

## 1. AIR CONDENSER CLEANING:

1. Disconnect the unit from the electricity.
2. Clean condenser using a vacuum cleaner, soft brush or low-pressure air. Clean from top to bottom, not side to side. Be careful not to bend the condenser fins.
3. Connect the unit to the electricity.

## 2. WATER FILTER REPLACE

1. Disconnect the unit from the electricity.
2. Close the inlet water faucet.
3. Close the faucet before the filter.
4. Remove the old cartridge and replace it with a new one.
5. Open all the closed faucets.
6. Connect the unit to the electricity.

## 3. WATER CIRCUIT CLEANING:

1. Disconnect the unit from the electricity.
2. Close the inlet water faucet.
3. Open the drainage faucet (only on machines less than the 5 tons) to drain the water tank completely. Use a container to collect the water.
4. Close the drainage faucet.
5. We recommend using the cleaning product Calklin. Prepare a solution with **50% phosphoric acid** and distilled water. **Do not use hydrochloric acid**. The mixture is more effective if the water is between 35°C and 40°C. Pour the mix slowly in the water tank (previously remove the cover).
6. Before connecting the unit, the cold production must be disabled. To do so, access the electric box from the evaporator and disconnect the cable connected to the #6 terminal.
7. Open the inlet water faucet and connect the unit. Let the solution flow for 20 minutes.
8. After that, open the drainage faucet, or empty the water bin. By doing so the solution will be diluted, with the water pump on and the inlet water faucet open.
9. After 10 minutes, stop the unit and close the inlet water faucet. Wait until the whole unit is completely drained.
10. Once the unit is drained, close the drainage faucet and open the inlet water faucet.
11. Before connection the unit, please reconnect the cold production. To do so access the electric box again and connect the cable to the terminal #6.
12. Connect the unit to the electricity. Produce ice for 5 minutes.

**CAUTION: Discard the ice produced during this time.**

13. After this time the unit can be used normally.

## 4. EVAPORATOR INTERIOR CLEANING:

1. Switch off the machine, turn off the water.
2. Remove the evaporator cover to clean all metal components of the evaporator: water distributor, main shaft, cutter, cutter supports, lower cross, etc...as described in point 3.
3. Cleaning of all metal parts. Dirt and surface rust stains must be completely removed by rubbing with a non-abrasive cloth or similar, which does not scratch or damage the metal surfaces of the walls and supports using soapy water, phosphoric acid in a proportion between 20 and 50% or a specific product for steel.

Dirt and surface rust must be removed with sufficient frequency when they appear, preventing them from remaining on the metal components for long periods of time.

In the case of saline environments, the frequency of cleaning should be increased, and maintenance should be carried out as soon as surface stains are observed and removed as soon as possible.

**IMPORTANT: In cases of prolonged lack of cleaning, dirt and surface rust in humid conditions could attack and damage the steel of the machine components, so it is recommended to remove them as soon as they appear. Both the cleaning and the possible deterioration of the machine due to lack of cleaning are not included in the machine manufacturer's guarantee.**

4. Cleaning the water collection channel. Check the condition of the water channel, clean the water collection channel and the return inlet to the bucket. Carry out the same procedure as in point 3, using a plastic bristle brush in the event of stains, accumulation of dirt or surface rust, applying soapy water.
5. Rinse the unit with water. Open the drain valve to completely empty the basin (on models that have one, if not, remove the water by external means). If there are sediments, remove them with a cloth. Close it again.
6. Switch on the machine. Start making ice and remove the ice produced in the first 5 minutes.

## 7. DISINFECTANT:

1. Disconnect the unit from the electricity.
2. Close the inlet water faucet.
3. Open the drainage faucet (only on machines less than the 5 tons) to drain the water tank completely. Use a container to collect the water.
4. Close the drainage faucet.
5. Prepare a solution with the disinfectant product. Pour the mix slowly in the water tank (previously remove the cover).
6. Before connecting the unit, the cold production must be disabled. To do so, access the electric box from the evaporator and disconnect the cable connected to the #6 terminal.
7. Open the inlet water faucet and connect the unit. Let the solution flow for the time required by the product used.
8. After that, open the drainage faucet, or empty the water bin. By doing so the solution will be diluted, with the water pump on and the inlet water faucet open.
9. After 10 minutes, stop the unit and close the inlet water faucet. Wait until the whole unit is

completely drained.

10. Once the unit is drained, close the drainage faucet and open the inlet water faucet.
11. Before connection the unit, please reconnect the cold production. To do so access the electric box again and connect the cable to the terminal #6.
12. Connect the unit to the electricity. Produce ice for 5 minutes.

**CAUTION: Discard the ice produced during this time.**

13. After this time the unit can be used normally.

### ***Exterior cleaning***

1. Disconnect the unit from electricity and close the water inlet.
2. Use a cloth with a degreasing detergent.
3. Apply 3 in 1 on the surface to leave a protective film.

## **8. MAINTENANCE TABLE:**

MAINTENANCE TASK	Dusty environment	Normal environment	Saline environment
Air condenser cleaning	6 months	12 months	6 months
Cleaning inside evaporator.	6 months	6 months	3 months
MAINTENANCE TASK	Agua dura (mayor 400ppm)	Agua normal (menor 400ppm)	Brine
Water filter replacement	6 months	12 months	6 months
Hydraulic circuit cleaning	6 months	12 months	Rinse with mains water after each prolonged shutdown (+12h).
Exterior cleaning	6 months	12 months	6 months
Sanitary cleaning	6 months	6 months	6 months
Evaporator interior cleaning.	3 months	6 months	3 months

**During the maintenance visit, check the connections on the electric board.**