

11/2016

Mod: ICEV500A



Diamond
catering equipment

PRODUTTORE AUTOMATICO DI GHIACCIO A CUBETTI

AUTOMATIC ICE - CUBE MAKER

MACHINE AUTOMATIQUE A GLAÇONS EN CUBES

AUTOMATISCHER EISWÜRFELBEREITER

PRODUCTOR AUTOMATICO DE HIELO EN CUBITOS

PRODUTOR AUTOMÁTICO DE CUBOS DE GELO

AUTOMATISCHE IJSBLOKJESMAKER

***MASKINE TIL AUTOMATISK FREMSTILLING AF
ISTERNINGER***

ΑΥΤΟΜΑΤΟ ΜΗΧΑΝΗΜΑ ΠΑΡΑΓΩΓΗΣ ΠΑΓΟΚΥΒΩΝ

AUTOMATISK ISBITSMASKIN

AUTOMAATTINEN JÄÄKUUTIOKONE

ISBITMASKIN

**MANUALE DI
INSTALLAZIONE, USO E
MANUTENZIONE**

***INSTALLATION,
USE AND MAINTENANCE
MANUAL***

**MANUEL
D'INSTALLATION,
UTILISATION ET
ENTRETIEN**

***INSTALLATIONS-
BEDIENUNGS- UND
WARTUNGSANLEITUNG***

**MANUAL DE
INSTALACION, USO Y
MANTENIMIENTO**

***MANUAL
DE INSTALAÇÃO, USO E
MANUTENÇÃO***

**HANDLEIDING VOOR DE
INSTALLATIE, HET
GEBRUIK EN HET
ONDERHOUD**

**VEJLEDNING
VEDRØRENDE
INSTALLATION, BRUG OG
VEDLIGEHOLDELSE**

**ΕΓΧΕΙΡΙΔΙΟ
ΕΓΚΑΤΑΣΤΑΣΗΣ ΧΡΗΣΗΣ
ΚΑΙ ΣΥΝΤΗΡΗΣΗΣ**

**INSTRUKTIONSBOK FÖR
INSTALLATION,
ANVÄNDNING OCH
UNDERHÅLL**

**ASENNUS-, KÄYTTÖ- JA
HUOLTO-OPAS**

**MANUAL FOR
INSTALLASJON, BRUK
OG VEDLIKEHOLD**



Diagram illustrating the front panel controls and displays of the oven:

- 1: Control knob
- 2: Control knob
- 3: Digital display
- 4: Digital display
- 5: Digital display

2

This diagram shows the unit being installed on a wooden base. A hand is shown using a wrench to tighten a screw into the bottom of the unit, securing it to the base plate. A dashed arrow points from the screw location to the next step.

The diagram shows a 3D perspective view of a rectangular box with dimensions L (length), A (height), and P (width). The front face of the box is divided into two vertical sections. The left section contains a horizontal band of small circles, and the right section contains a vertical band of small circles. Below the 3D view is a detailed 2D view of a rectangular feature with a width of 168 mm and a height of 70 mm. This feature is centered within a larger rectangular area. The dimensions are labeled with arrows and text: 168 mm for the width, 70 mm for the height, and X and Y for the overall dimensions of the feature's bounding box.

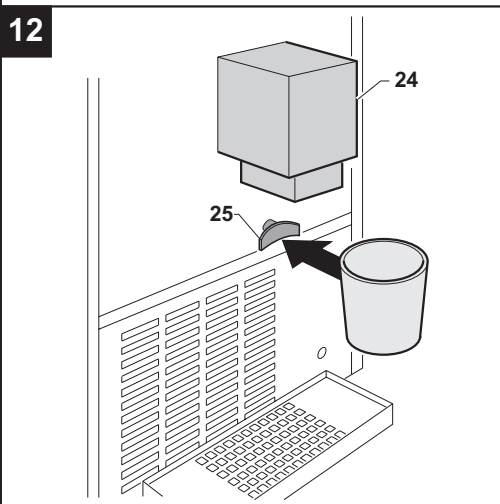
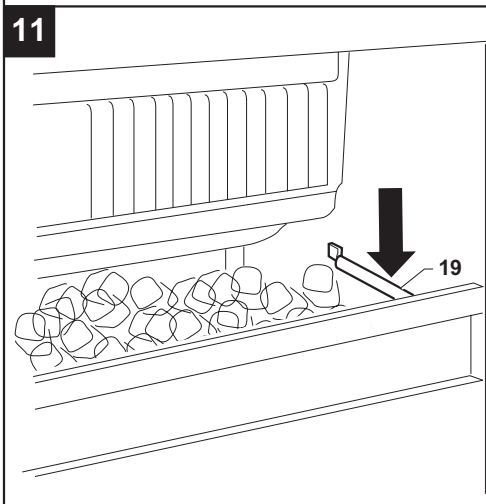
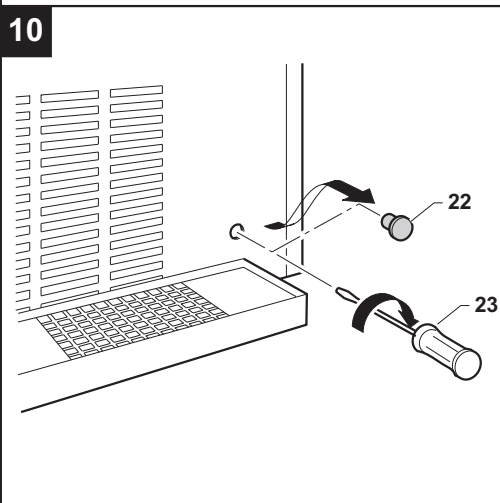
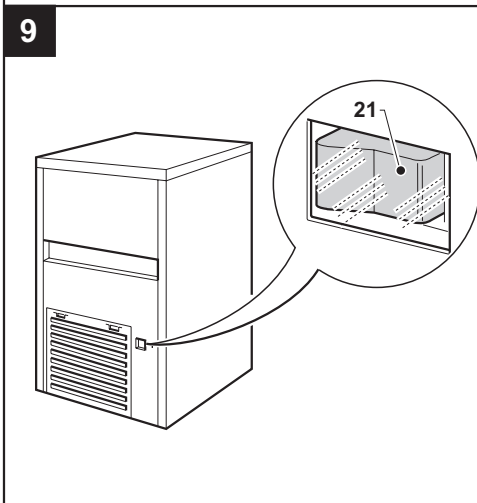
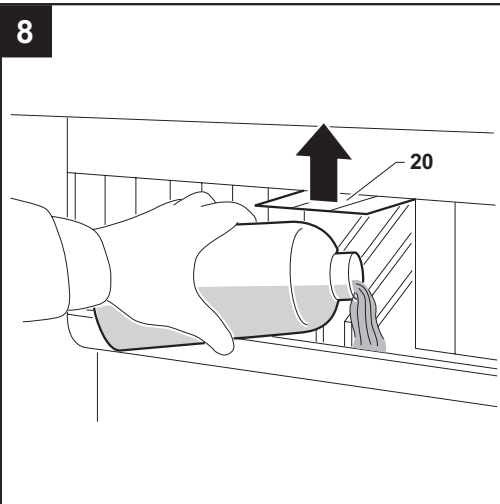
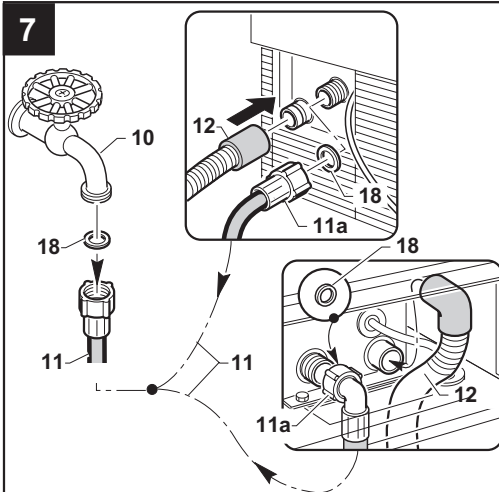
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Diagram 6 illustrates the final steps of attaching the door to the cabinet. It is divided into two parts, C and D.

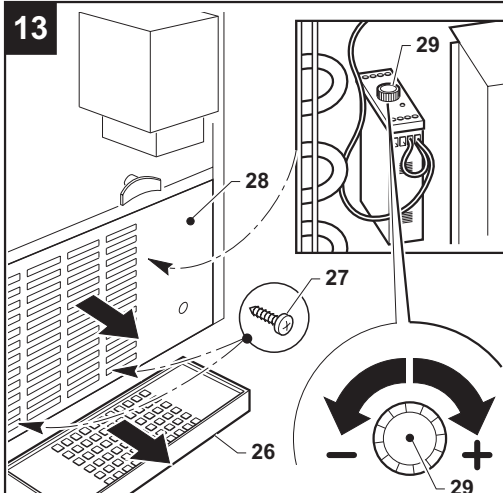
Part C: Shows the door being lifted into the cabinet. The door is shown with a curved arrow indicating its upward movement. The door is being lifted into the cabinet, and the door is shown with a curved arrow indicating its upward movement. The door is being lifted into the cabinet, and the door is shown with a curved arrow indicating its upward movement.

Part D: Shows the door being pushed into the cabinet. The door is shown with a curved arrow indicating its downward movement. The door is being pushed into the cabinet, and the door is shown with a curved arrow indicating its downward movement. The door is being pushed into the cabinet, and the door is shown with a curved arrow indicating its downward movement.

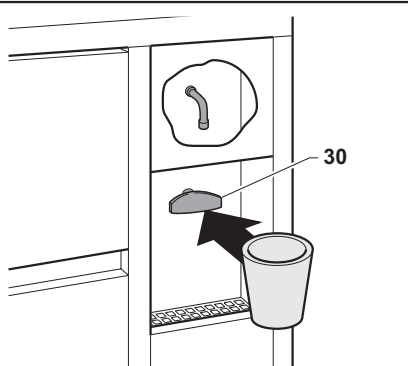
The diagram includes labels 13, 14, 15, 16, and 17. Label 13 points to the hinge pins. Label 14 points to the door. Label 15 points to the hinge bracket. Label 16 points to the hinge plate. Label 17 points to the hinge pin.



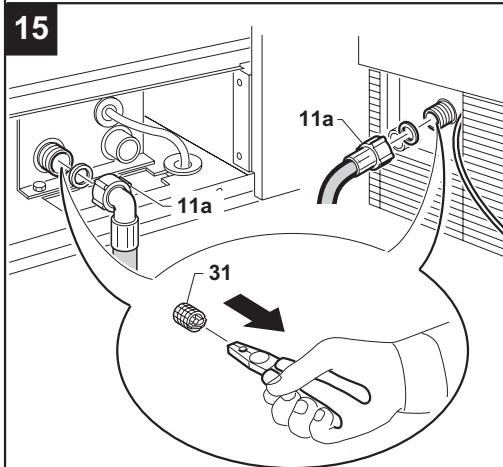
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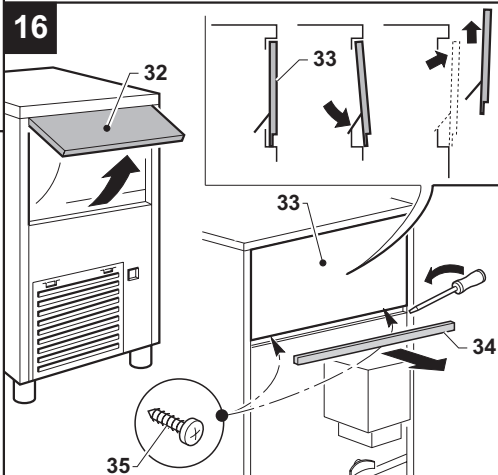
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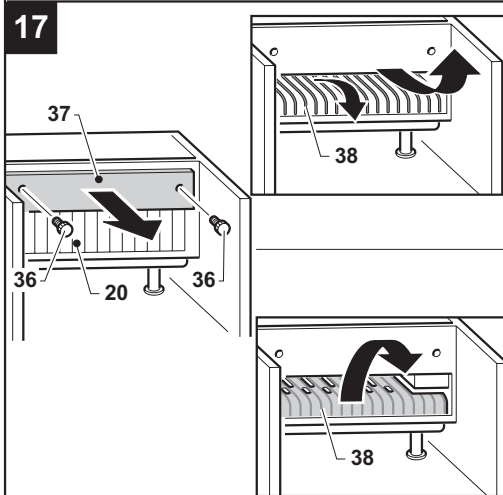
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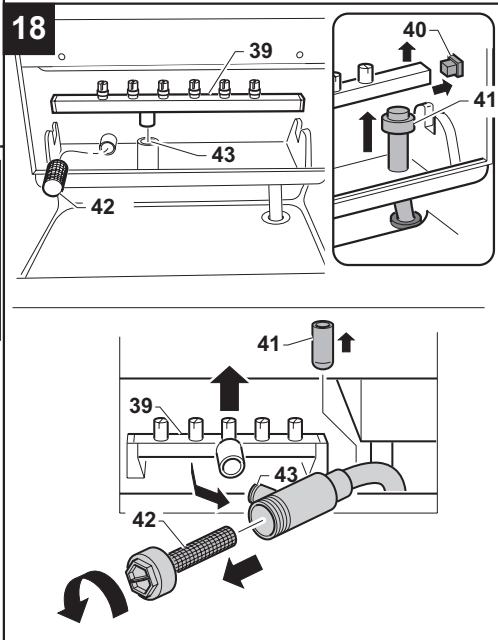
16



17



18



Dear Customer: Congratulations on having chosen a quality product which will certainly fully meet your expectations. Thank you for having purchased one of our products. Please read this Instruction Manual carefully before using your new automatic ice-cube maker with vertical evaporator system.

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1 IMPORTANT ADVICE AND RECOMMENDATIONS

This instruction manual forms an integral part of the automatic ice-cube maker with vertical evaporator (also more simply called appliance in the text) and must be kept for possible future consultation.

In the event of the appliance being sold or transferred to another person, this Manual must be handed over to the new user, in order to enable him to become familiar with the operation of the equipment and the corresponding advice and recommendations.

! Before installing and using the appliance, read the advice and recommendations contained in this Instruction Manual very carefully. They are given in order to ensure safe installation, use and maintenance of the appliance.

Any specific information or diagrams regarding particular models will be attached to this Instruction Manual.

! Do not remove any of the panels or grilles.

! Do not rest objects on the appliance or in front of the ventilation grilles.

! Always lift the appliance to move it. Do not push or pull it.

Any use of the appliance other than for the production of ice cubes using cold drinking water is to be considered as improper use.

! Do not obstruct the ventilation and heat-dissipation grilles, since poor aeration – in addition to reducing efficiency and causing poor operation – may also cause serious damage to the appliance.

Read the following warnings carefully:

The use of this appliance, as for any electrical device, requires compliance with certain

fundamental rules; in particular:

- Do not touch the appliance with wet or damp hands or feet.
- Do not use the appliance when you are barefoot.
- Do not use extensions in premises such as bathrooms or shower rooms.
- Do not tug on the power supply cable to disconnect it from the mains supply.
- Do not allow the appliance to be used by children or by incapable persons.

! If the appliance breaks down and/or operates in a faulty way, switch it off by means of the main switch fitted during the installation phase, turn off the water tap, and do not make any attempt to repair the appliance yourself. Contact only professionally qualified and authorized personnel.

In addition to rendering any form of warranty null and void, modifying (or attempting to modify) this appliance is extremely dangerous.

! To ensure the appliance operates efficiently and correctly, it is essential to comply with the manufacturer's instructions and to make sure that maintenance is performed by specially qualified personnel.

In the event of a failure, contact the dealer who sold you the appliance; he will be able to give you the address of your nearest Authorized Technical Service Center. Always insist on having genuine spare parts mounted.

! Should you decide to scrap your appliance, first disconnect the power supply cable from the mains, and then cut the cable off.

In addition, proceed as follows:

- Do not allow the coolant gas and oil in the compressor to disperse into the environment.
- Dispose of or recover the various materials according to the provisions established by the current laws in force in your country.

This appliance does not contain coolant that damages the ozone layer.



The manufacturer shall not be liable for any damage to the environment, animals, persons or objects caused by incorrect installation.

2 TECHNICAL DATA (Fig. 1)

The voltage and frequency are given on the data plate on the appliance. Refer to this data plate to check compliance.

Voltage (1), power (2), model (3), Serial No. (4) manufacturer (5).

The weighted equivalent continuous sound level A of this appliance is less than 70 dB (A). The measurements were made over an entire ice-cube production cycle, at a distance of 1 m from the surface of the appliance and at a height of 1.60 m from the floor.

The wiring diagram is stuck on the outside of the rear panel of the appliance.

3 ADVICE ABOUT TRANSPORTATION

The net weight and the weight including packaging of the appliance are given on the cover of this Instruction Manual. Please refer to the instructions on the packaging in order to correctly transport and lift the appliance.

To prevent the oil in the compressor from flowing back into the coolant circuit, always make sure that the appliance is kept upright during transport, storage, and handling. Follow the instructions given on the packaging.

4 UNPACKING

The appliance must be installed by authorized personnel in compliance with the current laws in force and the manufacturer's instructions.

Once you have removed the packaging according to the instructions on the box, make sure that THE APPLIANCE IS IN A PERFECTLY GOOD CONDITION. If in doubt, DO NOT USE IT and immediately CONTACT the dealer who sold it to you.

All the packaging items (plastic bags, cardboard, polystyrene foam, nails, etc.) must be removed and put out of the reach of children, as they are potential sources of danger.

Rest the wooden pallet on the floor and, using a hex socket wrench, loosen and remove the bolts (6 Fig. 2) that fix the appliance to the pallet.

Lift the appliance using equipment fit to bear its weight. Separate the appliance from the wooden pallet.

NOTE:

Some models are equipped with special threaded holes for the attachment of eyebolts. The corresponding attachment diagram is annexed to this instruction manual. (Fig. 3)

5 INSTALLATION

5.1 CONNECTION DIAGRAM

(see Fig. 4)

7. Electric connection controlled by omnipolar switch with differential
8. Water tap
9. Water supply pipe for ice production
10. Water supply pipe for condensation
11. Water drainage pipe

5.2 POSITIONING

It is advisable to install the appliance in a room where the temperature is between 10°C and 35°C, and with a water supply temperature of between 3°C and 25°C.

Avoid installing the appliance where it may be exposed to direct sunlight or near heat sources such as radiators, stoves, dishwashers, etc.



- This appliance
 - must not be used outdoors
 - must not be installed in damp places or where it is liable to be sprayed with water
 - must be positioned at a distance of at least 5 cm from the side walls

The appliance must be installed on a container. In any case, make sure that you comply with the instructions and recommendations given in this manual, particularly those regarding connection to the electric power source and the water supply (water filling/drainage).

Please consult the diagrams supplied with the containers themselves to correctly install the appliance on the special containers manufactured by our company.

The manufacturer declines all responsibility for installations made on containers not produced by our company.

Use a spirit level to check that the appliance is standing perfectly level.

5.3 CONNECTION TO THE ELECTRICITY MAIN

 **Before connecting the appliance to the electricity main, make sure that the mains voltage rating corresponds to the value indicated on the rating plate.**

 **Make sure that the appliance is connected to an efficient earthing system.**

 **Make sure that the capacity of the power supply system suits the maximum power value indicated on the rating plate of the appliance.**

The appliance must to be connected to the electric power supply in a permanent way. Provide an appropriate socket controlled by an omnipolar switch, with a contact opening gap of not less than 3 mm, in accordance with current national safety standards. This switch must be equipped with fuses, with the associated residual current device positioned in such a way as to be readily accessible.

 **Make sure that you fully uncoil the power supply cable and check that it is not crushed in any way.**

 **Should the supply cable be damaged, it must be replaced by a specialized technician using a special cable available from the manufacturer or from the Technical Service Centers.**

5.4 CONNECTION TO THE WATER MAIN

 **The appliance must only be supplied with cold water for human consumption (drinking water).**

The operating pressure must be between 0.1 and 0.6 MPa.

The appliance must be connected to the water main by professionally qualified personnel in accordance with the manufacturer's instructions.

 **A tap must be installed between the water mains and the feed pipe of the appliance, so that the water supply may be shut off if necessary.**

Where the feed water is particularly hard, you are advised to install a softener. Any solid particles (e.g., sand) may be eliminated by installing a mechanical filter, which must be periodically inspected and cleaned.

These devices must comply with the standards in force in the country of use.

 **Never turn the water supply tap off when the appliance is working.**

5.4.a FILLING WITH WATER (Fig. 5)

Insert the special seals provided (12) in the two threaded ring nuts of the water feed pipe (9) supplied with the appliance.

Without exerting excessive force in order not to risk cracking the unions, firmly tighten a threaded ring nut on the outlet of the valve located in the rear of the appliance. The other threaded ring nut must be screwed to the water tap (8); this too must be provided with a thread.

Repeat the operations described above to make the connection of the valve (W) (fig. 5).

5.4.b DRAINAGE (Fig. 5)

Fix the water drainage pipe (13 Fig. 5) in the housing provided on the rear of the appliance. Make sure that:

- The pipe is a hose.
- The internal diameter is 22 mm, as required.
- The water drainage hose is not throttled at any point throughout its length.
- The drainage hose slopes downwards by at least 15%.

It is advisable to drain the water straight into an open drain trap.

6 START-UP

6.1 CLEANING INTERNAL PARTS

The appliance will have already been cleaned in the factory. However, you are advised to wash the internal parts again before using the appliance. Make sure that the power supply cable is unplugged before carrying out the above cleaning operation.

For cleaning operations in general, use an ordinary detergent for washing dishes or a solution of water and vinegar. Rinse thoroughly with plenty of cold water and remove any ice that may have been produced during the initial cycles.

It is advisable to avoid using abrasive detergents or powders, since these might damage the finish. (For further information regarding cleaning of internal parts, refer to Point 9.3 of this Instruction Manual.)

6.2 START-UP

After the appliance has been correctly connected to the electric supply mains, to the water supply mains, and to the water drainage system, start it up as follows:

- a) open the water supply tap/s 8 fig. 4 and wait 3 minutes before proceeding to the next operation
- b) switch on the power supply via the appropriate switch provided during the installation phase.
Start the appliance by pressing the relative switch (15 Fig. 4) which lights up (if applicable).

7 MAIN CAUSES OF OPERATING FAILURE

Should the appliance fail to produce ice, before calling on the Authorized Technical Service Center, first check carefully that:

- the water supply tap/s (8, Fig. 4), fitted during the installation phase, has/have been turned on.
- the electric power is reaching the appliance, that the switch (7 Fig. 4) is in the "ON" position and that the button (15 Fig. 4) is lighted.

Furthermore:

- if there is excessive noise, make sure that the appliance is not touching furniture or sheet metal which can give rise to noise or vibrations;

- should any trace of water appear, check the drain hole of the container to ensure that it is not clogged, that the water fill and drain pipes are correctly connected and are not throttled or damaged.
- make sure that the temperature of the air or water does not exceed the installation limit values.
- make sure that the water inlet filter is not clogged.
- make sure that the spray nozzles are not clogged with scaly deposits.

If the fault still persists after the above inspections have been made, turn off the electric power source by means of the switch fitted during the installation phase, turn off the tap connecting to the water main, and contact the nearest Authorized Technical Service Center.

To obtain a faster and more efficient reply when you call the Center, state the model of the appliance precisely, together with its serial number or manufacturing number. This information is given on the serial N° plate (Fig. 1) affixed to the appliance and on the cover of this Instruction Manual.

8 OPERATION

When the container is full of ice, a special device inside the appliance automatically stops the appliance.

When ice is taken from the container, the thermostat will automatically reactivate ice-cube production, thus creating a new supply of ice.

The appliance is equipped with an electronic safety timer that stops the appliance if it fails to produce ice due to faults such as: faulty electrical components, lack of refrigerating gas, insufficient water, etc.

If the appliance blocks and the container is not full of ice, switch it off and on again using the switch provided during the installation phase in order to make sure that the electronic safety timer has activated. If the fault persists, the appliance will block again after the programmed time. In this case, disconnect the appliance from the electricity main by means of the switch provided during the installation phase, turn off the tap/s connecting to the water main and contact the nearest Authorized Assistance Center.

Some versions are also equipped with a safety pressure switch which activates in case of faults in the coolant circuit.

If the appliance is blocked and the container is not full of ice, press the reset button at the rear to make sure that the safety pressure switch has activated.

If the fault still persists, the appliance will automatically stop again. In this case disconnect it from the electric mains by means of the switch provided during the installation phase, turn off the tap connecting to the water mains and call the nearest Authorized Service Centre.

9 MAINTENANCE

9.1 FILTER CLEANING



At least every two months clean the filter located on the water intake valve, and the water outlet valve proceeding as follows:

- switch off the electric power supply via the switch (7 Fig. 4) provided during installation
- Shut off the water supply by turning the tap (8 Fig. 4) fitted during installation.
- unscrew the threaded ring nut/s (9a Fig. 6) of the water feed hose, located at the outlet of the valve at the rear of the appliance
- Using a pair of pliers, remove the filter (14 Fig. 6) from its seat without damaging the water feed pipe connector.
- Place the filter under a strong jet of water to remove residue, but replace the filter if it is excessively dirty.

After having carried out the cleaning operations, refit the filter and hose pipe taking the necessary precautions described earlier in the Instruction Manual.

- take out the screws and remove the right side grille (Fig. 7)
- turn the water drain solenoid valve clockwise through 90° and remove it by raising it from its seat without exerting too much force (Fig. 7)
- remove any sediments from the seat and the membrane of the solenoid valve using a brush; do not use pointed or sharp tools because they could damage it

- place the solenoid valve in its seat and turn it anticlockwise through 90° until it locks (Fig. 7)
- place the grille in its seat and lock it by means of the fastening screws.

When the operations have terminated, turn on both the electricity supply and water supply.

9.2 AIR-COOLED MODELS

For air-cooled models, it is very important to keep the finned condenser clean.

Have the finned condenser cleaned at least once every two months by an authorized Technical Service Center, which can include this operation in the scheduled maintenance program.

9.3 CLEANING AND SANITIZING (Fig. 8-9)



All cleaning operations must be carried out only after the electric power and water supplies have been disconnected, as described previously.

- Access the internal basin, following the instructions given in Figure 8.
- Remove the slide grille as shown in Figure 8 and clean the it.
- Remove the water from the pump casing by draining it away with a pipe.
- Remove the stainless steel pump return filter (16), as shown in Figure 9, and clean it under running water.
- For cleaning, use an ordinary dish-washing detergent or a solution of water and vinegar. To eliminate any encrustations, use a soft plastic-bristle brush and a sponge.
- Avoid using abrasive detergent or powders, which may damage the finishings.
- Pour 3 liters of white vinegar into the basin (Fig. 10), replace the slide and start the appliance after having made all the operations required for the startup.
- After 3 ice production cycles, turn the appliance off, close the tap, remove the slide, remove the water as described previously and repeat the tray cleaning operations.

To obtain a sanitizing effect, repeat the above cleaning operations using a suitable solution, such as one of those used for disinfecting baby feeding bottles.

When the cleaning and/or sanitizing operations have been completed, rinse thoroughly with plenty of cold water and eliminate any ice that may have been produced during the initial cycles.

Remember to thoroughly clean and sanitize the internal parts of the container.

Complete sanitizing can only be carried out only by the Authorized Technical Service Centers, and must be done regularly depending on the conditions of use of the appliance, the chemical and physical features of the water, and after every period in which the appliance has remained at a standstill for any length of time.

You are advised to ask your dealer to draw up a scheduled maintenance contract that will cover the following:

- **cleaning the condenser**
- **cleaning the filter located on the water inlet solenoid valve**
- **cleaning the ice-tray**
- **checking the charge of coolant gas**
- **checking the operating cycle**
- **sanitizing the appliance.**

10 PERIODS AT A STANDSTILL

If you do not intend to use the appliance for a certain period of time, proceed as follows:

- switch off the electric power source via the switch provided during installation
- shut off the water supply by turning off the tap/s provided during installation
- carry out all the operations envisaged for scheduled maintenance and cleaning of the apparatus
- clean and dry the internal tray.

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