

DISHWASHER INSTALLATION INSTRUCTIONS



AUTOMATIC HIGH LOOP

The drain hose is fastened to the back of the machine at the best height. To eliminate potential drain problems, leave this hose in place.

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INTRODUCTION

Read these instructions carefully and completely before you install the machine. The installation should be carried out by a qualified person who is familiar with all local codes and ordinances for electrical and plumbing connections.

If a dishwasher is being installed in this area for the first time, most of the cabinet work, plumbing, and electrical has to be done before you move the machine into place.

If you are replacing an old dishwasher, you must check the plumbing connection and wiring before you move the new dishwasher into place.

NOTE: Cosmetic damage must be reported to the ASKO dealer **within five days** from the date of purchase. As soon as you unpack the dishwasher, thoroughly check it for cosmetic damage.

WHAT YOU NEED

TOOLS

- 1) Phillips No. 2 screwdriver
- 2) Flat blade screwdriver
- 3) Torx screwdriver size T 20
- 4) Adjustable wrenches (if you use copper fittings)
- 5) Open-ended wrench (1/2" [12 mm] or 5/8" [16 mm])
- 6) Tape measure
- 7) Spirit level
- 8) Electric drill with 1" drill bit
- 9) Keyhole saw

MATERIALS

- Minimum 3/8" OD copper tubing of sufficient length for your installation
- Shut-off valve and fittings for water supply line

Tip Guards (optional) When it is not possible to attach the

dishwasher to the cabinet or the underside of the cabinet top, you should install tip guards to prevent the machine from tipping when you open the door.



Refer to page 4 for installation instructions.

The dishwasher is shipped with the high loop drain hose, inlet hose and electrical cord attached and ready to be connected.

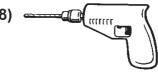














TECHNICAL DATA

Water pressure 18-176 psi

Power 120 V, 60 Hz, 15 amp.

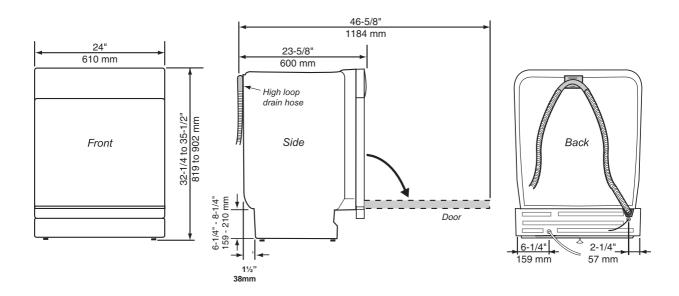
Heating element 1200 W **Max loading** 1300 W



DIMENSIONS

UNIT DIMENSIONS

	US Measurements	Metric Measurements
Height	32-1/4"-35-1/2"	819–902 mm
Width	*24"	610 mm
Depth	23-5/8"	600 mm
Weight	106 lb	48 kg



^{*}Models D3251/3252FI and D3531/3532FI are 23-5/8" wide.

PREPARING THE LOCATION

The best place for your dishwasher is in the kitchen near the sink. This makes it easier to connect the water and drain supply lines.

A built-in dishwasher must be enclosed on the top, both sides and the back.

The electrical and water supplies should enter through the area indicated by the shading on the illustration at right.

Access holes must be round and smooth, and they should not be more than 1-1/2" (38 mm) in diameter.

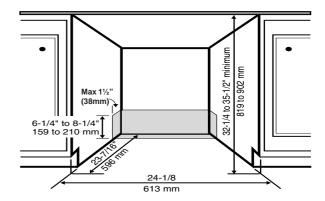
EUROPEAN INSTALLATIONS

The kick plate supplied with your dishwasher fits a 24" (610 mm) opening. When using European standard installation, a 23-1/2" (597 mm) wide toe kick is available from your ASKO dealer. (Part numbers: White=8073566-0; Black=8073566-86.)

For a 6" toe kick installation, the part numbers are: White=8073567-0: Black=8073567-86.

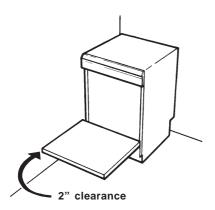
CABINET OPENING

	US Measurements	Metric Measurements
Height	32-1/4"-35-1/2"	819–902 mm
Width*	24-1/8""	613 mm
Depth	23-7/16"	596 mm



CORNER INSTALLATION

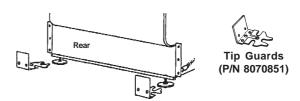
If the dishwasher is installed in a corner, there must be a minimum clearance of 2" (50 mm) from the side wall so the door can open.



INSTALLING THE TIP GUARDS (OPTIONAL)

When it is not possible to fasten the dishwasher to the cabinet, you should install tip guards to prevent the machine from tipping when the door is opened. The tip guards can be attached either to the floor or the wall.

The tip guards should be mounted behind the machine, 19" (483 mm) apart (measuring center to center) and 18-1/2" (470 mm) from the front of the machine. (Note: This measurement could vary, depending on the thickness of the custom panel, if any.)



We recommend that you install tip guards when it isn't possible to fasten the dishwasher to the cabinet.

WATER SUPPLY

WARNING! Plumbing connections must comply with applicable sanitary, safety and plumbing codes in your area.

The machine can be connected to either a hot or cold water supply. If a cold water supply is used, the washing times will be longer but the performance will not be affected.

The dishwasher comes with a 6-foot PEX water supply line that has a 3/8" NPT female connection.

After determining where the water supply line will enter under the sink, drill a 1-1/2" (38 mm) access hole and run the line to the approximate inlet valve location shown in the figure below. The water line inlet valve is on the right rear of the machine.

For service convenience, a shut-off valve (not supplied) should be installed in the supply line in an easily accessible location, such as, beneath the sink.

It is important that the water supply line and the shut-off valve have a sufficient flow volume. At last 3 gallons (12 liters) per minute must be able to pass through the line. The water pressure should be 18-176 psi.

EASYINSTALL CONNECTIONS

PEX tubing with 3/8" compression fitting

PEX tubing has a 95-year spec life. Fits American dishwasher water supply valves.



Drain hose boot

Ready to be cut to desired drain connection. Only one clamp required.



Electrical cord

110-120 volts, 15/20 amp cord supplied with unit.

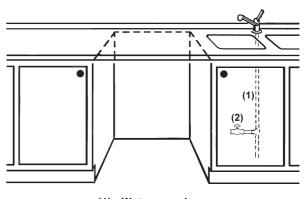


WARNING!

Do not use an extension cord for this appliance.

WARNING!

In order to prevent heat damage to the inlet valve, all solder connections must be made before the water line is connected to the dishwasher.



- (1) Water supply
- (2) Water supply valve (not supplied)

NOTE: Be sure to run the PEX tubing through the hole to sink compartment before moving the dishwasher into position.

DRAIN CONNECTIONS

ASKO provides a 7/8" (22 mm) corregated drain hose which is connected to the back of the unit to form a high loop. If additional drain hose is needed, please purchase an additional ASKO drain hose and joint it to the provided hose with a 7/8" (22 mm) copper tube.

NOTE: Do not use any fittings anywhere in the drain line that are less than 7/8" (22 mm) ID.

The access hole for the drain line should be 1-1/2" (38 mm).

The end of the drain line is 1/2" (12 mm), but it is adjustable to 7/8", 3/4", 5/8" (22mm, 19 mm, and 16 mm). If the drain connection is larger than

1/2" (12 mm), you can easily cut the drain line to fit the connection.



The illustrations to the right show three ways to connect the drain supply line.

THE HIGH LOOP

The high loop is necessary for proper draining. Therefore, all ASKO dishwashers have the drain hoses attached to the drain pump and fastened to the top back of the unit,



as illustrated. This gives the drain hose an automatic high loop, which is necessary for proper draining. The drain hose is fastened at the best high loop height.

To eliminate potential drain problems, simply leave this hose in place.

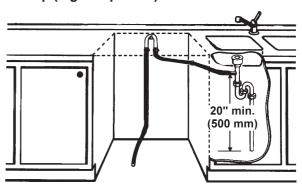
IMPORTANT THINGS TO REMEMBER:

- ◆ Failure to provide the proper drain connection height (minimum of 20" (508 mm) above the bottom of the dishwasher base) or a 20" (508 mm) high loop will result in improper drainage, which will damage the machine.
- No part of the drain hose should be higher than 35" (889 mm) from the bottom of the dishwasher.
- The drain hose can be extended to a maximum length of 10 feet (3048 mm). Joints and jointed tubes, if any, must have a minimum 7/8" (22 mm) ID.
- If the drain line is going to be connected to a waste disposer, be sure to remove the knockout or plug from the fitting on the disposer before connecting the drain line.
- Do not use fittings smaller than 7/8" (22 mm); otherwise the water may not drain properly.

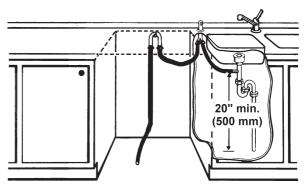
When the installation is ready, open the supply valve and let the pressure act for a while. Then check that all connections are tight and there are no leaks.

THREE WAYS TO INSTALL DRAIN CONNECTIONS

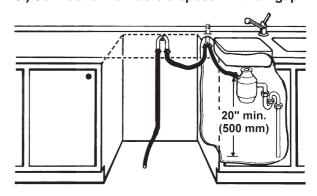
A.) Typical connection to sink plumbing before trap (high loop drain)



B.) Connection to air gap then to the trap



C.) Connection to waste disposer with air gap



NOTE: Don't forget to remove the knockout or plug from the disposer fitting.

ELECTRICAL CONNECTIONS

WARNING! Before working on wiring for any electrical appliance, be sure the electrical power has been turned off at the breaker/fuse box.

WARNING! Disconnect electrical power supply and place a tag at the disconnect switch indicating that you are working on the circuit.

WARNING! grounding Electrical and connections must comply with the applicable portions of the national electrical code and/or other local electrical codes.

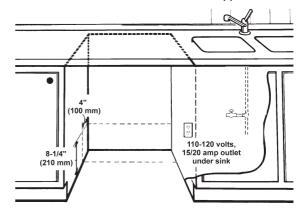
The dishwasher comes with an electrical cord for 110-120 volts, 15/20 amp supplied. This cord should be plugged into the 110-120 volt outlet under the sink.



If the cord is not long enough, or if a hard-wire installation is needed, follow instructions on page 8.

WARNING!

Do not use an extension cord for this appliance.



NOTE: Access holes should be 1-1/2" (38 mm) in diameter with no sharp edges.

GROUNDING INSTRUCTIONS

This unit must be grounded to operate properly. It 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 of the appliance.

Damage to the dishwasher could occur if it is not properly grounded.

WARNING! Make sure the water supply line, drain line and branch circuit wiring do not touch any exposed terminals of dishwasher wiring.

PREPARING THE DISHWASHER FOR INSTALLATION

At this point the styrofoam, plastic wrap, and the wood pallet (base) should be removed from the dishwasher. Now is an excellent time to inspect for any shipping damage. Should you find any damage, you should report it to your dealer or builder immediately.

Be sure to remove the toe kick and toe kick insulation which are wrapped in heavy brown paper and packed inside or on top of the dishwasher.

THE FILL STRIPS

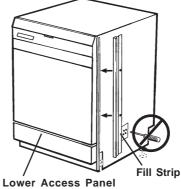
All standard ASKO dishwashers have color-coded fill strips to finish off the installation. To prevent damage to the machine, be sure to remove the shipping screws that secure the fill strips to the access panel. These screws are to be thrown away. Do not replace them into the access panel.

SLIDES FOR LEGS

The unit comes with white plastic slides for the legs to protect the kitchen floor from being damaged when you slide the unit into place. The slides simply snap onto the bottom of the legs.

> Protective slides for legs simply snap onto the bottom of the legs.





Do not screw the fill strips back to the lower access panel: otherwise, the

WARNING!

machine will have to be uninstalled if service is necessary.

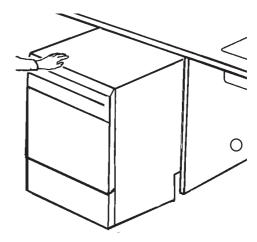
NOTE: If the cabinet opening is European measurement (23-1/2 inches [597 mm]), remove the II strips to fit the dishwasher into the opening.

MOVING THE MACHINE INTO PLACE

WARNING!

Make sure you put the protective slides on the legs to prevent damaging the floor when you slide the unit into place (see page 6).

- 1. Position the machine in front of the cabinet opening.
- 2. Make the height adjustment while the dishwasher is in front of the opening.
- 3. Pull out the drain hose to ensure there are no sharp bends.
- Start to feed water and drain lines and electric cord (if necessary) into the access hole in the cabinet.
- 5. Gently slide the unit into the dishwasher opening. As you do this, feed the drain line and inlet hose into the access hole in the side of the cabinet.



As you slide the unit into place, feed the drain line and inlet hose into the access hole in the side of the cabinet.

WARNING! Be careful of sharp edges.

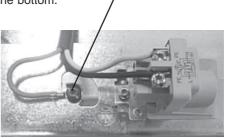
CONNECTING THE ELECTRIC CABLE

If the cord is not long enough, or if a hard-wire installation is needed, follow the steps below to complete the electrical connection.

WARNING! Before starting this procedure, be sure the power is turned off at the breaker/fuse box.

- Connect supply cable with a UL-listed strain relief bushing (if nonmetallic cable is to be used).
- 2. Connect branch circuit white lead to **N** lead on filter.
- 3. Connect branch circuit black lead to L lead on filter.

4. Connect ground wire to ground connection screw on the bottom.



NOTE: When doing a hard-wire installation, you must remove the supplied power cord.

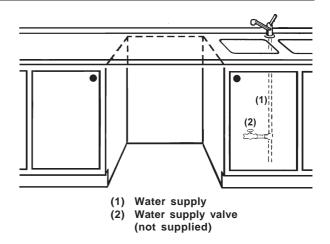
CONNECTING THE WATER SUPPLY

In order to prevent heat damage to the inlet valve, all solder connections must be made before the water supply line is connected.

Flush the water supply line prior to connecting it to the water fill tube.

The unit has a float switch in the base pan to protect against flooding. If the inlet valve connection is not seated properly, water may leak into the base pan and activate the float switch.

It is important that the water supply line and the shut-off valve have a sufficient flow volume. At last 3 gallons (12 liters) per minute must be able to pass through the line. The water pressure should be 18-176 psi.



NOTE: Be sure to run the PEX tubing through the hole to sink compartment before moving the dishwasher into position.

TESTING FOR LEAKS

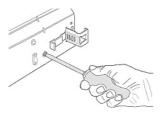
- 1. Turn on the water supply and check for leaks.
- Turn the power on at breaker/fuse box and test the dishwasher operation by running a Rinse cycle. (This should take about four minutes.)
- 3. Turn off the electrical power and check for leaks
- under the dishwasher and sink.
- 4. Make sure that no kinks have developed in the drain lines.

If there are no leaks and the dishwasher seems to be working properly, continue with the installation.

ADJUSTING THE LEVELING LEGS

Now that all the connections are made and the machine is in place under the cabinet, you should make the final height adjustment.

1. You should set the rear foot first. To do this. use screwdriver to rotate the adjusting screw on the bottom front of the machine. Turn the screw clockwise to raise the foot and anticlockwise to lower it.



- 2. Using a 1/2" (12 mm) wrench, adjust the locking nuts until the machine is level. (The machine may have an inclination of 2° maximum without affecting its performance.)
- 3. When the feet are properly adjusted, tighten the locking nuts to the base pan.

NOTE: When adjusting the unit lower than 33-1/4" (845 mm), the holes on the toe kick will need to be elongated. An accessory toe kick is also available for this type of installation. Contact your dealer to order.

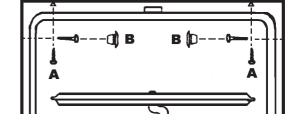
ASTENING THE DISHWASHER

It's necessary to fasten the dishwasher to the cabinet so it won't tilt when the door is opened or if something heavy is placed on the door. Use only the stainless steel screws provided with the machine.

- Use option A for U.S. or European standard installations. Use option B only for European standard installations.
- Cover the screw heads with the plastic plugs provided with the machine.
- 3. When the machine is properly attached, check that the feet are tight against the floor and that the machine is level.



Mounting Screws



NOTE: Option A can be used for U.S. or European installations. Use option B for European standard installations only.

NOTE: When it is not possible to attach the dishwasher to the cabinet, you should install tip guards. (See "Tip Guards" on page 2.)

INSTALLING THE TOE KICK

Once you have the toe kick bracket in place, you can install the toe kick, as follows:

- If you have not done so, take the toe kick and felt insulation from the top of the machine-packaging.
- Lay the insulation on the back side of the toe kick to make sure it fits properly.
- Peel the adhesive protection strip off the insulation and press it firmly to the back side of the toe kick, making sure you don't cover any slots on the toe kick.
- Positioning the notches on the toe kick at the edge of the access panel, slide the toe kick up behind the access panel then let it slide to the floor.
- 5. Screw the toe kick to the toe kick brackets.
- Adjust the toe kick depth.

SETTING THE TOE KICK **DEPTH**

- Press the grey catches toward each other to release the bracket.
- Pull out the holders as far as required.
- Press in the catches so that they lock the brackets in place.
- Hang the kick-plate onto the holders by inserting it into the grooves.



These models come with a European kickplate.

FITTING CUSTOM DOOR PANEL

Some models can only be installed with a fully-integrated custom door panel that extends from the toe kick to the counter top. The unit comes with everything needed to make installing the door panel easy. The door is predrilled for the panel's mounting screws.

The custom panel can be a minimum of 1/4" (6 mm) thickness to a maximum of 3/4" (19 mm) thickness.

ITEMS PROVIDED WITH THE UNIT

- ♦ Two 3/8" screws
- ♦ Four 1-3/4" screws

CUSTOM PANEL DIMENSIONS

Width: 23-1/2" (597 mm)

Height: 28-1/8"-30-1/8" (714 mm-765 mm)

(Measured from the top of the panel to the lower edge of the kitchen cabinet.)

Thickness: 1/4" (6 mm) to 3/4" (19 mm) max

Weight: Up to 22 lb.

NOTE: Specifications subject to change without

notice.

NOTE: Heavy-duty door springs can be purchased for

wooden door panels weighing over twelve

pounds. (P/N 8071323-77).

INSTALLING THE CUSTOM PANEL

Before fitting the custom panel, the dishwasher must be installed underneath the cabinet. After you've made the required measurements, pull the machine out again to install the panel.

Refer to the illustration at right for instruction references.

- Fit the handle (A) onto the panel according to the manufacturer's instructions. (NOTE: A handle should be used rather than a knob, because a knob does not provide enough grip.)
- Loosen the screws (D) on the outer edges of the dishwasher door.
- Pull the turbo fan exhaust frame (E) down until the lower edge aligns with the lower edge of the cabinets and tighten the screws.

WARNING!

The custom panel must not obstruct the turbo fan exhaust. See step 4 above for instructions on how to adjust the fan exhaust.

4. The two short screws (B) go into the back of the panel, 16-3/16" (411 mm) from the upper edge of the panel and 5/8" (16 mm) from the outer edges. Insert the short

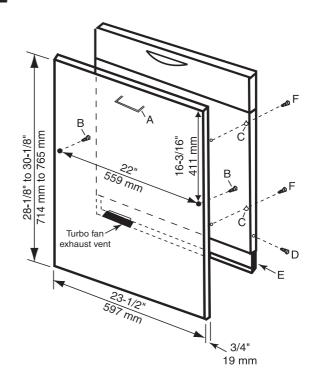


screws into the panel, leaving 1/8" (3 mm) of space between the screw head and the panel.

- 5. Hook the panel screws (F) into the keyholes (C) on the dishwasher door.
- 6. Push the panel sidewards.

NOTE: The custom panel should not extend more than 2-15/16" (75 mm) below the bottom of the dishwasher door. Otherwise, it will strike the toe kick and damage the machine and/or the panel.

- 7. Open the door and tighten the screws (F) inside.
- 8. Remove the backing from the protective tape and affix it on the bottom edge of the panel, in front of the exhaust vent.
- 9. Before you push the dishwasher into the cabinet

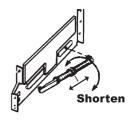


opening, test the door to make sure it opens properly. The door is counter-balanced, so it should remain in any position. If it doesn't, you may need to adjust the door springs (see above).

10. Fasten the diswasher to the cabinet (see page 9).

ADJUSTING THE DOOR SPRINGS

After you install the custom panel, make sure the door stays in place at any angle. If it tends to fall down, pull out the machine and tension the door springs on the sides of the machine by moving them one hole farther back or by twisting the spring to make it



shorter. If that doesn't resolve the problem, you may need to purchase the heavy-duty door springs (part number 8071323-77).

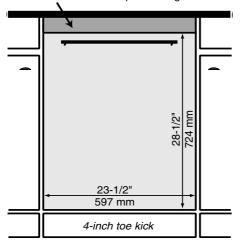
CUSTOM PANEL INSTALLATION OPTIONS

4-inch Toe Kick Installations

Custom panels the same height as the dishwasher door

If the custom panel is the same height as the dishwasher door, a 2" (51 mm) decorative fill strip or pull-out cutting board must be used to fill the area between the panel and the counter top (as illustrated below).

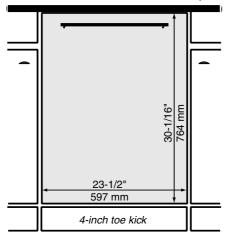
2-inch decorative fill strip or cutting board



Custom panels that extend to cabinet top

Another installation option for a 4" toe kick is to extend the custom panel to the cabinet top (as illustrated below), which eliminates the need for a decorative fill strip.

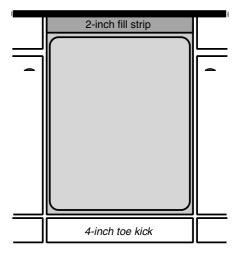
Panel extends from toe kick to cabinet top



With this installation, the door panel extends 1-3/4" inches above the dishwasher control panel, as illustrated.



If you install the door panel to reach the cabinet top, we recommend that you install a 2" fill strip between the upper edge of the dishwasher and the counter to hide the top of the dishwasher and further reduce water noise.



A stainless steel fill strip is also available for this type of installation (part number 8073869-95).

One-Piece Custom Door Panel

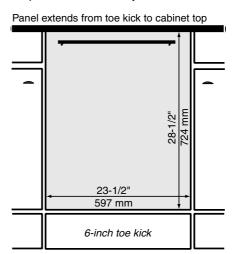
A one-piece custom door panel with a curved handle is now available for the FI dishwashers. This door is available in stainless steel (as shown), black, and white. To order this door panel, contact your dealer.

These doors are designed for 4" toe kick installations.



6-inch Toe Kick Installations

For 6" toe kick installations, the decorative fill strips or support strips are unnecessary.



The part number for the 6-inch toe kicks are: 8073567-01 (white), 8073567-86 (black)

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