

Installation and Maintenance Manual

ELKAY[®]

commercial products

DSWH160UVPC

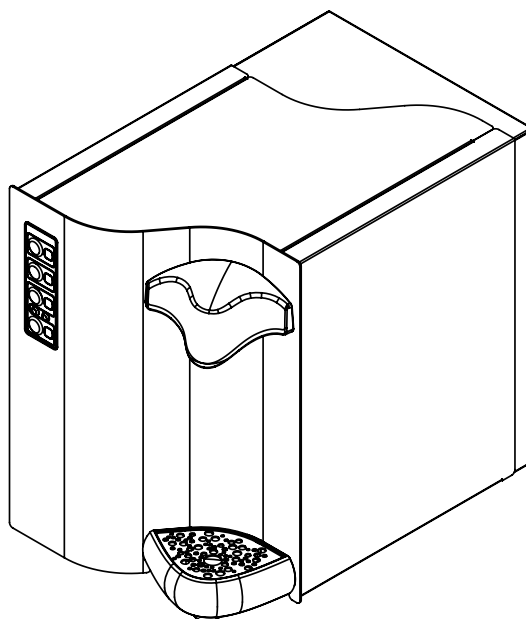


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NOTICE: Read the instructions in this manual and retain for future reference.

Declaration of Conformity



Materials compliant for contact with drinking water

This unit is intended for the dispensing of drinking water, and so the materials that enter into direct contact with water meet the criteria for food-grade components pursuant to the current legislation. In addition, the unit is manufactured in compliance with Italian Ministerial Decrees 174 of 04/06/2004 and 25 of 02/07/2012.

Electrical safety

This water cooler is designed, manufactured and marketed in compliance with:

- the safety objectives of the Low Voltage Directive 2006/95/EC;
- the protection requirements of the Electromagnetic Compatibility Directive 2004/108/EC.

The electrical safety of the product is ensured only when it is properly connected to an efficient, legally compliant grounding circuit.

UL standard for safety of drinking water coolers, ANSI/UL 399, Issued: 2008/08/22, Ed: 7, Rev: 2013/10/18

CSA standard for refrigeration equipment, CSA C22.2 No. 120, Issued: 2013/03/01, Ed: 4

Association



International Awards

2015 - BEST PROMOTION OF HEALTH AND HYDRATION
EUROPEAN AQUA AWARDS 2015, ROME

2015 - BEST ENVIRONMENTAL PRACTICE
EUROPEAN AQUA AWARDS 2015, ROME

2014 – BEST PROMOTION OF HEALTH AND HYDRATION
EUROPEAN AQUA AWARDS 2014, BUDAPEST

2013 – BEST PRODUCT INNOVATION
EUROPEAN AQUA AWARDS 2013, BERLIN

2012 – BEST ENVIRONMENTALLY FRIENDLY PRACTICE
EUROPEAN AQUA AWARDS 2012, ISTANBUL

Recommendations for Safeguarding the Environment

Packaging materials



The packaging materials are 100% recyclable. Please follow the local guidelines on waste disposal. For safety reasons keep the packaging material out of the reach and sight of children.

Scrappage



The DSWH160UVPC water cooler is made using recyclable material.

This unit is marked in compliance with European Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE). By ensuring that the product is scrapped correctly, you will help to prevent potential negative consequences for the environment and for health. This symbol indicates that the product should not be treated as domestic waste but should be taken to a dedicated recycling center for electrical and electronic equipment. Immediately prior to scrapping, cut off the power cable.

For more information on the treatment, recovery and recycling of this product, please contact the appropriate local office, the waste disposal service or the reseller from which the product was purchased.

This product contains no CFCs or HFCs, which contribute to global warming.

This is the first water cooler on the American market to use natural refrigerant.

The refrigerating system is filled with R134a: a natural gas that does not contribute to global warming and that allows for substantial Energy Savings.

Explanation of Warning/Safety Icons



NOTICE: Indicates an instruction which, if not followed, could result in damage to product or property or poor product performance.



CAUTION: Indicates an instruction which, if not followed, could result in minor or moderate injury.



WARNING: Indicates an instruction which, if not followed, could result in serious injury or death.

Introduction

The DSWH160UVPC cooler brings contemporary style and state-of-the-art technology to commercial water dispensers. DSWH160UVPC offer the highest level of quality and modern design.

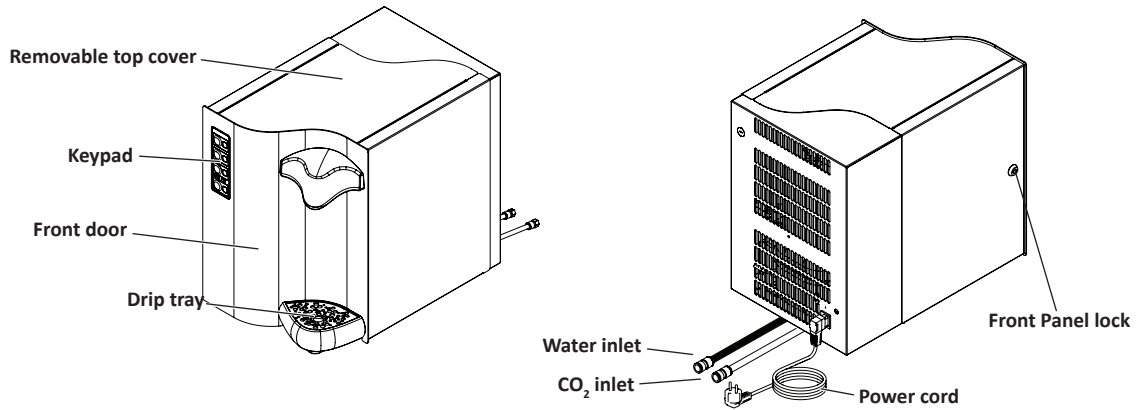
- Multiple dispensing options: cold still water, cold sparkling water, and hot water
- Natural materials throughout: stainless steel
- Internal components made entirely of stainless steel
- High-insulation ice bank ensures a high output of cold water, still and sparkling
- Self-diagnosis and alarm system responds to little or no water flow, an accidental water leak or the need for CO₂ cylinder replacement
- Energy Saving command: when selected, this feature enables standby functionality of the unit, with consumption reduced by 75% compared to full functionality



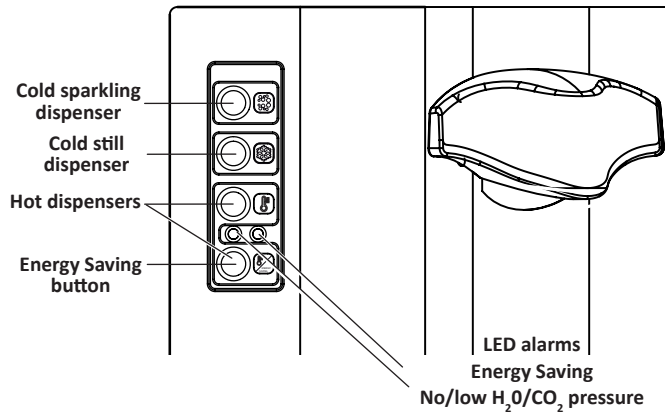
NOTICE: Due to rigorous testing, product may reasonably be expected to contain traces of sanitizing solution.

Components Guide

DSWH160UVPC



DSWH160UVPC Keypad



Product Specifications

Specification	DSWH160UVPC
Cooling capacity <i>gal/h (lt/h)</i>	4 (15) 85 6 oz. cups/h
Cold water temperature	42°F – 48°F (5.5°C – 8.8°C)
Ice bank capacity <i>gal (lt)</i>	2 (7)
Ice bank <i>lb (kg)</i>	6.6 (3.5)
Cooling technology	ICE BANK single stainless steel coil
Condensation	Ventilated
Adjustable cooling thermostat	Yes
Refrigerant gas	HFC R134a
Pump	Professional booster pump
Max hot water temperature	185°F (85°C)
Hot water tank capacity <i>gal (lt)</i>	0.265 (1)
Heater wattage	1000W
Inlet water pipe	ø 3/8"
Power	110V - 60Hz
Power consumption	1350 W - 11 A
Working room temperature	Min 41°F – Max 107.6°F (Min 5°C – Max 42°C)
UNIT WEIGHT <i>lb (kg)</i>	71.65 (32.5)
SHIPPING WEIGHT <i>lb (kg)</i>	80 (36.3)
Dimensions W x D x H <i>in (mm)</i>	13 x 19.48 x 18.41 (330 x 494.9 x 467.5)
Dispensing area height <i>in (mm)</i>	10.67 (271)
Packaging dimensions W x D x H <i>in (mm)</i>	15.23 x 21.54 x 27.38 (387 x 547 x 695.5)
Dispensing	Supply option (sparkling, cold and hot water)
Push buttons	Stainless steel push buttons
Energy Saving device	Included, dedicated push buttons
Display Alarms	No/low water, No/low CO ₂
Materials	All robust stainless steel parts

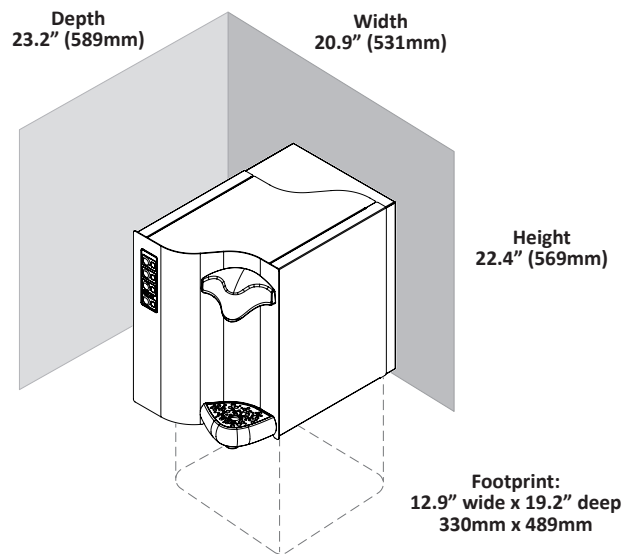
* rated at a room temp. of 77°F and inlet water temp. of 68°F

Before You Begin – Requirements for Installation

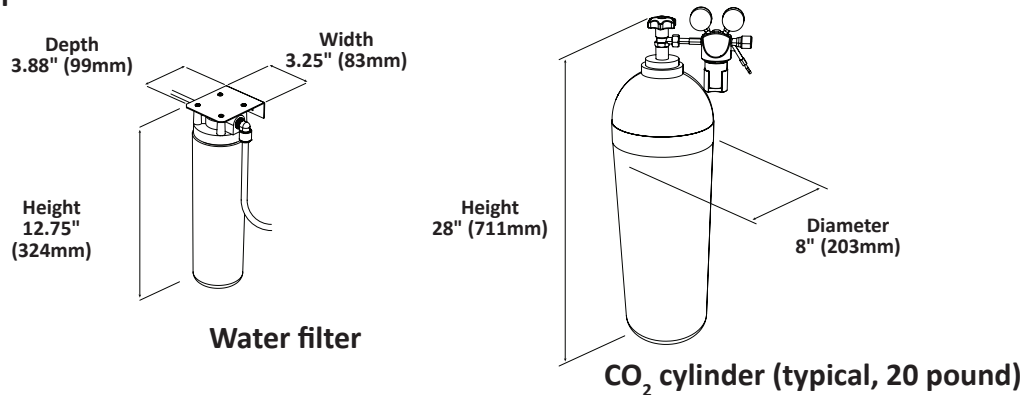
Mounting Dimensions

Over counter (includes 4" clearance on sides and back)

DSWH160UVPC



Under counter



Operating Environment

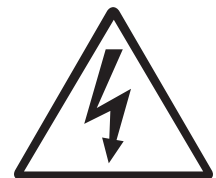
- Install the machine in a clean, dry, well-ventilated room. It is designed to function correctly in environments with a temperature of 16°C to 32°C – Climatic Class N, (between 61°F and 90°F).
- Check that the water cooler is level, that it is on a surface that can support its weight and in an environment suitable for its size and use.
- Do not place the machine near a source of heat.
- To guarantee adequate ventilation, leave at least 4" (100 mm) of space around the unit.
- Take care not to damage the cooling fluid circuit. It is essential to ensure that the tubes of the refrigerant circuit are not damaged.
- The unit is not intended for use by children.
- Keep the areas surrounding the unit dry to avoid the risk of people slipping.
- The unit must not be cleaned with a water jet.

Water

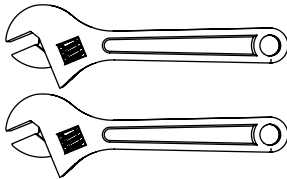
- Always connect the water cooler to a water main that supplies drinking water only.
- Use of 3/8" diameter connections for DSWH160UVPC is recommended.
- Turn off the main water inlet tap if the unit is not to be used for a long period.

Electrical

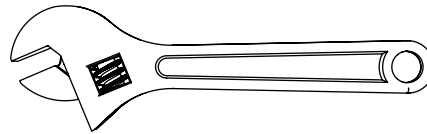
- Check that the voltage shown on the serial number plate corresponds to the voltage being supplied at the installation site.
- Do not use extension cables or multiple-power sockets. The machine must be located close enough to a standard power socket that the supplied power cable reaches without stretching.
- After installation, check that the machine is not standing on its power supply cable.
- Ensure that it is possible to disconnect the power supply either by removing the plug or via a two-pole circuit breaker placed upstream of the plug.
- Before any maintenance or cleaning operation is carried out, remove the plug from the socket or disconnect the power supply.
- If the power cable is damaged, it must be replaced by the manufacturer, by its technical support service or by a qualified technician.
- Do not position other electrical equipment in the immediate vicinity of the water cooler.



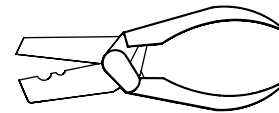
Tools You Will Need



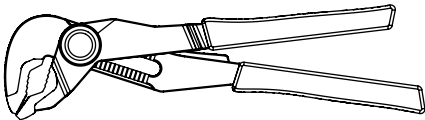
(2) 8" adjustable wrenches



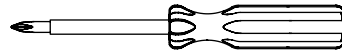
(1) 12" adjustable wrench



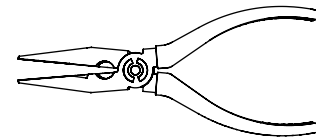
(1) 12" pipe cutter



(1) 10" adjustable pliers



(1) universal screwdriver



(1) wire cutting pliers

Unpacking the Kit

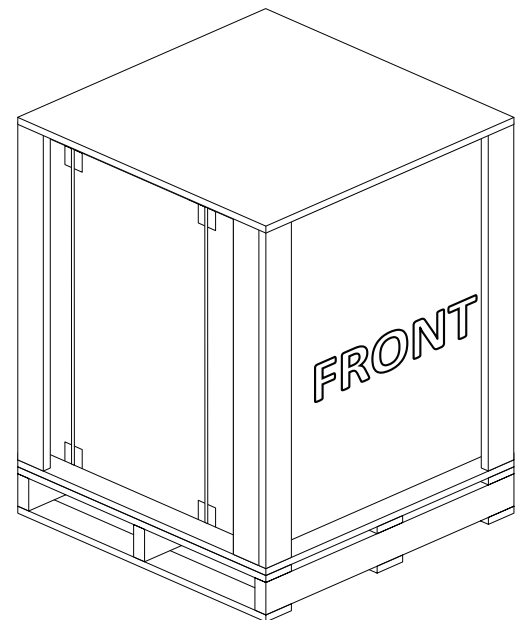
Remove the front panel (labeled FRONT) and cover of the wooden packing case.

Remove the cardboard box and the internal protective packaging by sliding them up and over the top.

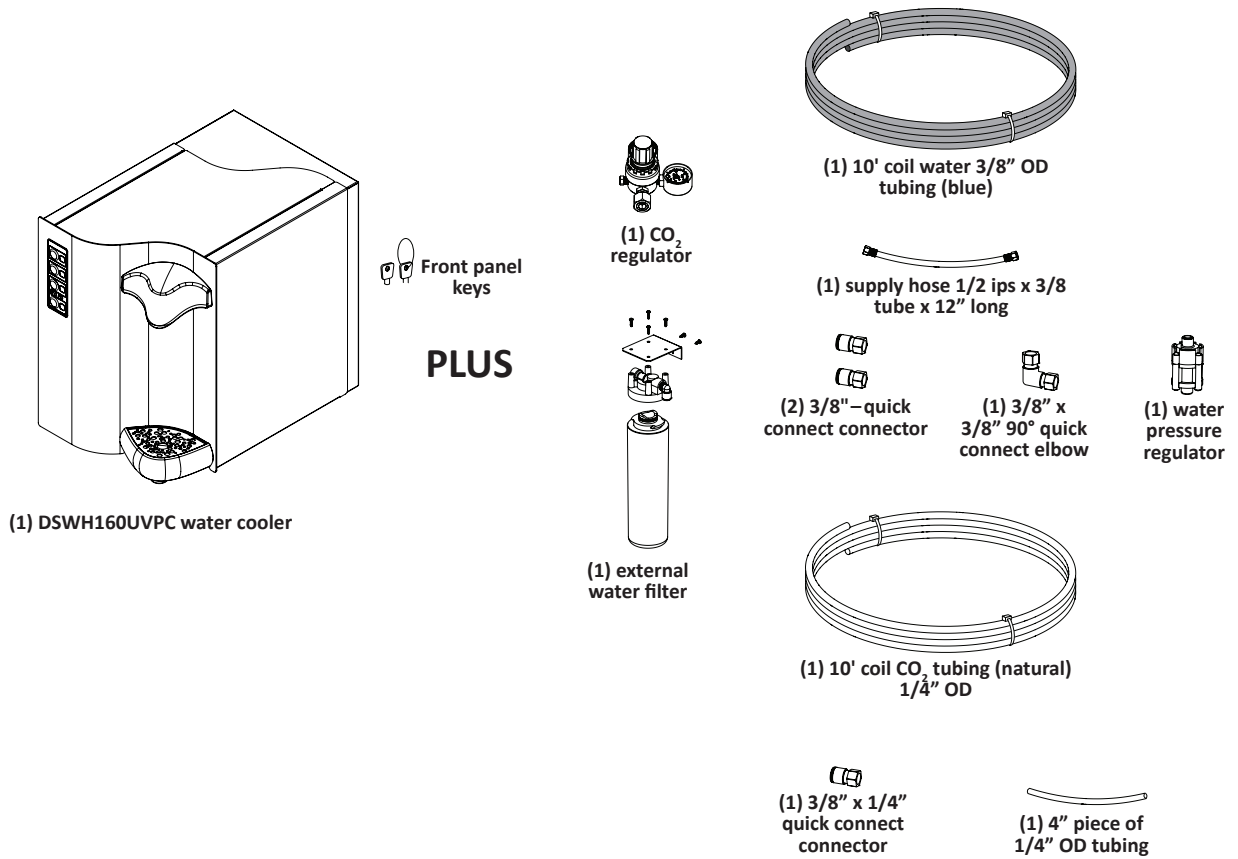
Once you have unpacked the machine, check all components to ensure that they are not damaged. Contact the carrier immediately if there has been any damage during shipping.

NOTICE: Ensure that your machine is installed by a qualified technician in compliance with the manufacturer's instructions and the local safety guidelines.

NOTICE: Only qualified technicians should access the internal components of your machine, other than to fill the ice bank.



What's in the Kit



! **NOTICE:** CO₂ source is not included and must be supplied separately.

Installing the Machine



CAUTION: Wear safety gloves when handling the machine. Metal edges are sharp, and touching them could result in minor or moderate injury.



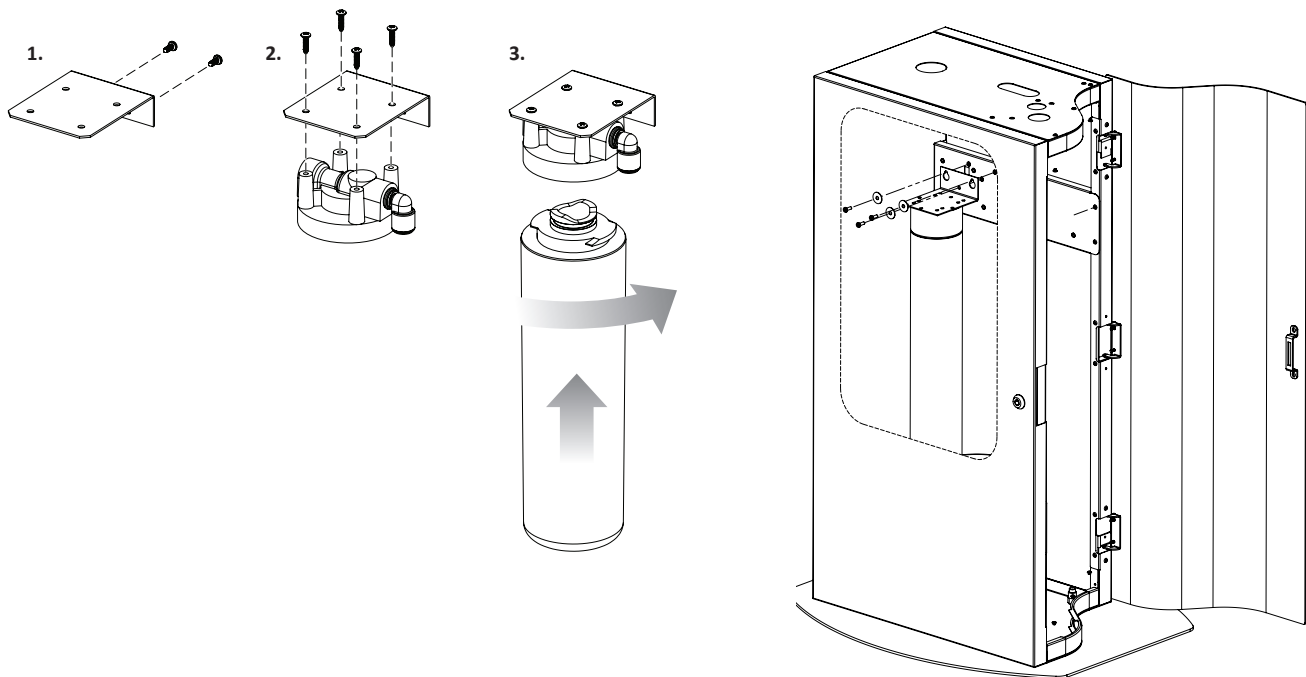
CAUTION: The unit weighs more than 100 lbs (45 kg) when the ice bank is filled. Lifting without proper support could result in minor or moderate injury.

1. Install external water filter and CO₂ cylinder.

1. Use (2) Phillips head screws to mount bracket to under-counter wall or DSCABWH cabinet panel.
2. Use (4) Phillips head screws to mount filter head to bracket.
3. Remove cap from filter. Insert filter into filter head and turn clockwise (right) until it stops.

When installing external water filler within the DSCABWH cabinet, please refer to the following mounting instructions:

1. Use 3 Phillips head screws and washers to mount filter bracket to cabinet mounting strip as shown below.



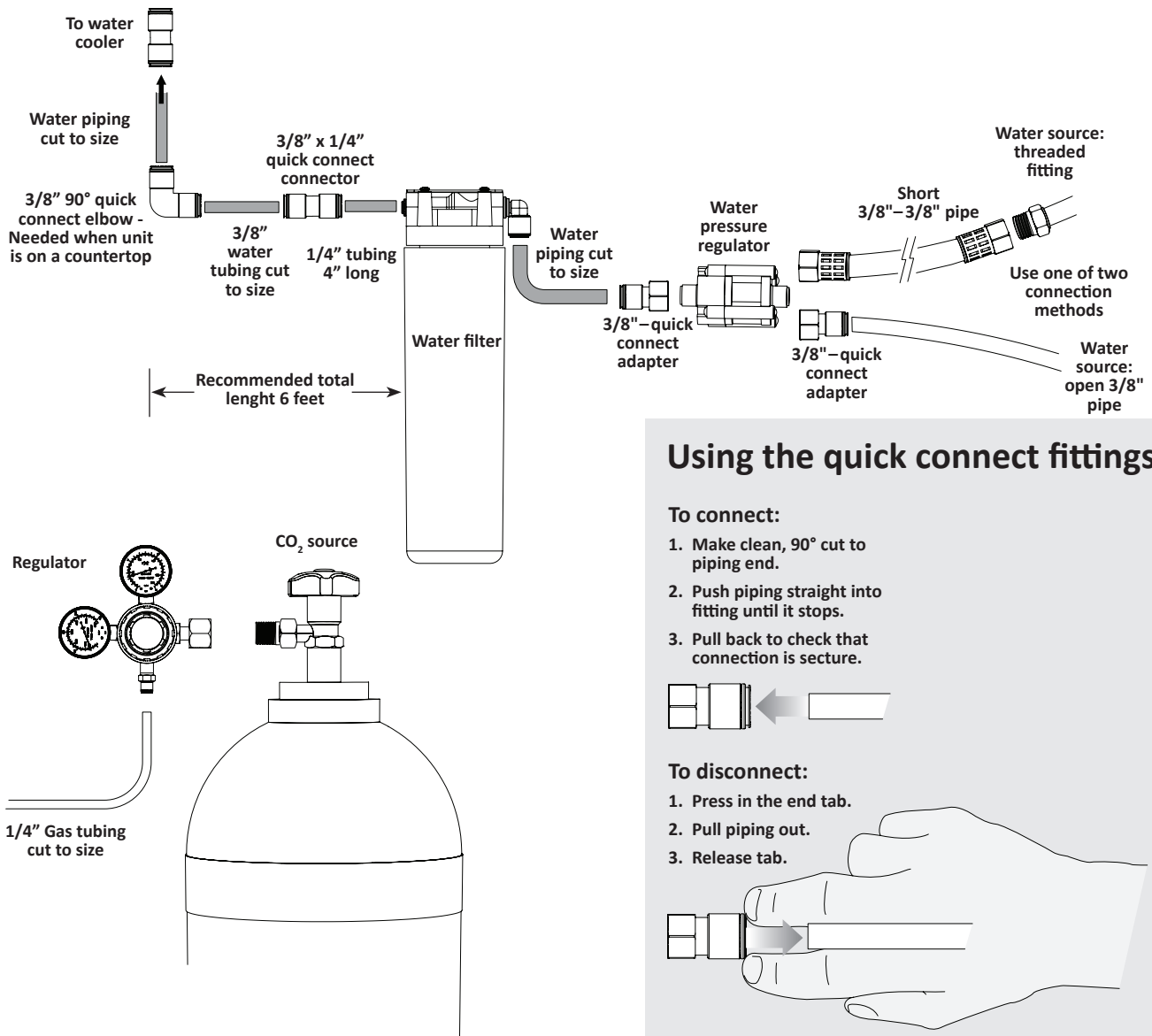
NOTICE: Install CO₂ source per manufacturer's recommendations.

2. Cut, size and connect water and CO₂ piping to fit your installation.

NOTICE: The water pressure entering the machine must be between 14.5 psi (0.10 MPa) minimum and 51 psi (0.35 MPa) maximum. If the inlet water pressure is higher than 51 psi, the water pressure regulator supplied must be used.

NOTICE: An incoming flow rate of >1.0 gallon/minute is recommended for optimal quality of sparkling water.

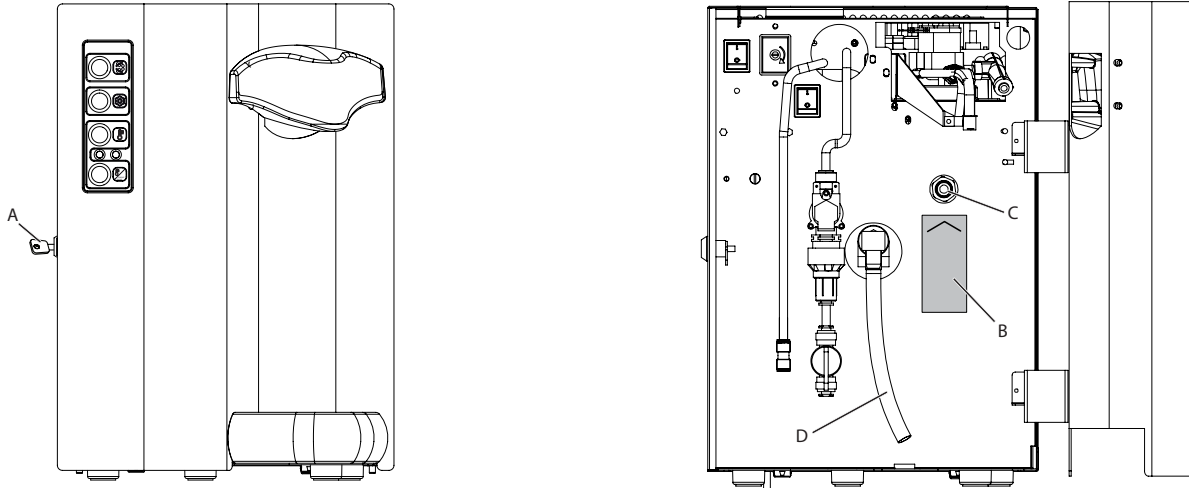
NOTICE: Check all input piping and connections for leaks before connecting to the machine.



3. Fill the ice bank in your machine.

DSWH160UVPC

1. Unlock and open the side door using the supplied key (A).



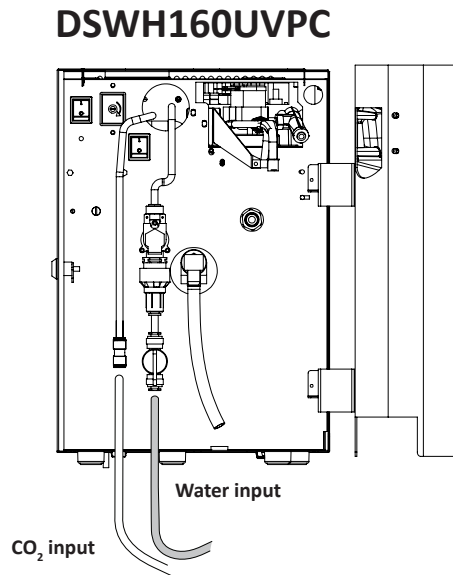
2. Look for the bright yellow label with the arrow (B), which points to the ice bank inlet hole (C).
3. Insert piping from water supply directly into the ice bank inlet.
4. Fill slowly until water starts to come out of the ice bank drainage pipe (D).
5. If you have to move the unit, remember to empty the ice bank first.
6. Turn off water supply and remove piping from ice bank inlet.

4. Place the machine in its operating location.



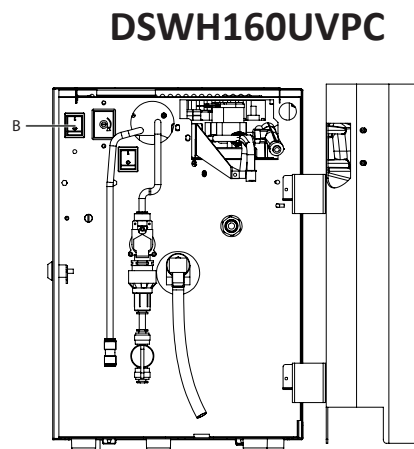
NOTICE: Ensure machine remains level while being lifted into place to prevent spillage from ice bank.

5. Connect external water and CO₂ piping.



6. Plug the machine into the wall socket and turn it on.

1. Connect the power cable to the nearest socket.
2. Open the front panel with the supplied key and press the power button at the top left of machine (B).

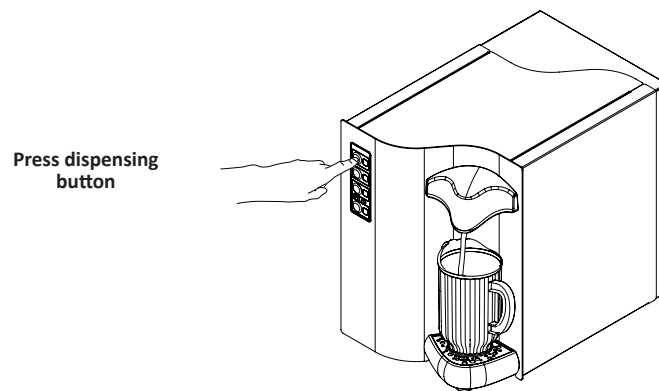


NOTICE: Chilling of the ice bank begins immediately when unit is turned on. Complete chilling of ice bank will require around 30 minutes - 1 hour. The machine should not be used as a water dispenser until chilling is complete.

7. Purge the water lines.

1. Place receptacle beneath tap to catch dispensed water. Discard water as necessary.

DSWH160UVPC



2. Allow water to run continuously until flow is clear of air.
3. Repeat for all taps.



NOTICE: The "No/low CO₂" error LED will flash when dispensing begins. This is correct, as the CO₂ connection has not been activated yet. This alarm can be ignored during this step.

8. Turn on the boiler



NOTICE: Never turn on the boiler unless you have filled the machine with water.



NOTICE: Never turn on the boiler when the inlet water is disconnected.

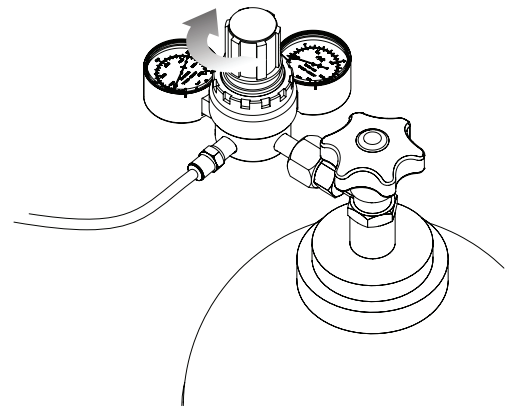
1. Open the front panel with the supplied key and press the boiler button at the top center of machine.
2. After around 10 minutes, the water reaches the setted temperature.




CAUTION: Hot water reaches 185°F. Keep children away. Hot, boiling water and steam will scald if spilled on skin. Do not touch the dispensing nozzle to avoid burns.


9. Open the CO₂ valve.

1. Using a screwdriver slowly turn valve screw counterclockwise (left) to open valve.
2. Continue until pressure reads 50 to 58 psi max.





10. Re-purge the line for sparkling water.

 **NOTICE:** The water will flow flat at first, then gradually become more sparkling as the line is purged of still water.

 **NOTICE:** If the "No/low CO₂" error LED flashes during this step, there is a problem with the connection to the CO₂ source. Check all components in the gas system before proceeding.

11. Allow machine to complete initial chilldown.

 **NOTICE:** Complete chilling of ice bank will require around 30 minutes - 1 hour. The machine should not be used as a water dispenser until chilling is complete.

 **NOTICE:** Complete water heating will require around 10 minutes. The machine should not be used as a water dispenser until heating is complete.

Operating the Keypad

To dispense your water serving

Hold down the button for that dispenser.

Note: For safety reason, to dispense hot water you must hold down the upper hot water button first and then the lower hot water/Energy Saving button at the same time.

To stop dispensing your water serving

Release the button for that dispenser.

To turn on Energy Saving mode

Press and release for less than 4 seconds the Energy Saving button.

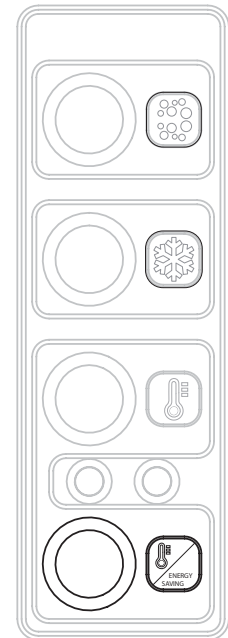
Note: The green LED on the right turns on.



NOTICE: Energy Saving mode slows down the activation time of the compression. This mode should only be used when the machine will not be operated, such as when the business has closed for the day.

To turn off Energy Saving mode

Press the Energy Saving button or any of the dispensing buttons.



Alarms

The blue LED on the left is flashing if an alarm is active:

- Quick flashing - Little or no water at the inlet
- Slow flashing - Little or no CO₂ remaining

To reset an alarm

Turn the machine off, then on again.



NOTICE: Alarms indicate a problem with the water, CO₂, or electrical system of the machine. Do not operate the machine until the problem has been located and fixed.

Routine Maintenance

Daily

- Clean all external surfaces of the machine, the drip tray and the dispensing nozzles.



NOTICE: It is recommended that all external components of the product be cleaned daily.

It is recommended that you use dish soap, warm water and a clean, soft cloth to clean the product.

DO NOT USE THE FOLLOWING PRODUCTS:

Do not use ... chlorine bleach solutions on the product. Chlorides found in most soaps, detergents, bleaches and cleaners can attack stainless steel. These products can cause surface-pitting.

Do not use ... metal fibers to clean the product. Metal fibers have a tendency to disintegrate and release small metal particles that are embedded in the surface. Metal particles oxidize and give the impression that the surface of the product is rusting.

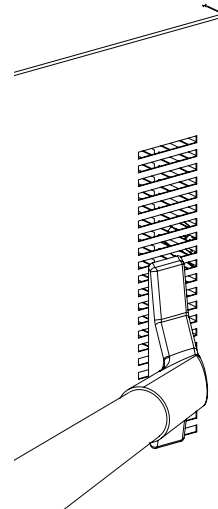
Do not use ... abrasive cleaners or abrasive pads, as these will scratch the surface of the product.

Do not use ... a water jet.

- To remove limescale, use a slightly acidic product (e.g. citric acid) that has been heavily diluted – excessive acidity may damage the surface of the steel.
- To clean the drip tray, use a diluted limescale cleaner such as citric acid. The drip tray may also be washed in the dishwasher.
- Before cleaning the keypad, turn off the machine to prevent accidentally dispensing water.

Weekly

- Use a vacuum to clean out all vents.



Annually

- Replace the water filter after 6000 gallons or a maximum of 1 year, or earlier depending on water quality.



NOTICE: The filter head has an internal shutoff valve that stops the flow of water when the filter is removed. It is not necessary to shut off the water supply.

1. Turn used filter counterclockwise (to the left) 1/4 turn to remove from filter head. Pull filter away from head and remove.
2. Remove the cap from the new filter. Place the cap on the used filter to seal it.
3. Insert the new filter into the filter head and turn the filter clockwise (to the right) until it stops.
4. Place a receptacle under the still water dispenser and dispense continuously for a minimum of two gallons to purge air and fine carbon particles from filter.

- Sanitize the machine



NOTICE: This operation must be carried out by your ELKAY reseller or by a qualified technician.

When required

- Replace the UV lamp



CAUTION: The light emitted by the ultra-violet lamp may cause serious burns to the eyes and skin. Disconnect the electrical source of supply of the UV radiation before opening the machine.



NOTICE: The UV OUT lamp can not be installed on the hot water nozzle.

1. Disconnect the unit from its electrical source.
2. Once the unit is shut down, open the side panel with the key provided in the kit.
3. Disconnect the electrical connector of the UV OUT lamp. Pull the lamp removing it from its fitting holder — handling it carefully.
4. Insert the new lamp and reconnect the connector — handling it carefully.
5. Repeat the procedure for all the dispensing valves.
6. The used UV lamps can be disposed at your local waste management site.



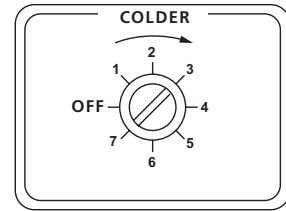
NOTICE: This operation must be carried out by your ELKAY reseller or by a qualified technician.



NOTICE: For the replacement of UV OUT pipe is not necessary to turn water off.

- Set the thermostat

1. Set the thermostat between 5 and 6 to control the temperature of the cold water.
2. If you want to avoid the formation of ice in the bank, turn the thermostat screw located on the back side of the machine at least 1/4 anti-clockwise.



Troubleshooting

Problem	Possible Cause	Action To Take
No water dispense	The main water valve is closed	Open the valve
	The power switch is set to OFF	Set the power switch to ON
	Malfunction in the ribbon cable connection/ spade connectors	Repair connection to main circuit board
	The water inlet solenoid is not working	Bypass the solenoid and replace it
	The ice bank is frozen	Defrost the ice bank Reduce the thermostat setting
	The low voltage transformer is not working	Replace the transformer

Problem	Possible Cause	Action To Take
Low flow dispense	The filter is clogged	Replace the filter
	The main water valve is not fully opened	Open the valve
	The flow control valve is not fully opened (sparkling water only)	Open the valve
	The CO ₂ cylinder is empty (sparkling water only)	Replace the cylinder

Problem	Possible Cause	Action To Take
Sparkling water doesn't come out	The CO ₂ cylinder is empty	Replace the cylinder
	The pump is not working	Force the pump to start Replace the pump if broken
	The solenoid is not working	Repair or replace the solenoid
	The flow control valve is too tight	Open the valve

Problem	Possible Cause	Action To Take
Water is not cold enough	The ice bank is empty	Fill the ice bank with water
	The thermostat is not adjusted properly	Adjust the thermostat
	The condenser is dirty	Clean the condenser
	The fan is not working	Replace the fan
	Cold or not warm enough air is blowing through the condenser	Check for faulty compressor or gas leak on the refrigerant circuit and repair
	Malfunction in the over temperature switch/ relay	Switch the machine off and wait 5 minute for restart Replace if broken
	The compressor is not working	Replace the compressor
Leak in the refrigeration system	Refrigeration system requires repair or replacement	

Problem	Possible Cause	Action To Take
Hot water is not hot	The power switch is off	Switch on the boiler
	The safety therm-o-disk has tripped	Reset the therm-o-disk
	Disconnected wires to the boiler	Connect the wires

Problem	Possible Cause	Action To Take
Poor sparkling water quality	Incorrect air gap in the carbonator	Close the CO ₂ cylinder valve, pull up the ring on safety valve (on the carbonator bowl head) until all air gap is out
	Use of rinse aid or highly polished glass	Avoid excessive use of rinse aid
	The CO ₂ regulator is set low	Set the CO ₂ regulator between 55-60 psi (3.5-4 bar)
	Water is not cold enough	Set the thermostat properly
	The incoming water pressure is too high	Install an inlet water pressure reducer (included)
	The carbonator bowl is filled by the inlet high water pressure and not by the pump	Install an inlet water pressure reducer (included)
	Incorrect inlet pressure	Install an inlet water pressure reducer (included)

Problem	Possible Cause	Action To Take
Slow flashing blue LED (no CO ₂) alarm on	The CO ₂ cylinder is empty	Replace the cylinder
	The CO ₂ valve is closed	Open the valve
	The seal is leaking	Tighten regulator connection at CO ₂ tank Replace seal
	The CO ₂ exit pressure lower than 36 psi (2.5 bar)	Set the pressure between 55-60 psi (3.5-4 bar)
	A reset is needed	Turn the machine off and back on

Problem	Possible Cause	Action To Take
Quick flashing blue LED (no water) alarm on	The pump runs for 4 minutes continuously	Check why the water is not entering the unit and fix it
	The water valve is closed	Open the valve
	The filter is clogged	Replace the filter
	The main inlet water valve is closed	Open the valve
	The water inlet solenoid is not working	Look for disconnected or loose wires Replace the solenoid
	The ice bank is frozen	Defrost the ice bank

Problem	Possible Cause	Action To Take
Dripping water	The solenoid is dirty	Open the solenoid and clean it, use diluted solution for removal of mineral and calcium buildup Replace the solenoid
	There's sparkling water still in the nozzle	Clean the nozzle

Problem	Possible Cause	Action To Take
Noise/Vibration	The ice bank is empty	Fill the ice bank
	The agitator or the pump is not covered by water	Fill the ice bank
	The copper tubing is vibrating against the cabinet	Fix the position of the the tubing
	The fan is dirty	Clean or replace it

Contacting Customer Support

Elkay Manufacturing Company
2222 Camden Court
Oak Brook, IL 60523
800-726-0553

Replacement Parts

DSWH160UVPC	DSCABWH	Part Number	Product Name
x		1000002622	Motor Fan 120x120x25
x		1000002623	Booster Pump
x		1000003891	Main PCB
x		1000002625	General Power Switch
x		1000002626	Ice Bank Thermostat K55
x		1000002627	Feet 4MA
x		1000002629	Submerged Agitator Pump
x		1000002631	Inlet Solenoid Valve
x		1000003894	Exit Solenoid Valve 2IN-1OUT
x		1000003895	Exit Solenoid Valve (hot)
x		1000003896	Flow Control 6mm
x		1000003897	Flow CONTROL 8mm
x		1000003898	Transformer 110-24
x	x	1000002636	Lock with 2 Keys
x		1000003900	UV OUT Pipe
x		1000003902	Blusoda DripTray and Grill complet Set
x		1000003903	Wave DripTray and Grill complet Set
x		1000003904	BOILER TERMODISK 87°
x		1000003905	BOILER SAFETY TERMODISK 110°
x		1000003906	BOILER EVO NO PRESSURE 1 Lt 1000W 110V
	x	1000003842	WASHER M4 19x5,7mm
	x	1000003840	SCREW PHILLIPS M4x12
	x	1000003837	CABINET BASE
	x	1000003836	CABINET BODY
	x	1000003839	SCREW SOCKET HEAD 10x30

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