

**OPERATION & MAINTENANCE
INSTRUCTIONS**

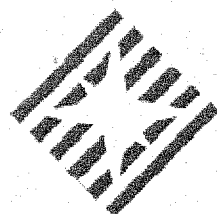
PROWHIP 5K



APPLICARE

TARGA

CARATTERISTICHE



PROMAG
LE MACCHINE PER IL GELATO

PROMAG

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

Tel. (051) 6505358 - Fax (051) 6505253

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FOREWORD

INSTRUCTION HANDBOOK

Editing this handbook, it was taken into due account community directions on safety standards as well as on free circulation of industrial products within E.C. (R.E.C. Council direction 89/392 and subsequent, known as "Machines Direction").

PURPOSE

This handbook was edited while taking users needs into due account.

Topics relevant to a correct use of the machine have been analyzed in order to keep unchanged in the long run quality features characterizing PROMAG machines throughout the world.

A significant part of this handbook refers to the conditions required to the machine use and mainly to the behaviour to be held during routine and special maintenance.

Nevertheless, this handbook cannot meet in details all demands; in case of doubts or failing information, please apply to:

PROMAG - Via Emilia, 45 - 40011 Anzola Emilia (Bologna) - Italy
Tel. (051) 6505358 - Fax (051) 6505253

HANDBOOK STRUCTURE

This handbook is structurilized in sections, chapters and subchapters in order to consult it more easily.

Section

A section is the part of handbook identifying a specific topic referred to a machine part.

Chapter

A chapter is that part of section describing a group or concept relevant to a machine part.

Subchapter

It is that part of a chapter detailing the specific component of a machine part.

It is necessary that each person involved in the machine running reads and clearly understands those parts of the handbook of own concern, and particularly:

- The Operator must have a look at chapters concerning the machine start-up and the operation of machine groups.
- A skilled technician employed in installation, maintenance, repair, etc., must read all parts of this handbook.

ADDITIONAL DOCUMENTATION

Along with an instruction manual, each machine is also supplied complete with further documentation:

- **machine equipment:** A list of spare parts delivered together with the machine for its maintenance.
- **Wiring diagram:** A diagram of wiring connections put into the machine.

CONVENTIONAL SYMBOLS



ATTENTION: ELECTRIC SHOCK DANGER

The staff involved is warned that the inobservance of safety rules in carrying out the operation described may cause an electric shock.



ATTENTION: GENERAL DANGER

The staff involved is warned that the operation described may do harm if not carried out in the observance of safety rules.



NOTE

It points out significant information for the staff involved.



WARNING

The staff involved is warned that the inobservance of information may cause a loss of data and damages to the machine.



MACHINE OPERATOR

It deals with an unskilled person, who has no specific competences and can only carry out easy functions, such as the machine operation by means of controls available on push-button panel, and filling and drain of products used during production.



MAINTENANCE ENGINEER

He is a skilled engineer for operation of the machine under regular conditions; he is able to carry out interventions on mechanical parts and all regulations, as well as maintenance and repairs. He is qualified for interventions on electrical and freezing plants.

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PROMAG ENGINEER

It deals with a skilled engineer the manufacturer puts at clients' disposal for complicated interventions und particular conditions or anyhow in accordance with agreements taken with the machine's user.



PROTECTIONS

This symbol placed by description side means that the operator must use personal protections against an implicit risk of accident.

SAFETY

When using industrial equipment and plants, one must be aware of the fact that drive mechanisms (rotary motion), high voltage components, as well as parts subject to high temperatures may cause serious damages to persons and things.

Who is in charge of plant safety must be on the look-out that

- an incorrect use or handling is avoided
- Safety devices are neither be removed nor tampered
- Service is regularly carried out
- Only are original spare parts used especially as far as those components with safety functions are concerned (ex.: protection microswitches, thermostats).

To achieve the above, the following is necessary:

- At working place an instruction manual relevant to the machine should be available.
- Such documentation must be carefully read and prescriptions must consequently be followed.
- Only must adequately skilled personnel be assigned to electrical equipment.

QUALIFICATION OF THE STAFF

Staff attached to the machine can be distinguished according to training and responsibility as follows:

OPERATOR

- A person who has not necessarily a high technical knowledge, just trained for ordinary operation of the machine, such as: startup, stop, filling, basic maintenance (cleanout, simple blocking, instrumentation checkings, etc.).

SKILLED ENGINEER

- A person engaged on more complicated operations of installation, maintenance, repairs, etc.

IMPORTANT!

One must be on the look out that the staff does not carry out any operation outside his own sphere.

NOTE:

According to the standard at present in force, a SKILLED ENGINEER is who, thanks to

- *training, experience and education,*
- *knowledge of rules, prescriptions and interventions on accident prevention,*
- *knowledge of machine operating conditions,*

is able to realize and avoid any danger and has also been allowed by the person in charge of plant safety to carry out all kinds of interventions.

WARNING

When installing the machine, insert a differential magnetothermal protection switch on all poles of the line, adequately sized to the absorption power shown on machine data plate and with contact opening of 3 mm at least.

- Never put your hand into the machine, alike during production and cleaning operations. Before carrying out any maintenance operation, make sure that the machine is in "STOP" position and main switch has been cut out.
- It is forbidden to wash the machine by means of a bolt of water under pressure.
- It is forbidden to remove panels in order to reach the machine inside before having disconnected the machine.
- **PROMAG** is not responsible for any accident that might happen during operation, cleaning and/or servicing of its units, if this warning has not been fully complied with.



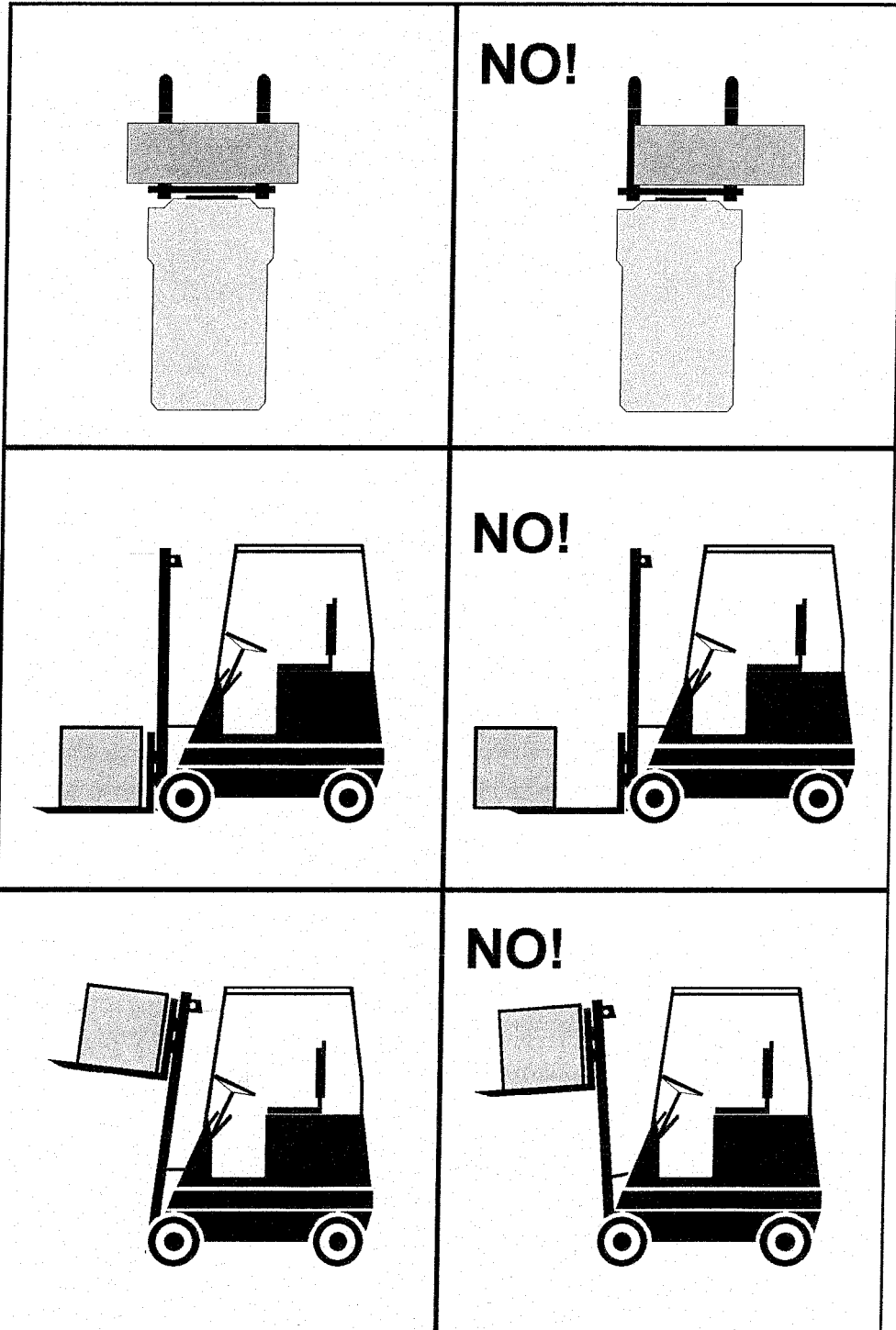
1 RECEIVING, MOVING, OPENING THE PACKING

1.1 RECEPTION

- Before unpacking the machine, check that packing shows no external damages due to collisions during transportation.
- An external damage could mean the machine itself is damaged: in this case, immediately apply to insurance company and leave everything as it was on reception.

1.1.1 LIFTING A PACKED MACHINE

To lift the packing, insert lift forks into the space between pallet feet, so as to balance the machine weight and consequently packing barycenter.



1.1.2 FORBIDDEN MATERIAL HANDLING EQUIPMENT

Material handling equipment not in compliance with following safety characteristics must never be used:

- Lifting capacity lower than machine weight
- Unsuitable construction features of the lift (ex.: too short forks)
- Construction features altered by use
- Unconforming ropes and cables
- Worn ropes or cables.



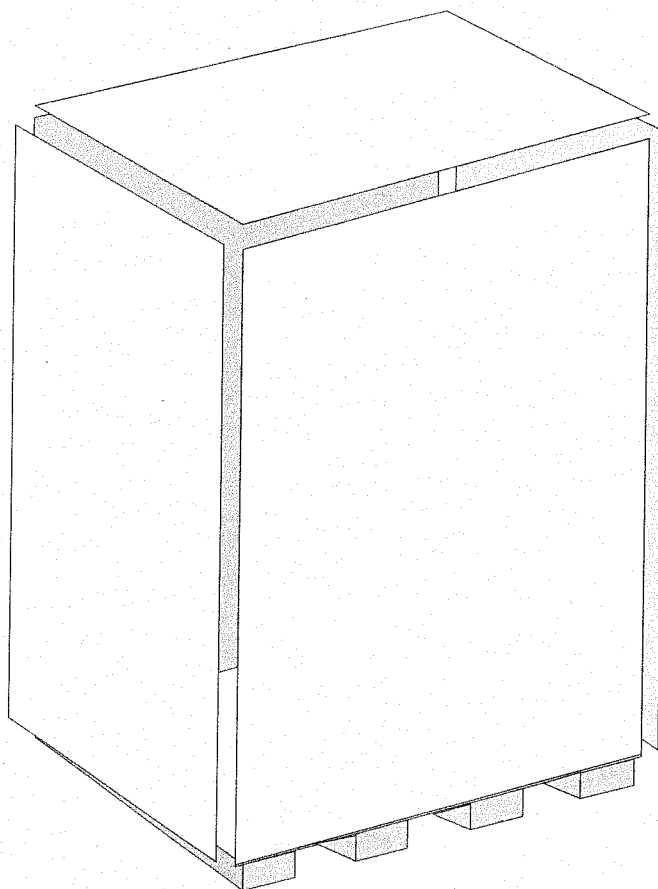
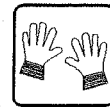
1.2 UNPACKING

There are two types of packing: wooden type or in corrugated board.

Walls of a wooden packing are nailed and the machine is fastened by means of stay bolts connecting machine frame bottom to packing wooden base.

A wooden packing can be opened by means of proper tools; it is recommended to protect exposed parts, such as hands with gloves, against wood splinters.

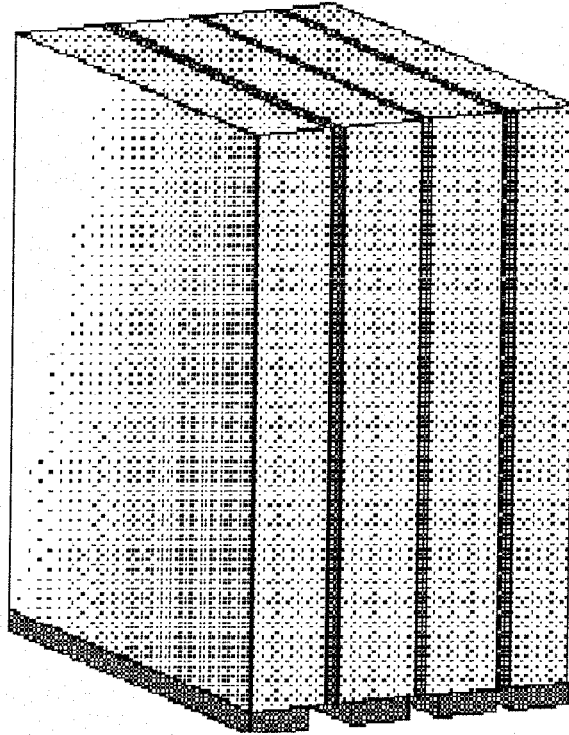
- Remove nails starting from the upper part until the machine still fastened to the pallet (board) is left uncovered.
- Check that the machine has not been damaged during transportation.





Board packing is externally closed by three steel straps.
The machine is secured at the the inside through other straps.
This packing can be opened by means of snips.

Act with utmost care, as one may be hurted when cutting the straps if they are not strongly held during this operation.



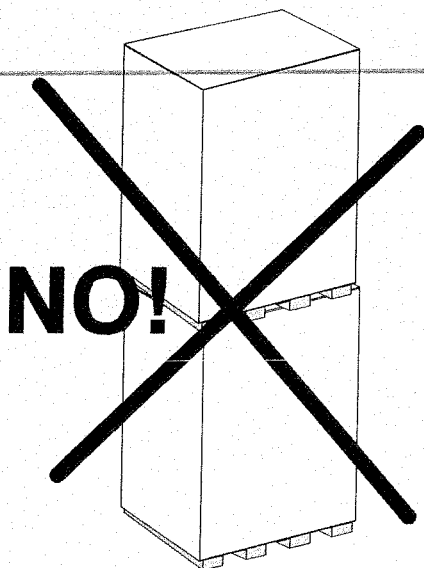
Attention:

Inside the packing you will find an instruction handbook; it is necessary to carefully read it before operating the machine.

1.3 STORING A MACHINE

The machine must be stored in a dry and dump-free place.

Before storing it, wrap the machine in a cloth in order to protect it against dust and else.



IMPORTANT:

When storing a packed machine, never place a crate on another.

1.4 DISPOSAL OF PACKING STUFFS

When opening the packing crate, divide packing stuffs per type and get rid of them according to laws in force in machine installation country

2 GENERAL INFORMATION

2.1 GENERAL DATA

2.1.1 MANUFACTURER'S IDENTIFICATION DATA

The machine has a data plate carrying manufacturer's data, machine type and serial number given when it is manufactured.

A	B	F	G	
PROMAG				
ANZOLA EMILIA - BOLOGNA - ITALY				
Matr. ●		Cod. ●		
V ●		Hz ●		
Gas		A		
●		kg		
CE				
C	D	E	H	I

A = Serial number

B = Machine type

C = Voltage

D = Fuse Current

E = Gas type and weight

F = Machine code

G = Condensation
A=Air W=Water

H = Frequency

I = Power input

2.1.2 CLIENT/USER'S IDENTIFICATION DATA

CLIENT:

ADDRESS:

TELEPHONE:

Machine serial number:

Machine delivered on:

Instr. handbook delivered on:

2.1.3 INFORMATION ABOUT SERVICE

All operations of ordinary maintenance are described in section "Maintenance" of this handbook; any further operation requiring radical interventions on the machine must be agreed with the manufacturer, who will also examine the possibility of a direct action on the spot.

2.1.4 INFORMATION TO THE USER

- The manufacturer of the machine here described is at user's disposal for any explanation and information about the machine operation.
- In case of need, the interlocutor is the distributor being present in user's country, or the manufacturer if there is no distributor in that market.
- Manufacturer's service department is at clients' disposal for any information about operation, and requests of spare parts and service.
- The manufacturer reserves the right to carry out all machine changes deemed as opportune without previous notice.
- Descriptions as well as pictures contained in this handbook are not binding.
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2.2 INFORMATION ABOUT THE MACHINE

2.2.1 GENERAL DATA

Counter top machines for production and instantaneous distribution of whipped cream, made up of following plus points:

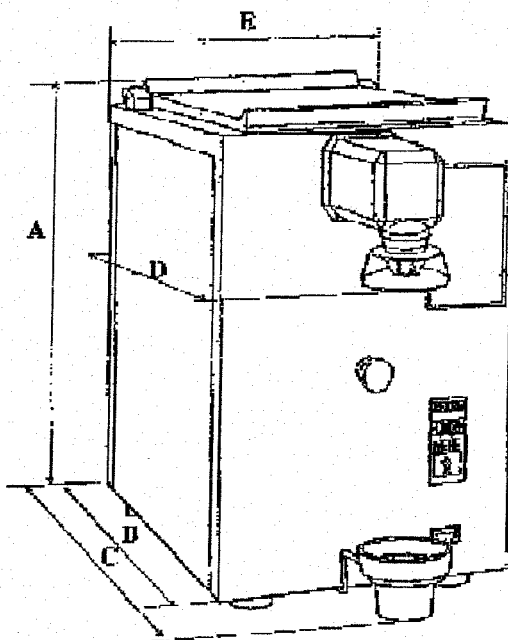
- "direct refrigeration" tanks for proper storage of the liquid cream at + 4°C, under steady thermometer control;
- big capacity pumps;
- regulation of air-cream mix for easy whipping of all natural and vegetable types of cream;
- refrigerated dispensers up to cream dispensing nozzle;
- and an electronic panel with on/off switch, digital control of cream temperature inside the tank and control of whipped cream distribution, that can be dispensed in free portions, programmed portions being all equal, or continuously.

PROMAG recommends to always use high quality cream in order to satisfy your customers, even the hardest-to-please ones. Any saving made to the prejudice of quality will surely turn into a loss much bigger than the saving itself.

Bearing in mind the above statements, please take heed of the following suggestions:

- Closely follow instructions given by your mix supplier.
- Do not alter your supplier's recipes, by adding sugar.
- Taste the whipped cream before serving it and start selling only if entirely satisfactory.
- Make sure your staff always keeps the machine clean.
- Have your machine serviced always by companies authorized by **PROMAG**.

2.2.2 MACHINE LAYOUT



2.2.3 TECHNICAL FEATURES

Model	Hourly output*		Tank capacity	Electric power			Installed power	Weight kg	Dimensions				
	kg	litres**	litres	V	Hz	Ph	kW	Net	A	B	C	D	E
Prhowhip 5K	80	240	6	220	50/60	1	0,7	53	510	460	620	610	310

* Hourly output may vary depending on cream used.

** Considering an average cream overrun of 200%



2.3 INTENDED USE

The machines for the production of whipped cream, model PROWHIP 5K must be solely used for the purpose described in chapter 2.2.1, "General information" within the functional limits described below.

Voltage	±10%
Min air temperature °C	10°C
Max air temperature °C	32°C
Max relative humidity	85%

The machine has been designed for its use in places which are not subject to explosion-proof standards; its use is thus bound to conforming places and normal atmosphere.

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 ROOM NECESSARY TO THE MACHINE USE

The machine must be installed in such a way that air can freely circulate allaround; install it in such a way that it is close to the rear wall no less than 20 cm, so that condensing air can circulate unhindered.

Rooms for the approach to the machine must be left free in order to enable the operator to act without constraint and also to immediately leave working area, if need be.

NOTE

An insufficient air circulation affects operation and output capacity of the machine.

3.2 ELECTRIC CONNECTION

Before connecting the machine to the mains, check that machine voltage indicated in data plate corresponds with the mains.

Insert a differential magnetothermal protection switch adequately sized to absorption capacity required and with contact opening of 3 mm at least. The machine is delivered already complete with 3-wire cable: blue wire must be connected to the neutral one.

IMPORTANT

Yellow/green ground wire must be connected to a good ground outlet.

3.2.1 REPLACEMENT OF POWER CABLE

If the machine main cable is damaged, it must be replaced by a cable with similar features.

Replacement will have to be carried out by skilled personnel, only.

3.3 POSITIONING

Level the machine on its supporting face so as to allow a proper functioning and avoid that liquid cream flows out.

3.4 CLEAN OUT

Eliminate dust from machine, as well as the protective material the machine was strewed with.

Use just water and, if need be, add a mild soap-based detergent with a soft cloth.

ATTENTION

Do not use either solvents or alcohol and detergents that may damage the machine parts or contaminate parts coming into contact with product.

3.5 REFILLING

Motor installed in the machine is of the type with lubrication for life; no action of checking/replacing or topping up is necessary.

Gas filling necessary to the freezing system is carried out at PROMAG works during machine postproduction testing. New machines do not need any further refilling.

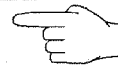
If a gas addition happens to be made, this must be carried out by skilled technicians, only, who can also find out trouble origin.

3.6 MACHINE TESTING

A postproduction test of the machine is carried out at PROMAG premises; Operation and output functionality of the machine are thoroughly tested.

Machine test at end user's must be carried out by skilled technicians or by one of PROMAG engineers.

After the machine instlaling and correct connections, also carry out all operations necessary to functional check and test of the machine.



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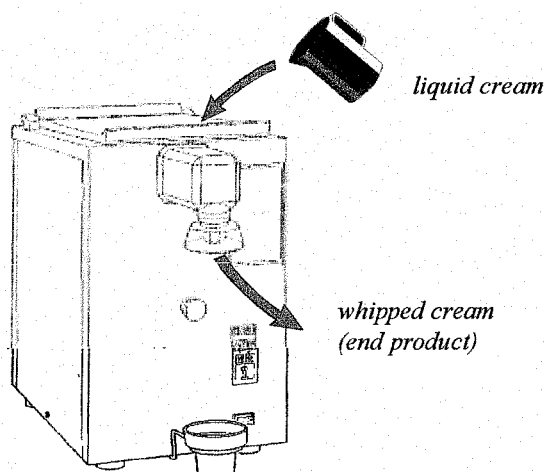
4 INSTRUCTIONS FOR USE



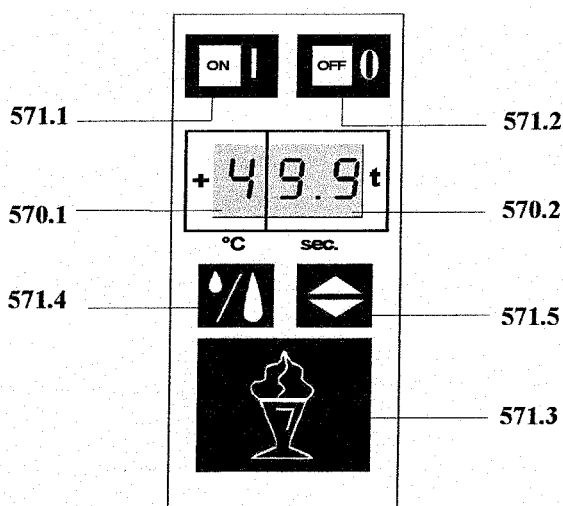
4.1 MACHINE CONFIGURATION

The machine consists of motor drive for pump and of motocompressor for the cooling unit (with aircondensation).

After pouring the liquid cream into the tank, you can start distribution by pressing relevant push button. Thanks to the pump, the cream already mixed with air reaches the texturizer which provides to "whip" it. Whipped cream can be dispensed in three possible ways: in free portions, programmed and equal portions, continuously.



4.2 CONTROLS AVAILABLE TO THE OPERATOR



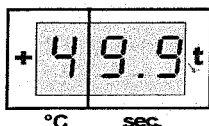
ON BUTTON (Pos. 571.1)

When pressing this button, the machine is ready to start.



OFF BUTTON (Pos. 571.2)

When pressing this button, the machine is off.



LIQUID CRYSTAL DISPLAY (Pos. 570.1 e 570.2)

During routine operation of the machine, the digit displayed on Pos. 570.1 is the temperature of the cream inside the tank. Value is expressed in centigrade degrees.

Digits at Pos. 570.2 indicate setting time of portioner, when inserting it. Value is expressed in seconds. If the portioner is disconnected, the message on display is "_ _".

**PORTIONER BUTTON (Pos. 571.4)**

By this button, you can insert or disactivate the portioner.

When connecting it, the digit appearing on display pos. 570.2 is equal to the dispensing time set.

When disconnecting the portioner, the message on display pos. 570.2 is " _ _ ".

**PORTIONER INCREASING TIME BUTTON (Pos. 571.5)**

This button is only active if the portioner has been connected.

If pressed in a sequence, the setting time of the portioner increases by a tripping time of 0.1 seconds each time; if you hold the button down more than one second, you will get a quick and continuous increase of the time up to a maximum of 9.9 seconds; then you will start back from 1 second to progressively rise again.

**DISTRIBUTION BUTTON (Pos. 571.3)**

Pressing this button when the portioner is disconnected, whipped cream is dispensed as long as you hold the button down.

When connecting the portioner and pressing this button, distribution is timed according to the time set on display pos. 570.2.

It also allows manual or automatic continuous distribution (see relevant paragraphs).

SOCKET FOR FOOT CONTROL DISTRIBUTION (POS. 172)

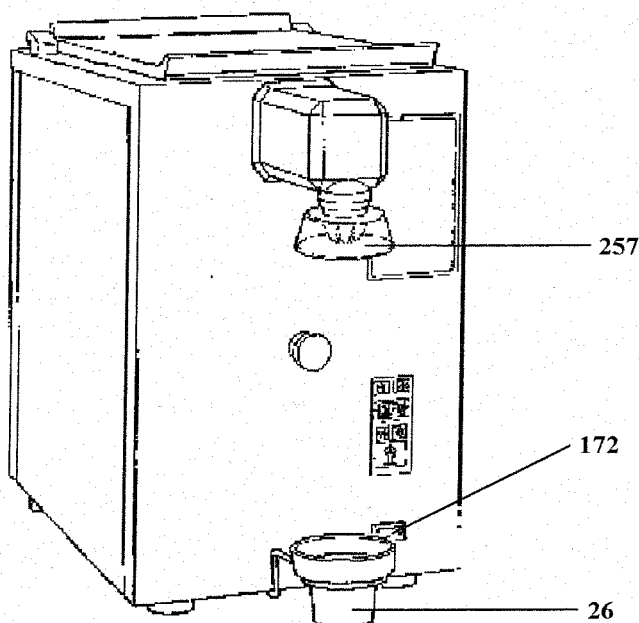
An accessory for foot control distribution can be plugged to the socket pos. 172. Such an accessory allows to dispense the whipped cream whenever the operator is using his hands to decorate.

4.3 DRIP TRAY

The drip tray pos. 26 (see picture below) collects possible mix drops coming out from the front lid during distribution.

It is also a hygienic protection to the breaksprinkle and the nozzle on front lid during idling times.

This protection becomes active by simply inserting with a pressure the tray pos. 26 into the breaksprinkle cup pos. 257.





4.5 PRELIMINARY OPERATIONS, WASH AND STERILIZATION

Before starting the machine for the first time, it is necessary to thoroughly clean its parts and above all sterilize all parts coming into contact with the cream.


IMPORTANT

Clean out and sterilization must be carried out at the end of every working day, as a habit and with utmost care, in order to secure high quality and the observance of healthy rules.

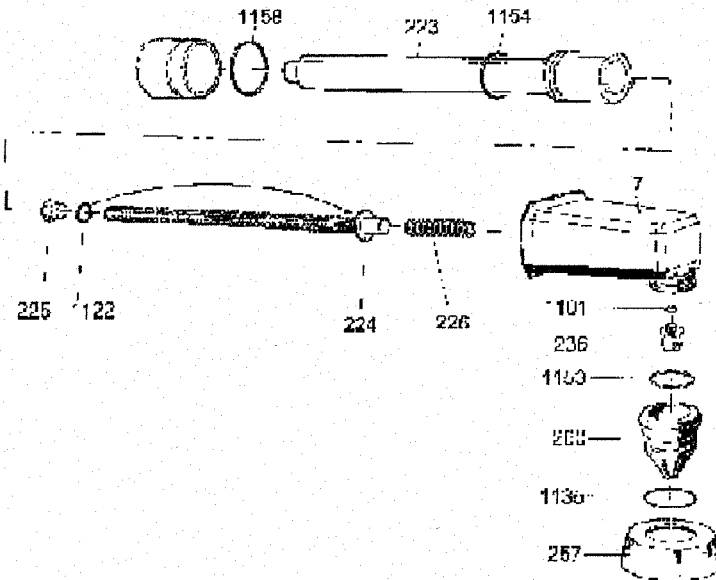
4.4.1 CLEAN OUT

Disconnect the machine from the mains.

Pour wash water, possibly cold or lukewarm, into the tank, as hot water might damage plastic parts.

Drain all wash water by pressing the distribution button  pos. 571.3.

Remove front lid pos. 7, by rotating it anticlockwise and withdrawing it towards yourselves; remove then all front lid parts as shown in picture herebelow.



Remove texturizer sheath pos. 223 by withdrawing it from the machine front side. With the extractor remove the texturizer pos. 224 all rubber gaskets, the plug pos. 225 and the spring pos. 226.

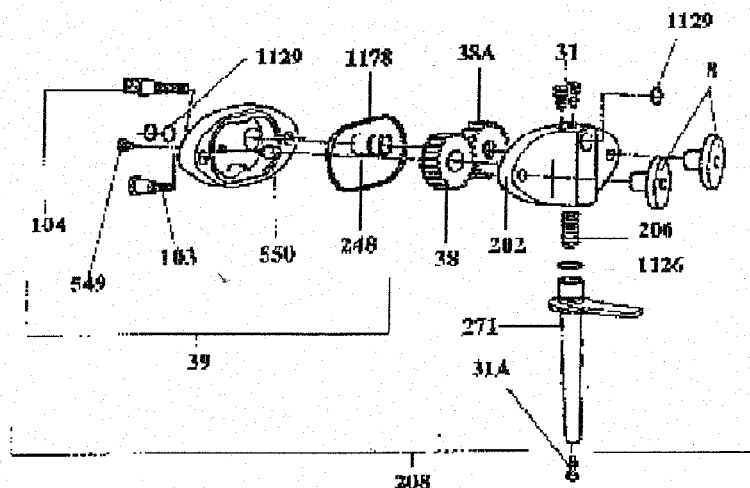
Also remove the pressurization pump by rotating it by 1/4 turn and withdraw it.

Remove gears pos. 38 and 38A by unscrewing knobs pos. 8.

Remove all other parts of the pump as shown in the picture herebelow.


Wash all parts with water and a cleansing solution, using the special brushes included in the accessories kit. Air-dry or reassemble the parts still wet.

To re-assemble the parts, follow the reverse order of disassembly.



4.4.2 STERILIZATION

With machine off, after reassembling all parts previously washed and positioning drain plug pos. 221 into the tank bottom and outside drain plug pos. 132 on front side, let a NON COORISIVE sterilizing water-solution into the upper tank.

Press the distribution button pos. 571.3  until a few drops solution will come out from the front lid. Disconnect the main switch and drain all sterilizing solution by lifting the drain plug and removing the outside rain plug, after placing a pail under the drain pipe

Reinstall the plugs, after draining all solution.

**ATTENTION**

Do not touch the sterilized parts with hands, napkins, or else.



Rinse with running water.

WARNING

Too a long running of the pump with empty tank or just filled with water and detergent or sterilizer would cause a quick wear. During wash and sterilization, let the machine run just a few seconds.

**4.4.3 HYGIENE**

Mildew and bacteria grow rapidly in cream fat contents. To eliminate them, it is necessary to thoroughly wash and clean all parts in contact with the cream, as described above.

Stainless steel and plastic materials, as well as rubber used in the construction and also their particular shapes make clean out easy, but cannot prevent proliferation of mildew and bacteria if not properly cleaned.

ATTENTION

Before using the machine again, thoroughly rinse it with just water, in order to remove all residues of sterilizer.



4.5 PRODUCTION AND DISTRIBUTION OF WHIPPED CREAM

After installing the machine as per instructions in chapter INSTALLATION, and after washing and sterilizing it, follow the procedure described hereafter.

4.5.1 CHOOSING THE LIQUID CREAM

Always use cream in a perfect state. For the best whipped cream use cream with a minimum 32% fat content.

Particular products are available for the production of a good whipped cream in spite of a lower fat percentage. In such cases, before starting the production, follow the manufacturer's directions and test the product obtainable with your machine.

Before pouring the product into the tank, sweeten the liquid cream with liquid sugar or 100 gr castor sugar per litre of liquid cream.

ATTENTION

Make sure that sugar has been thoroughly dissolved into the cream because sugar lumps may obstruct the cream whipper and damage the pump.

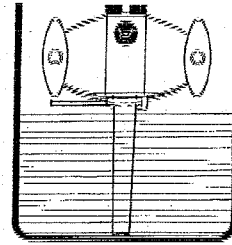
Do not add more than 100 gr sugar per litre; the more the cream is sugared, the lower its overrun will be.

WARNING

NEVER add solid stuffs, such as hazel nuts, chocolate splits and the like to the cream. They would not pass through the pump and would quickly wear it out.


4.5.2 WHIPPED CREAM DISTRIBUTION

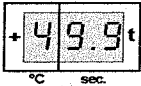
Pour liquid cream at +4°C into the tank;
The cream level must never reach the pump (see picture) and add more cream when the level is about 2 cm from the bottom.




The whipped cream can be dispensed in three ways described herebelow:

TIMED DISTRIBUTION


Insert the portioner by pressing relevant button pos. 571.4 

Check indication on display  pos. 570.2 and if it differs from the one you

wish, then change it using the time increase button pos. 571.5 

Press the distribution button pos. 571.3  about 1 second; by this, you will get the portion according to the time set.

MANUAL CONTINUOUS DISTRIBUTION

Press the portioner button pos. 571.4  and cancel the time previously displayed; the new displaying indication will consist of two dashes " _ _ ".


Press the distribution button pos. 571.3 ; cream distribution will only stop when releasing the distribution button.

AUTOMATIC CONTINUOUS DISTRIBUTION

Press the portioner button pos. 571.4  and cancel the displayed time; the new indication must consist of two dashes " _ _".

Press the distribution button pos. 571.3  and time increase button pos. 571.5  at the same time.

Release both buttons; the machine will dispense whipped cream, continuously.

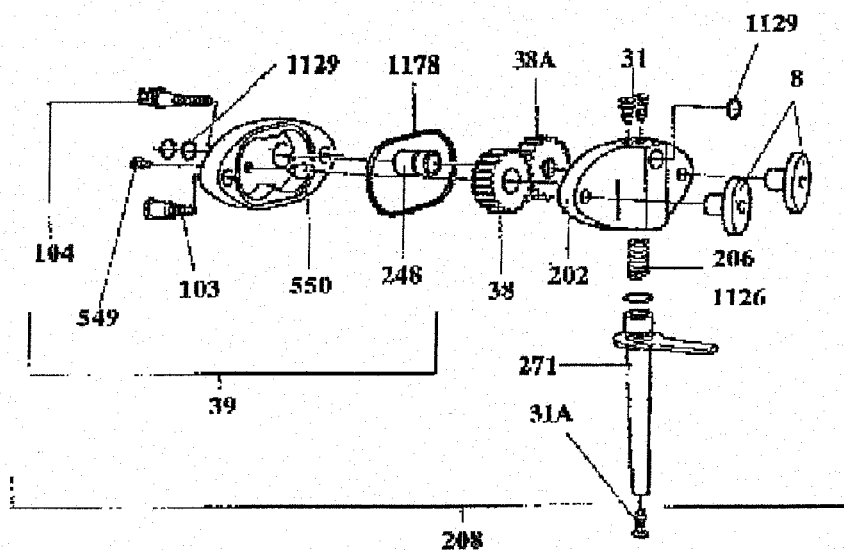
To stop cream distribution, press the distribution button pos. 571.3 .

4.5.3 AIR INTAKE REGULATION

When the whipped cream comes out liquid, move the lever of regulator pos.271 (see picture herebelow) one notch at a time to the right.

When the whipped cream comes out slowly or mixed with air bubbles, move the lever one notch at a time to the left.

For a satisfactory proportion of air and cream, the lever should be positioned in the middle, i.e. in front of the operator.

**4.6 STORAGE**

This cream whipper is provided with a thermostatically controlled storage system ensuring good storage of the cream even over long periods. However, before starting again the distribution after a pause period, mix the liquid cream that might have separated, taste it and check its temperature which must never be below the limits fixed by Health Laws in force in your Country.

By long idling periods, the machine must be cleaned and sterilized before starting to work again.

WARNING

NEVER leave cream in the machine when it is not operating.



5 SAFETY DEVICES

5.1 MACHINE SAFETY DEVICES

THERMAL PROTECTIONS

The motor of freezing compressor as well as the pump are provided with internal thermal protections on windings, which cut out motor running when the temperature reaches its setting time. Reset of thermal protections is automatic.

6 DISASSEMBLING AND REASSEMBLING OF PARTS IN CONTACT WITH THE PRODUCT

IMPORTANT

Cleanout and sterilization must be carried out at the end of every working day, as a habit and with utmost care, in order to secure quality of production in the observance of healthy rules.



6.1 CLEAN-OUT

Disconnect the machine from the mains.

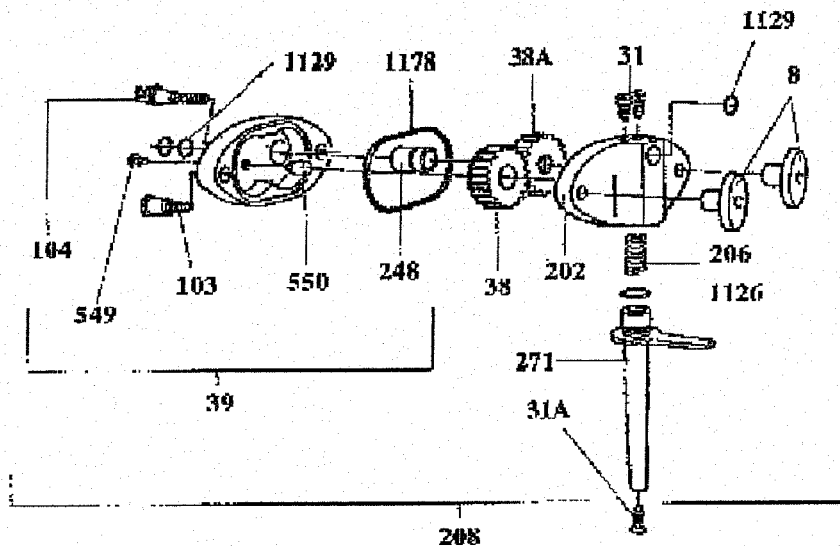
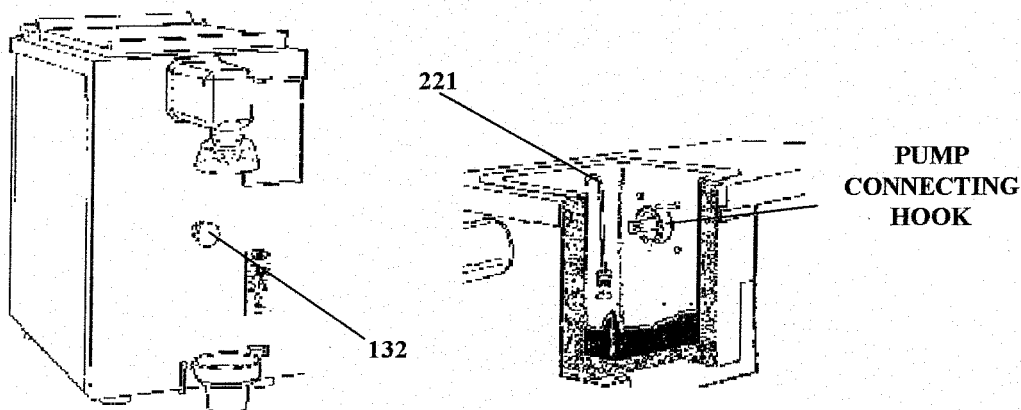
Remove residual cream from the tank by lifting drain plug pos. 221 and removing the outside drain plug pos. 132 on the machine front side.

Fill the tank with lukewarm water also using a mild detergent. Drain by opening the plug pos. 132 on the machine front side.

Also remove the pump, by rotating it by 1/4 turn, and withdraw it.

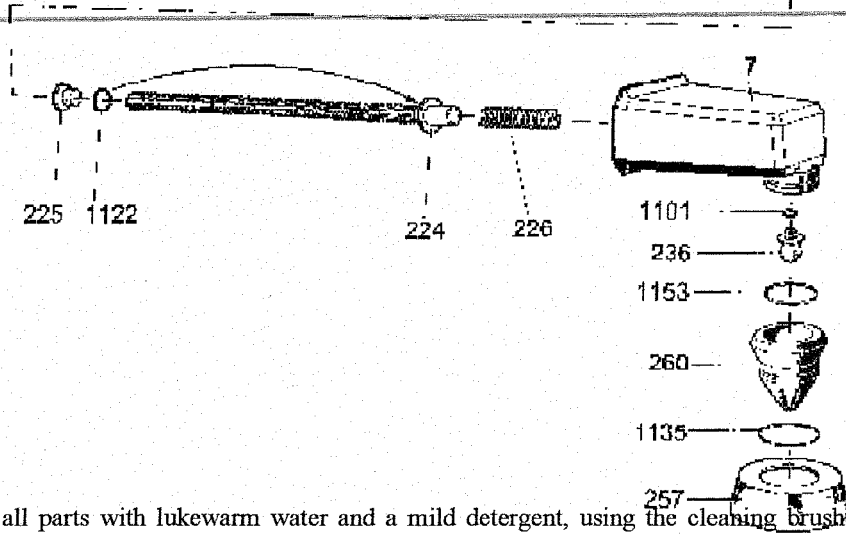
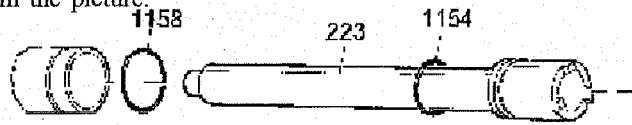
Remove then gears pos. 38 and 38A by unscrewing knobs pos. 8.

Remove all other parts of the pump, as shown in the picture herebelow.





Remove texturizer sheath pos.223 by withdrawing it from machine front side. With an extractor remove the extractor pos. 224 and all rubber gaskets. Turn the front lid anticlockwise and withdraw by pulling it towards yourselves. Strip the front lid as shown in the picture.



Wash all parts with lukewarm water and a mild detergent, using the cleaning brushes you will find in the accessories kit.

Do not use hot water when washig plastic parts as you may damage them.


Keep the parts in sterilized lukewarm water 2 to 5 minutes. Use the sterilizing product according to the manufacturer's instructions.

Place the parts on a clean and sterilized surface and let them air-dry, or reassemble when still wet.

To re-assemble the parts, follow the reverse disassembly procedure.

6.2 STERILIZATION

With machine off, pour a NON CORROSIVE water-sterilizer solution in the upper tank.

Press the distribution button  until a few drops come out from the front lid.

Drain all solution by opening the plug pos. 132 on the machine front side.

ATTENTION

Do not touch the sterilized parts with hands, napkins, or else.

Rinse with running water.

WARNING

Too a long running of the pump with empty tank or just filled with water and detergent or sterilizer would cause a quick wear. During wash and sterilization, let the machine run just a few seconds.

6.3 HYGIENE

Mildew and bacteria grow rapidly in cream fat contents. To eliminate them, it is necessary to thoroughly wash and clean all parts in contact with the cream, as described above.

Stainless steel and plastic materials, as well as rubber used in the construction and also their particular shapes make cleanout easy, but cannot prevent proliferation of mildew and bacteria if not properly cleaned.

WARNING

Before using the machine again, thoroughly rinse it with just water, in order to remove all residues of sterilizer.



7 MAINTENANCE

7.1 SERVICING TYPOLOGY

ATTENTION

Any servicing operation requiring the opening of machine panels must be carried out with machine set to stop and disconnected from main switch!

Cleaning and lubricating moving parts is forbidden!

Repairs of electrical and freezing plants must be carried out by skilled engineers!



Operations necessary to proper machine running are such that most of servicing is completed during production cycle.

Servicing operations, such as cleaning of parts in contact with the product, replacing of stuffing box, disassembling of beater assembly are to be carried out at the end of a working day, so as to speed up serving operations required.

Herebelow you can find a list of routine servicing operations:

- Clean out of panels

To be carried out daily, with neutral soaps and cold or lukewarm (max. 40°C) water.

- Clean out and sterilization

To be carried out at the end of every working day according to procedure described in section 6.



WARNING

Never use abrasive sponges to clean machine and its parts, as their surfaces might be scratched.



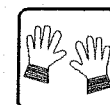
7.2 AIRCOOLING

Clean the condenser, periodically, so as to remove dust, paper and what can prevent air from circulating.

For clean out, use a brush with long bristles or a bolt of compressed air.

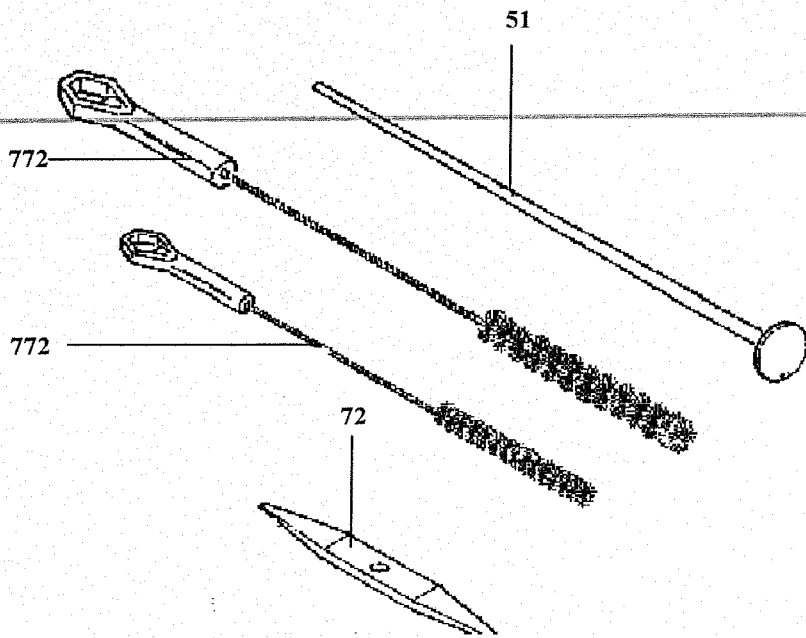
ATTENTION!

When using compressed air, personal protections are necessary in order to avoid accidents; put on protective glasses!



**NEVER USE SHARP METAL OBJECTS TO CARRY OUT THIS OPERATION.
GOOD WORKING OF A FREEZING PLANT MOSTLY DEPENDS ON
CLEANING OF CONDENSER.**

7.3 TABLE OF EQUIPMENT



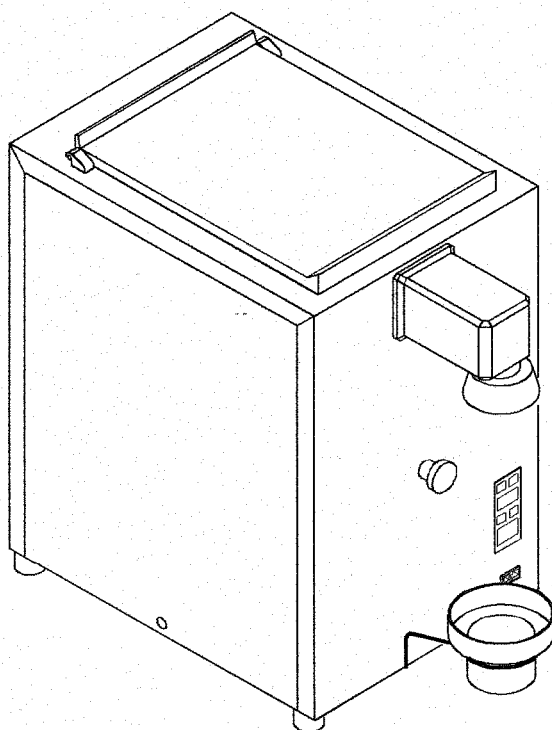
Pos.	Qt.y	Description
51	1	Break sprinkle
72	1	OR extractor
772	1	Brush D 8X250
772	1	Brush D 15x350

8 TROUBLESHOOT GUIDE

TROUBLE	CAUSE	CURES
Although switch is on, no cream is dispensed when opening the spigot.	<ol style="list-style-type: none"> 1. Pump knobs are loose 2. Texturizer is blocked 3. Texturizer is dirty 4. Holes of regulator are obstructed 	<ol style="list-style-type: none"> 1. Tighten knobs 2. Disassemble and dip it into the liquid cream or grease it with butter or margarine and then reassemble. Otherwise, remove the spring, reassemble the spigot and let the machine run a few seconds; once some cream is dispensed, assemble the spring and start whipped cream distribution again. 3. Wash parts pos. 223 and 224 with lukewarm water and rinse with cold water 4. Disassemble the regulator and wash it with lukewarm water in order to open all holes. Rinse with cold water.
Whipped cream is unsatisfactory or wet	<ol style="list-style-type: none"> 1. Poor quality liquid cream, or cream deteriorated, acid, etc. 2. Liquid cream is too warm 3. Fats have separated 4. Aging not sufficient 5. Adjustment holes are too large 6. Pump and texturizer are obstructed 	<ol style="list-style-type: none"> 1. Wash the machine and fill with fresh cream 2. Let the cream cool in the tank up to 4÷6°C. When using sterilized cream that can be stored at room temperature, it is always necessary to first pre-cool it before its use. Do not let the cream freeze because no whipping will be then obtained. 3. Mix the cream inside the tank or replace it, if need be, with fresh cream. 4. Store cream in the tank to proper temperature a few hours before starting distribution: whipping result will be much more satisfactory. 5. Move regulator lever to the right (see par. 4.5.3). 6. Wash them with lukewarm water; then rinse with cold water and reassemble.
Whipped cream is dispensed too slowly and not continuously	<ol style="list-style-type: none"> 1. Adjustment holes are too small 2. No liquid cream in the tank or cream level too low 	<ol style="list-style-type: none"> 1. Move regulator lever to the left (see par. 4.5.3) 2. Add new cream



PROMAG
LE MACCHINE PER IL SGLATO



PROWHIP 5K

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

I

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.

GB

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.

F

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 la même numéro de repère indiqué 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.

D

Hinweise für die Konsultation des ERSATZTEILHANDBUCHES

Das Ersatzteillhandbuch besteht aus graphischen Abbildungen und Tabellen.

Graphische Abbildungen:

- Die Abbildungen umfassen die Detailzeichnung der Hauptaggregate der Maschine
- Die Aufgliederung der Abbildungen ist in "TAV. 0" angegeben.
- Jedes Ersatzteildetail ist mit einer Positionsnummer identifiziert; die eingerahmten Positionsnummern identifizieren die empfohlenen Ersatzteildetails.

Tabellen:

- In den Tabellen sind die Positionsnummern, die Beschreibung und der Code des Teils aufgelistet.
- Ist dieselbe Positionsnummer mehrmals in Zusammenhang mit anderen Code angegeben, muß bei der Bestellung die Maschinenummer 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.

E

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 matrícula 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	Description	Bezeichnung	Description	Bezeichnung	Description
007	118115310	PORTELLO	DISPENSING HEAD	PORTILLON	FRONTVERSCHLUSS	PORTILLO	FRONTVERSCHLUSS	PORTILLO
007	118115360	PORTELLO BIANCO STP.10476	DISPENSING HEAD	PORTILLON	FRONTVERSCHLUSS	PORTILLO	FRONTVERSCHLUSS	PORTILLO
008	173100060	POMELLO POMPA	KNOB	POMMEAU	HANDGRIFF	POMO	HANDGRIFF	POMO
019	131165450	CONDENSATORE ARIA ECO D12063	AIR CONDENSER	CONDENSATEUR A AIR	CONDENSATEUR A AIR	CONDENSADOR AIRE	LUFT KONDENSATOR	CONDENSADOR AIRE
026	102159040	SCODELLINO SGOCCIOLIO ST.15866	DRIP TRAY	TASSE	SCHALE	CUBETA	SCHALE	CUBETA
031	177110200	VALVOLA MEMBRANA	VALVE	SOUPAPE	VENTIL	VALVULA	VENTIL	VALVULA
031A	177110190	VALVOLA MEMBRANA	VALVE	SOUPAPE	VENTIL	VALVULA	VENTIL	VALVULA
038	152125610	INGRANAGGIO CONDOTTO	DRIVEN GEAR	ENGRENAGE	ZAHNRAD	ENGRANAJE	ZAHNRAD	ENGRANAJE
038A	152125510	INGRANAGGIO CONDUTTORE	DRIVING GEAR	ENGRENAGE	ZAHNRAD	ENGRANAJE	ZAHNRAD	ENGRANAJE
039	129515070	CORPO POMPA R CON PERNI	PUMP BODY	CORPS DE POMPE	PUMPENKOERPER	CUERPO BOMBA	PUMPENKOERPER	CUERPO BOMBA
051	129068430	PARASPRUZZI LEXAN BIANCO L=268	SPLASH GUARD	PARAFLAQUE	SPRITZSCHUTZ	SALPICADERO	SPRITZSCHUTZ	SALPICADERO
072	193010040	ESTRATTORE OR	O-RING EXTRACTOR	EXTRACTEUR DE JOINTS	O-RING AUSHEBER	EXTRACTOR	O-RING AUSHEBER	EXTRACTOR
081	157160400	MOZZO PULEGGIA MOVIMENTO POMPA	HUB	MOYEU	NABE	CUBO	NABE	CUBO
087	153150420	PUL.MOT.12,7 1Z 45 24	MOTOR PULLEY	POULIE MOTEUR	RIEMENSCHIEBE	POLEA MOTOR	RIEMENSCHIEBE	POLEA MOTOR
095	153130660	PUL.M.P.52 1Z 118 14	PUMP SHAFT PULLEY	POULIE ARBRE POMPE	RIEMENSCHIEBE	POLEA BOMBA	RIEMENSCHIEBE	POLEA BOMBA
096	155100540	ALBERO POMPA	PUMP SHAFT	ARBRE POMPE	PUMPEWELLE	EJE BOMBA	PUMPEWELLE	EJE BOMBA
097	161155250	MANICOTTO MOZZO POMPA	PUMP HUB COUPLING	MANCHON MOYEU POMPE	MUFFE	MANGUITO	MUFFE	MANGUITO
102	158180090	GHIERA FISSAGGIO MOZZO POMPA	RING NUT	COLLIER DE SERRAGE	SICHERUNGSRING	ABRAZADERA	SICHERUNGSRING	ABRAZADERA
132	173138230	TAPPO TUBO SCARICO GRIGIO	PLUG	BOUCHON	VERSCHLUSSTOPPEN	TAPON DESAGUE CUBA	VERSCHLUSSTOPPEN	TAPON DESAGUE CUBA
149B	158165030	DISTANZIALE FERMA CUSCINETTO	SPACER	ENTRETOISE	DISTANZSTUECK	DISTANCIADOR	DISTANZSTUECK	DISTANCIADOR
150	574300132	COND.EL.CAR-OLIO 12,5MF 450V	STARTING CAPACITOR	CONDENSATEUR DE DEMARRAGE	ANLAUFKONDENSATOR	CONDENSADOR PUESTA EN MAR	ANLAUFKONDENSATOR	CONDENSADOR PUESTA EN MAR
167	551210453	M.SISME K48424-M00674 220501	BEATER MOTOR	MOTEUR AGITATEUR	RUEHRWERKSMOTOR	MOTOR ELECTRICO	RUEHRWERKSMOTOR	MOTOR ELECTRICO
168	561191025	C.DANFOSS TL4G	COMPRESSOR	COMPRESSEUR	KOMPRESSOR	COMPRESOR	KOMPRESSOR	COMPRESOR

Pos.	Cod.	Descrizione	Description	Description	Bezeichnung	Descrizione
		22024050601				
170A	552290151	M.NMB 4715MS-23T-B50 23050601	FAN MOTOR	MOTEUR VENTILATEUR	VENTILATOR MOTOR	MOTOR VENTILADOR
172	578500220	PRESA MAGIC TICINO ART. 5100	ELECTRIC PLUG	PRISE DU COURANT	STECKDOSE	ENCHUFE DE CORIENTE
186	192111790	PANNELLO COMANDI PROHWIP	FRONT PANEL DECAL	DECALCOMANIE FRONTALE	ABZIEHBILD	CALCOMANIA
186A	192112010	DECALC.PULSANT.MPR 7 SEGM.ANONIMA	PUSH BUTTON DECAL	DECALCOMANIE CLAVIER	ABZIEHBILD	CALCOMANIA
186D	192111910	DECALC.POSTERIORE SERIE MPR/G	DECAL	DECALCOMANIE	ABZIEHBILD	CALCOMANIA
202	129035320	COPERCHIO POMPA RVM	PUMP COVER	COUVERCLE POMPE	PUMPENDECKEL	TAPA BOMBA
206	178100900	MOLLA C I 1,5 15 33 5,24	PUMP SPRING	RESSORT POMPE	FEDER	RESORTE BOMBA
208	129000360	POMPA RVM COMPLETA	PUMP	POMPE COMPLETE	PUMPE KPL.	BOMBA
221	173138210	TAPPO CHIUSURA SCARICO VASCA	UPPERTANK DRAIN PLUG	BOUCHON	VERSCHLUSSTOPFEN	TAPON DESAGUE
223	129064180	TUBO TESSURIZZATORE	TEXTURIZER TUBE	TUBE TESSURISATEUR	SCHWELLROHR	CANO TEXTURIZADOR
224	129066140	TESSURIZZATORE	TEXTURIZER	TESSURISATEUR	SCHWELLSTAB	TEXTURIZADOR
225	173135060	TAPPO TENUTA	PLUG SEAL	BOUCHON	ABDICHTUNGSVERSCHLUSS	TAPON
236	173138410	TAPPO	PLUG	BOUCHON	VERSCHLUSS	TAPON
248	157130010	BOCCOLA CORPO POMPA	PUMP BUSHING	COQUILLE CORPS DE POMPE	BUCHSE	CASQUILLO
250	102144400	COPERCHIO VASCA BIANCO	TANK COVER	COUVERCLE CUVE	BEHAELTERDECKEL	TAPA TANQUE
253	102127530	CERNIERA FISSA DX BIANCA	HINGE	CHARNIERE	SCHARNIER	BISAGRA
253A	102127630	CERNIERA FISSA SX BIANCA	HINGE	CHARNIERE	SCHARNIER	BISAGRA
260	118155170	FRASTAGLIATORE STP11093 BIANCO	NOZZLE UNIT	DOUILLE SORTIE CREME	AUSGABETUELLE	EQUIPO PARA ESTRIAS
271	129045180	REGOLATORE POMPA	FEEDING PUMP TUBE	REGULATEUR DE POMPE	PUMPENREGLER	REGULADOR BOMBA
275	129020010	RAZZA TRASCINAMENTO	PULLEY DRIVE KEY	TRIANGLE D'ENTRAINEMENT	WELLENKREUZ	ARRASTRE
329A	542000103	ANELLO ANGUS 30 16 4,5	O-RING	BAGUE DE RETENUE	SPEZ. DICHRUNGSRING	ANILLO RETEN
345	158260310	TAZZA PARASPRUZZI	CAP	PROTECTION	NABENTELLER	COPA PROTECCION
433	178100040	MOLLA C I 2,5 16,5 46,5 21,35	SPRING	RESSORT	FEDER	RESORTE

Pos.	Cod.	Descrizione	Description	Description	Bezeichnung	Descrpcion
550	155162000	PERNO TRAZIONE INGRANAGGIO	GEAR SHAFT BUSHING	AXE TRACTION ENGRANAGE	STIFT	PERNO TRACCION ENGRANAJE
575	573800509	PULSANT.COMELETTR.MPR 7 SEGM.	PUSHBUTTON PANEL	CLAVIER	TASTATUR	CAJA DE PULSADORES
575	573800613	PULSANT.ELETTR.MPR 7 SEGM.ANONIMA	PUSHBUTTON PANEL	CLAVIER	TASTATUR	CAJA DE PULSADORES
607	572910101	SONDA TS TIPO P09251 C.SILIC.	PROBE	SONDE	FUEHLER	SONDA
772	599100108	SCOVOLINO D. 8X250	FINE BRUSH	ECOUVILLON	REINIGUNGSBUERSTE	CEPILLO
772A	599100115	SCOVOLINO D. 15X350	FINE BRUSH	ECOUVILLON	REINIGUNGSBUERSTE	CEPILLO
790	531001026	CINGHIA 10 X 6 803 Z30 3/4	BELT	COURROIE	RIEMEN	CORREA
903	521111326	CUSCINETTO RIV 62205-2RS1	BEARING	ROULEMENT	KUGELLAGER	RODAMIENTO
930	102131050	SUPPORTO SCODELLINO SGOCCIOLIO	SUPPORT	SUPPORT	HALTERUNG	SOPORTE
1101	541000101	OR 1,78 2,9 NB 70 2012	O-RING	JOINT OR	OR-DICHTUNG	JUNTA OR
1122	541000122	OR 2,62 10,78 NB 70 3043	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
1135	541000135	OR 2,62 23,81 NB 70 132	O-RING	JOINT OR	OR-DICHTUNG	JUNTA OR
1141	541000141	OR 2,62 15,88 VA 75 121	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
1154	541000154	OR 3,53 28,17 NB 70 4112	O-RING	JOINT OR	OR-DICHTUNG	JUNTA OR
1158	541000158	OR 3,53 34,52 NB 70 4137	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
1199	541000199	OR 4 8 NB 60 435 85- 150	O-RING	JOINT OR	OR-DICHTUNG	JUNTA OR

