

LIQUID CO2 GLASS FROSTER

USER AND MAINTENANCE MANUAL

FIRST ISSUE

AUG 2021

REVISION

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LAST ISSUE

AUG 2021

NSF

# NUMBER AND DELIVERY TIMES IN ACCORDANCE WITH THE TYPE OF GLASSES TO SANITIZE

TYPE OF GLASSWARE	SANITIZATION AND CHILLING	SANITIZATION AND FREEZING
Small glass	1 shot Time 2 seconds 0.35 ounces	2 shots Time: 4 seconds 0.71 ounces
Medium glass	1 shot Time 3 seconds 0.53 ounces	2 shots Time: 5 seconds 0.88 ounces
Large glass	1 shot Time 4 seconds 0.71 ounces	3 shots Time: 7 seconds 1.23 ounces
Tankard/Jug	1 shot Time 5 seconds 0.88 ounces	2 shots Time: 10 seconds 1.76 ounces

**NOTE:** On ERT models (Tube length 40') the CO<sub>2</sub> consumption is 15% higher than the standard model.

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### 1. General Information

#### 1.1. Quick Start

To start the machine carry out the following actions:

- 1. Unpack the machine, retaining the packaging for any future shipment
- 2. Install the machine on a flat surface
- 3. Place the CO<sub>2</sub> cylinder in a place away from and protected from heat
- 4.Connect the CO<sub>2</sub> cylinder with siphon tube to the solenoid valve, as described in section 5.2 of this manual and open the cylinder valve
- Connect the charger to the existing outlet on the appliance (see figure at center of page 13)
- 6.Connect the charger to a power outlet with a voltage between 100 and 240 Vac and leave to charge for approximately 8 and 16 hours
- 7. When fully charged, disconnect the charger from the outlet then from the appliance and store in a dry place
- 8. Turn on the machine. Run an empty cycle to clean the machine. Please note: this stage may be accompanied by the emission of certain odors resulting from material residues from packaging
- 9.At the end of the cycle, turn off the machine using the proper switch.

<u>IMPORTANT NOTE</u>: It is essential that you read all parts of this manual fully and thoroughly before operating the machine.

#### 1.2. Models

- 1. Krowne Glass Froster Tabletop
- 2. Krowne Glass Froster Drop-In
- 3. Krowne Glass Froster Drainboard Cabinet
- 4. Krowne Glass Froster Cabinet









The first section of this manual is applicable to all versions, except for the position of the POWER ON switch on the Drop-In model (see previous pictures); the Drop-In model is described in detail in the second part of this manual.

# 1.3. Composition of the Machine

Verify that the contents of the packaging are composed of the following material:

- · Sanitizing machine with wired electrovalve
- · Battery charger from mains
- Mains cable
- User and maintenance manual
- Declaration of Conformity
- NSF Certificate on the identifying label with the S/N

## 2. Identification of Parts



Electrovalve group; CO<sub>2</sub> Cylinder connection



Sanitizing machine



Battery charger and mains cable

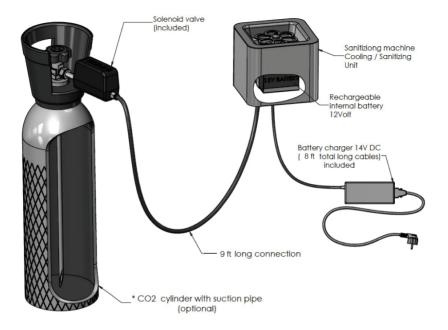


User and maintenance manual



Declaration of Conformity

The various parts are connected to each other as illustrated by the image on the following page >>



# 3. Safety Instructions

- Please read this instruction manual carefully before attempting to operate the appliance for the first time, and comply with all safety instructions!
- The appliance must only be used for the purposes and in the manner described in these instructions.
- Please keep these instructions for future reference.
- Any appliance sold or passed on to third parties must be accompanied by the instruction manual and Declaration of Conformity.
- The use of all models of the Krowne appliance does not preclude the need to wash and sterilize glasses, which must be thoroughly cleaned after each use.

## 3.1. Intended Use and Purpose

This appliance, which functions using jets of carbon dioxide, is designed explicitly for the purpose of sanitizing and cooling glasses or glass and plastic containers. It is intended for both professional and home use.

Use of the appliance in small areas requires the presence of adequate ventilation in order to prevent the build-up of toxic fumes harmful to human health (i.e, concentrations above 0.5% of  $CO_2$ ).

### 3.2. Safety Warnings

Please pay attention to the safety symbols used in this instruction manual, which are as follows:



Where needed, the following safety warnings have been used in there instructions for use.

**DANGER!** High risk: Failure to observe this warning may result in fatal injury or serious material damage

**HAZARD WARNING**: Medium Risk: Failure to observe this warning may result in injury or serious material damage.

**CAUTION**: Low risk: Failure to follow this warning may result in minor injury or material damage.

#### 3.3. Dangers

The potential dangers associated with the appliance during various stages of its operation and use are listed below:

#### - DANGER TO CHILDREN AND THOSE WITH DISABILITIES

Children should not be allowed to play with any of the packaging material or protective plastic bags. Please keep the appliance out of the reach of children and always maintain a watchful eye when children are in the vicinity of the machine.

The appliance is not suitable for use by children, by adults with limited physical, mental, or intellectual capacities, or those lacking necessary experience.

Ensure that children do not play with the appliance, knock it over, cause the adapter to fall, or tamper with the CO<sub>2</sub> cylinder.

#### - POWER SUPPLY

- To avoid the risk of electric shock, protect the appliance from humidity and damp conditions, splashes of water or moisture.
- Do not use the appliance outdoors or near water-filled receptacles, such as sinks.
- Make sure that the support base beneath the unit is dry.
- Do not use the appliance if the power supply unit or power cable are damaged in any way or if the machine itself has been previously knocked over or dropped.
- To avoid risk, do not modify or make any changes to the product. Do not replace the connection cable yourself.
- In case of the need for repair, do not attempt such repairs yourself. Only have your appliance repaired by our service center or laboratories authorized by Krowne.
- In the event that liquids penetrate the appliance casing or foreign objects fall into the appliance, immediately disconnect the plug from the electrical supply.

Have the appliance safety checked before operating it. The appliance casing, power cable, power adapter, and plug must not be immersed in water or other liquids. However, if the appliance falls into water or other liquid, immediately remove the plug from the electricity supply. Under no circumstances touch or attempt to remove appliance until you have done so.

Do not attempt to use the appliance until a specialist laboratory has checked it.

Do not touch the power supply with wet hands.

Connect the plug only to a properly installed and easily accessible socket, the voltage of which corresponds to the indications on the nameplate. The socket must be easily accessible even after connection.

Make sure that the power cord can not be damaged by sharp edges or hot spots. Even after switching off, the appliance is not completely disconnected from the mains. To isolate it completely from the power supply, pull out the mains plug from the socket.

When positioning the appliance, make sure that the power cord is not throttled or pinched. To remove the plug from the socket, always pull at the plug and never the cable. The power supply line must be protected by an RCD with  $I\Delta n = 30$  mA, instantaneous trip: if in doubt consult a qualified installer.

#### - HYGIENE

The appliance must be cleaned regularly in order to prevent the growth of bacteria. Do not place dirty glasses containing liquid residues on the grille. Avoid the build-up of liquid in the drip tray. While the sanitizing action combats the build-up of bacteria in glassware, it is not a substitute for the cleaning and sanitization performed by a dishwasher.

#### - USE

Never look directly into the jet stream or directly expose it to parts of the body (face, hands, arms, etc.), in order to avoid the risk of frost burn. Avoid placing your hands inside the basin during operation or immediately after appliance use.

Before using the appliance, ensure it is completely dry, as the presence of water in the tank can lead to splashing and potential frostbite; if liquids have accumulated in the drip tray, dry it thoroughly.

There is a risk that protective treatments and finishes applied to work surfaces may cause the rubber feet fitted to the appliance to corrode or become stuck to the surface; to ensure this does not occur, place a non-slip base or mat under the machine. Do not use detergents or acids for cleaning surfaces; only use products specifically suitable for cleaning stainless steel. Clean all exterior surfaces of the machine by hand; the nozzle, rosette and accompanying parts can be washed in a dishwasher.

# 4. Appliance Description and Technical Specifications

#### 4.1. Sanitization

The sanitizing appliance is designed to reduce the presence and build-up of bacteria in ready to use glasses and plastic containers by means of a rapid chilling action using jets of food grade liquid carbon dioxide (E290).

This process not only eliminates most of the pathogens present on the inner surface and on the edge of the glass or container but also has a cooling or chilling effect, thus enhancing the taste of the contents.

The process consists of blasting the inside of the glass with a jet of carbon dioxide at -108.4 Fahrenheit degrees below zero, which cools both the interior and surface of the glass.

This cooling and sanitization process reduce the presence of prinicipal microrganisms considerably, as the following table reporting the analyses carried out by the University of Udine demonstrates, thus optimizing glass hygiene.

The degree of reduction of the main microorganisms is shown is the following table (As per analysis carried out at the University of Udine):

Microorganism	Reduction Percentages
Salmonella Enteritidis	> 88 %
Staphylococcus Aureus	> 83 %
Escherichia Coli	> 87 %
Penicillium Nalgiovense	> 83 %
Listeria Innocua	> 80 %
Pseudomonas Putida	> 66 %
Brettanomyces Bruxellensis	> 50 %

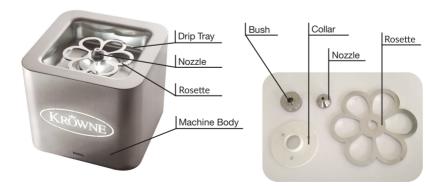
The carbon dioxide is drawn in a liquid state from a special gas cylinder (available upon request) and converted into a gaseous state upon vaporization. Please note that under certain atmospheric conditions dependent upon temperature, humidity and low atmospheric pressure, etc., dry ice may form on the machine nozzle; this phenomenon, which may last for a few hours, is by no means abnormal and does not compromise the functioning of the appliance in any way. Any dry ice on the glass will evaporate within a few seconds without leaving any trace.

## 4.2. Appliance Parts

The appliance consists of the following parts:

- Glassware sanitizer, as illustrated in the diagram below:

Removable parts for daily cleaning



Most of the parts installed in the tray are removable for easy and accurate washing. The removal and subsequent reinstallation operations are very simple and are described in the following chapters. The sanitizing machine is connected to the  $CO_2$  gas cylinder by means of a screw connection and a solenoid valve to regulate the flow the flow of gas to the glasses.

Krowne CO2 Glass Frosters do not come with gas cylinders but other cylinders may be used, provided that they have the following characteristics:

- Connection: in accordance with UNI4406 ISO 5145 Gr2 W21.7 x 1/14" Ø 27 x 2:
- · Fitted with a dip tube
- Fitted with a manual valve to shut off the gas supply.
- · Fitted with an overpressure valve
- Content: food grade CO<sub>2</sub> (E290)

Krowne can supply, on request, the gas cylinders for other countries, for example Italy, Japan, China, Russia, etc. The machine is connected to the supply solenoid valve through a 9.1 foot long pipe. If there is a need to increase the length of the pipe, a special version is available with a pipe length of 40' and with a double solenoid valve.

In this case the selection of the length of the piping must be carried out at the time of ordering. For pipe lengths over 9-3/16', there may be a slight delay of  $CO_2$ . This delay is do to the passage of the gas inside the pipe and does not represent a malfunction of the machine.

#### - Battery Charger

The battery charger charges the battery fitted inside the appliance thus eliminating the need for a power supply and allowing the device to be used for mobile banquets or other outdoor events.

Please note the following: the time required to charge the appliance is between 8 and 16 hours; the charger must only be connected to the appliance when the battery is very low; do not attempt to charge the appliance using chargers other than that supplied as this may damage the appliance, causing it to malfunction, and is not covered by the warranty.

#### - CO<sub>2</sub> Bottle (Cylinder)

The  $CO_2$  bottle is not supplied as standard but represents an optional product, which can be supplied on request. There is two types of cylinders for optimal operation of its machinery:

- 1) 8.81 pound bottle for sanitizing and cooling about 150 glasses;
- 2) 22 pound bottle for sanitizing and cooling about 400 glasses;

If you use a cylinder not marketed by Krowne, remember that it must have an overpressure valve to protect the user in case of overpressure inside the cylinder. The machine must be connected to a **tank with a dip tube** and filled with  $CO_2$  E290 food grade. Be careful not to bend excessively (minimum bend radius of 2") or crush the black connecting tube between the cylinder and the machine, in order to avoid the reduction or interruption of the  $CO_2$  gas flow towards the glasses.

## - Battery

The battery used in the machine is a LEAD-GEL 12 V 5 Ah Lithium-free battery. It is not accessible to the user and if a replacement is required, said replacement must be performed by authorized personnel only and using spare parts with the same characteristics. (Not included)

If the machine is not in use, the battery must be recharged every 6 months; failure to this recommendation could cause battery damage that is not covered by warranty

# 4.3. Technical Specifications

#### Common technical characteristics

Power adapter for charger	100 - 240 Vac, 50/60 Hz
Maximum power consumption (charging)	56 W
Jet spray pressure	1 bar
Spray duration	Proportional to time pressure applied
Level of protection	IP2X exclusively when operated internally
Common physical characteristics	
Working temperature	From +50 to + 104 °F
Maximum operating altitude	6,562 ft
Noise level when spraying	89 dBA
Vibrations generated during spraying	are not sufficient to pose any danger
Maximum number of stackable packages	5
Dimensions and weight of power supply	4-1/2" x 1-15/16" x 1-3/16"; 220 gr; Line length 4-1/2 ft
CO <sub>2</sub> cylinder connection	UNI4406 ISO 5145 Gr2 - W 21.7 x 1/14" Ø 27 x 2
OO2 Oylindor Connection	ONTHIODICO OTTO GIE WEIN X 1/11 DEI XE
Specific physical characteristics	KROWNE GLASS FROSTER TABLETOP
Specific physical characteristics	KROWNE GLASS FROSTER TABLETOP
Specific physical characteristics  Appliance dimensions and weight	KROWNE GLASS FROSTER TABLETOP 7-7/8" x 7-7/8" x 6-11/16"; weight 9.5 lbs.
Specific physical characteristics  Appliance dimensions and weight  Specific physical characteristics	KROWNE GLASS FROSTER TABLETOP 7-7/8" x 7-7/8" x 6-11/16"; weight 9.5 lbs. KROWNE GLASS FROSTER DROP-IN
Specific physical characteristics Appliance dimensions and weight Specific physical characteristics Appliance dimensions and weight	KROWNE GLASS FROSTER TABLETOP 7-7/8" x 7-7/8" x 6-11/16"; weight 9.5 lbs.  KROWNE GLASS FROSTER DROP-IN 8-11/16" x 8-11/16" x 5-15/16"; weight 6.6 lbs.  KROWNE GLASS FROSTER
Specific physical characteristics  Appliance dimensions and weight  Specific physical characteristics  Appliance dimensions and weight  Specific physical characteristics	KROWNE GLASS FROSTER TABLETOP 7-7/8" x 7-7/8" x 6-11/16"; weight 9.5 lbs.  KROWNE GLASS FROSTER DROP-IN 8-11/16" x 8-11/16" x 5-15/16"; weight 6.6 lbs.  KROWNE GLASS FROSTER DRAINBOARD CABINET
Specific physical characteristics Appliance dimensions and weight Specific physical characteristics Appliance dimensions and weight Specific physical characteristics Appliance dimensions	KROWNE GLASS FROSTER TABLETOP 7-7/8" x 7-7/8" x 6-11/16"; weight 9.5 lbs.  KROWNE GLASS FROSTER DROP-IN 8-11/16" x 8-11/16" x 5-15/16"; weight 6.6 lbs.  KROWNE GLASS FROSTER DRAINBOARD CABINET 24" x 18" x 36"

### 5. Installation

#### NOTE:

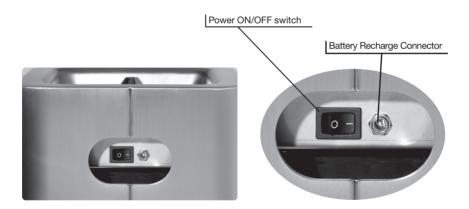
On first use, there may be tiny scraps of debris remaining on the product from the packaging material; the product may also emit an odor. To ensure the machine is clean and ready to use, first run the machine on an empty cycle. The appliance is delivered in sturdy cardboard packaging; gently remove the individual parts from the box and lay them out on a flat surface. Check that the contents are complete and that all the following items are included:

- 1) Glassware sanitizing machine (appliance)
- 2) Battery charger
- 3) Power adapter
- 4) Instruction manual and 2 years warranty
- 5) US Statement of Compliance
- 6) NSF Certification on the label with S/N number

If one or more parts is missing, please contact the distributor or product manufacturer.

## 5.1. Set-Up Instructions

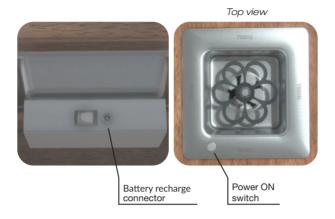
Before use, it is necessary to recharge the battery supplied with the appliance. To do this, simply connect the power cable to the power charger and the low voltage cable to the connection socket of the sanitizing machine. This is positioned next to the on/off switch, as illustrated in the following pictures:



NOTE: The model Drop-In have the position of the power ON switch and the connector for battery recharging in different positions, as shown in the the figures on the following page >>



#### KROWNE GLASS FROSTER DROP-IN



The battery takes between 8 to 16 hours recharge. Once fully charged, it is sufficient to operate the appliance for 7 to 10 days of normal service. When the recharge is completed, the charger must be removed from both the appliance and from the mains socket and stored in a safe, protected place. The appliance is fitted with four rubber feet so that it can be placed firmly on a work-top as illustrated below.



To ensure proper operations and the safety of personnel operating the appliance, the machine must be placed on a dry, smooth, flat surface.



#### **DANGER**

Use only carbon dioxide that is specified for food use or is marked 'E290'. The use of other types of carbon dioxide (e.g. industrial use CO<sub>2</sub>) cannot guarantee the optimal levels of hygiene that the appliance can provide and may impart an unpleasant odor to the glasses thus treated.



#### **DANGER**

The machine must always be used and maintained in ventilated environments as continued use of the machine in closed, unventilated spaces may lead to a build-up in the percentage of CO₂ present to above 0.5%, which is considered to be potentially hazardous to health.

#### **CAUTION**

The dip tube inside the cylinder must be designed to reach a position approximately 1/16" from the bottom of the cylinder to ensure better use of the carbon dioxide in its liquid state. The use of cylinders not fitted with the appropriate dip tube may hinder the proper functioning of the appliance. In the event of machine failure resulting from such improper use, the appliance will not be covered by the warranty.

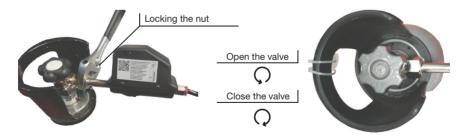
SAFETY WARNING! Under no circumstances must the gas cylinders used with this appliance be placed close to heat sources or in direct sunlight. ALWAYS ensure that ambient temperatures do not exceed 40°C.

## 5.2. Connecting the Gas Cylinder

While the battery is charging, the CO<sub>2</sub> cylinder can be connected to the appliance. To connect the cylinder, follow the steps listed below:

- Install the cylinder in the desired location, away from naked flames or sources
  of heat
- 2. Position the ring nut/flange on the connector tube against the connection thread on the cylinder
- 3. Manually screw the connection ring nut/flange to the thread by rotating clockwise until tight. Finish tightening the nut using a N. 27 spanner.
- Slowly release the CO₂ cylinder valve by turning the knob counter-clockwise until it is fully open and the mechanism locks.

See the following pictures:



5. If, when opening the valve, you can hear CO<sub>2</sub> escaping, close the valve, unscrew the connection, check there is no dust or dirt between the two concial surfaces. Following the steps described above, re-screw the connector to the cylinder. Before using the appliance, the battery charger and the power cable must be unplugged and both stored in a safe place for subsequent reuse.

If it is necessary to replace the  $CO_2$  cylinder, close the gas supply from the cylinder before unscrewing the nut from the thread. Then carry out an empty cycle to discharge the pressure of the gas present inside the pipes. Then proceed with the connection of the new full tank as described previously. The cylinders (both full and empty) must always be transported with the appropriate trolley and must be stored in a vertical position, held in position by chains or straps.









CO<sub>2</sub> cylinder transportation

Avoid using damaged cylinders or showing signs of corrosion. Be careful to **NEVER** tighten the fitting to the cylinder by turning the black box of the solenoid valve. **ALWAYS** use N. 27 spanner as shown in the previous figures. Any failure of the solenoid valve due to its rotation during installation is not covered by warranty.

# 6. Operation and Use

# 6.1. Compatible Glassware

The appliance is specifically designed for the sanitization of drinking glasses, decanters, jugs and other containers. The table on page 2 provides appromixate time estimates for sanitizing and chilling/ freezing glasses. All sanitizing, cooling and freezing times are influenced by climatic and atmospheric conditions (ambient temperature, humidity, and atmospheric pressure). Changes in these conditions may cause variances in the time required and in the quantity of CO<sub>2</sub> consumed to achieve the same results.



#### **IMPORTANT!**

It is strongly discouraged to use low quality glasses, obtained with re-glazed glass, or produced using 2 different types of glass, as they are highly prone to unpleasant cracking or breakage. In this case, suspend the sanitizing and cooling activities on the specific type of glass subject to cracking and/or breakage. As a rule thumb, to recognize a low-quality glass is to verify the specific weight of the glass, which is approximately half of a normal glass.

## 6.2. Operating Instructions

- 1. Open the manual valve on the cylinder
- 2. Using the switch, turn the appliance to the ON position
- 3. Take a glass and place upside down on the rosette wheel
- 4. Press down on the rosette wheel. Shortly, the gas will flow out from the nozzle at a temperature of -108.4 °F degrees below zero. An initial delay in supply (2 - 3 seconds maximum) is not indicative of the appliance malfunctioning and is due to the length of the pneumatic tube connecting the cylinder to the appliance
- 5. Slight changes in the force and quantity of gas supplied are determined by several factors such as atmospheric pressure, the level of the liquid in the cylinder, temperature and atmospheric humidity, and again are not an indication of the appliance malfunctioning
- After a few moments (see table above) lift the glass to cut off the gas supply. At this point the glass is chilled, sanitized and ready to use
- 7. If you wish to freeze the glass, simply repeat steps 4) and 5) above.



Press the glass on the rosette, point 3)



Sanitizing and chilling, point 4)

#### 6.3. Turn Off the Machine

To turn off the machine, carry out the following operations:

- 1. Close the manual valve of the CO<sub>2</sub> cylinder
- 2. Press the upper rosette for a few seconds and in any case until no more gas comes out of the nozzle
- 3. Turn off the power switch on the side of the machine
- 4. Eventually (if necessary) connect the charger to recharge the internal battery.

NOTE: It is necessary to recharge the machine when there is no gas supply when the rosette is pressed and / or the LEDs under the canopy do not light up.

## 6.4. Troubleshooting

In the event that the appliance fails to function properly, consult the checklist below, as it could just be a minor problem that the user can solve by himself.



#### **DANGER**

Never attempt to repair the appliance yourself.

NOTE: In case of malfunction, contact Krowne customer service via e-mail at customerservice@krowne.com

FAULTS	POSSIBLE CAUSES/SOLUTIONS
The device does not work	Check that the battery is charged Check that the manual valve on the cylinder is open Check the power button is in the ON position
Presence of dry ice on the surface of the glass	Manual valve partially open Humidity in the air
No gas is released when pressing glass on rosette wheel	Check that the tube between the appliance and the cylinder is not crushed or flattened Gas cylinder empty.
Splashes of liquid appear when gas is activated	Presence of liquid on the tray Dry out the drip tray
Gas leakage from the machine	Stop using the machine (*)
Low gas supply	Solenoid valve filter dirty

#### \* IMPORTANT!

Should it become apparent that gas is leaking from the nozzle of the appliance even when idle, stop use immediately and contact Krowne to arrange for the appliance to be sent to its laboratory in order to carry out any necessary maintenance and repairs.

#### **FILTER CLEANING**

To check the cleaning of the solenoid valve filter it is necessary to:

- 1. Close the cylinder gate
- 2. Press the rosette until the gas supply stops
- 3. Turn off the machine with the power on switch
- 4. Unscrew the connection of the solenoid valve to the cylinder
- 5. Unscrew the white gasket from the connection shank to the cylinder
- Remove the filter inside the connecting tube between the solenoid valve and the cylinder connection, beating lightly on a rigid surface, see the following figures



To clean the filter, wash it under running water and neutral detergent, then dry it thoroughly before reinstalling it on the solenoid valve pipe.

The filter must be reinstalled only when it is dry, as the presence of water or humidity could cause the machine to malfunction.

To reinstall the solenoid valve on the cylinder, follow the steps described above from 6) to 1).

# 7. Krowne Glass Froster Drop-In

#### 7.1. Appliance Description

The Krowne Glass Froster Drop-In appliance, the built-in version of the Tabletop model differs in that it is designed to be installed and fitted directly to work tops, making it readily accessible and part of the work top or dispensing point.



Position of the on/off button for the activation of the appliance

The technical features of the Krowne Drop-In's are described in paragraph 4.3. NOTE: All Krowne models are also designed to remain constantly connected to the electrical grid.

## 7.2. Components

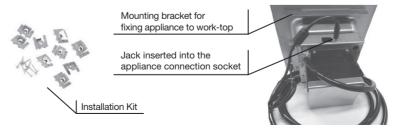
Check that the package contains all the following items supplied as standard:

- 1. Glass sanitizer appliance
- 2. Battery charger
- 3. Battery charger cable
- 4. Instruction manual and 2 year warranty
- 5. NSF Certificate on the identifying label with the S/N
- 6. Kit for mounting the appliance to the work-top.

#### 7.3. Installation

The actions to be made to install the appliance are:

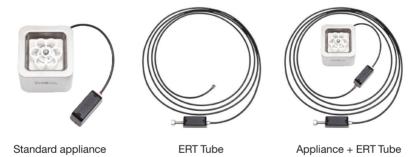
- Prepare a 7-11/16" x 7-11/16" square hole on the chosen work-top where desired, bearing in mind that a space of 13/16" minimum must be left around the body of the appliance, except the connector side, where a minimum space of 2-3/8 inchs must be left for easy insertion of the connector.
- Mount the appliance to the surface and lock into place with the mounting kit supplied - as indicated in the following figure:



- 3. Connect the charger to the machine by inserting the charger plug into the connection socket on the appliance (see diagram above)
- Connect the battery charger plug into the mains supply socket, away from water or moisture
- 5. Connect the solenoid valve to the CO<sub>2</sub> cylinder as indicated in section 5.2 of this manual
- 6. Turn on the appliance by pressing the button positioned on the edge of the upper frame
- Be careful not to stand too close to the nozzle, perform a preliminary trial/ cleaning cycle.

This serves to verify that the appliance is working properly and also helps to eliminate any residue that might have become trapped in the  $CO_2$  circuit during the connection of the  $CO_2$  cylinder, for example, or packaging residue. All other operations of the machine (cylinder installation and removal, cleaning, search faults, etc.) are the same as those described for the Tabletop version if the appliance. Please refer to the relevant instructions

### 8. 40 Feet Tubes



Krowne has designed ERT tubes with a length of 40' for the needs of connecting a CO2 cylinder with a dip tube. They can be connected to all Krowne Glass Froster models. Tabletop, Drop-In, Cabinet as long as they are prepared by the manufacturer ("do-it-yourself" variations are not possible). ERT tubes are the ideal solution for those who do not have enough space for the cylinder within the standard connection length supplied which is equal to:

• 9-3/16' for Tabletop, Drop-In, & Cabinet.

The 40 ft ERT tubes have a diameter of only 3/8" inch, are flexible and very robust.

CO<sub>2</sub> consumption in all models with ERT option determines an increase compared to standard consumption (3/16 ounces / sec) of approximately + 10/15%.

# 9. Cleaning

To ensure the optimal levels of hygiene the appliance is capable of delivering are maintained, the machine must be cleaned daily to remove all the liquids residues that can accumulate in the drip tray. To clean the product, follow these steps:

- 1. Close the valve on the CO<sub>2</sub> cylinder
- 2. Place a glass on the rosette wheel and press down to relieve any residual pressure of  $\text{CO}_2$
- 3. Turn off the machine with the power switch
- 4. Wait a few minutes until the nozzle reaches room temperature
- 5. With a sponge, collect any liquid present in the collection tank of the machine
- Unscrew the nozzle, the rosette wheel, the bush/bearing and ring nut/flange and wash in hot water with a mild detergent; alternatively these parts can be washed in the dishwasher.

Having removed the aforementioned parts, clean the drip tray, removing all residual liquid. Wash the inside with a wet sponge and a mild, low-alkaline detergent suited to cleaning stainless steel. Be careful not to allow any dirt or water to enter the CO<sub>2</sub> connection tube (see the following illustration).

 After cleaning the machine, reassemble the parts in reverse order to when disassembling the parts (see point 5).





# 10. End of Product Life and Disposal Instructions

#### 10.1. End of Product Life

When the appliance has reached the end of its serviceable life, it must be dismantled and disposed of in the proper manner. If the machine needs to be stored prior to disposal, it must be made unusable by taking the following steps

- 1) Remove the power cable from the charger
- 2) Close the valve on the CO<sub>2</sub> cylinder
- 3) Make a pressure on the rosette of the machine in order to relieve the pressure of the  $CO_2$  on the pipes
- 4) Switch off the machine using the power ON/OFF switch
- 5) Unscrew the fitting with the cylinder and store the cylinder in a protected position.

## 10.2. Disposal



Within North America, products carrying the symbol illustrated on the left must be taken to a stainless steel recycling location. Battery is to be disposed of separately. Please follow your regions disposal process for batteries. All components must not be disposed of with regular household waste, but must be delivered to a garbage center for recycling electrical and electronic equipment. Recycling helps to reduce raw material consumption and environmental pollution.

#### **PACKAGING**

Dispose of the packaging in compliance with the environmental regulations foreseen for your country.

# 11. Warranty Conditions

Machine: Glassware Sanitizing Appliance

Model: Table Top, Drop-In, Cabinet, Drainboard Cabinet

This appliance is guaranteed for two years from the date of purchase. The appliance has been carefully manufactured and deeply tested before delivery. Keep your receipt or invoice as proof of purchase. In case of interventions under warranty, contact the manufacturer by telephone. The appliance can be repaired under warranty only if sent together with a copy of the invoice or purchase receipt.

The warranty is valid only for material or manufacturing defects, not for transportation damage, wear parts or damage to fragile parts such as switches or accumulators or the use of components from different manufacturers.

The product is intended for both domestic and professional use. The warranty is void in case of improper use or tampering, use of force and interventions not carried out by our authorized assistance team or by the manufacturer. This warranty does not constitute any limit to the consumer's statutory rights. The warranty period is not extended in the event of a warranty claim. This also applies to replaced and repaired components.

Damages and defects already existing at the time of purchase must be reported immediately after unpacking, and no later than one week from the date of purchase. Repairs carried out after the expiry of the warranty period are subject to charges. In many cases, the reason for complaints is due to errors in use. These problems could certainly be solved by telephone.

Contact customer service with any questions with the following contact: Krowne Metal Corporation at customerservice@krowne.com or (800) 631-0442



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