Figures A, B, C):

#### **A** NOTICE

- Either one of the above methods must be used or the dishwasher will not operate properly.
- A hose that attaches to a sink spray can burst if it is installed on the same water line as the dishwasher. If your sink has one, it is recommended that the hose be disconnected and the hole plugged.
- The total length of the drain hose is 76-3/4" (1950mm). If a hose extension is required, a drainage hose of equal quality must be used.
- The maximum length must not exceed 157-1/2" (4000mm). Otherwise, the cleaning process is negatively influenced.

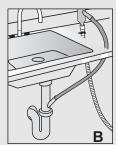


#### **Under the Sink Drain**

 Install a Y-branch tail pipe (Figure A).

## **A** NOTICE

You must add a loop at least 28" (71.1cm) above the floor of the cabinet and above the drain connection in the drain hose to prevent waste water from not draining properly and causing either poor washing results or a bad odor.



#### Installing an Air Gap

• If the local ordinance requires an air gap (Figure B).

#### **A** NOTICE

Check with local ordinance for type of air gap required.



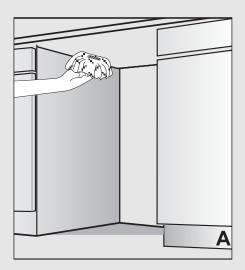
#### Disposal

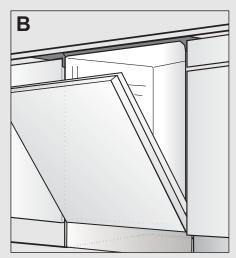
- Remove the drain connection plug before attaching the drain hose from the dishwasher.
- Every disposal has a hookup for a dishwasher; consult your disposer manual for correct connection (Figure C).

# Installation Preparation

#### Steam Protection Foil

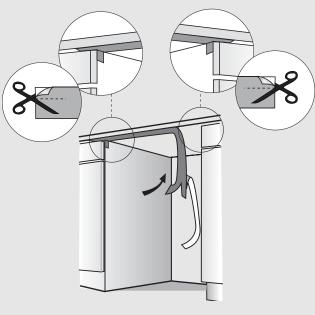
Steam will form inside the dishwasher during operation. At the end of the cycle, when the dishwasher door is opened, it is required to use a steam protection foil to prevent any steam from collecting on the underside of the counter top.





#### Fitting the Protection Foil

- Before applying the steam protection foil to the underside of the countertop, clean the area with a damp cloth (as shown in Figure A). Once the area dries, apply the steam protection foil.
- The steam protection foil will be applied at the location where the hot steam escapes when you first open the door (as shown in Figure B).

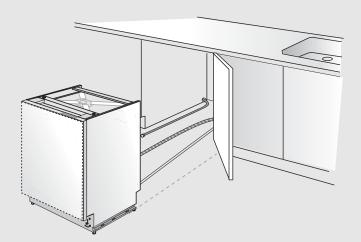


## **A** CAUTION

Steam protection foil must be applied where the steam escapes when door is first opened. Failure to install the steam protection foil during installation can lead to damage to to the cabinets and countertop.

## Placement of Dishwasher into the Opening

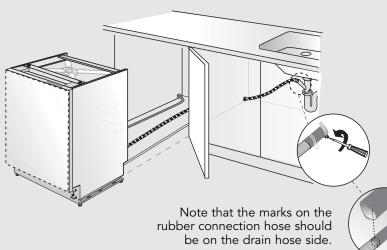
Now place the dishwasher into the opening and get ready to connect all hoses and electrical connections.



#### **A** CAUTION

Make sure all hoses are pulled through the side opening of the cabinet, no hoses are kinked, and all slack is taken out as shown in the figure to the left.

# Drain Hose Connection, Water Supply, and Electrical Connections



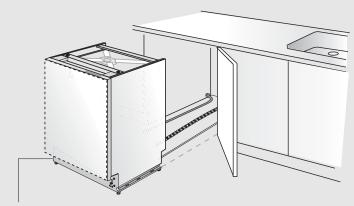
#### **Drain Hose Connection**

Connect the drain hose to the drain plumbing.

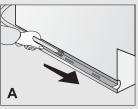
- Use the supplied rubber connection hose and drain hose clamps to connect the dishwasher drain hose to the plumbing drain connection.
- Use the spring clamp to secure the rubber connection hose to the dishwasher drain hose. Use the screw clamp to secure

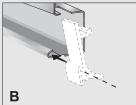
the rubber connection hose to the plumbing drain connection.

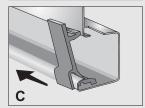
## Preparation of Water Supply

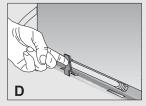


Left Side Water Supply Connection

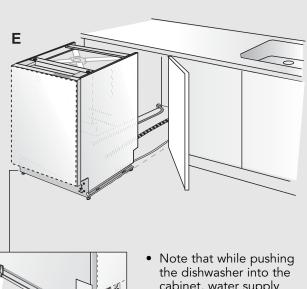




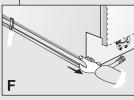




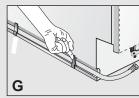
- Before pushing the dishwasher into the cabinet, you must place water supply hoses into the channel of the dishwasher (Figure A).
  Place the supplied clips into the channel (Figure B) so that you can move these clips along the channel (Figure C) and fix by pressing on (Figure D) so that you can keep the water supply hose in the channel.



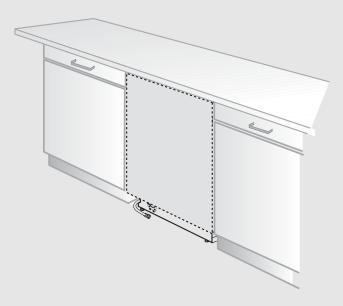
 After installing one clip for each side, push the dishwasher into the cabinet (Figure E).

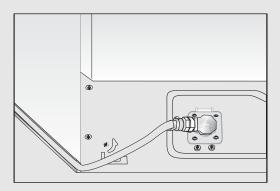


 Note that while pushing the dishwasher into the cabinet, water supply hose must move in the channel to the front (Figure F).



• Fix the second clip (Figure **G**).





Water supply may be connected to the dishwasher in one of two ways:

- With metal braided hose.
- With copper tubing.

## **A** CAUTION

- Hot water supply line: Use minimum 3/8" O.D. copper tubing or metal braided dishwasher supply line.
- braided dishwasher supply line.

   Temperatures required for soldering and sweating will damage the dishwasher's water inlet valve so if any such operation is needed, keep the heat source min. 7-7/8" (20.0cm) away from the dishwasher's water inlet valve.
- There should not be any sharp bends in the water line that may restrict the water flow.
- Teflon tape or pipe thread compound must be used for sealing the connection. Before connecting the copper water supply line to the dishwasher, flush it with hot water to clear any foreign material.

#### **A** NOTICE

After connections are made, turn on the water supply to check for leaks.

#### **Electrical Connection**

### WARNING

- Make sure the voltage and frequency listed on the data plate correspond with the household electrical supply. This data must correspond to prevent injury and machine damage. Consult a qualified electrician if in doubt.
- Only connect the dishwasher to the mains when all installation and plumbing work is done.
- DO NOT use any extension cord or portable outlet device to connect the dishwasher to a power supply.
- The power-supply receptacle for the appliance shall be installed in a cabinet or on a wall adjacent to the undercounter space in which the appliance is to be installed.
- The access hole of the supply cord to the installation compartment must be smooth and rounded and it must be large enough for the attachment plug to pass through. The longest dimension of the opening shall not be more than 1.5" (35mm). If the partition is metal, it needs to be covered with an edge protector.
- Care must be taken when the appliance is installed or removed, to reduce the likelihood of damage to the power-supply cord.

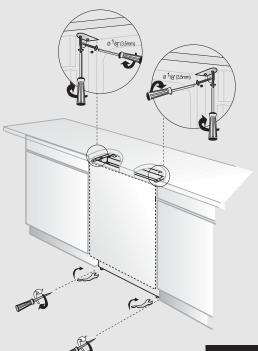
#### **Grounding Instructions**

This appliance must be grounded. In the event of a malfunction or breakdown, grounding will reduce the risk of electrical shock by providing a path of least resistance for electrical current. This appliance is equipped with a cord having an equipmentgrounding 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. This appliance must be connected to a grounded metal, permanent wiring system, or an equipment-grounding conductor must be run with the circuit conductors and connected to the equipment-grounding terminal or lead on the appliance.

## **A** WARNING

 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. Do not modify the plug provided with the appliance; if it will not fit the outlet, have a proper outlet installed by a qualified electrician.

## Readjusting Leveling Legs



Now that the dishwasher is in the cabinet, you must readjust the leveling legs to bring the dishwasher up to the required height and attach it underneath the countertop.

- Readjust the front leveling leg with adjusting wrench to balance the dishwasher and raise it up under the countertop; make sure the unit is level.
- Readjust the rear leveling leg with a screwdriver to balance the dishwasher and raise it to the required height using the brackets supplied.
- Attach the dishwasher underneath the countertop with the four screws supplied (Ø 1/8"x1/8"-Ø 3.5mmx14mm). Make sure you do not go through the top of the countertop or damage granite.

#### Adjusting the Movable Kickplate

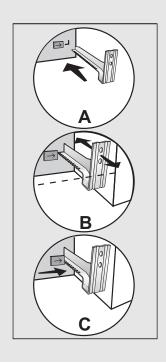
Now that you have successfully installed the dishwasher, you need to attach the kickplate to the dishwasher. The two-piece kickplate can be adjusted to the height and depth needed for your kitchen. Be sure to use the slotted kickplate in the front and the other behind it. They slide into each other.

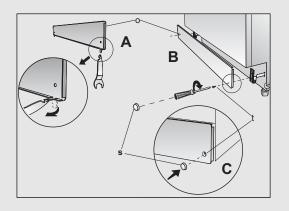
- 1. Insert the movable kickplate brackets into the channel (A).
- 2. Make sure that the plastic tab to the left of the "L" opening on the dishwasher has not closed the channel you will push the bracket through.

## **A** NOTICE

There is a left and a right bracket.

- Adjust the kickplate brackets forward or backwards so that they will align with the kitchen kickplate (B).
- Lock the kickplate brackets as shown with the plastic tab on the dishwasher into the teeth of the bracket (C).
- 3. Now attach the kickplate to the bracket with the two (Ø 3/16"x1/4"-Ø 4mmx6mm) screws and the caps provided as follows.





If the enclosure height is below 33-1/16" (84.0cm), use only (o) labeled kickplate (kickplate without slots). Installation should be done following the steps illustrated in the Figures A, B, and C respectively.

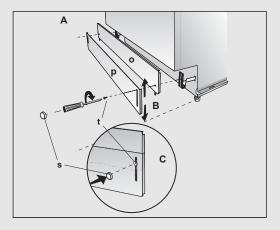
1. Bend tabs on kickplate (0) inwards (A).

- 2. Secure kickplate to brackets with screws (t) as shown in the supply bags (B).
- 3. Attach caps (s) as shown in the supply bags (C).

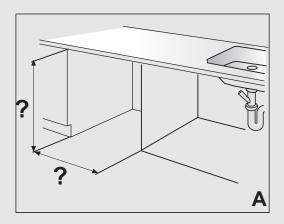
If the enclosure height is above 33-1/16" (84.0cm), use "o" and "p" labeled kickplates together. Make sure the slotted kickplate (p) is on the outside so you can adjust height of the kickplate. Installation should be done following the steps illustrated in the figures A, B, and C respectively.

1. Align the kickplate (o) and (p) (A).

- 2. Secure kickplates to brackets with screws (t) after adjusting the height of the slotted kickplate (p) (B).
- 3. Attach caps (s) as shown in the supply bags (C).



## Installing a Custom Panel



Measure the height and width of the enclosure (Figure A) and the kickplate. Determine how big the wooden door can be. For example, if the height is 33-7/8" (86.0cm) and if the kickplate is 3-15/16" (10.0cm), the door can not be taller than 29-15/16" (76.0cm).

1. Prepare the wooden door with the

mounting brackets.

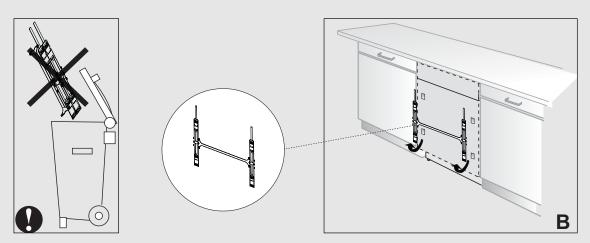
Height of the wooden door Height:

30" (76.2cm)

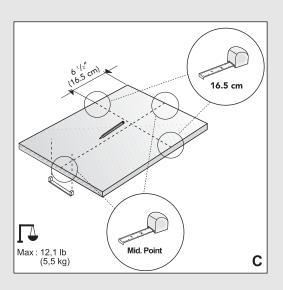
23-1/4" to 23-1/2" Width:

(59.1cm to 59.7cm)

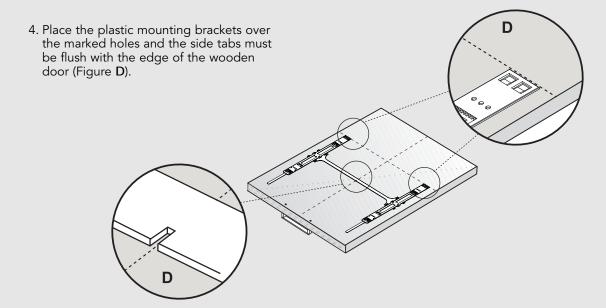
Thickness: 3/4" (1.9cm)

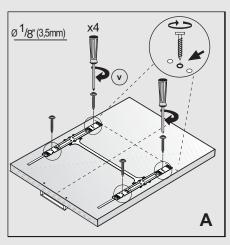


2. Remove the plastic mounting brackets from the dishwasher (Figure B).

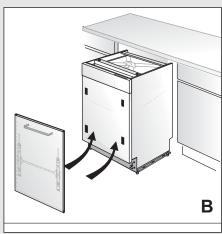


3. Mark the wooden door as shown in the drawing (Figure C).

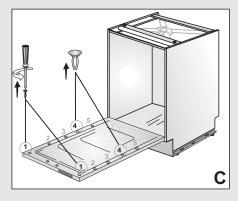




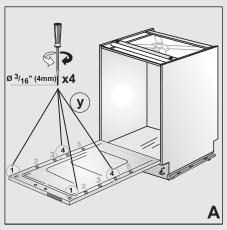
5. Attach the two mounting brackets to the wooden door with 4 screws (Ø 1/8"x5/8" (Ø 3.55mmx14mm) (Figure **A**).



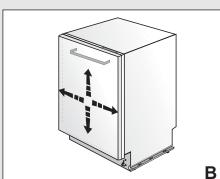
Mount the wooden door onto the dishwasher with the plastic mounting brackets which you have attached (Figure B).



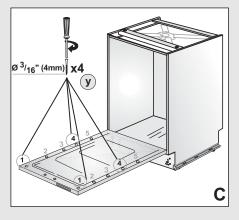
7. Open the door and remove the two caps and two screws inside the door at position 1 and 4 (Figure C).



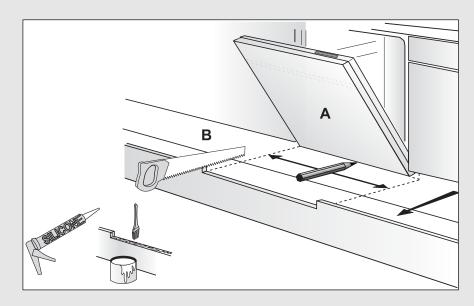
8. Using the four screws Ø 3/16"x1-11/16" (Ø 4mmx43mm) provided, attach the wooden door to the dishwasher at position 1 and 4 (Figure A).



9. Check the position of the wooden door and make sure it is aligned properly (Figure B).

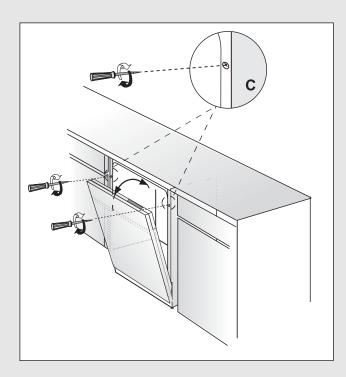


10. Tighten the screws in position 1 and 4 completely after the final alignment (Figure C).



- 11. Check whether the bottom of the door hits the kickplate of the kitchen cabinet (Figure A).
- (Figure A).

  11.1. If the door hits the kickplate, cut the necessary section out of the kickplate (Figure B).
- 11.2 Apply silicon or sealant to the cut edge of the kitchen cabinet kickplate or paint so it does not absorb moisture.

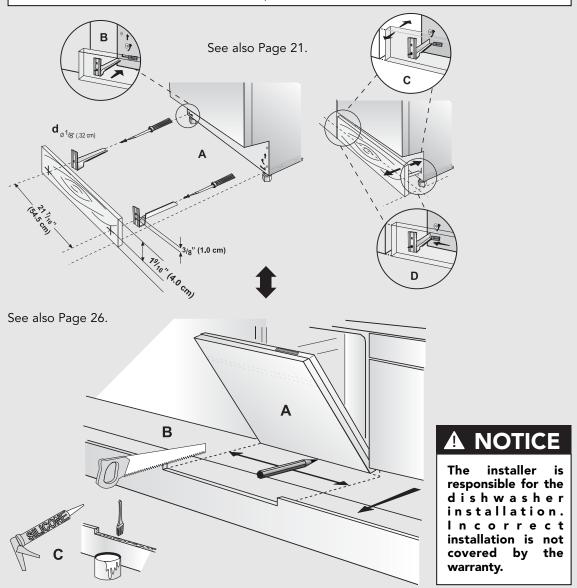


## Adjusting Door Tension with Custom Wooden Door

- Check the door tension of the dishwasher; if the door closes too quickly or if the door falls open, the spring tension needs to be adjusted.
- The adjustment screws can be found on the front of the dishwasher after you open the door (see drawing).
- Adjust the spring tension by turning the screw to the right for more weight and to the left for less weight. (Figure C).

### **A** NOTICE

If you have a European kitchen or want to install a wooden kickplate to match your kitchen, please refer to one of the two drawings given below. Follow the same instructions on the brackets as for the removable kickplate. Installation should be done following the steps illustrated in the Figures A, B, C, and D respectively.



## Installer Checklist and Final Instructions

Your installer must have completed and
checked the following:
The dishwasher is square and level.
The dishwasher is fastened securely to the
cabinetry.
The dishwasher door opens and closes
freely. The dishwasher door must close
without hitting any cabinetry or
countertop.
The inlet water supply is turned on and
checked for leaks.
The drain hose has been connected and
checked for leaks. There must be no kinks
or obstructions in the drain hose.
The drain hose must be installed with a
28" (710mm) high drain loop for drain
hook-ups without any air removed.
If the dishwasher drain is hooked up to a
garbage disposal, the drain hopper plug
must be removed.
The spray arms are free and rotate freely.
The rinse cycle has been run.
The water level will be below the filter
screen after the end of the wash program.
It is normal to find some water in the drain filter area.
Set the water softener to the correct water
hardness for your area. If the dishwasher
drain is connected to a garbage disposal,
make sure that the drain/hopper plug has been removed.
Deen removed.

#### **Final Instructions**

- Press the On/Off button to turn the dishwasher on.
- Power indicator light comes on.
- Use the Program Select button to choose a washing program.
- Start the program with the Start/Pause/Cancel button.
- Run the dishwasher through one complete cycle. When the wash cycle is completed, use the On/Off button to turn the dishwasher off.

#### **Self-Help Hints**

The screen does not come on:

- Check to make sure the breaker to the dishwasher is in the on position.
- Check to make sure that the supply cord is plugged.

No water is coming into the dishwasher:

• Check to make sure the hot water shut-off is in the ON position.

Water does not drain:

- Make sure drain hose is not kinked or comes out of air gap next to the sink.
- Remove drain hose from disposal making sure plug is removed.

# Service & Registration

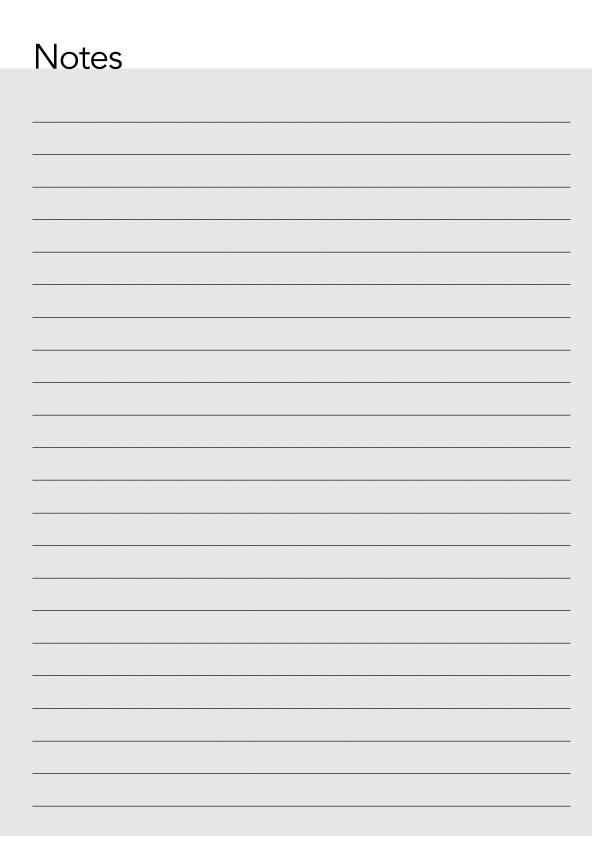
Only authorized replacement parts may be used in performing service on the appliance. Do not repair or replace any part of the appliance unless specifically recommended in the manual. All servicing should be referred to a qualified technician.

Contact Viking Range Corporation, 1-888-VIKING1 (845-4641), for the nearest service parts distributor in your area or write to:

#### VIKING RANGE CORPORATION PREFERRED SERVICE 1803 Hwy. 82W Greenwood, Mississippi 38930 USA

The serial number and model number for your dishwasher are located on the identification plate mounted on the right side of the inner door.

These installation instructions should remain with the dishwasher for future reference.



# Notes



Viking Range Corporation 111 Front Street Greenwood, Mississippi 38930 USA (662) 455-1200

For product information, call 1-888-VIKING1 (845-4641) or visit the Viking Web site at vikingrange.com



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