

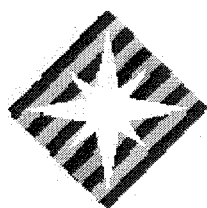
INSTRUCTION MANUAL

SOFTY 503 E

NWN
MACHINERY WORLD

APPLICARE

TARGA CARATTERISTICHE



PROMAG
LE MACCHINE PER IL GELATO

PROMAG

- Via Emilia, 45 - 40011 Anzola Emilia (Bologna) - Italy

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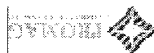
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PREFACE

INSTRUCTION MANUAL

This manual has been written in conformity to community directives for the harmonization of safety norms and for the free circulation of industrial products among EC member nations (directive of EC Council 89/392 and amendments thereto, known as "Machine Directive").

PURPOSE

This manual has been written with awareness that the user needs to have detailed information about the machine and how it operates.

The manual describes the way to use the machine correctly so that its qualities, which distinguish PROMAG products throughout the world, may be maintained unaltered over time.

A major part of the manual describes the conditions required for use, and especially the procedures to be followed for cleaning operations and ordinary and extraordinary maintenance.

Nevertheless, the manual cannot satisfy every need in detail. In case of doubt or insufficient information, contact:

PROMAG - Via Emilia, 45 - 40011 Anzola Emilia (Bologna) - Italy

ORGANIZATION OF THE MANUAL

The manual is organized in sections, chapters, and sub-chapters for easy consultation and search for specific topics.

Section

A section is a part of the manual that identifies a specific topic referring to a part of the machine.

Chapter

A chapter is a part of a section that illustrates a unit or a concept referring to a part of the machine.

Sub-chapter

A sub-chapter is the part of a chapter that gives a detailed description of a specific component of a part of the machine.

All persons operating the machine must read and understand the parts of the manual that regard his specific duties. In particular:

- the operator must read the chapters regarding startup and functioning of the machine units.
- the qualified technician performing installation, maintenance, repairs, etc., must read the entire manual.

ADDITIONAL DOCUMENTATION

The following documentation is supplied in addition to the instruction manual for each machine:

- **Spare parts supplied with machine:** List of components supplied with the machine, used for simple maintenance.
- **Electrical diagram:** Diagram of electrical connections, inserted in the machine.

ATTENTION !!

Read this instruction manual carefully before operating the machine.

Read the safety instructions carefully as well.



SAFETY

When using industrial machinery and equipment, you must be aware that mechanical parts in rotary motion, electrical parts under high voltage, parts at high temperatures, etc., may cause serious damage to persons and property.

Safety supervisors for the equipment must see that:

- All improper uses or maneuvers are avoided.
- Safety devices are not removed or tampered with.
- Maintenance is performed at regular intervals.
- Only original spare parts are used, especially for safety components (ex.: protective microswitches, thermostat).

For this purpose:

- Documentation for use, maintenance, etc., for the machine in use must be available at the work station.
- Such documentation must be read carefully and all instructions followed.
- Only adequately trained persons must be assigned to operate the machinery and electrical devices.

QUALIFICATION OF PERSONNEL

The personnel operating the machine may be classified as follows according to level of preparation and responsibility:

OPERATOR

- Person not necessarily having a high level of technical knowledge, trained to run the machine under normal operating conditions. For example: startup, stop at end of work, loading of consumable materials, product feeding, elementary maintenance operations (cleaning, simple jams, instrument checks, etc.).

QUALIFIED TECHNICIAN

- Person performing more complex operations such as installation, maintenance, repairs, etc.
- IMPORTANT!** Make sure that personnel do not perform any operations beyond their field of knowledge and responsibility.

NOTE:

Current norms define **QUALIFIED TECHNICIAN** as one who:

- by training, experience, and instruction,
 - by knowledge of norms, regulations, and interventions in accident prevention,
 - by knowledge of the operating conditions of machinery,
- is able to recognize and prevent all dangerous situations and has been authorized by the equipment safety supervisor to perform all types of interventions.



STANDARD SYMBOLS

WARNING: DANGER OF ELECTRIC SHOCK

Tells the person that the operation described, if not performed according to safety norms, presents risk of electrical shock.



WARNING: GENERIC DANGER

Tells the person that the operation described, if not performed according to safety norms, presents risk of physical harm.



NOTE

Gives the person important information.



ATTENTION

Gives person information which, if not observed, may cause loss of data or damage to machine.



MACHINE OPERATOR

Identifies a non-qualified person, i.e., lacking specific skills, who is able to perform simple tasks only, such as running the machine by means of the commands on the button panel, loading and unloading of products used during production.



MAINTENANCE PERSONNEL

Qualified technician able to run the machine under normal conditions, to work on mechanical parts in order to perform all necessary adjustments, maintenance operations, and repairs. Qualified to operate on electrical and refrigerator systems.



PROMAG TECHNICIAN

Qualified technician provided by the constructor to perform complex operations under special circumstances or as arranged with the user.



PERSONAL PROTECTION

The presence of this symbol next to the description means that the operator must use personal protections, since the risk of accident is implicit.



WARNINGS

- At the time of installation, you must also install a differential magnetothermal switch to section all poles of the line. This switch must be appropriate for the absorbed power stated on the machine data plate and have a cutoff of at least 3 mm.
- Never use your hands to intervene on the machine, either during production or during cleaning. For maintenance, first make sure that the machine is in **STOP** position and that the mains switch has been turned off.
 - DO NOT wash the machine with a jet of pressurized water.
 - DO NOT remove the blades to access the inside of the machine before having cut power to the machine.
 - **PROMAG** will not be liable for any accidents that may take place during use, cleaning, or maintenance of its machines deriving from non-observance of the above safety rules.



1. RECEIPT, HANDLING, OPENING OF CRATE

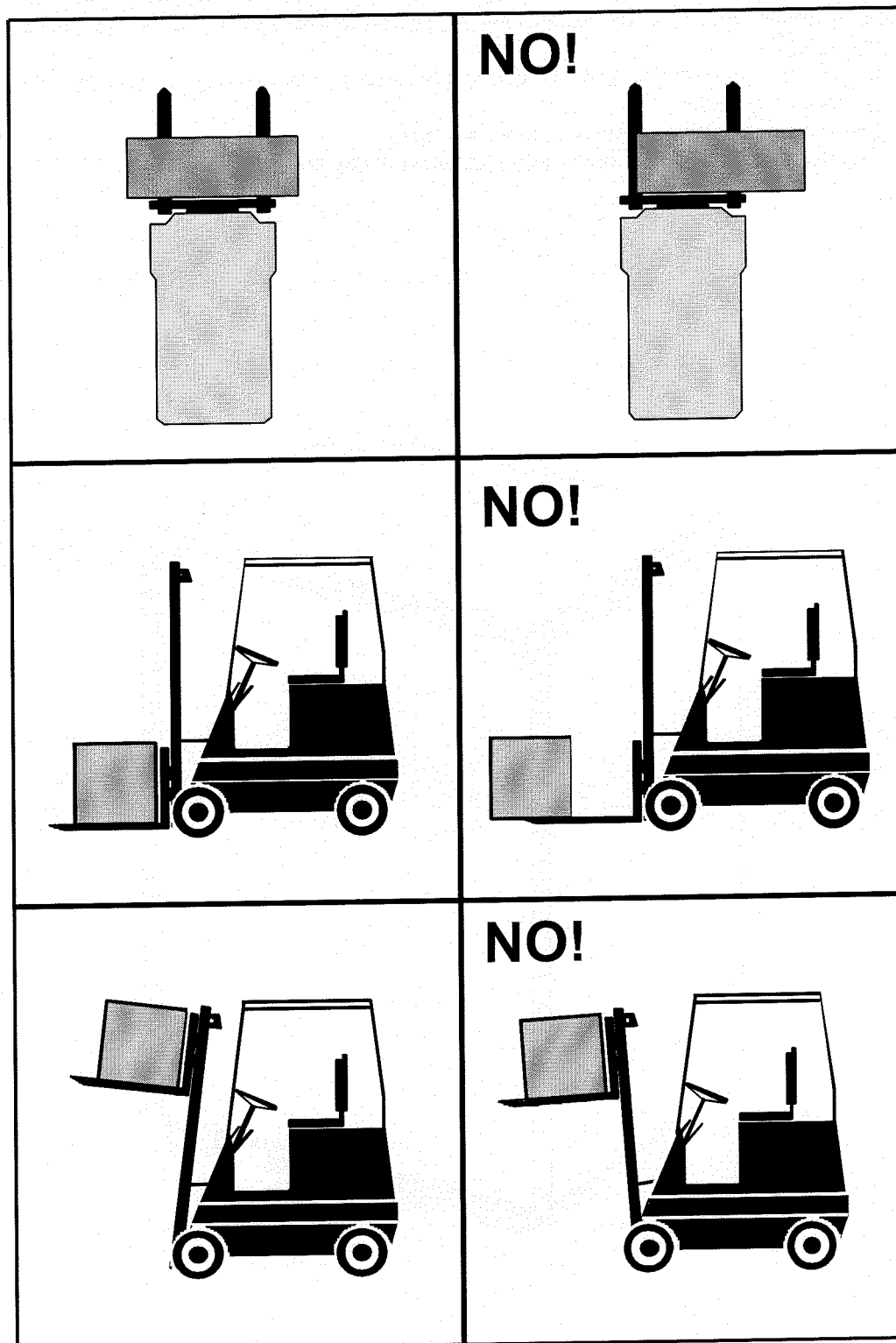
1.1 RECEIPT

- Before opening the crate, check that it was not damaged by impact during transport.
- If the crate is damaged in such a manner as to lead you to suspect damage to its contents, notify the insurance company immediately and leave the crate as it is.



1.1.1 LIFTING THE CRATED MACHINE

The crate must be lifted by completely sliding the forks of the lift truck in the space between the feet of the pallet, dividing the weight of the machine in order to keep the barycenter of the crate in equilibrium.



1.1.2 FORBIDDEN LIFTING MEANS

DO NOT use lifting means or systems with features that do not satisfy safety requirements, such as:

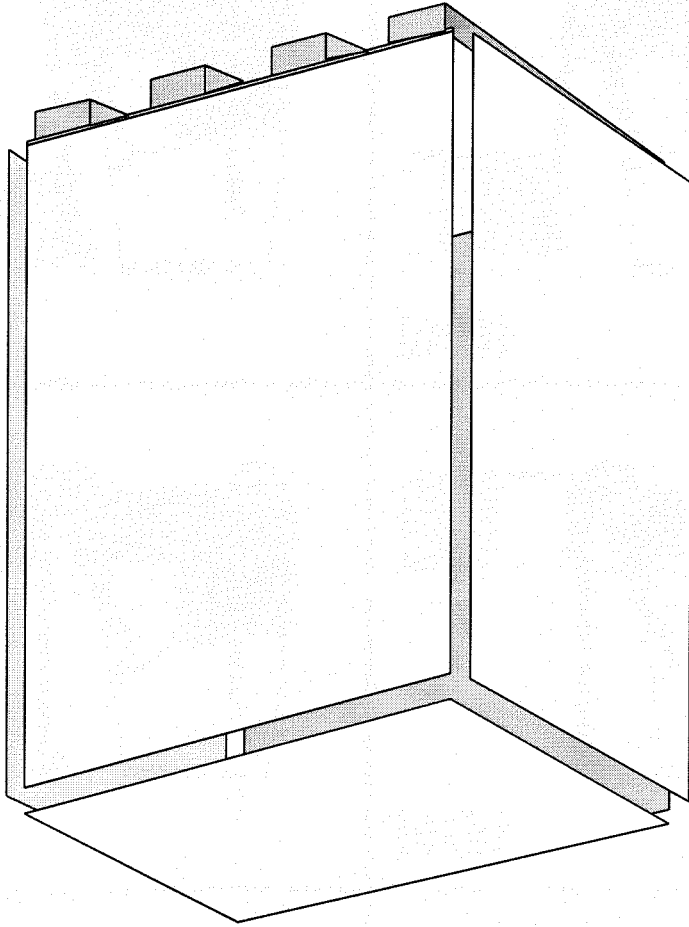
- Lifting capacity less than machine weight
- Constructive characteristics of lift truck unsuitable (ex. short forks)
- Constructive characteristics altered by use
- Ropes or cables not conforming to norms
- Worn ropes or cables.

1.2 OPENING THE CRATE

The crate may be made of either wood or corrugated cardboard.

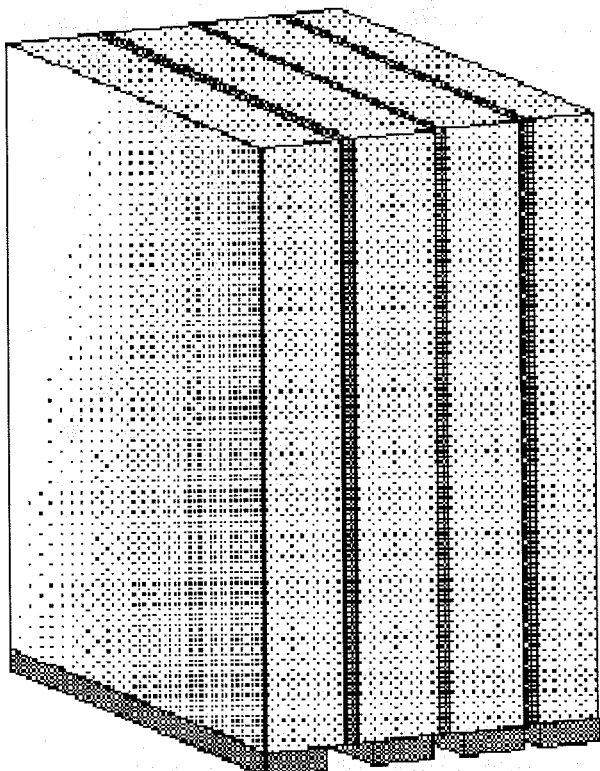
If the crate is made of wood, its panels will be nailed together and the machine will be secured by means of two tie rods that connect the bottom of the machine frame to the base of the crate. Open the wooden crate by using suitable tools. Remember to wear gloves to protect your hands against splinters.

- Remove the nails starting from the top, and proceed until uncovering the machine (still attached to the pallet.
- Remove the protective wrapping from the machine.
- Visually check that the machine was not damaged during transport.



The cardboard crate is closed on the outside by three steel straps.
Inside, the machine is secured by other straps.
Open the crate by cutting the straps with shears.

Be very careful when cutting the straps, as this is a dangerous operation. You may be hurt if the straps are not held securely when cut.



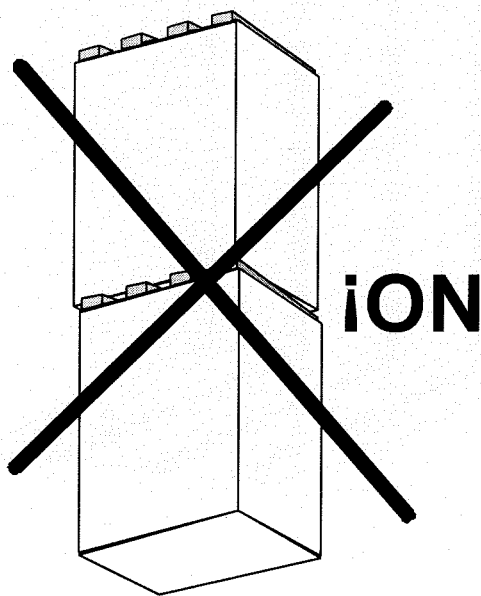
Attention:

**The instruction manual is inside the crate.
Read it carefully before operating the machine.**



1.3 STORING THE MACHINE

The machine must be stored in a dry place with very low humidity.
Before storing the machine, protect it with a wrapper to prevent the deposit of dust or other material.



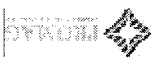
IMPORTANT:

When storing the crated machine, do not stack the crates.



1.4 DISPOSING OF PACKING MATERIALS

When opening the crate, be sure to separate the packing materials by type and dispose of them according to the regulations in the country of destination.



2. GENERAL

2.1 GENERAL INFORMATION

2.1.1 DATA IDENTIFYING CONSTRUCTOR

The machine has a plate with data identifying the constructor, machine type, and serial number assigned at the time of construction.

A		B		F		G	
							
		PROMAG					
		LE MACCHINE PER L'ESLETTO					
		ANZOLA EMILIA - BOLOGNA - ITALY					
Matr.				Cod.			
V				Hz		kw	
Gas		A					
		kg					
CE							
C		D		E		H	
						I	

A = Serial number
 B = Machine type
 C = Voltage
 D = Fuse current
 E = Gas type, weight and pressure
 F = Machine code
 G = Condensation type
 H = Frequency
 I = Power

2.1.2 DATA IDENTIFYING CUSTOMER/USER

CUSTOMER:

ADDRESS:

TELEPHONE:

Machine Serial Number:

Machine delivery date:

Manual delivery date:

2.1.3 INFORMATION ON MAINTENANCE SERVICE

Ordinary maintenance procedures are described in the "Maintenance" section of this instruction manual. Any other operation that requires radical intervention on the machine must be arranged with the constructor, which will evaluate the possibility of a direct intervention at the customer's premises.



2.1.4 INFORMATION ON RELATIONSHIP WITH USER

- The constructor of the machine described in this manual is available for any and all explanations or information that the user may require regarding the operation of the machine or improvements that may be made to it.
- The person to be contacted in this regard shall be the distributor in the user's country or, if there is no such distributor, the company itself.
- The constructor's customer service department will always be available for any request regarding function, spare parts, or technical service.
- The constructor reserves the right to make appropriate changes to the machine without previous notice.
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2.2 INFORMATION ON THE MACHINE

2.2.1 GENERAL

This is a free-standing machine for the production and immediate dispensing of soft ice cream, equipped with a selector that controls all functions.

The main components of the machine are:

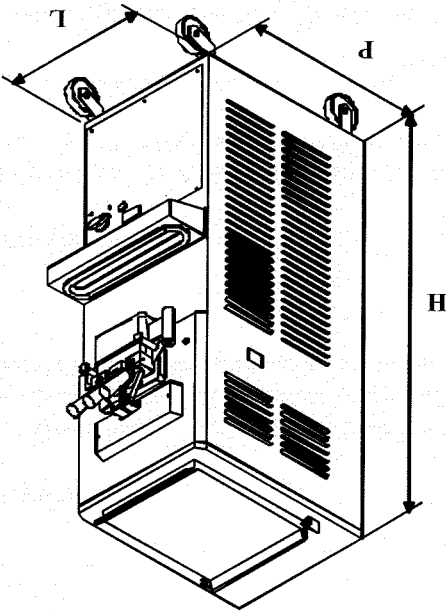
- Gear pumps with over-run regulator
- Beaters for high over-run
- Insulating panel for total expulsion of product
- Cooling of mix in separate tank
- Rotating health protection on spout
- Temperature indicator for mix in tank
- Tank cover
- Wheels for easy movement

PROMAG advises you to always use high-quality mix when making ice cream. This will satisfy even the most demanding customer. Any cost saving made in the mix to the detriment of quality will surely result in a loss that is much greater than what you have saved.

In light of the above, we advise you as follows:

- Make the mix yourself with natural products of the highest quality, or obtain mixes from serious and trustworthy companies.
- Scrupulously follow the supplier's instructions for preparation of the mix.
- Do not change the recipes by adding, for example, more water or sugar.
- Taste the ice cream yourself, and sell it only if you are completely satisfied.
- Make sure your staff always keeps the machine clean.
- If any repairs are required, always contact one of the maintenance companies authorized by PROMAG.

2.2.2 MACHINE LAYOUT



Softy 503 E			MODEL
Width	Depth	Height	
mm. (L)	mm. (P)	mm. (H)	
510	840	1580	

2.2.3 TECHNICAL DATA

MODEL	Hourly output*	Tank capacity	Power supply			Installed power	Condenser	Net weight kg Netto
	kg	liters	Volts	Hz	Ph	kW		
Softy 503 E	30	10 X 2	380	50	3	2,5	Air**	236

* Hourly output and mix quantity per freeze may vary depending on the temperature and type of mix used and on the over-run desired.

** Also available with water condenser.

Performance refers to room temperature of 25°C and condenser water at 20°C.

2.3 INTENDED USE

Machine models SOFTY 503 E may be used exclusively for the production of ice cream, in accordance with the information contained in paragraph 2.2.1 "General", within the functional limits stated below.

Voltage:	+/-10%
Min. air temperature °C:	10°C
Max. air temperature °C:	43°C
Min. water temperature °C:	10°C
Max. water temperature °C:	30°C
Min. water pressure:	1 kPa (1 bar)
Max. water pressure:	8 kPa (8 bar)
Max. relative humidity in air:	85%

- The machine is not intended to be used for any purpose other than that for which it was originally constructed.

2.4 NOISE

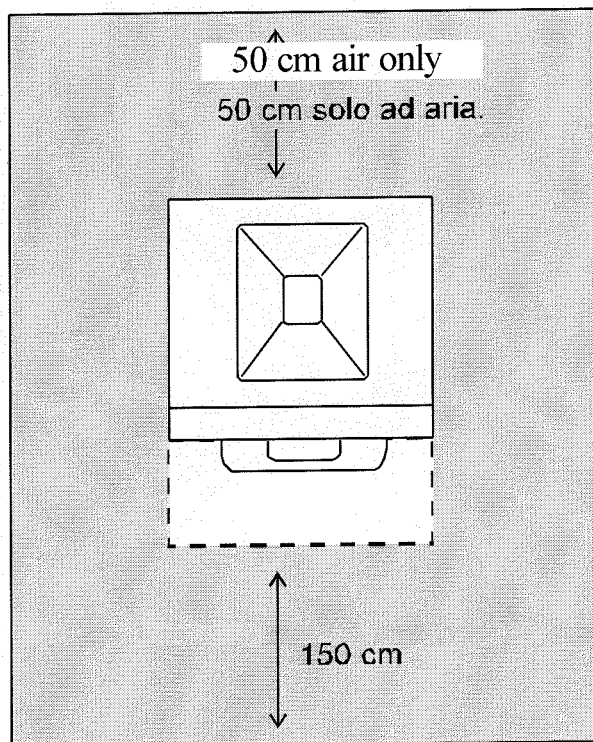
The steady acoustic pressure level weighed A in a working place alike by watercooled and by aircooled machines is less than 70 dB(A).

3. INSTALLATION

3.1 SPACE REQUIRED TO USE MACHINE

The machine must be positioned so that there is enough space for air to circulate freely on all sides. Leave sufficient space for the operator to access and operate the machine without restriction and to be able to leave the work area immediately if necessary.

We advise you to leave at least 150 cm. of access space to the machine, taking into account the space occupied by open panels.



3.2 CONNECTION TO WATER MAINS

The machine has to be connected to the water mains, which must not have a pressure exceeding 800 kPa (8 bar).

On machines with air condensation, the drinking water connection (for washing) is located under the machine.

On machines with water condensation, the water connections (for washing and for cooling of gas) are located on the rear plate.



3.3 MACHINE WITH AIR CONDENSER

Machines with air condensers must be installed with a minimum distance from the rear wall of at least 50 cm. to allow condensation air to circulate freely.



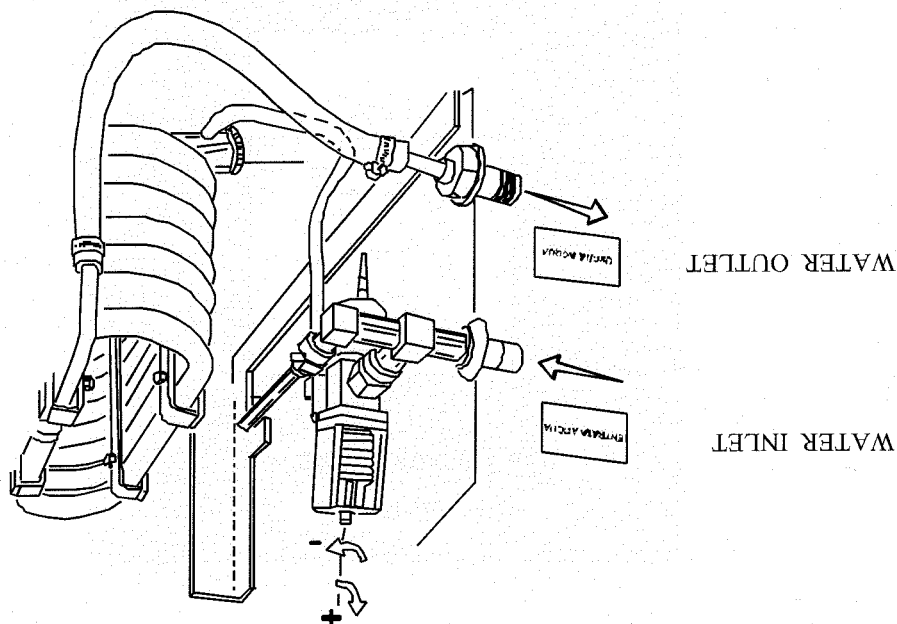
NOTE

Poor aeration of the machine will negatively affect its operation and output.





In order to function, the machine with water condenser has to be connected to running water or to a cooling tower.
The water inlet must have a pressure of at least 100 kPa (1 bar) and a flow rate at least equal to expected hourly consumption.
Connect the inlet pipe, marked with the "Water Inlet" plate, to the water mains by inserting a tap, and the outlet pipe, marked with the "Water Outlet" plate, to a discharge by inserting a tap.



3.4.1 ADJUSTMENT OF PRESSURE VALVE

IMPORTANT

If the pressure valve needs to be recalibrated, this must be performed by qualified personnel only. The valve must be adjusted so that no water leaks when the machine is off, and that lukewarm water comes out when the machine is producing.

NOTE:

Water consumption increases if the temperature of the water entering the machine exceeds 20°C.

ATTENTION:

Do not leave the machine in rooms having temperatures below 0°C without having drained the condenser circuit (see Section 7 of this manual).



3.5 ELECTRICAL CONNECTION

Before connecting the machine to the electrical mains, check that the voltage is the same at that shown on the identification plate.

You must also install a differential magnetothermic cutoff switch between the machine and the mains. This switch must be appropriate for the absorbed power required and have a cutoff of at least 3 mm.

The machine is supplied with a five-wire power cable. The blue wire is to be connected to neutral.

IMPORTANT

The yellow/green ground wire must be connected to an efficient ground.

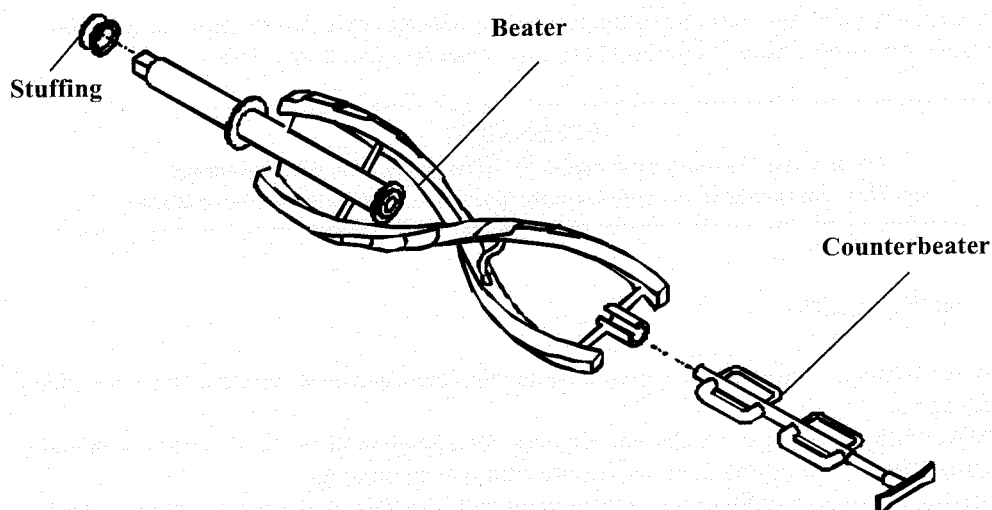
3.5.1 REPLACEMENT OF POWER CABLE

If the machine power cable becomes damaged, replace it immediately with a cable having identical characteristics.

This is to be done by qualified technical personnel only.

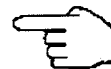
Rotation of beater

For model *SOFTY 503 E* machines, the beater rotates in a *counterclockwise* direction.



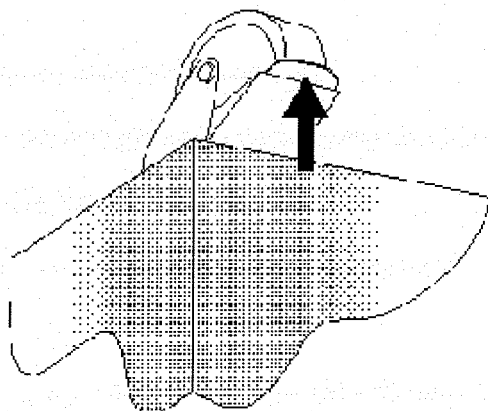
Reversing direction of rotation

To reverse the direction of rotation if it is incorrect, switch two of the three phase wires coming from the differential thermal switch.



3.6 PLACEMENT OF THE MACHINE

The machine is set on wheels to allow easy placement. The wheels have mechanical locks that may be used to keep the machine from moving.



3.7 CLEANING

Clean the machine of any dust and of the protective coating applied at the time of shipment. Use water only, with a mild soap-based detergent if needed, and a soft cloth.

ATTENTION

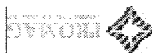
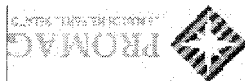
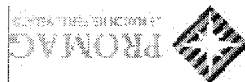
Do not use solvents or alcohol or detergents that could damage machine components or contaminate parts in contact with the product.

3.8 REFILLING

The motor installed in the machine is permanently lubricated, and needs no checking/replacement or topping up.
 PROMAG fills the circuit with the gas required for operation at the time of post-production inspection. The new machine does not require filling or topping up.
 If it becomes necessary to fill or top up the circuit with gas, this must be done only by qualified technical personnel, able to determine the reason for this need.

3.9 MACHINE INSPECTION

The machine undergoes post-production inspection at PROMAG, during which all operations and functions are thoroughly tested.
 Machine inspection at the end user's premises must be performed by trained technical personnel or by a PROMAG technician.
 When the machine is in position and all connections to feeds are correctly made, perform the operations required for the functional and operative testing of the machine.



4. OPERATING INSTRUCTIONS

4.1 SAFETY WARNINGS

When using the machine, you must be aware that mechanical parts in rotary motion, electrical parts under high voltage, parts at high temperatures, etc., may cause serious damage to persons and property.

Safety supervisors must see that:

- All improper uses or maneuvers are avoided.
- Safety devices are not removed or tampered with.
- Maintenance is performed at regular intervals.
- Only original spare parts are used, especially for safety components (ex.: protective microswitches, stop buttons, differential switches, etc.).

For this purpose:

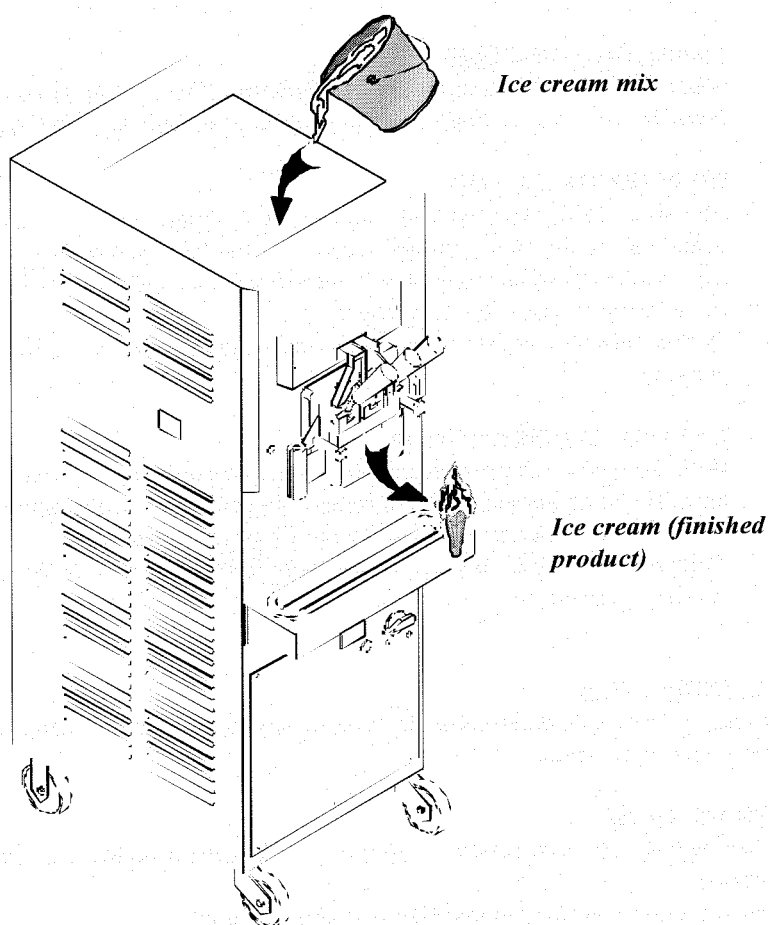
- Documentation for use, maintenance, etc., for the machine in use must be available at the work station.
- Such documentation must be read carefully and all instructions followed.
- Only adequately trained persons must be assigned to operate the machinery and electrical devices.

4.1.1 MACHINE CONFIGURATION

The machine is composed of a motor to drive the beater, a cooling system with water or air condenser (or both, depending on the model).

Ice cream is prepared by pouring the mix in the tank and starting the automatic production cycle until achieving optimum ice cream consistency as set by PROMAG.

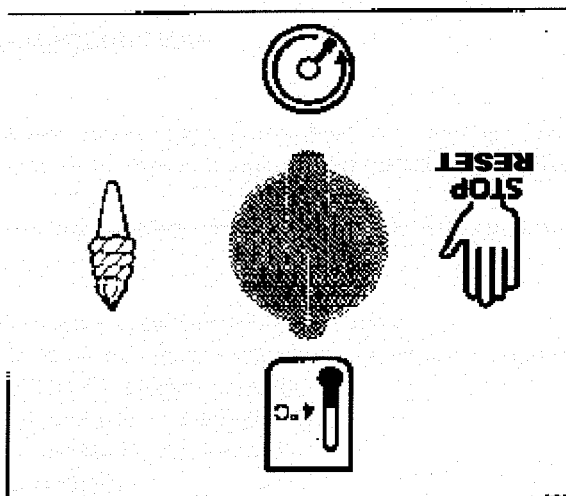
When the cycle is finished, the ice cream is ready to be extracted by means of the levers.



4.2 CONTROLS

The machine has a function selector located on the front panel. Each function is identified by a symbol.

4.2.1 FUNCTION SELECTOR

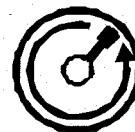


4.2.2 FUNCTIONS AVAILABLE TO OPERATOR



STOP (OFF)

When selected, stops the machine. In this status, the machine is ready to receive commands for any function. To select a new function, you must always return to STOP.



CLEANING (BEATER)

When this function is on, only the beaters turn. The cooling system stays off. *Note: We do not recommend prolonged use of the machine in this position.*



DISPENSING (AUTO)

Operation of the beaters and compressor is completely automatic, and is controlled by the Hard-O-Matic Control. If the temperature of the mix in the tank is too high when the H-O-M is turned off, the compressor will continue to run in order to lower the temperature. During business hours, the selector must always stay in "DISPENSING" position.



ENERGY CONSERVATION

With the beaters stopped, the compressor (controlled by the thermostat) will turn off and on automatically in order to keep the mix in the tank and the ice cream in the cylinders sufficiently cold for good conservation. *Note: it is advisable to keep the machine in this position during prolonged periods of inactivity.*

TANK LEVEL INDICATOR

The lighting of these pilot lamp indicates that the level of mix in the tank has reached minimum and that more mix should be added.

CLEANING PILOT LAMP

This lamp, located near the function selector, will turn on when the machine is in CLEANING (BEATER) position. The lamp serves to remind you that the machine is in this position.

Note: the machine should operate in this position only for the minimum time necessary, because the beaters could become damaged.

4.3 PRELIMINARY OPERATIONS, WASHING AND STERILIZATION

Before operating the machine for the first time, you must carefully clean all of its parts and sterilize all of the parts that will be in contact with the ice cream.

IMPORTANT

Cleaning and sterilization must always be performed with maximum care at the end of each production in order to guarantee quality of production and observe necessary rules of hygiene.

4.3.1 PRELIMINARY CLEANING

Proceed as follows to clean the machine:

- 1 Fill the two tanks with water.
- 2 Close the spout and fill the tank with soap solution. Then run the machine by setting the selector in "CLEANING"  BEATER position.
- 3 Lower the dispensing lever and let all of the water run out of the tanks.
- 4 With regard to disassembly of machine parts, see the instructions contained in Section 6 "CLEANING, DISASSEMBLY, AND REASSEMBLY OF PARTS IN CONTACT WITH PRODUCT".

SAFETY NOTE

To prevent pointless wear of the whipping cylinder and the beater,
DO NOT leave this function on for more than 3 minutes.

4.3.2 STERILIZATION

With the machine off, and with the extraction spout closed, fill the two tanks with water and add some NON-CORROSIVE sterilizing solution.

Set the selector to "CLEANER"  BEATER position.

ATTENTION

Prolonged operation in "CLEANING" position with the cylinder empty or with water containing dissolved sterilizers will cause rapid wearing of the beater.

Leave the machine running only for the time required for such operations (recommended time 10-15 seconds).

Drain the sterilizing solution completely by means of the product extraction spouts.

Note: it is advisable to rinse with running water before setting the machine in production.

ATTENTION

You may no longer touch the sterilized parts with your hands, cloths, or other objects.

4.3.3 HYGIENE

The fats contained in ice cream are ideal media for the proliferation of molds, bacteria, etc. To eliminate them, wash the parts in contact with the mix and with the ice cream with maximum care, as described above.

The stainless materials, plastic materials and rubber elements used to make such parts, and their shape, make cleaning easier but do not prevent the formation of mold, etc., if insufficiently cleaned.

ATTENTION

Before re-using the machine to make ice cream, rinse completely with water only to remove all traces of sterilizer.



4.4 STARTUP

4.4.1 LOADING THE MIX

After washing, sterilizing, and completely rinsing the machine immediately before use, as indicated above, pour the mix into the tank (or tanks, depending on the model). Be careful that the level does not reach the pump.

Make sure that the panel is completely closed.

Disconnect the two compression tubes, pour mix into the tanks, and position the pump regulator at the point desired (usually at the midpoint).

Position the selector on the "CLEANING"  **BEATER** function.

Check that all knobs on the pump are correctly tightened.

You should see mix coming out of the two central holes on the pump. Check that flow is the same in both tanks.

Put the machine in "STOP"  **OFF** position and reconnect the two compression tubes.

Position the machine in "CLEANING"  **BEATER** and run it for 30 seconds.

Put the machine in "STOP" **OFF** position again.

Put a bucket under the product extraction panel and extract some mix. In this way, the cylinders depressurize and the mix will load in them.
Cylinder depressurization serves to check if there is the correct dose of mix and air in the cylinders.

Put the machine in "CLEANING"  **BEATER** and then in "DISPENSING"  **AUTO**.

4.4.2 TURNING ON THE MACHINE

Insert feed fitting pos. 207 in the pump and compression tube pos. 32 in the tank (see figures A) to let the mix fill the cylinder.

After approximately 1 minute, push the STOP button and then push the “DISPENSING”



AUTO button.

The machine will stop after about 10 minutes. You may then begin dispensing ice cream by means of the product extraction lever.

NOTE: the machines have 3 product extraction spouts. They are set up to dispense 2 flavors of ice cream separately or mixed.



WARNING

During operation of the machine, make sure that the cover of the tank is closed, so that no dust or other impurities may come into contact with the mix.

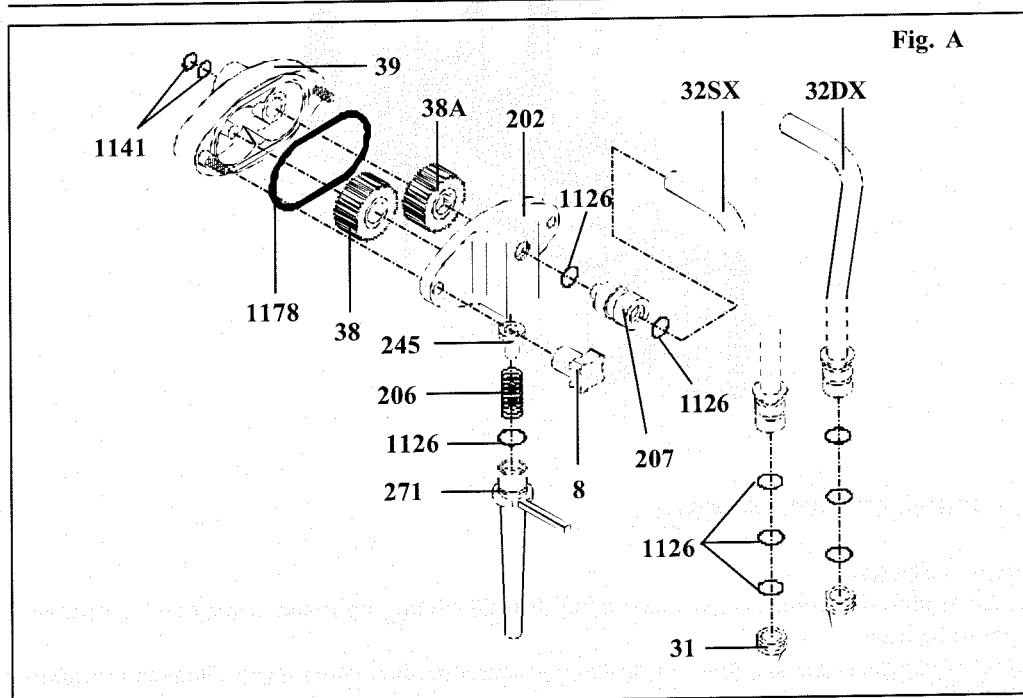


Fig. A

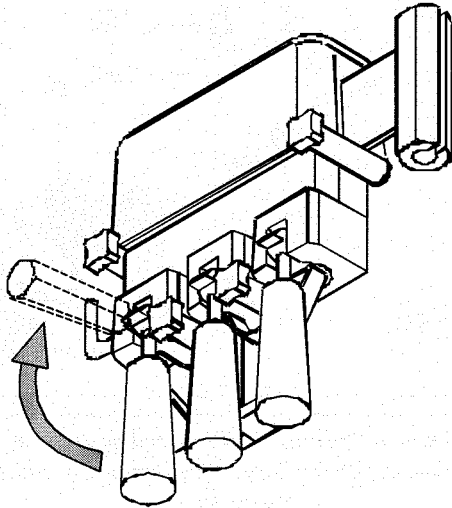
4.4.3 ICE CREAM EXTRACTION SPOUT

The extraction lever is used to open the spout and start the beater, so that ice cream can be dispensed even when the machine, in "DISPENSING" position, is stopped because the ice cream has reached the right consistency.



To extract the ice cream correctly, pull the lever down, as shown by the arrow in the figure below.

Note: the ice cream extraction method is the same for machines having more than one spout.



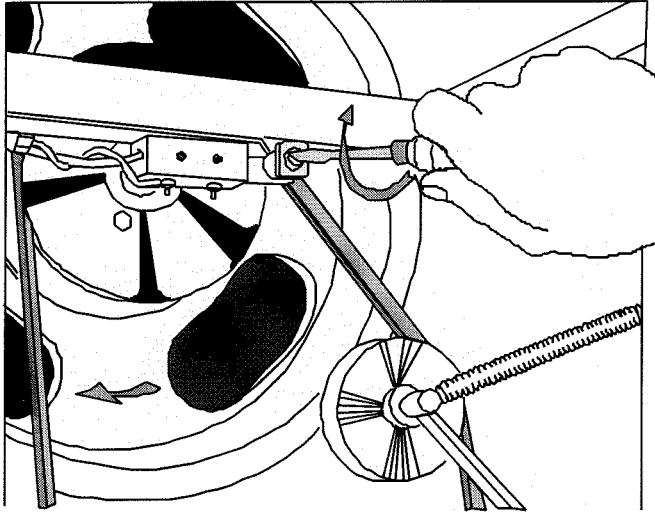
4.4.4 PRODUCT CONSISTENCY

Creamy products

The calibration for product consistency set by PROMAG may be changed according to the type of mix to be used.
PROMAG supplies the machine set on the maximum product consistency obtainable, usually applicable to creamy flavors.

Low-fat products

Low fat products are usually dietetic products. In this case, it is necessary to change product consistency by turning the H-O-M regulating screw located at the axial microswitch (see figure below).



5. SAFETY DEVICES

5.1 MACHINE SAFETY SYSTEMS

The safety devices on the two machines are:

THERMAL RELAYS

Detect overheating of beater motor and motocompressor. When maximum calibration levels are reached, they turn off the machine, which goes to "STOP" OFF.

Before resetting operation, you have to determine the cause of the problem.
The thermal relays may be reset manually.

PRESSURE SWITCH

This protects the cooling system and stops the compressor for the cooling circuit in the event of insufficient water in the circuit (water condensation) or insufficient circulation of air in the condenser (air condensation). It resets automatically.

WARNING

Excessive operating time of the compressor or repeated stops and starts indicate insufficient condensation. Check the cause.

FUSES

These protect the electrical circuit for the controls from overloads.
If they blow, check and eliminate the problem before replacing them.

NOTE:

To identify the sizes and ratings of the fuses, see the machine electrical diagram.



6. CLEANING, DISASSEMBLY, AND REASSEMBLY OF PARTS IN CONTACT WITH PRODUCT

IMPORTANT

Cleaning and sterilization must always be performed with maximum care at the end of each production in order to guarantee quality of production and observe necessary rules of hygiene.



6.1 CLEANING

To remove all ice cream and mix from the machine, select the Cleaning  **BEATER** position. Leave the machine in this position for a few minutes so that the ice cream remaining in the cylinder will soften.



Remove all remaining product by means of the dispensing levers.

During this operation, detach feed fitting pos. 207 from the pump, then remove compression tubes pos. 32DX and 32SX to speed up the flow.

When product extraction is finished, position the function selector on Stop  **OFF**.

Fill the tanks with water.

Wait a few minutes and then remove all of the water by means of the product extraction levers.

Proceed to disassembly of the machine parts. Follow the instructions below.

6.2 DISASSEMBLY OF PANEL AND PISTONS

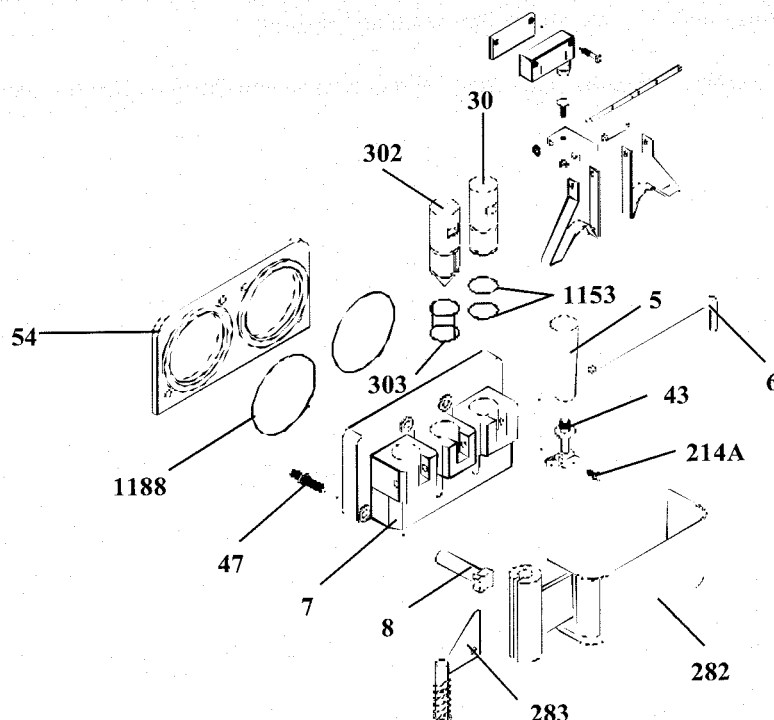
Proceed as follows to disassemble the panel:

- unscrew the long side knobs pos. 8;
- remove the pistons pos. 30 and piston pos. 302;
- remove all of the OR ring by using the extractor supplied, wash them are fully and grease them with vegetable grease.



Wash all disassembled pieces in water and then reassemble.

To replace the panel, simultaneously tighten the diametrically opposite knobs in order to have a perfect seal.



6.3 DISASSEMBLY OF BEATER

After removing the panel, proceed to disassembly of the beater pos. 21.

Remove the beater by gently pulling it toward the outside. Be careful not to damage it.

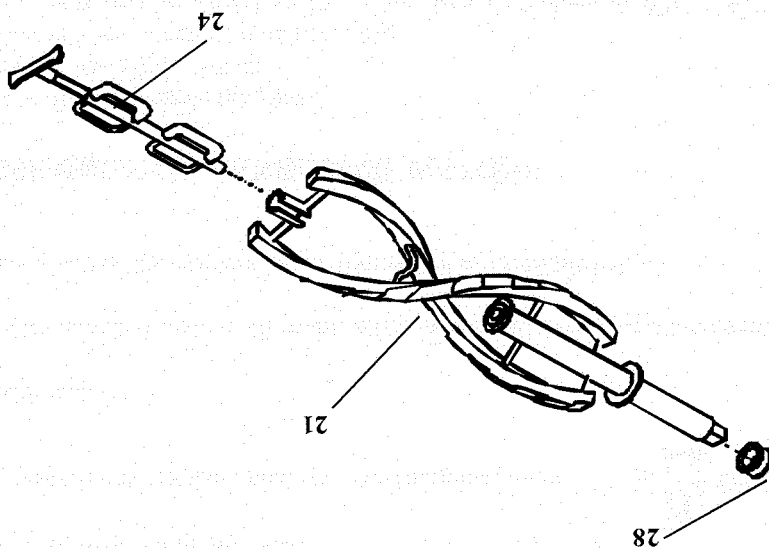
ATTENTION

Perform this operation very carefully. If the beater falls to the floor it could be damaged.

Remove counterbeater pos. 24.

Slide stuffing pos. 28 from its seat on the beater and check it for wear.

Wash all of the pieces in water. Grease the stuffing and then reassemble all of the parts.



6.3.1 CHECK OF STUFFING

When removing the stuffing, check it for defects.

If no defects are seen, it may be reused after it has been washed and adequately greased.

On the other hand, if you see traces of ice cream in the drip box after dispensing, we advise you to replace the stuffing, since it is most probably worn and leaking.

The spare stuffing is contained in the spare parts kit that comes with the machine (see section 7 "Maintenance").



6.4 DISASSEMBLY OF PRESSURE PUMP

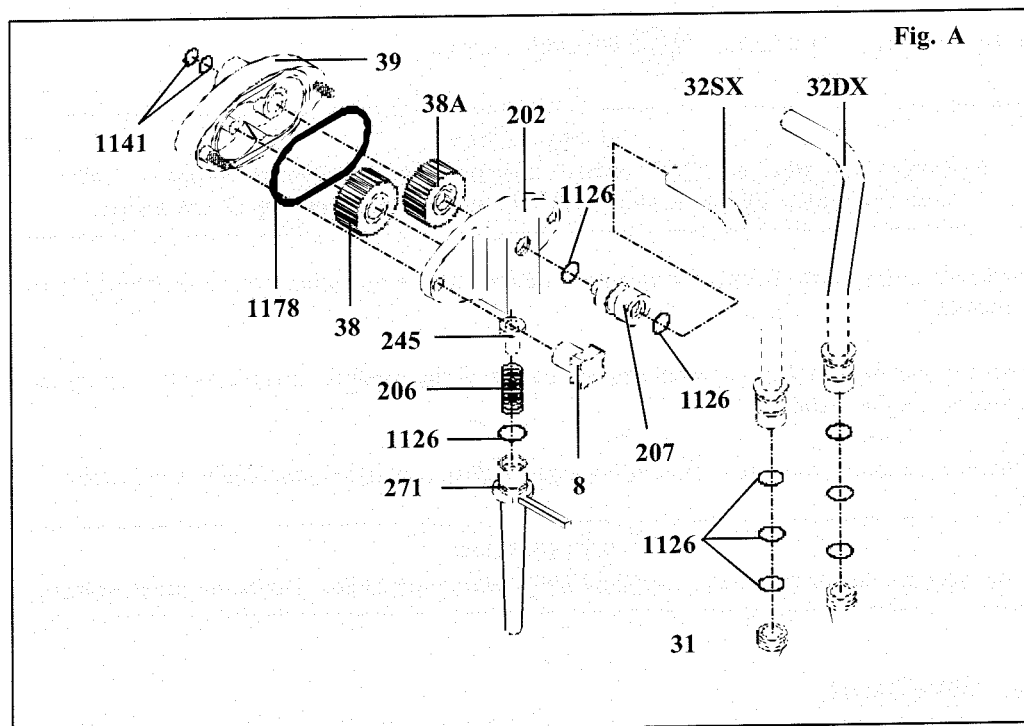
Pull feed fitting pos. 207 toward the outside (see Fig. A).

Slide compression tubes pos. 32DX and 32SX from their seats by pulling them up.

You can now remove the pump by turning it clockwise 1/4 of a turn and then very carefully pulling it toward the outside.

Wash all of the pump parts.

Reassemble all of the parts in the reverse of the order used for disassembly.



6.4.1 DISASSEMBLY OF PRESSURE PUMP BYPASS VALVE

Remove regulator pos. 271 and slide out valve pos. 245 (see Fig. A on previous page).

Remove spring pos. 206.

This is already supplied by the constructor at the right calibration, so be very careful not to damage it and ruin the calibration during washing.

Note: when reassembling the pump, be careful to reassemble the valve correctly.

6.5 STERILIZATION

With the machine off, and with the extraction spout closed, fill the two tanks with water and add some NON-CORROSIVE sterilizing solution.

Se the selector to "CLEANER"  BEATER position.

ATTENTION
Prolonged operation in "CLEANING" position with the cylinder empty or with water containing dissolved sterilizers will cause rapid wearing of the beater.

Leave the machine running only for the time required for such operations (recommended time 10-15 seconds).

Drain the sterilizing solution completely by means of the product extraction spout (or spouts, depending on the model).

Note: it is advisable to rinse with running water before setting the machine in production.

ATTENTION
You may no longer touch the sterilized parts with your hands, cloths, or other objects.

6.6 HYGIENE

The fats contained in ice cream are ideal media for the proliferation of molds, bacteria, etc. To eliminate them, wash the parts in contact with the mix and with the ice cream with maximum care, as described above.
The stainless materials, plastic materials and rubber elements used to make such parts, and their shape, make cleaning easier but do not prevent the formation of mold, etc., if insufficiently cleaned.

ATTENTION
Before re-using the machine to make ice cream, rinse completely with water only to remove all traces of sterilizer.



7. MAINTENANCE

7.1 TYPE OF INTERVENTION

ATTENTION

All maintenance operations that require opening of the guard must be performed with the machine turned off and disconnected from its electrical power socket!

It is forbidden to clean or lubricate moving parts!

Repairs of the electrical system and cooling system must be performed by specialized technicians!



The operations needed for good functioning of the machine during production require that the majority of ordinary maintenance operations be integrated in the production cycle. Maintenance operations such as cleaning of parts in contact with the product, replacement of stuffing, and disassembly of the beater, are normally performed at the end of each work shift, thereby streamlining the maintenance procedure.

The following is a list of the normal maintenance operations to be performed:

- **Cleaning and replacement of stuffing**
Clean at the end of each work shift. Replace after a visual check for wear or if there is loss of product in the drip box.
- **Cleaning of beater**
To be performed at the end of each work shift.
- **Cleaning of scrapers**
To be performed at the end of each work shift.
- **Cleaning of plate**
To be performed daily with neutral soap. Be careful never to allow soap to enter the beater unit.
- **Cleaning and sterilization**
To be performed at the end of each day according to the procedures described in section 6 of this manual.

ATTENTION

When cleaning the machine and its parts, never use abrasive sponges that could scratch its surfaces.



7.2 WATER COOLING

For machines with water cooling, drain the water from the condensation circuit at the end of the season if the machine is to be stored in a room where the temperature might drop below °C. This will avoid possible damage to the circuit.

- Slide the tube from its fitting and drain all water from the circuit.

7.3 AIR COOLING

Clean the condenser at regular intervals too remove dust, paper, and anything else that might block the circulation of air.

For cleaning, us a brush with long bristles or a jet of compressed air.

ATTENTION

Be very careful when using compressed air.
Use personal protections to prevent accidents. Wear protective goggles!

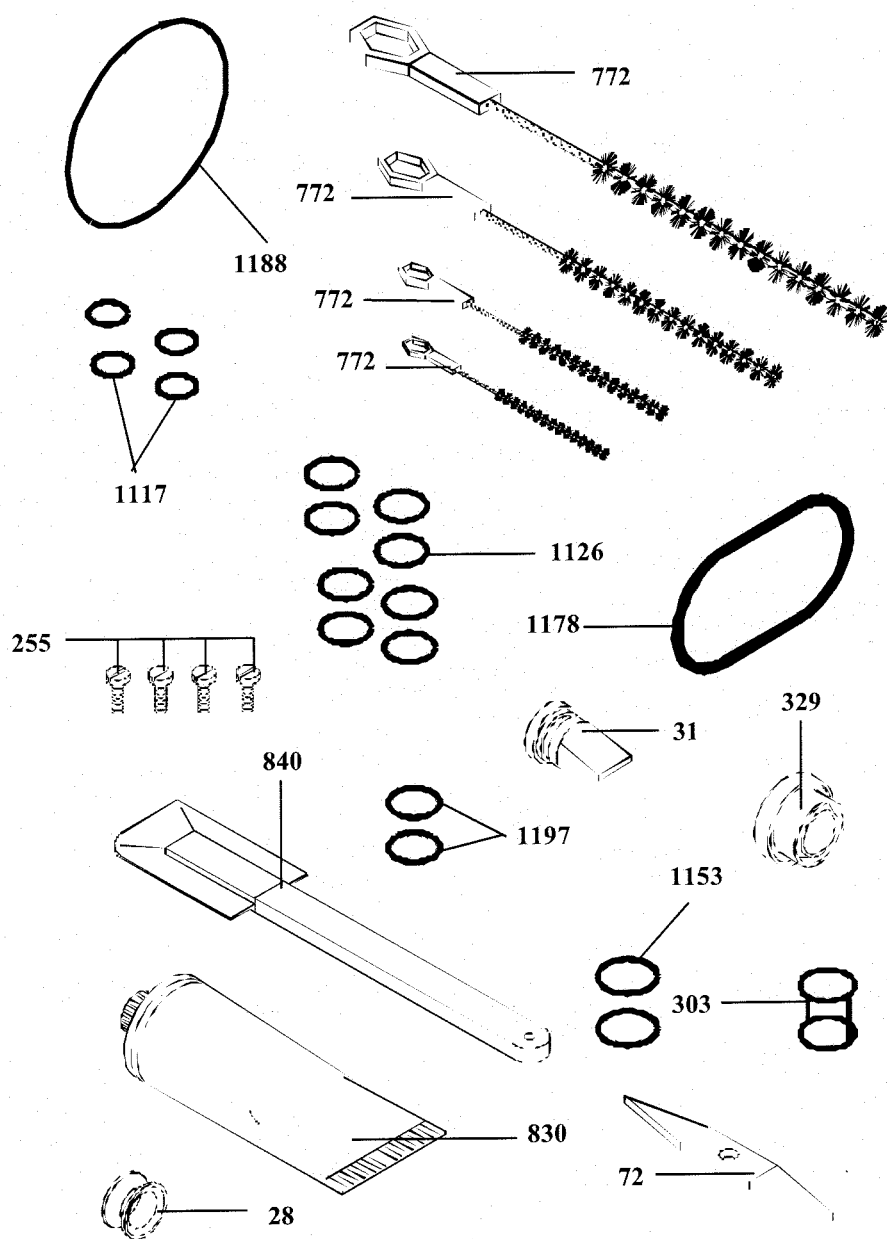
DO NOT USE POINTED METAL OBJECTS TO PERFORM THIS OPERATION. THE FUNCTIONING OF THE COOLING SYSTEM DEPENDS MAINLY ON THE CLEANLINESS OF THE CONDENSER.

7.4 ORDERING SPARE PARTS

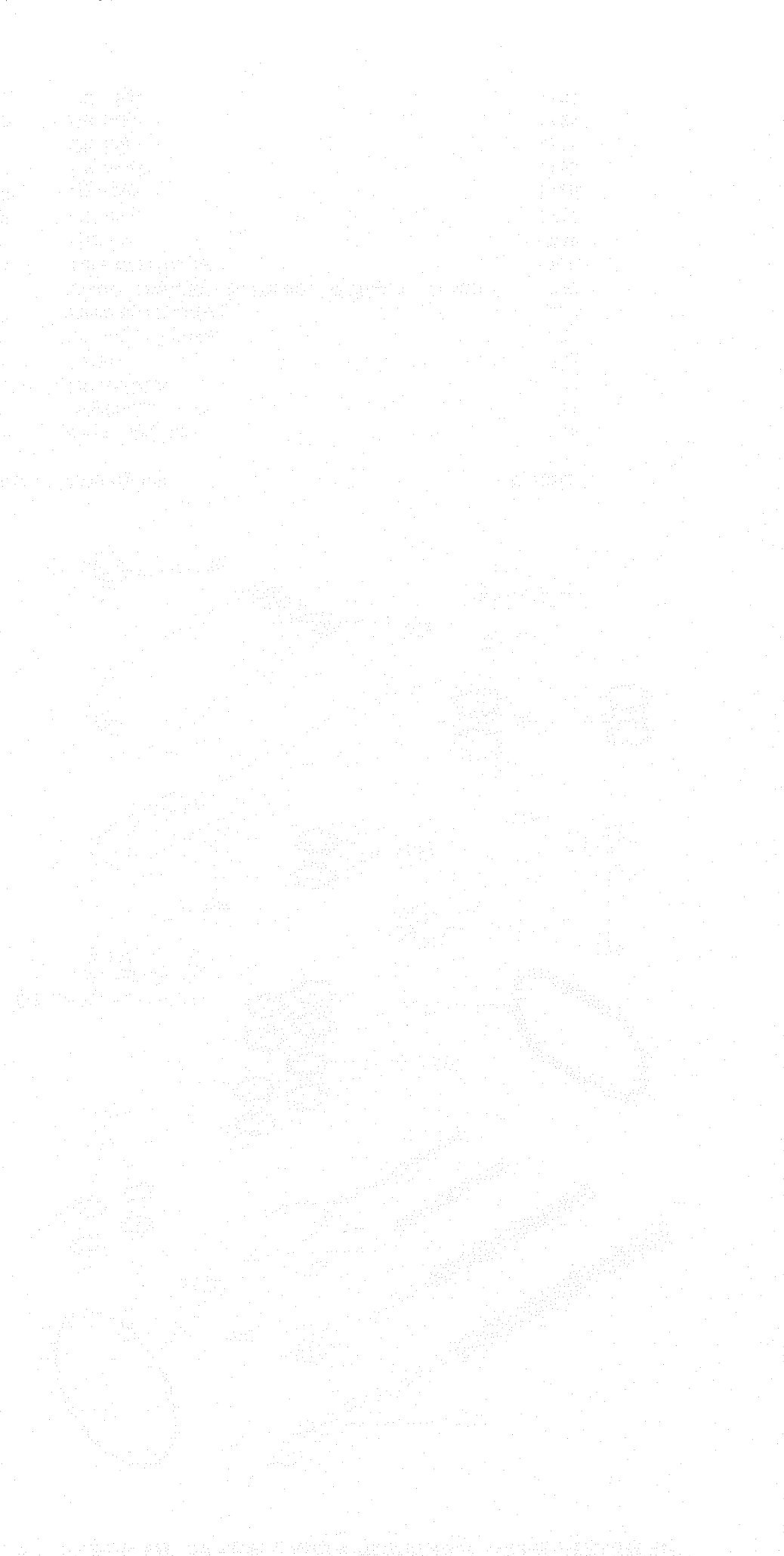
If any parts become worn or broken, request spare parts from a PROMAG technician.
Always indicate the machine type and the serial number stamped on the identification plate located on the rear of the machine.



7.5 TABLE OF SPARE PARTS SUPPLIED WITH MACHINE



Qty.	Description	Position
1	Beater stuffing	28
1	Diaphragm valve	31
1	OR extractor	72
4	Screws	255
1	OR ring for piston	303
2	Pump body stuffing	329
4	Brushes D 8x250 - D 15x350 - D 20x450 - D 40x40	772
1	Tube of Petro-gel	830
1	Spatula	840
2	OR rings	1117
8	OR rings	1126
4	OR rings	1153
2	OR rings	1178
2	OR rings	1188
2	OR rings	1197



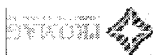
8 TROUBLESHOOTING

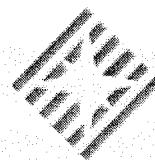


Problems	Possible causes	Recommended remedies
The machine doesn't turn on.	a) Outside electrical circuit b) Blown fuses c) Overload tripped	a) Check outside connection. b) Check and replace. c) Reset overloads.
The compressor starts, but stops after a few seconds without the ice cream hardening.	a) Machine with water circuit: water not circulating. b) Machine with air circuit: air not circulating.	a) Open the tap. Check that the rubber tube is not flattened or bent in half. b) Check that the rear of the machine is at least 50 cm. from the wall. Clean the condenser of rags, dust, etc.
The machine never stops in DISPENSING position.	a) Insufficient circulation of air or water. b) Air was not bled when machine was started up and too much has remained in the cylinder. c) There is no mix in the tank. d) Pump not working correctly.	a) See remedy no. 2. b) Open the piston and remove about 1/2 liter of product. c) Add mix. d) Moisten the gears with water or mix. Tighten the pump knobs. Check all pump OR rings and replace if necessary.
The machine functions but ice cream does not come out of the spout.	a) Ice in spout. b) Insufficient sugar in mix.	a) Ice in spout. b) Insufficient sugar in mix.
The machine functions but ice cream is too soft.	a) Too much sugar in mix. b) The machine has worked too long without dispensing ice cream. c) Ice cream is extracted too soon.	a) Modify or replace mix. b) Extract ice cream until cylinder is full of new mix. c) Remember to observe the production rate indicated on the table.
Mix or ice cream leak from above or below closed piston.	a) Piston without OR or OR ruined.	a) Insert or replace Ors
Mix drips into drip box.	a) Beater stuffing missing or defective.	a) Assemble or replace stuffing.
Ice cream comes out of rear panel.	a) Gaskets missing or poorly assembled. b) Front knobs not tightened uniformly.	a) Secure or replace. b) Loosen and retighten.

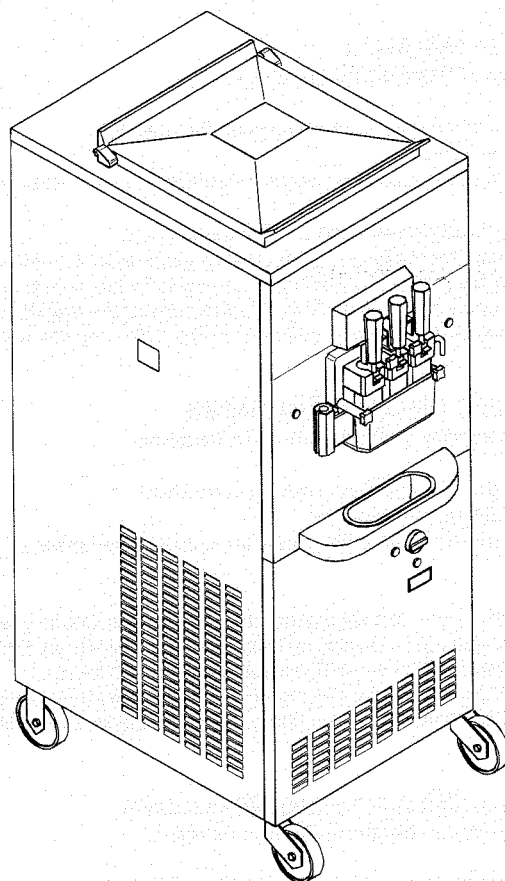


Problems	Possible causes	Recommended remedies
Ice cream has insufficient over-run.	a) OR rings leak air.	a) Check OR rings on tubes conveying mix from pump to cylinder. Replace if necessary.
	b) Pump cover loose.	b) Check that pump valve is correctly positioned. Replace valve and spring if necessary.
	c) Pump air hole closed.	c) Tighten knobs.
	d) Unsuitable mix.	d) Reload with richer mix or with less sugar.
	e) Pump air hole closed.	e) Wash the pump and clear the hole.
The pump is blocked.	a) Defective gears.	a) Find the damaged part and file or replace it.
	b) Mix contains hard pieces (nuts, granules).	b) Filter the mix. The pump will work only with filtered mix.





PROMAG
LE MACCHINE PER IL GELATO



SOFTY 503/E/P-G

LISTA DI RICAMBI
LIST OF SPARE PARTS
LISTE DES PIECES DE RECHANGE
ERSATZETEIL - LISTE
LISTA DE REPUESTOS



COME CONSULTARE IL MANUALE PARTI DI RICAMBIO:

Il Manuale Parti di Ricambio è costituito da Tavole grafiche e da Tabelle.

Tavole grafiche:

Le tavole riportano il disegno esploso dei gruppi principali della macchina.

La suddivisione delle tavole è identificata nella TAV.0.

Ogni particolare di ricambio è identificato da un numero di posizione, i numeri di posizione posti in un riquadro identificano i particolari di ricambio consigliati.

Tabelle:

Le tabelle riportano i Numeri di Posizione, la Descrizione ed il Codice del particolare.

Nel caso in cui lo stesso numero di posizione sia riportato più volte, ma associato a codici differenti, è necessario, all'atto dell'ordine, specificare la matricola della macchina in possesso del cliente, al fine di identificare il codice del particolare da fornire.

Per ordinare uno o più particolari di ricambio identificare sulla TAV.0 la tavola in cui è rappresentato il gruppo macchina in cui è presente il particolare, identificare quindi sulla tavola il particolare ed il relativo numero di posizione, quindi ricercare sulle tabelle il numero di posizione ed il corrispondente codice.



How to consult the SPARE PARTS MANUAL:

The Spare Parts Manual is made up of Drawing Plates and Tables.

Drawing Plates:

The plates contain the exploded views of the main units comprising the machine.

The subdivision of the plates is listed on "TAV.0".

Each spare parts item is identified by a position number, position numbers found in a box indicate the spare parts items recommended.

Tables:

The tables list the Position numbers, Descriptions and the Codes for items.

When the same position number appears more than once, but is also associated with different codes, specify the serial number of the customer's machine when ordering for the purpose of identifying the code for the item to be supplied.

To order one or more spare part items, identify the plate on "TAV.0" representing the machine unit on which the item is located. Locate the item on the plate and the corresponding position number as well. Then use the position number to locate the corresponding code on the table.



Comment consulter le LIVRET DES PIÈCES DÉTACHÉES:

Le livret des Pièces Détachées se compose de Planches et de Tableaux.

Planches:

Les planches illustrent la vue éclatée des groupes principaux de la machine.

La "TAV.0" illustre la subdivision des différentes planches.

Chaque pièce détachée est identifiée par un numéro de repère: les numéros de repère en encadré identifient les pièces détachées conseillées.

Tableaux:

Les tableaux indiquent les Numéros de repère, la Désignation des pièces et les Codes des pièces en question.

Si le même numéro de repère indique plusieurs fois mais qu'il est associé à des codes différents, lors de la commande il faut préciser le numéro de série de la machine; cela permettra d'identifier le code de la pièce à fournir.

Pour commander une ou plusieurs pièces détachées, repérer sur la "TAV.0" la planche représentant le groupe dont fait partie la pièce, ensuite identifier la pièce en question sur la planche ainsi que son numéro de repère, puis rechercher sur les tableaux le numéro de repère et le code y relatif.



Hinweise für die Konsultation des ERSATZTEILHANDBUCHES

Das Ersatzteillhandbuch besteht aus graphischen Abbildungen und Tabellen.

Graphische Abbildungen:

Die Abbildungen umfassen die Detailzeichnung der Hauptagregate der Maschine

Die Aufgliederung der Abbildungen ist in "TAV.0" angegeben.

Jedes Ersatzteildetail ist mit einer Positionsnummer identifiziert, die eingekreisten Positionsnummern identifizieren die empfohlenen Ersatzteildetails.

Tabellen:

In den Tabellen sind die Positionsnummern, die Beschreibung und der Code des Teils aufgeführt.

Ist dieselbe Positionsnummer mehrmals in Zusammenhang mit anderen Code angegeben, muß bei der Bestellung die

Maschinennummer angegeben werden, um den Code des zu liefernden Ersatzteils ausfindig machen zu können.

Um eines oder mehrere Ersatzteile zu bestellen, anhand der "TAV.0" die Abb. feststellen, in der das Maschinenaggregat dargestellt ist, für das das Teil bestimmt ist; anhand dieser Abb. dann das Ersatzteil und die entspr. Positionsnummer identifizieren und schließlich in den Tabellen die Positionsnummer und den entspr. Code suchen.



COMO CONSULTAR EL MANUAL DE PIEZAS DE REPUESTO

El Manual Piezas de Repuesto está formado por Tablas gráficas y por Cuadros

Tablas gráficas

Las tablas indican el dibujo expuesto individualmente en todos sus particulares (tridimensional) de los grupos principales de la máquina.

La subdivisión de las tablas está identificada en la "TAV.0".

Cada pieza de repuesto se identifica por un número de posición, los números de posición colocados en un recuadro identifican las piezas de repuesto aconsejadas.

Cuadros

Los Cuadros indican los Números de Posición, la Descripción y el Código de la pieza.

En el caso de que el mismo número de posición esté indicado más de una vez, pero asociado a códigos diferentes, es necesario, en el momento del pedido, especificar la matricula de la máquina que posee el cliente, con el fin de identificar el código de la pieza que hay que suministrar.

Al hacer el pedido de una o más piezas de repuesto, identificar en la "TAV.0" la tabla en la que está representado el grupo máquina en donde se halla la pieza, por consiguiente identificar en la tabla la pieza y el relativo número de posición, después buscar en los cuadros el número de posición y el correspondiente código.

Pos.	Cod.	Descrizione	Description	Bezeichnung	Descrizione
001	576100280	PORTALAMPADA 53B9-04 ARANCIO M13	LAMP HOLDER	LAMPENFASSUNG	PORTALAMPARAS
001A	576100282	PORTALAMPADA 53B9-00 TRASPARENTE M13	LAMP HOLDER	LAMPENFASSUNG	PORTALAMPARAS
002	582200132	TERMOMETRO GRUTER TIPO 922	THERMOMETER	THERMOMETER	TERMOMETRO
003	572200214	COMMUTATORE ROTATIVO BRETER 106651	ROTARY SWITCH	UMSCHALTER	CONMUTADOR
005	118164050	MANIGLIA RUBINETTO COMPLETA BIANCA	FRONT LID HANDLE	HANDGRIFF FRONTVERSCHLUSS	MANILLA PORTILLO
006	155162730	PERNO RUBINETTO	DISPENSING LEVER PIN	STIFT FRONTVERSCHLUSS	PERNO PORTILLO
007	118108440	CORPO PORTELLO	DISPENSING HEAD	FRONTVERSCHLUSS	PORTILLO
008	173105450	POMELLO CORTO BIANCO	KNOB	HANDGRIFF	POMO
008A	173105340	POMELLO LUNGO BIANCO	KNOB	HANDGRIFF	POMO
011	582100126	TERMOSTATO DANFOSS	THERMOSTAT	THERMOSTAT	TERMOSTATO
018	581800119	VALVOLA W 3/8"DANFOSS	WATER VALVE	WASSERVENTIL	VALVULA AGUA
019	131165140	CONDENSATORE ARIA	AIR CONDENSER	LUFT KONDENSATOR	CONDENSADOR AIRE
021	142070210	AGITATORE 2E C SX P	BEATER	RUEHRWERK	AGITADOR
024	157180710	CONTRAAGITATORE 2E	BEATER IDLER	GEGENRUEHRWERK	CONTRAAGITADOR
025G	173138980	TERMINALE AGITATORE 2E	BEATER END PUSHER (GRAVITY)	RUEHRWERKENDE	TERMINAL AGITADOR
027	102159330	CASSETTINO SGOCCIOLIO L=380	DRIP DRAWER	ABTROPFTASSE	CAJETIN RECOGE
028	177120260	PREMISTOPPA AGITATORE SILICONE	BEATER SHAFT SEAL	WELLENDICHTUNG	PRENSAESTOPA AGITADOR
029	102164510	COPERCHIO FORO CASSETTINO BIANCO	COVER	DECKEL	TAPA
030	118133130	PISTONE PORTELLO COMPLETO	SPIGOT PISTON	KOLBEN	PISTON PORTILLO
031	177110350	VALVOLA MEMBRANA SILICONE BIANCO	VALVE	SOUPAPE	VALVULA
032	129100370	TUBO COMPRESSIONE DX	COMPRESSION FEED PIPE	KOMP. ROHR	TUBO DE COMPRESION
032A	129103370	TUBO COMPRESSIONE SX	COMPRESSION FEED PIPE	KOMP. ROHR	TUBO DE COMPRESION
038	152120120	INGRANAGGIO CONDOTTO	DRIVEN GEAR	ZAHNRAD	ENGRANAJE

Pos.	Cod.	Descrizione	Description	Description	Bezeichnung	Descripción
038A	152120030	INGRANAGGIO CONDUTT.	DRIVING GEAR	ENGRENAGE	ZAHNRAD	ENGRANAJE
039	129515070	CORPO POMPA R CON PERNI	PUMP BODY	CORPS DE POMPE	PUMPENKOEPPER	CUERPO BOMBA
043	118170530	COMANDO PISTONE	PISTON LEVER	COMMANDE PISTON	KOLBENBETAETIGUNG	MANDO PISTON
047	171100520	VITE PRIGIONIERA	STUD	GOIJON FILETE	STIFTSCHRAUBE	TORNILLO PRISIONERO
049	171102200	BOTTONE ARRESTO MENSOLA	CUP HOLDER STUD	GOIJON BLOCAGE CONSOLE	KNOFF KONSOLLE	BOTON PARA PARADA REPIISA
050	102133060	MENSOLA BIANCA	SHELF	CONSOLE	AUFLAGE	REPIISA FRONTAL
051	129068460	PARASPRUZZI LEXAN BIANCO L-225	SPLASH GUARD	PARAFLAQUE	SPRITZSCHUTZ	SALPICADERO
052	129068010	CURSORE ESTERNO AGO ALIMENTAZIONE	FEED TUBE SLEEVE	CURSEUR AIGUILLE ALIMENTATION	LAEUFER	CURSOR
053	129070170	AGO ALIMENTAZIONE	FEED TUBE	AIGUILLE DALIMENTATION	SICKERROHR	AGUJA ALIMENTATION
054	158210770	GUARNIZIONE ANTERIORE	FRONT GASKET	GARNITURE ANT.	ZYLINDER DICHTUNG- VORNE	GUARNICION FRONTAL
072	193010040	ESTRATTORE OR	O-RING EXTRACTOR	EXTRACTEUR DE JOINTS	O-RING AUSHEBER	EXTRACTOR
074	576100175	LAMPADA 2132 T 24V	LAMP	LAMPE	LAMPE	LAMPARA
076	158210240	GUARNIZIONE MOVIMENTO POSTERIORE	REAR DRIVE GASKET	GARNITURE MOUV. ARRIERE	DICHTUNG HINTERE LAGERUNG	GUARNICION MOVIMIENTO TRASERO
077	164110090	SUPPORTO MOVIMENTO POSTERIORE	REAR DRIVE SUPPORT	SUPPORT MOUVEMENT POSTERIEUR	LAGERBOCK	SOPORTE MOVIMIENTO TRASERO
079	158115510	ANELLO	RING	JOINT	RING	ANILLO
081	157160160	MOZZO	HUB	MOYEU	NABE	CUBO
081A	157160170	MOZZO CONDUTTORE	HUB	MOYEU	NABE	CUBO
086	153105310	PUL.ASSIALE 32 J 360 55	AXIAL PULLEY	POULIE AXIAL	RIEMENSCHIEBE	POLEA AXIAL
087	153170790	PUL.MOTORE 24 20J 65 62	MOTOR PULLEY	POULIE MOTEUR	RIEMENSCHIEBE	POLEA MOTOR
087	153170800	PUL.MOTORE 24 20J 55 63	MOTOR PULLEY	POULIE MOTEUR	RIEMENSCHIEBE	POLEA MOTOR
095	153130700	PUL.ALBERO POMPA 14 1SPZ 50 34,5	PUMP SHAFT PULLEY	POULIE ARBRE POMPE	RIEMENSCHIEBE	POLEA BOMBA
096	155100420	ALBERO POMPA	PUMP SHAFT	ARBRE POMPE	PUMPEWELLE	EJE BOMBA
097	161155330	MANICOTTO MOZZO POMPA	PUMP HUB COUPLING	MANCHON MOYEU POMPE	MUFFE	MANGUITO
101	157140020	BOCCOLA GALOPPINO E MOZZO POMPA	BUSHING	COQUILLE	BUCHSE	CASQUILLO

Pos.	Cod.	Descrizione	Description	Description	Bezeichnung	Description
102	158180060	GHIERA FISSAGGIO MOZZO POMPA	RING NUT	COLLIER DE SERRAGE	SICHERUNGSRING	ABRAZADERA
116	153090200	PUL.GALOPPINO 20 76 30	TENSION PULLEY	POULIE GALET	RIEMENSANNER	RODILLO TENSOR
118	153130030	PUL. INTERTRASMISSIONE	TANSMISSION PULLEY	POULIE	RIEMENSCEIBE	POLEA
120	531200111	CINGHIA 12,7x610x50,8 240H200	BELT	COURROIE	RIEMEN	CORREA
138	581500117	SPIA LIQUIDO SGN 10S M/F	SIGHT GLASS	VOYANT LIQUIDE	SCHAUGLAS	VENTANA LIQUIDO
139B	173110950	RONDELLA PULEGGIA INTERTRASMISSIONE	WASHER	RONDELLE	SCHEIBE	ARANDELA
140	581200820	CORPO VALV. SOLENOIDE DANFOSS EVR 3 032F3233	SOLENOID VALVE BODY	CORPS ELECTROVANNE	KOERPER MAGNETVENTIL	CUERPO ELECTROVALVULA
141	581201042	BOBINA VALV. SOLEN. 24V-50/60HZ	SOLENOID VALVE COIL	BOBINE ELECTROVANNE	SPULE MAGNETVENTIL	BOBINA ELECTROVALVULA
146	581400115	FILTRO DANFOSS DML 163 S 023Z4842	FILTER DRYER	FILTRE	FILTER	FILTRO
147	584200121	CONDENSATORE W HPCR 1104 TR	WATER CONDENSER	CONDENSATEUR EAU	WASSERKONDENSATOR	CONDENSADOR AGUA
149	158155170	DISTANZIALE	SPACER	ENTRETOISE	DISTANZSTUECK	DISTANCIADOR
152	572300103	MICROINTERRUTTORE BURGESS 3BRB	MICROSWITCH	MICRO-INTERRUPTEUR	MIKROSCHALTER	MICROINTERRUPTOR
167	551711510	M.LESS. YXJ90L6 230-400/50/31	BEATER MOTOR	MOTEUR AGITATEUR	RUEHRWERKSMOTOR	MOTOR ELECTRICO
168	561222412	C.FRASCOLD A1,5-8 POE 220/380/3	COMPRESSOR	COMPRESSEUR	KOMPRESSOR	COMPRESOR
170	551090253	M.VENT.EBM A4E350-AA06-02 230/50/1	FAN MOTOR	MOTEUR VENTILATEUR	VENTILATOR MOTOR	MOTOR VENTILADOR
171	574100308	TRASFORMATORE 1\$50VA 0-220-410/0-0-14-24V	TRANSFORMER	TRANSFORMATEUR	TRANSFORMATOR	TRANSFORMADOR
173A	571100228	CONTATTATORE A12-30-10 24V 50/60HZ	CONTACTOR	CONTACTEUR	KONTAKTOR SCHUTZ	CONTACTOR
177	583100148	PRESSOSTATO DANFOSS CC20W 29/20 060F1130	PRESSURE SWITCH	PRESSOSTAT	DRUCKWAECHTER	PRESOSTATO
178	581101054	VALVOLA TERMOSTATICA TES2 MOP 30 068Z3438	THERMOSTATIC VALVE	DETENDEUR THERMOSTATIQUE	THERMVENTIL	VALVULA TERMOSTATICA
180	571200545	RELE FINDER 40.31 24V AC	RELAY	RELAIS	RELAIS	RELE'
180A	571200551	RELE FINDER 55.34 24V AC	RELAY	RELAIS	RELAIS	RELE'

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Pos.	Cod.	Descrizione	Description	Description	Bezeichnung	Description
181	107109010	STAFFA OSCILLANTE GALOPPINO	TENSION PULLEY BRACKET	ETRIER	BUEGEL	ABRAZADERA
182	178150500	MOLLATA 1,4 12 76 5,95	TENSION PULLEY SPRING	RESSORT	FEDER	RESORTE
185	165120030	DITO TRIPLO COM. MICRO	MICRO CONTROL	COMMANDE MICRO	MIKRO BETAETIGUNG	MANDO MICRO
186	192113880	DECALCOMANIA FRONTALE SOFTY 503/E	FRONT PANEL DECAL	DECALCOMANIE FRONTALE	ABZIEHBILD	CALCOMANIA
186E	192114060	DECALC. SCATOLINO MICRO SOFTY 333	DECAL	DECALCOMANIE	ABZIEHBILD	CALCOMANIA
187	102134090	SCATOLINO DOPPIO MICRO	DOUBLE MICRO BOX	BOITE DOUBLE MICRO	DOPPELMICROSCHALTER	DOBLE MICRO CAJA
190	164115010	APPOGGIO FISSO	FIXED BEARING	APPUI FIXE	FEST AUFLAGE	APOYO FIJO
191	164116010	APPOGGIO MOBILE	FLOATING BEARING	APPUI MOBILE	BEWEGL.AUFLAGE	APOYO MOVIL
193	164117010	PIATTELLO APPOGGIO MOLLE	SPRING BEARING CUP	PLATEAU	FEDERPLATTE	PLATILLO SOPORTE
195	153110130	PUL.CONDUTTRICE POMPA 95 1SPZ 135 79	PUMP DRIVING PULLEY	POULIE CONDUCTRICE POMPE	RIEMENSCHIEBE	POLEA COND. BOMBA
201	573100187	TEMPORIZZATORE FIBER ELETTR. L03 10-2" 24V/5060	TIMER	TEMPORISATEUR	ZEITUHR	TEMPORIZADOR
202	129035170	COPERCHIO POMPA R	PUMP COVER	COUVERCLE POMPE	PUMPENDECKEL	TAPA BOMBA
206	178100870	MOLLA C I 1,5 15 42 5,24	PUMP SPRING	RESSORT POMPE	FEDER	RESORTE BOMBA
207	129050170	RACCORDO ALIMENTAZIONE	PRESSURE TUBE CONNECTOR	RACCORD ALIMENTATION	ANSCHLUSS	RACOR ALIMENTACION
208	129002200	POMPA R COMPLETA	PUMP	POMPE COMPLETE	PUMPE KPL.	BOMBA
211	155160510	PERNO BIELLETTA DOPPIO MICRO	ROD PIN	PIVOT	BOLZENSTANGE	PERNO BIELETA
212	165103510	BIELLETTA MICRO	MICROSWITCH LINK ROD	BIELLETTTE MIKRO	UBERTRAGUNGSTANGE	BIELA MICRO
214	171101020	VITE REGOLAZIONE COMANDO PISTONE	ADJUSTMENT SCREW	VIS	SCHRAUBE	TORNILLO
214A	171120060	VITE REGISTRO COMANDO MICRO	SCREW	VIS	SCHRAUBE	TORNILLO
215	593000120	PUNTALE CILINDRICO DA INTERNO D.20	HUB PLUG	BOUCHON	VERSCHLUSSTOPFEN	TAPON
222	158165270	AMMORTIZZATORE ASSIALE	SHOCK ABSORBER	AMORTISSEUR	DAMFER	AMORTIGUADOR

Pos.	Cod.	Descrizione	Description	Description	Bezeichnung	Descrizione
228	581110030	COPERTURA VALVOLA TERMOSTATICA	THERMOSTATIC VALVE COVER	COUVERTURE SOUPAPE THERMOSTATIQUE	DECKEL THERMVENTIL	COBERTURA VALVOLA TERMOSTATICA
240	591000213	RUOTA GIREVOLE D.100 NYLON BIANCO	PIVOTING WHEEL	ROUE	SCHWENKBARES RAD	RUEDA
241	591000113	RUOTA FISSA D.100 NYLON BIANCO	FIXED WHEEL	ROUE	FIXES RAD	RUEDA
245	177110290	VALVOLA POMPA R-TP	PUMP VALVE	SOUPAPE POMPE	PUMPENVENTIL	VALVULA BOMBA
248	157130010	BOCCOLA CORPO POMPA	PUMP BUSHING	COQUILLE CORPS DE POMPE	BUCHSE	CASQUILLO
250	102144640	COPERCHIO VASCHE	TANK COVER	COUVERCLE CUVE	BEHAELTERDECKEL	TAPA TANQUE
253	102127530	CERNIERA FISSA DX	HINGE	CHARNIERE	SCHARNIER	BISAGRA
253A	102127630	CERNIERA FISSA SX	HINGE	CHARNIERE	SCHARNIER	BISAGRA
255A	171110110	VITE A TIRANTE	SCREW	VIS	SCHRAUBE	TORNILLO
271	129045240	REGOLATORE POMPA	FEEDING PUMP TUBE	REGULATEUR DE POMPE	PUMPENREGLER	REGULADOR BOMBA
282	158261090	RACCOGLITORE PORTELLO BIANCO	SPLUSH GUARD	COLLECTEUR	STAUBSCHUTZ	PROTECTOR GRUPO EROGACION
283	164050500	SUPPORTO RACCOGLITORE COMPLETO	SPLUSH GUARD BRACKET	SUPPORT	STAUBSCHUTZ-HALTERUNG	SOPORTE PROTECTOR GRUPO
302	118133430	PISTONE CENTRALE COMPLETO	FRONT LID CENTRAL PISTON	PISTON CENTRAL PORTILLON	MITTL.KOLBEN	PISTON CENTRAL COMPLETO
303	158130320	ANELLO OR SPECIALE PISTONE	CENTER PISTON O-RING	JOINT POUR PISTON CENTRAL	DICHTUNG MITTLERER KOLBEN	ANILLO OR PARA PISTON CENTRAL
329A	542000103	ANELLO ANGUS 30x16x4,5	O-RING	BAGUE DE RETENUE	SPEZ. DICHRUNGSRING	ANILLO RETEN
347	155145750	ASTA SUPPORTO GALLEGGIANTE COMPLETA	TANK LEVEL ROD	JAUGE NIVEAU	FUEHLER NIVEAU	VARILLA NIVEL
348	116300010	GALLEGGIANTE CON MAGNETE SP.6,5	FLOATING	FLOTTEUR	SCHWIMMER	FLOTANTE
433	178150200	MOLLA C A 3 18 36 37,74	SPRING	RESSORT	FEDER	RESORTE
475	599900172	VALIGETTA CORREDO	ACCESSORIES	ACCESSOIRES	ZUBEHOERTEILE	ACCESORIOS
536	581101073	VALVOLA AUTOMATICA AMV 3,2 BAR	AUTOMATIC VALVE	SOUPAPE AUTOMATIQUE	AUT.EINSPRITZVENTIL	VALVULA AUTOMATICA
537A	581110613	ORIFICIO N° 03 068-2079	ORIFICE	ORIFICE	EINSPRITZDUESE	ORIFICIO
537B	581110624	ORIFICIO VALVOLA AUTOMATICA AMV N°1	ORIFICE	ORIFICE	EINSPRITZDUESE	ORIFICIO

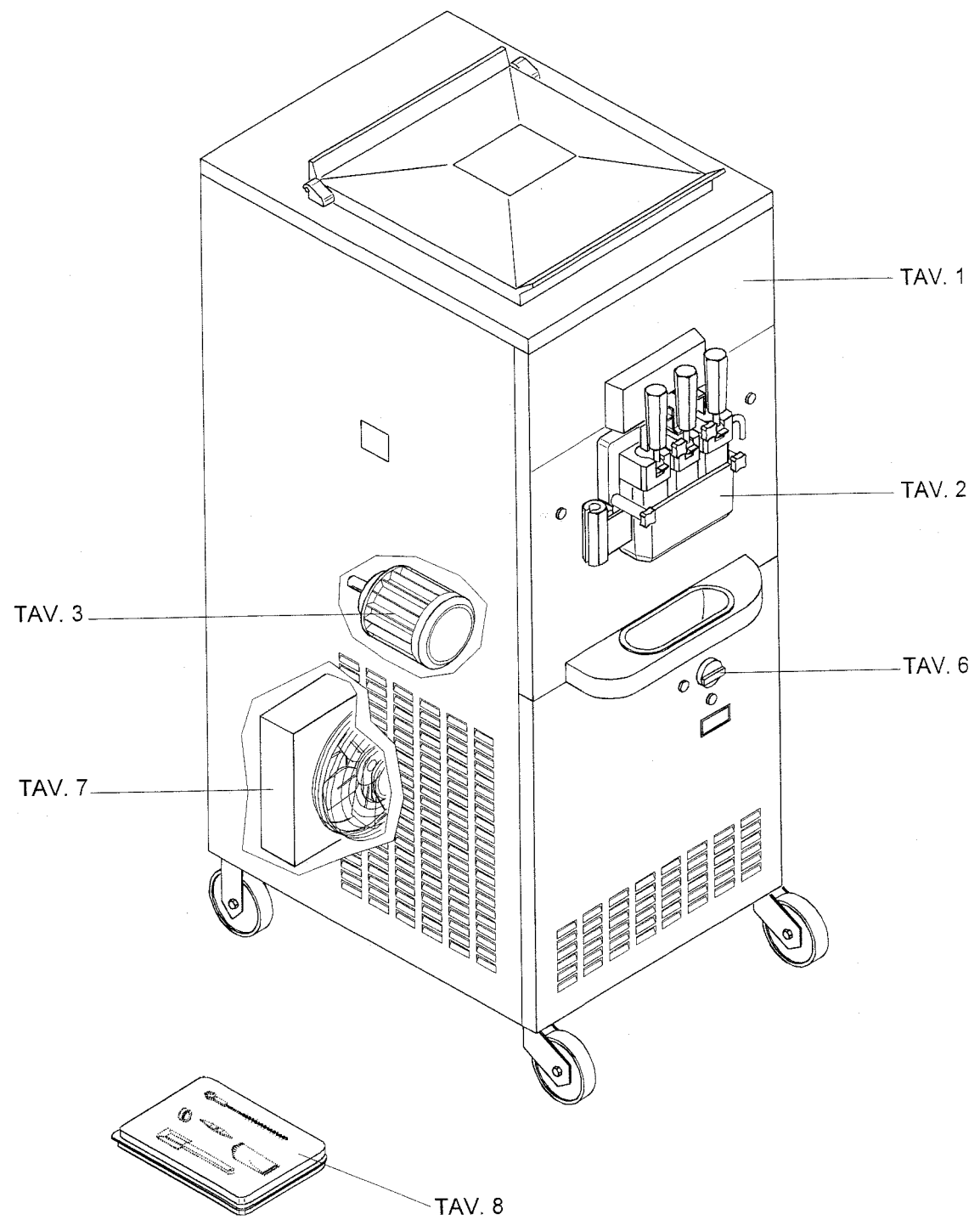
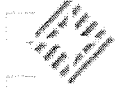


PROMAG
LE MACCHINE PER IL GELATO

SOFTY 503/E

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Pos.	Cod.	Descrizione	Description	Description	Bezeichnung	Description
550	155162000	PERNO TRAZIONE INGRANAGGIO	GEAR SHAFT BUSHING	AXE TRACTION ENGRENAGE	STIFT	PERNO TRACCION INGRANAJE
708	576200295	FUSIBILE OMEGA ST 5x20 T 630MA 250V	FUSE	FUSIBLE	SICHERUNG	FUSIBLE
708A	576200285	FUSIBILE OMEGA SF 5x20 F 2A 250V	FUSE	FUSIBLE	SICHERUNG	FUSIBLE
772	599100108	SCOVOLINO D. 8x250	FINE BRUSH	ECOUVILLON	REINIGUNGSBUERSTE	CEPILLO
772A	599100115	SCOVOLINO D. 15x350	FINE BRUSH	ECOUVILLON	REINIGUNGSBUERSTE	CEPILLO
772B	599100120	SCOVOLINO D. 20x450	FINE BRUSH	ECOUVILLON	REINIGUNGSBUERSTE	CEPILLO
772C	599100140	SCOVOLINO D. 40x400	FINE BRUSH	ECOUVILLON	REINIGUNGSBUERSTE	CEPILLO
790	531300133	CINGHIA POLY V 1427 J56,2 20N	BELT	COURROIE	RIEMEN	CORREA
790A	531005533	CINGHIA 9,7x8 987 XPZ	BELT	COURROIE	RIEMEN	CORREA
830	743000111	TUBETTO GELILUBE	FOOD GRADE LUBRIC.	TUBE DE VASELINE	GELILUBE TUBE	TUBO GELILUBE
840	178600160	SPATOLA PULIZIA	SPATULA	SPATULE	SPATEL	PALETA
850	193200750	SERIE ANELLI OR	O-RING SET	JOINTS OR	OR RING	JUNTAS OR
903	521111330	CUSCINETTO RIV 6206-2RS1	BEARING	ROULEMENT	KUGELLAGER	RODAMIENTO
903C	521112201	CUSCINETTO RIV 3206 A-2RS1	BEARING	ROULEMENT	KUGELLAGER	RODAMIENTO
921	572910140	SONDA DRY REED N.O. 29	SAFETY SWITCH	SONDE DRY REED	REEDFUEHLER	SONDA DRY REED
996	157080270	MOVIMENTO POSTERIORE CONDOTTO COMPLETO	COMPLETE DRIVEN ASSEMBLY	MOVEMENT CONDUIT COMPLET	GETRIEBEBENE NABE KPL.	MOVIMIENTO TRASERO CONDUCTIDO
997	157080070	MOVIMENTO POSTERIORE CONDUITT.COMPLETO	COMPLETE DRIVING ASSEMBLY	MOVEMENT CONDUCT. COMPLET	TREIBENDE NABE KPL.	MOVIMIENTO CONDUCT. COMPLETO
1116	541000116	OR 1,78 15,6 NB70 2062	O-RING	JOINT OR	OR-DICHTUNG	JUNTA OR
1119	541000119	OR 2,62 9,13 NB 70 109	O-RING	JOINT OR	OR-DICHTUNG	JUNTA OR
1126	541000126	OR 2,62 13,95 NB 70 3056	O-RING	JOINT OR	OR-DICHTUNG	JUNTA OR
1153	541000153	OR 3,53 26,58 NB 70 4106	O-RING	JOINT OR	OR-DICHTUNG	JUNTA OR
1178	541000178	OR 3,53 73,03 NB 40 176	O-RING	JOINT OR	OR-DICHTUNG	JUNTA OR
1188	541000188	OR 5,34 91,44 NB 40 6362	O-RING	JOINT OR	OR-DICHTUNG	JUNTA OR
1266	541000266	OR 2,69 16,89 NB 75 VAITON 5-592	O-RING	JOINT OR	OR-DICHTUNG	JUNTA OR
1285	541000285	OR 3,53 4,34 NB 70 0462	O-RING	JOINT OR	OR-DICHTUNG	JUNTA OR



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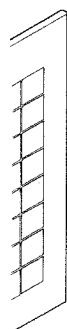
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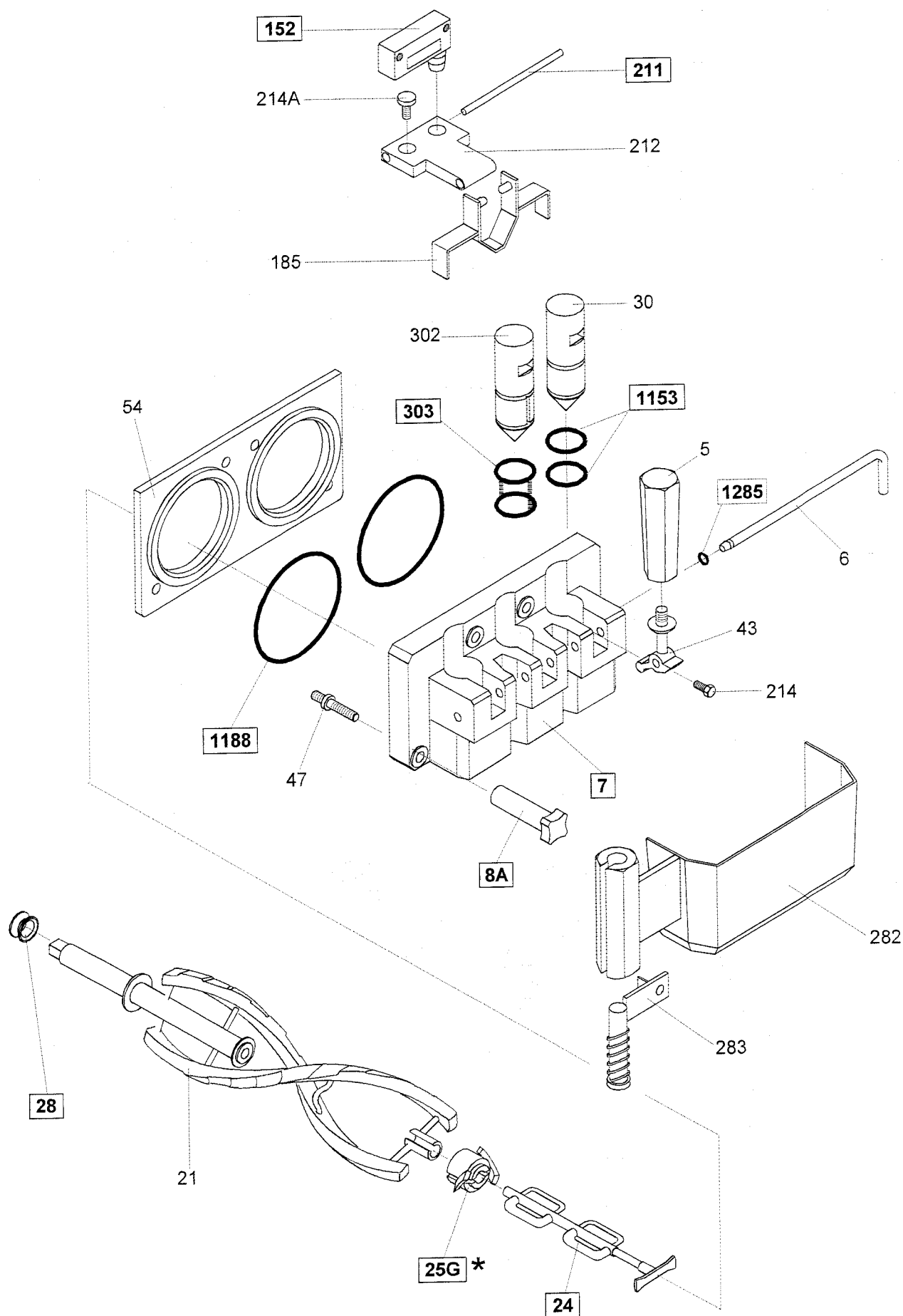
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8211

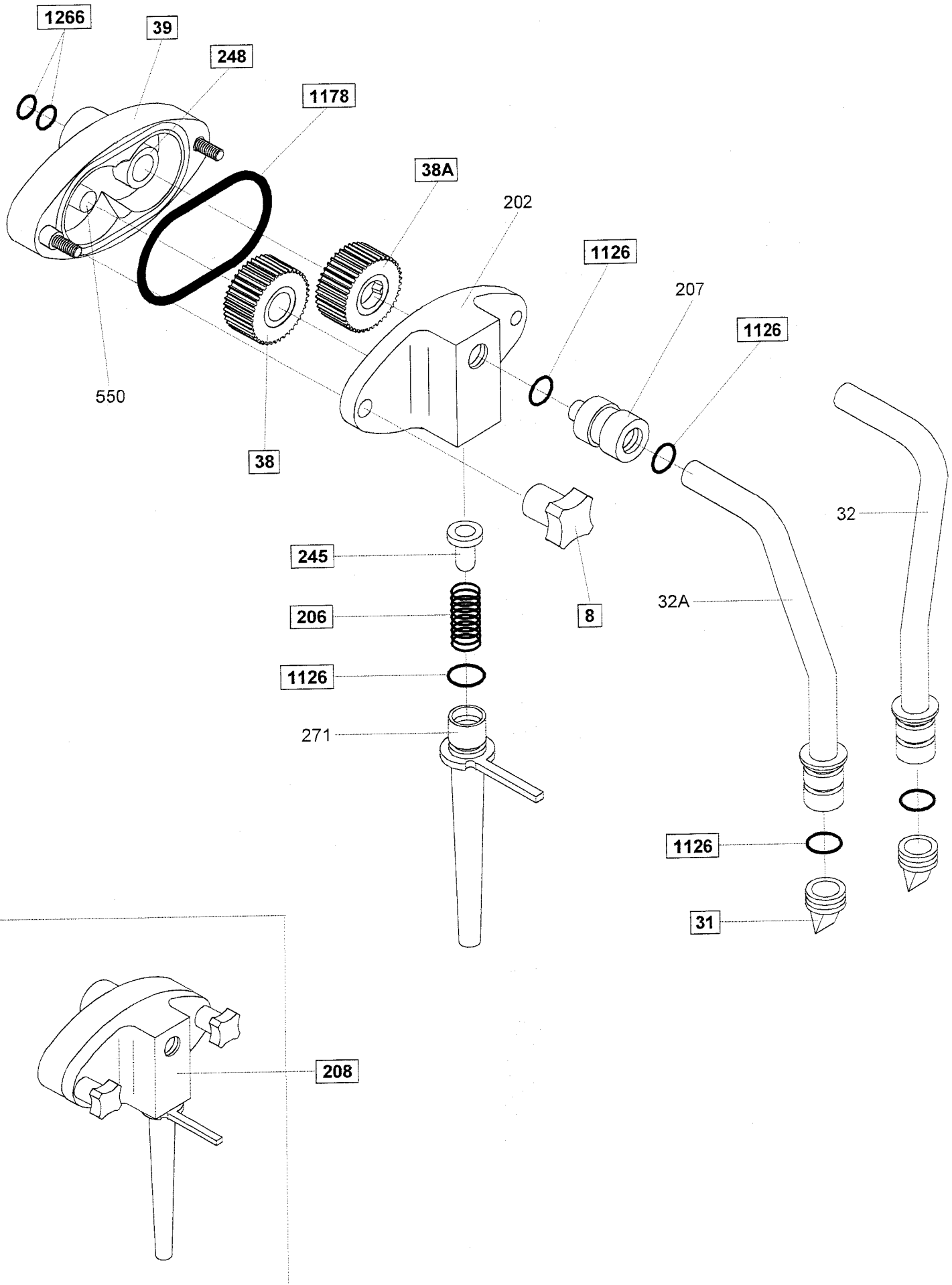
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* Solo per macchine a gravita'



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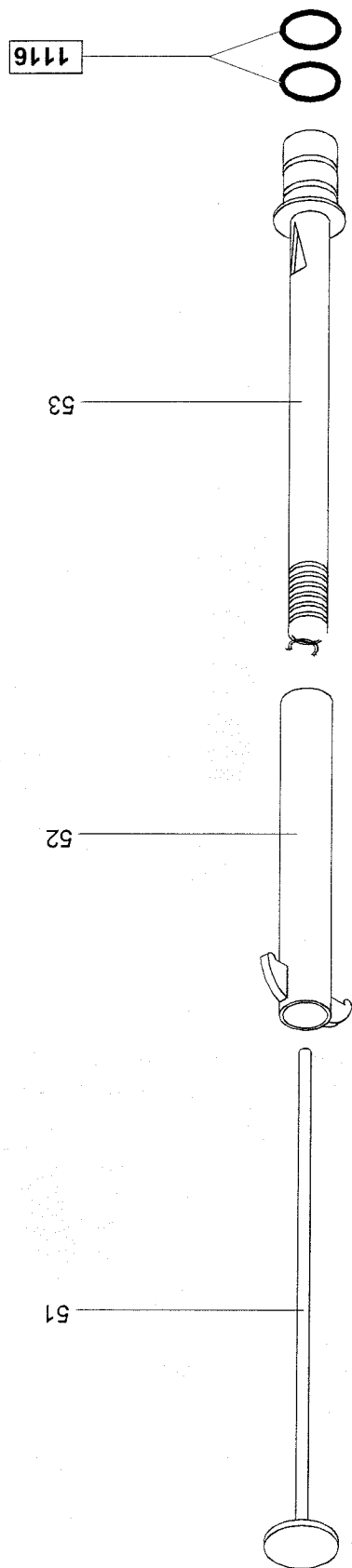
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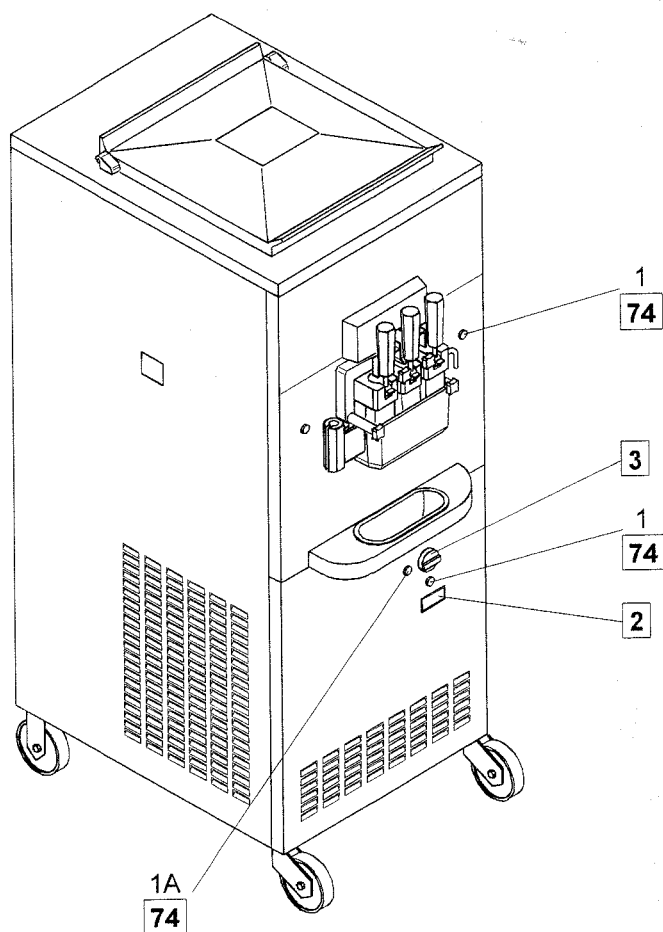
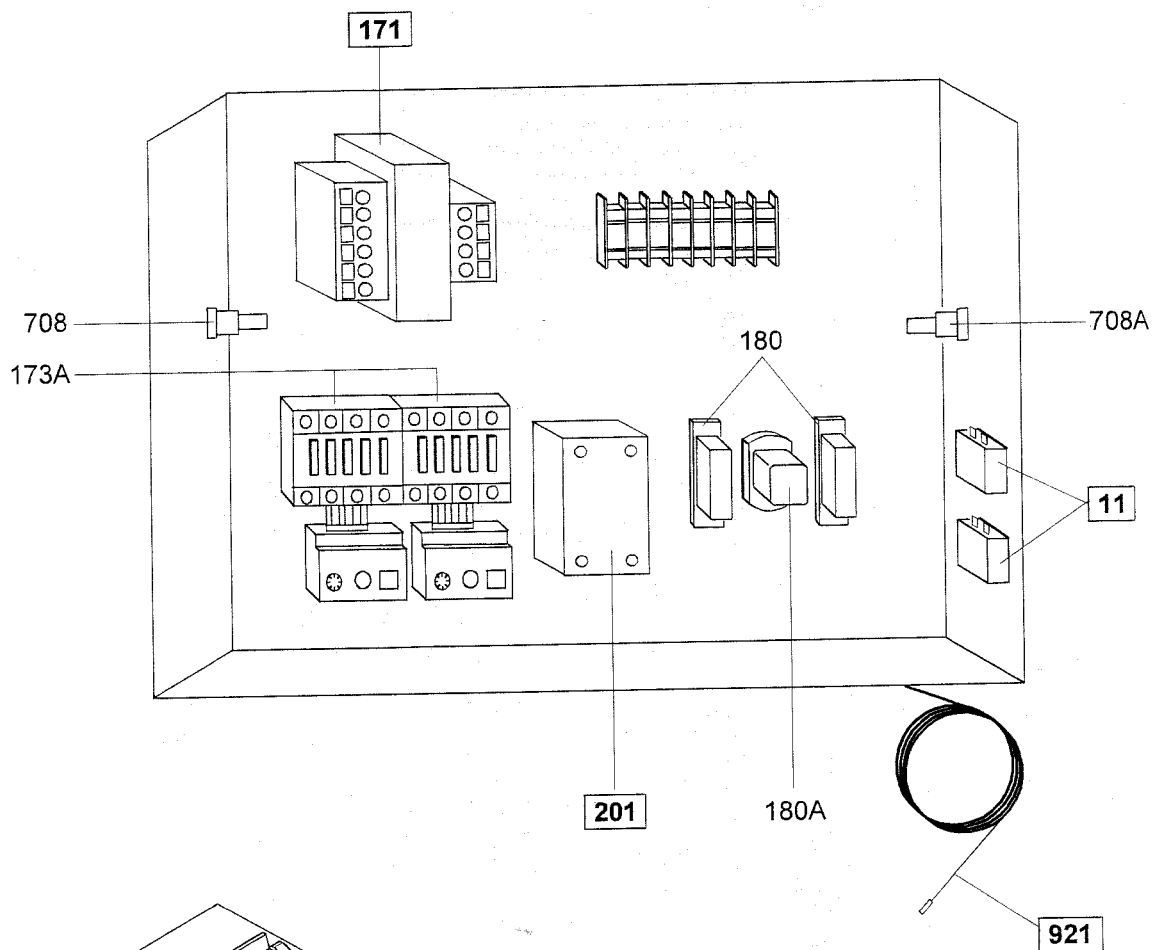
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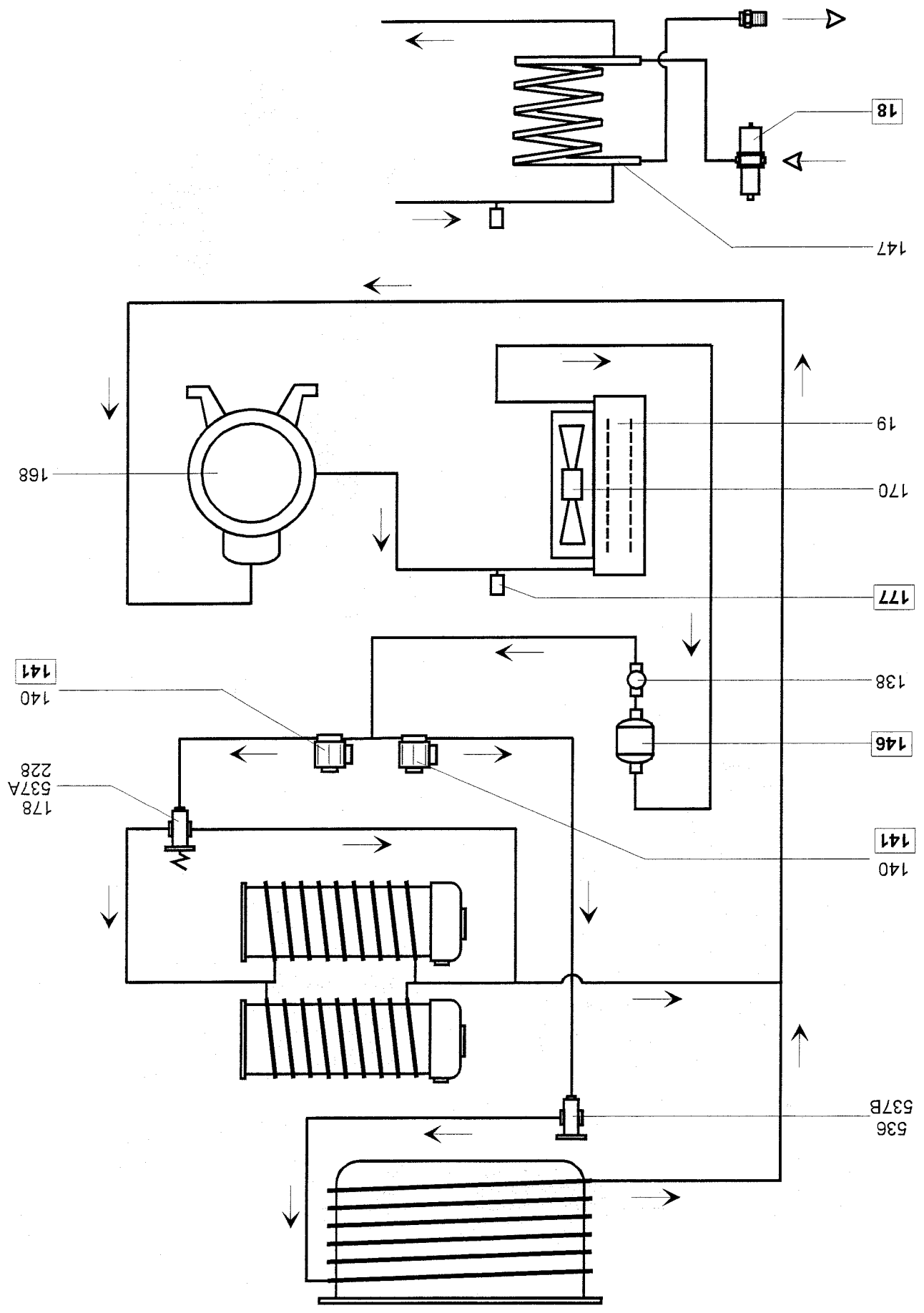


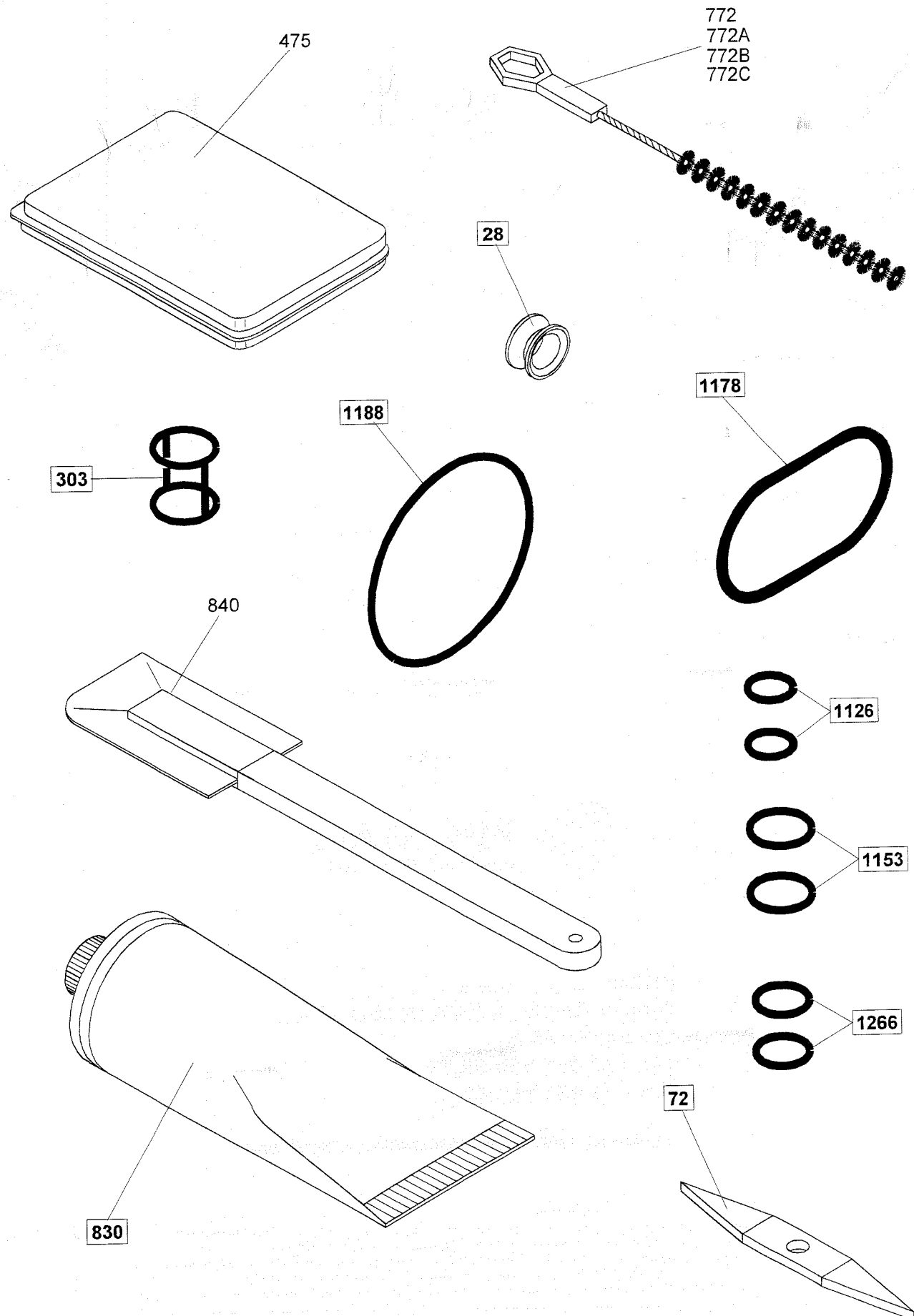


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	Rev. 00

IMPIANTO FRIGORIFERO





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