Zumex Vending

USER MANUAL

INDEX

1. ZUMEX: Original System and ASP Technology

Only ZUMEX offers:

An Original squeezing system and an antibacterial technology (ASP) in its machines.

Original System®

ORIGINAL SYSTEM

Original squeezing system patented by ZUMEX.

The upper and lower pressing units get the maximum amount of juice avoiding it from being mixed its sking, and guaranteing its best juice quality, flavour and hygiene.

ASP

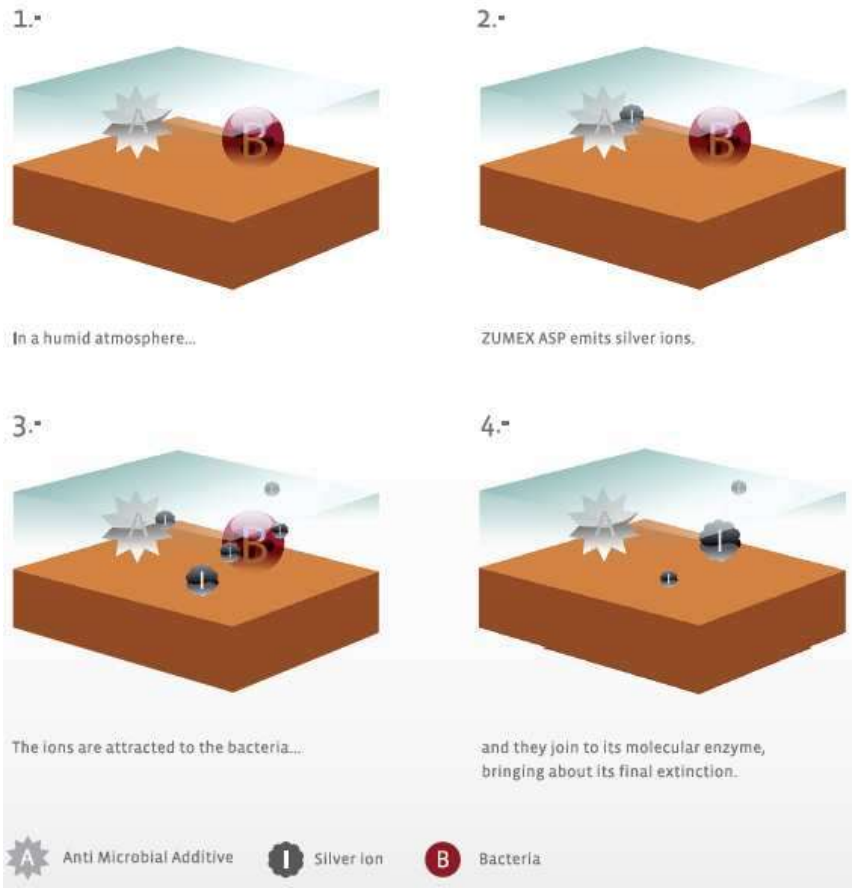
AntibacterialSilverPolymer

ASP

Because hygiene comes first we are committed to the latest in technology. We present you with the 1st generation of juicers with exclusive antibacterial technology. A system based on injection, in all the parts intended for squeezing, of a soluble glass which contains silver ions. After a simple chemical process, these ions eliminate and inhibit the growth of any type of bacteria up to 99.9%, ensuring extra effective and lasting protection*.

*Effectiveness tested by an independent laboratory.

www.zumexasp.com



2. GENERAL INFORMATION

This documentation is an integral part of the machine; for this reason, it should accompany all property transfers or company moves.

This guide contains all the information that the persons in charge of operating and maintaining the machine need in order to work under safe conditions. In addition, we suggest contacting your local distributor for more information and to exchange parts or accessories (FOR EXCHANGES, PLEASE LIST THE SERIAL NUMBER). We discourage carrying out any type of operation for which the exact way to proceed is not understood.

This guide or a copy of it must always be found near the machine so that the operator is able to refer to it. It should be kept away from heat, humidity and corrosive materials (oil, lubricants, and other corrosive products). The guide should be consulted with care so that it is not damaged. Pages should not be torn out and information should not be substituted or erased; in no case should its contents be modified.

Do not remove or cover the identification stickers on the machine that are located on the right side in the upper right corner and inside the door in the upper left corner.

2.1. SAFETY WARNINGS

- BEFORE ATTEMPTING INSTALLATION AND STARTING UP THE MACHINE YOU HAVE ACQUIRED, YOU SHOULD CAREFULLY READ THE RECOMMENDATIONS GIVEN IN THIS GUIDE. IT CONTAINS IMPORTANT INFORMATION CONCERNING INSTALLATION SAFETY, NORMS FOR USE AND MAINTENANCE OPERATIONS

- **THE MACHINE MUST NOT BE EXPOSED TO BAD WEATHER AND MUST NOT BE INSTALLED IN AREAS WHERE IT WILL BE IN DIRECT SUNLIGHT.**

- THE MACHINE SHOULD BE INSTALLED IN A PLACE WITH GOOD VISIBILITY.

- AFTER THE CONTENTS OF THE WASTE CONTAINER HAVE BEEN EMPTIED, PUT THE CONTAINER BACK INTO PLACE PAYING SPECIAL ATTENTION TO THE CORRECT PLACEMENT INSIDE THE CONTAINER OF THE 40-MM-DIAMETER WASTE INPUT TUBE AND THE SILICON TUBE FROM THE EVAPORATOR CONDENSATION TRAY (REFRIGERATION UNIT).

- BE ESPECIALLY CAREFUL WHEN MANIPULATING THE BLADE DURING CLEANING.
- DO NOT SPRAY THE APPLIANCE WITH WATER TO CLEAN IT.
- BEFORE CLEANING OR MAINTENANCE OPERATIONS, ALWAYS DISCONNECT THE MACHINE FROM THE ELECTRICAL NETWORK. ALWAYS USE ORIGINAL ACCESSORIES AND SPARE PARTS.

3. WARRANTY AND CERTIFICATES *

The quality control system established by ZUMEX guarantees that this unit is in perfect operating condition.

SCOPE OF THE WARRANTY: This machine has one year warranty against defects and construction problems that could harm the correct operation, provided that the inner parts or mechanisms have not been manipulated. The following are excluded from the warranty.

EXCLUSIONS*:* Labor, trips, transport, parts that have become deteriorated due to natural wear as a consequence of use, as well as any damage resulting from the incorrect usage or installation of the unit and faults caused as a result of force majeure. Any incorrect handling of the ID Label will make the Warranty void. Likewise, the warranty will also be void if other persons handle the unit, since only the Authorized Technical Support Service is qualified and authorized to do so.

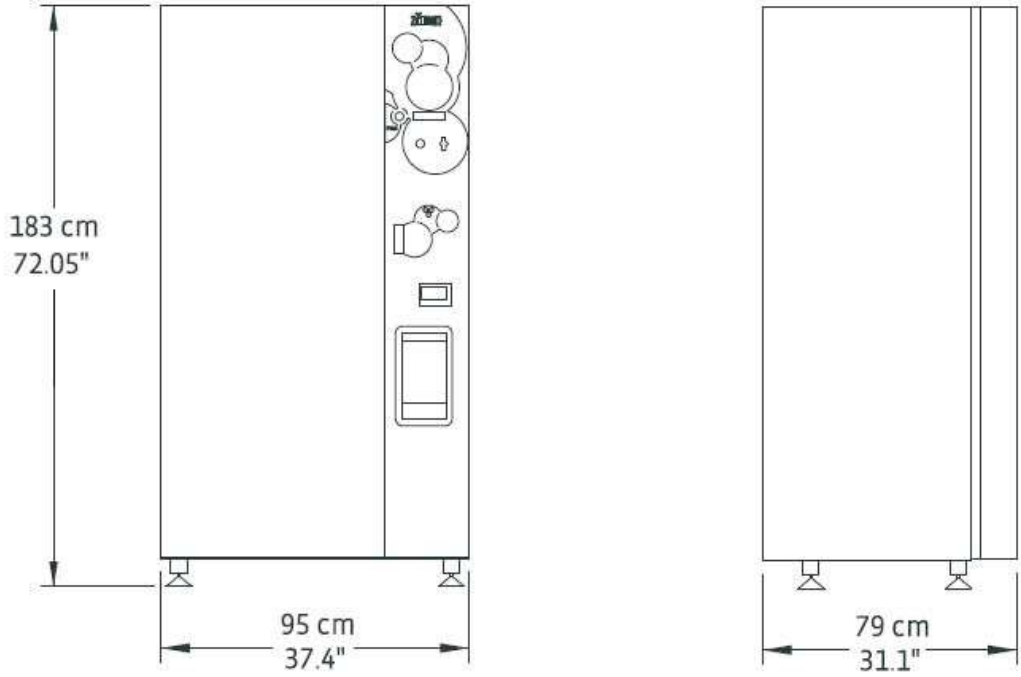
Always provide the Serial Number on the ID label when contacting the Technical Support Service.

CE

* Certifications vary depeding on the model, check machine’s ID label.

4. TECHNICAL CHARACTERISTICS

Dimensions (Width x Height x Depth)	95 x183 x 79cm
Weight	310 Kg
Orange storage capacity	45 -50 Kg
Serving before refilling	100 – 120 glasses
Temperature of the machine	Adjustable 5 ºC -16 ºC
Individual serving time	Adjustable (from 30 to **55** sec)
Serving volume	Adjustable 170 ml -190 ml
Outside work temperature	10º - 50º C
Maximum water input pressure	6 kg/cm2)
Average energy consumption	0.49 kWh
A-weighted pressure level	Less than 70 dB



5. START UP

5.1. MACHINE INSTALLATION

5.1.1. TRANSPORTATION AND STORAGE

- Loading and unloading must be done with maximum care.
- The machine must be raised with a motorized or manual forklift, being careful to avoid damaging the lower screen support with the forklift prongs.
- Store the machine in a dry place with temperatures between 0 - 50º C.
- Do not store or install the machine outdoors.
- Once installed, lock the machine immediately in place to avoid movement.

DO NOT

1.- Tip the machine over.

2.- Drag the machine with ropes or similar.

3.- Raise the machine from one side only.

4.- Raise the machine with pulleys or ropes.

5.- Shake or jerk the machine and its packaging.

5.1.2. UNPACKING

- Remove packaging being careful not to scratch the machine.
- Inspect the machine inside and out to verify whether it has been damaged. Notify the carrier of any problems.
- The keys for closing the door are fastened with a cable tie to the upper rear rack of the machine. These keys are used to access the inside of the machine for operational and maintenance work.

5.1.3. INSTALLATION WARNINGS

The machine should be placed on a smooth, level surface. For proper operation, it is necessary to ensure that the machine is level by adjusting the four feet. The leveling blocks can be turned using a spanner until they are in the correct position. Proper leveling will avoid possible problems with door closing and displacement of liquids insides the machine. For adequate ventilation of the electronic controls and proper functioning of refrigeration, the **MINIMUM** distance between the back of the machine and the wall is **200** mm.

5.2. CONNECTIONS

5.2.1. ELECTRICAL CONNECTIONS

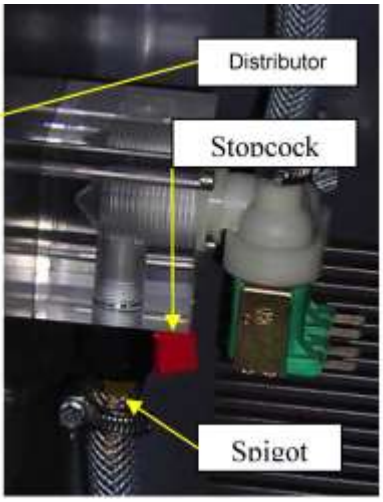
The machine should be connected to the electrical network indicated on the machine label (**220V 50Hz or 115V 60Hz**). The power connection line must withstand 10 amperes and must be grounded. These characteristics must be verified with a multimeter before connecting the machine. Once the machine has been connected, the effectiveness of grounding must be checked.

The machine must be placed in such a way that the plug is visible.

WARNING
• THE MACHINE MUST BE CONNECTED TO AN OUTLET WITH A DIFFERENTIAL CIRCUIT BREAKER, MAGNETO-THERMAL CIRCUIT BREAKER AND A GROUND. • IF THE POWER CABLE IS DAMAGED, IT MUST BE REPLACED. CONTACT YOUR DISTRIBUTOR.

5.2.2. WATER INLET CONNECTION

The machine features a general distributor with two electro-valves that control water supply to the gun and to the squeezing mechanism, which is equipped with a 3/8 G female threaded stopcock and/or a spigot with a 12 mm exterior diameter, to which the water inlet is connected, either from the water pump of the standalone, 10-liter tank or from the drinking water network.




3/8 G female stopcock

12 mm spigot

5.2.3. CONNECTION TO WATER NETWORK
Characteristics of water network and intake connected to the machine:

Water must be taken in through reinforced-core flexible tubing with a 10 mm interior diameter that is able to withstand pressure up to 12 Kg/cm^2.

Water in this intake must be **drinkable**.

Network pressure must not be above 4 Kg/cm^2.

The water intake must have a stopcock for emergencies.

What to consider when making the connection:

If pressure is above 4 Kg/cm^2, install a pressure regulator that will limit pressure to 4 Kg/cm^2.

Before connecting the machine to the network or disconnecting it, close the stopcock.

Purge the network to avoid solid particles entering the electro-valve.
Be sure there are no leaks in the connection before finalizing it.
If there is an external risk of freezing, the water intake must be insulated.

5.2.4. CONNECTION TO THE WATER PUMP

If an external intake from the water network is not available, the machine has a standard set of independent mechanisms, including a self-aspirating 2 Kg/cm2 pump and a 10-liter water tank, and the machine is programmed to operate in this mode. Its operation in automatic mode is identical to that of the machine when it is connected to the water network (check **P7**, programming parameters: WATER SUPPLY MODE). If this mechanism has been dismounted, the following steps must be taken to reinstall it.

Put the pump in place and connect the plug for the 24V DC pump..

Connect the pump outlet tube to the spigot of the water intake distributor and tighten the flange.

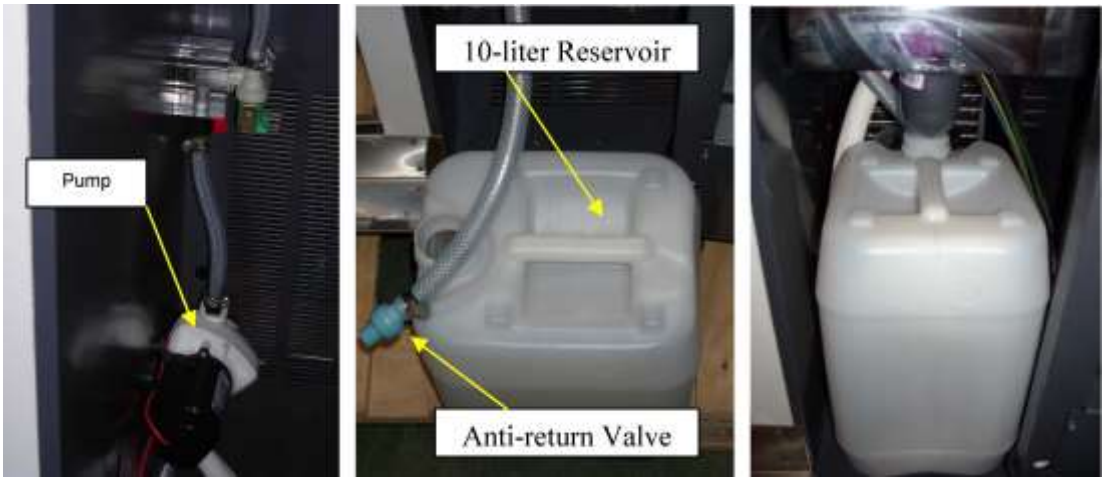
Put the pump aspiration hose with the anti-return valve inside and maintain the anti-return valve at the bottom of the water container.

Adjust the operating mode: check **P7**, programming parameters, WATER SUPPLY MODE and select option 2, ***standalone***.

To use the gun, press the key with a gun symbol to start the pump; it will stop after fifteen seconds.

(Direct action on the key from the **ZUMEX VENDING VERSION 2.x** screen).

Whenever the machine is examined, the water reservoir should be filled.



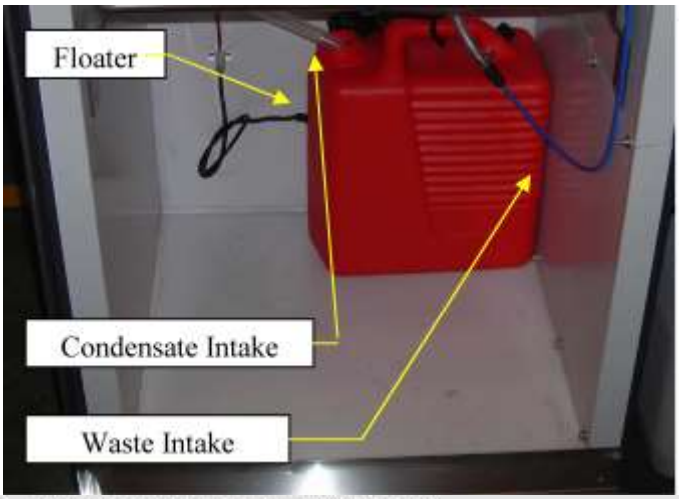
5.2.5. DRAIN CONNECTION

DRAINAGE CONTAINER

As a standard feature, the machine includes a container that functions as a drainage collector in its lower part (behind the trash bag). Cleaning process water and water from the evaporator drain into this container from two points. The container has a capacity of approximately 11 liters and features a floater to indicate filling level and communicate filling status to the CPU by means of a connection located on the lower left side of the machine.

WARNING
• WHEN YOU TAKE THE DRAINAGE CONTAINER OUT TO EMPTY IT, CHECK THAT THE FLOATER IS IN THE CORRECT POSITION, INDICATED BY A BLUE DOT. IF YOU INVERT THE FLOATER POSITION, THE MACHINE WILL ASSUME THAT THE CONTAINER IS FULL AND WILL NOT FUNCTION.
• WHEN THE CONTENTS OF THE WASTE CONTAINER HAVE BEEN EMPTIED, PUT THE CONTAINER BACK INTO PLACE, BEING VERY CAREFUL THAT THE 40-MM-DIAMETER WASTE INTAKE TUBE AND THE SILICON TUBE FROM THE EVAPORATOR CONDENSATION TRAY (REFRIGERATION UNIT) ARE PERFECTLY POSITIONED INSIDE THE CONTAINER.
• THE CONTAINER LID SHOULD BE LEFT OFF IN ORDER TO ENCOURAGE COLD AIR RE-CIRCULATION IN THE GLASS DISPENSER..

WASTE CONTAINER FLOATER = FULL WASTE CONTAINER FLOATER = EMPTY



6. MACHINE OPERATION

6.1. GENERAL MACHINE FEATURES

- Juice is **squeezed when it is requested**, and only the amount of juice to be consumed is squeezed.
- The machine has a **filtering system** that allows serving the juice free of pulp and seeds.
- The squeezing system provides **exceptionally high-quality juice**, since essential oils are not included because the orange skin is not crushed during the squeezing process.
- The time required to obtain a glass of juice is approximately **30 to 55 sec** (depending on the type of serving).
- It is possible to **adjust juice temperature** to personal preferences.
- The machine has an **automatic and programmable cleaning system**, which can be personalized according to different parameters to be triggered after X number of glasses or once a day at a predetermined time.
    - **Juice production can be programmed using two options:**

    - **BY JUICE LEVEL:** Squeezing is done by **measuring the level of juice** in the glass, which ensures that customers always received an exact quantity of juice.

    - **BY NUMBER OF ORANGES:** Juice is obtained by **programming the squeezing of a predetermined number of oranges.** In this mode, oranges are never visible in the juicer.

- The system of orange **supply** is **flexible**, since it allows using oranges with recommended diameter 65-78mm (maximum 81mm).
- The oranges storage bucket, the squeezing system, the glass dispenser and the waste compartment are all **refrigerated**.
- Evaporator defrosting takes place in a positive way with respect to the interior temperature of the refrigeration circuit at each FRIGO OFF. In addition, the refrigeration unit (evaporator) has a complementary defrosting system using an electric resistor that can be programmed to a specific time.
- The **machine** is completely **modular** and allows easy mounting and dismounting of these modules, without tools, which is a great help for maintenance.
- Thanks to the machine's simplicity and robustness, **maintenance** required is **minimal**.
- MDB protocol payment Systems (coin aceptor, bill validator, cashless

solutions). **Ask for the list of payment systems recommended by Zumex.**

6.2. SERVICE MODE PROGRAMMING

6.2.1. FAST SERVICE OR BY NUMBER OF ORANGES

WARNING: When you use this operation mode, it is necessary to fill the orange feeder basket and to maintain the infrared sensor (supply barrier) according to the instructions found in section 4.5.1 ORANGES.

1º.-Enter second-level configuration via password (press “Menu” first, and “Del” secondly. Enter password and confirm with “Menu”)
2º.-In parameter **P11** select the size of oranges to be used (1 = small, 2 = medium, 3 = large).
4º.-In parameter **P13**, select the **“1-FAST”** option or squeezing *by number o*f *oranges*. The infrared sensor will be activated automatically.
5º.-Using the keyboard, introduce the number of oranges that you want that the machine squeezes per juice service. Make sure that the feeder tube is empty and the squeezer system does not contain oranges, and press “1-YES”.

6.2.2. NORMAL AND FINE – SERVICE BY JUICE LEVEL

1º.-Enter second-level configuration via password (press “Menu” first, and “Del” secondly. Enter password and confirm with “Menu”).
2º.-In parameter **P11** (fig. 30 and fig. 31), select the size of oranges to be used (1 = small, 2 = medium, 3 = large).
3º.-In parameter **P12**, select **“1-NORMAL”** option: FINAL LEVEL OF JUICE IN OPTO 5; or “**2-EXTRA**” option for Final level of juice in OPTO 6.
4º.-In parameter **P13**, select option **“2-NORMAL”** or **“3-FINE”**.

6.3. USER MACHINE OPERATION

- Insert cash (coin slot, bill holder), card or prepaid (cashless) key.

- Push the **YELLOW** button to request juice. YELLOW: JUICE REQUEST

- The automatic glass dispenser extracts a glass, which is detected by the machine (If, for some reason, an error is produced and the glass is not extracted, the system will try again two more times; if the problem persists, the machine returns the money and goes out of order until the next scheduled technical visit)

- The orange feeder bin starts to rotate, allowing the oranges to fall one by one to the squeezing system, which will start into action. This process continues until the correct level of juice in the glass has been detected.

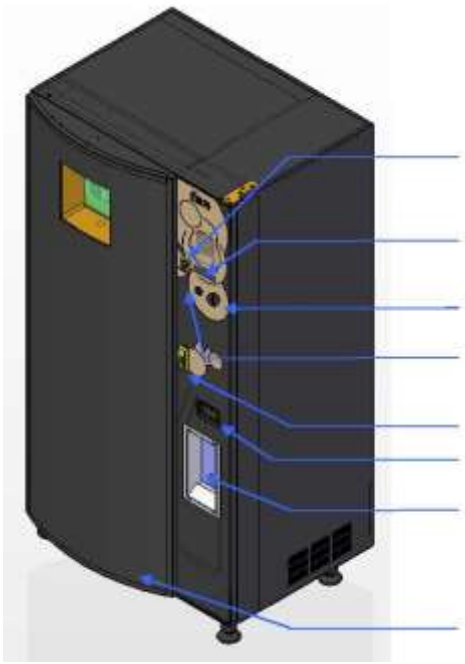
- If programmed P13 = “1-FAST”, the feeder will let fall only the number of oranges programmed in this mode.

- Once the proper level or correct number of oranges has been detected, the filter is cleaned by the sweeper. When this is finished, payment is collected, **a signal (2 beeps) is heard and** a **light turns on in the glass holder (during** 5 **seconds)**, indicating that the glass may be removed and that the machine is ready for the next request.

COMMENTS:

- The maximum number of oranges that can be programmed for a serving is six (depending on programmed size).
- To avoid unnecessary manipulation, the glass holder has a safety system that, in case of manipulation, considers that a serving is finished when a maximum of three oranges have been squeezed and money is not returned.
- The machine is programmed for a maximum serving time. If this time has elapsed and the required level in the glass has not been reached, the machine returns the money and goes out of order (remember this when using oranges that do not contain much juice).
- ***Coin slot and/or bill tray:*** When juice is requested using the coin slot or bill tray, the machine collects payment once the juice has been correctly served and returns money if the programmed level has not been reached, the number of oranges programmed has not been squeezed or there are no more glasses in the glass dispenser. If a bill validator has been installed together with the coin acceptor, special attention should be paid to filling all the coin tubes with an adequate amount of coins and to limiting the value of bills accepted, so that the machine will not accept a bill and then be unable to give change or it runs out of change. If this happens, the machine will go OUT OF ORDER. In the same way, we recommend that when a bill validator is installed, one of the coin tubes should contain the unitary fraction of bills (for example: if euro bills are accepted, one of the coin tubes should hold €1 coins).
- ***Card slot or cashless key:*** When juice is requested using a credit card or cashless key, **the machine charges for payment as soon as juice is requested (when yellow button is pushed).** If for any reason the juice is not served correctly, the machine will return the amount to the card. Therefore, IT IS A GOOD IDEA TO LEAVE THE CARD IN THE CARD SLOT DURING THE ENTIRE JUICE PREPARATION PROCESS.

6.4. MACHINE PARTS



Juice Request Button

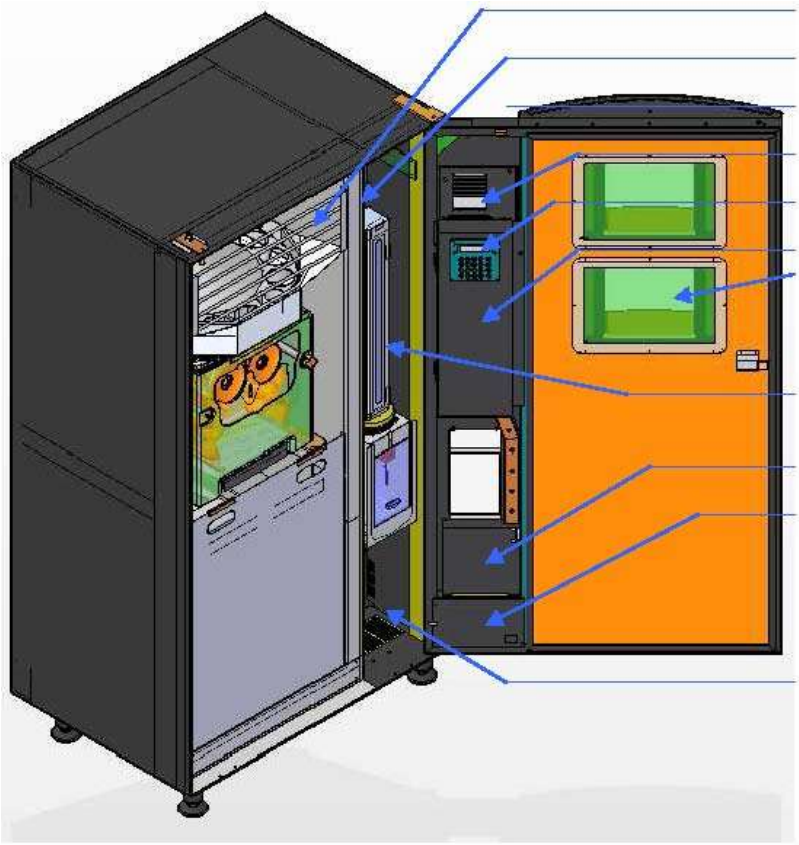
Outside Display

Coin Slot

Return Button

Lock Money Return Box Glasses Window

Cover



6.4.1. DOOR COMPONENTS

Orange Feeder Power Card Pressing Unit Bill Compartment Inside Display Coin Compartment Windows

Glass Dispenser

Coin Box Lighting Unit

Potable Water Reservoir

1º.-*Lighting Unit:*

Composed of two fluorescent tubes, ballasts and ballast starters, with programmable switch for lighting the cover (fig. 1).

2º.-*Cover:*

The company's standard advertising is placed here (fig. 2).

3º.-*Coin Slot:*

Used for inserting the amount of coins necessary to obtain the product (fig. 3).

4º.-*Return Button:*

Used to free inserted coins and recover them (fig. 4).

5º.-*Juice Request Button:*

Located to the left above the return button; pushing it activates the juicing process (fig. 5)

6º.-*Coin Return Box:*

Located in the lower part, it is used to provide change or return coins that have been inserted (fig. 6).

7º.-Glasses Window:

This is opened to lift out the glass of juice (fig. 7).

8º.-*Outside Display:*

Screen on which the machine shows information needed by the customer (fig. 8).

9º.-Door Windows:

Windows through which oranges stored in the feeder and the pressing group can be seen (fig. 9).

10º.-Closing the Door:

Put the key into the door opening (fig. 10 A) and turn it to the right (fig. 10 B), which frees the handle; turn the handle 90º to the left (fig. 10 C).

3º 4º 5º 6º 7º 8º

10ºA 10ºB 10ºC 9º

6.4.2. INTERNAL PARTS

11º.-Feeder:

Feeder with an approximately 50 kg capacity (depends on orange diameter). Electronically controlled, it supplies the pressing unit with the oranges necessary for the juicing process.

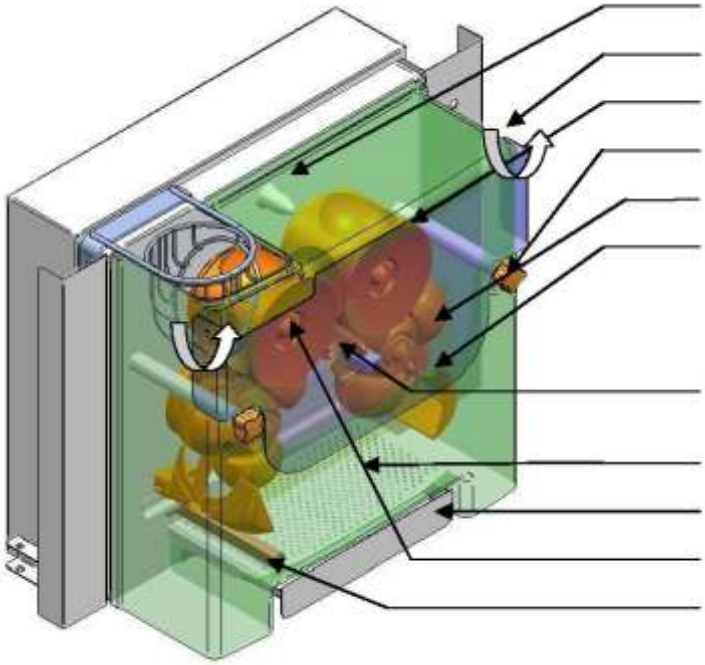
12º.-<u>Pressing Unit:</u>

The Zumex juicing system allows squeezing oranges when juice is requested.

Always be sure that the peel ejectors are correctly positioned to facilitate passage of the peels to the peel collection bag.

To dismount the pressing group, proceed as follows:

Raise the door of the outside cover and take off the inside cover.
Remove the two cover knobs.
Remove front cover; do not push on the inside shield; this might bend it.
Remove the two peel ejectors.
Remove the blade (manipulate with care).
Unscrew the (4) knobs that maintain the pressing units in place.
Remove pressing units

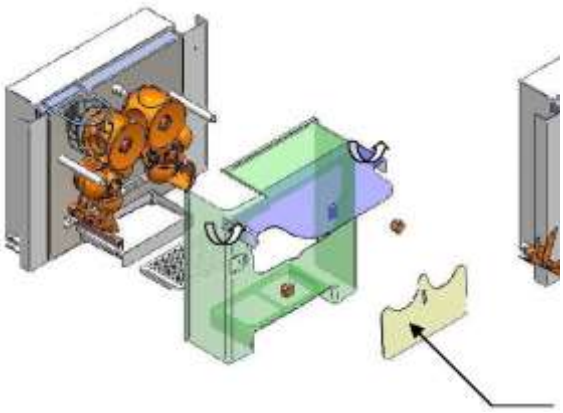


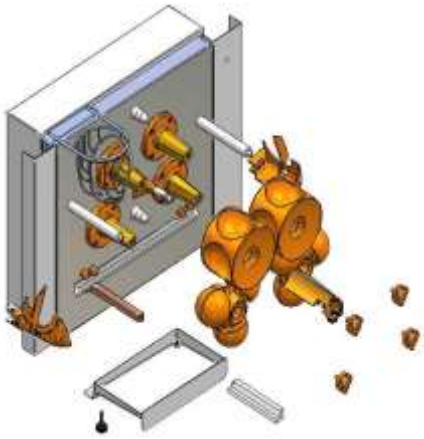
Cleaning Diffuser Nozzles Front Cover Upper Pressing Unit

Cover Knobs Lower Pressing Unit Peel Ejectors

Blade Holder

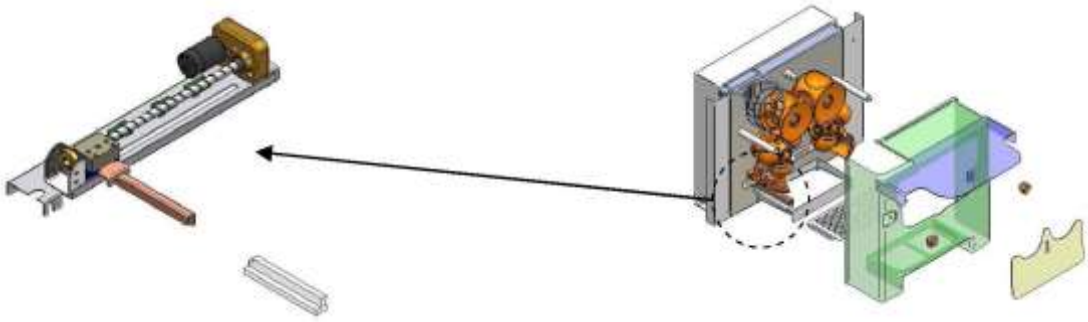
Filter Juice Tray Pressing Unit Security Knobs Cleaning Brush





13º.-<u>Sweeper:</u>

This sweeper comprises a system for eliminating juice pulp. When juice comes from the pressing group, it falls on a filter where pulp accumulates. Pulp is then swept away at the end of each juicing process.



IMPORTANT
• WHEN THE COVER IS DISMOUNTED, BE CAREFUL NOT TO LOOSE THE PIECE OF TRANSPARENT PLASTIC THAT ACTS AS A SWEEPER.

14º.-<u>Refrigeration Unit (Compressor, Condenser, Filter and Evaporator)</u>

The Zumex vending machine is refrigerated in the area where oranges are manipulated and includes a temperature probe, which can be programmed to control and act on the refrigeration unit.



Recommended temperature: *8 ºC in summer y 12 ºC in winter.*

For equipment maintenance, the refrigeration unit (evaporator and compressor base frame, fan and condenser) can be completely taken out by dismounting the lower right side panel of the refrigerated cabinet; the compressor base frame is accessible by dismounting the rear grill of the cabinet. This group is electronically controlled so that:

- It will not become blocked by freezing, thanks to an automatic protection system.
- If the temperature control system does not change status within 50 minutes, the machine is stopped automatically for 8 minutes.
- When the safety key is placed into the upper frame, the system disconnects the compressor but not the evaporator fans, which continue to function while the machine remains under electrical power.
- Evaporator defrosting is done is a positive way at the interior temperature of the refrigeration circuit at each FRIGO OFF. In addition, the refrigeration unit (evaporator) features complementary, programmable defrosting at a predetermined time by means of an electrical resistor.
- The compressor is filled with R134A gas, which uses the latest technology and “will not harm the ozone layer”. For refillment, always use this gas with 318 grams, supplied by specialized industrial refrigeration suppliers.

15º.-<u>Glass Dispenser:</u>

Element for dispensing glasses; it will hold 125 glasses.

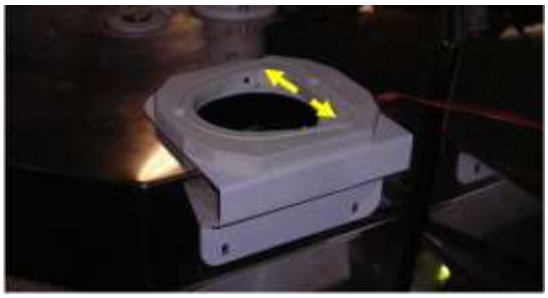
16º.-<u>Optos Unit</u> (infrared optical sensors for detecting juice level)

These elements provide optimal control of juice level and verify that a glass has fallen into place. Electronically managed, they control juice level and ensure that the volume of each drink served is very consistent.



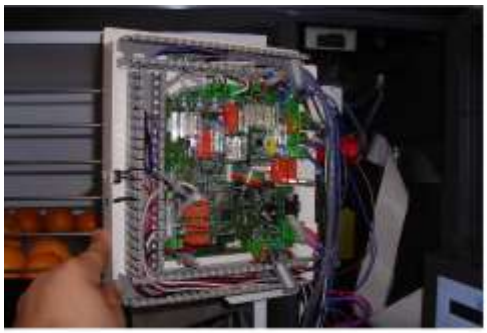
17º.-<u>Infrared Feeder Barrier</u> (infrared optical sensor):

This element controls the passage and number of oranges that are fed into the squeezer system in FAST SERVICE mode.

18º.-<u>Power Card and Control Card:</u>

On the power card, you will find the machine feeding differential, the current filter, the transformer for 24V continuous current and the continuous current stabilizer. On the control card, you will find the microprocessor that electronically manages all machine operations and the control electronics that act as a mediator between the different parts. It also includes protective functions for the different mechanisms and, by means of LEDs, gives information on the status of these mechanisms.




19º.-<u>Keyboard and Inside Display:</u>

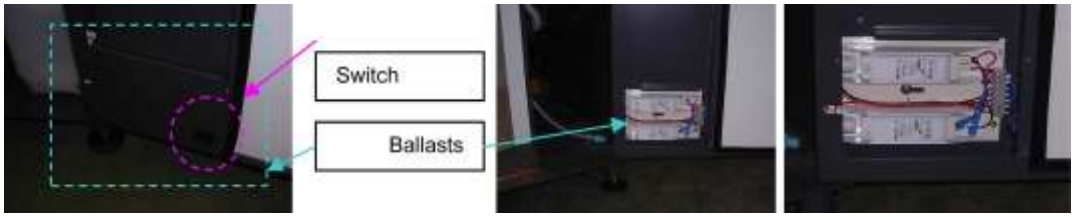
The machine has a keyboard with displays, from which the operator receives information on the status of equipment, as well as on how to access machine programming parameters. The keyboard carries out a series of direct actions on the main parts to ensure their proper functioning.

20º.-<u>Peels waste bucket:</u>

High capacity waste bucket (80 liters) with wheels and handles.

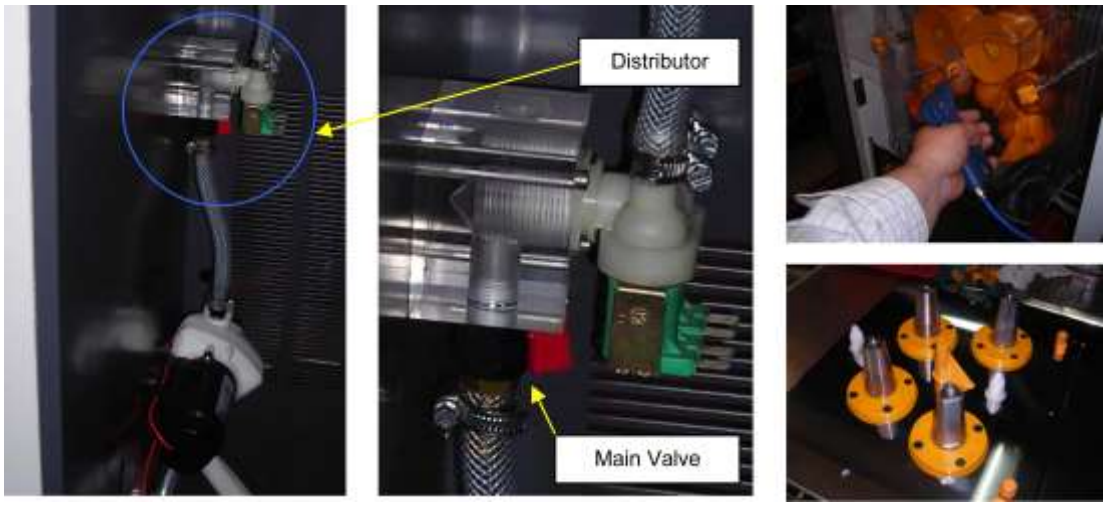
21º.-<u>Switch for Cover Lights and Lighting Unit Power:</u>

This switch shuts off electrical supply only to the fluorescent tubes in the door and to the area where the ballasts and ballasts starters for the tubes are found.



22º.-<u>Water Distributor:</u>

This is a general distributor with two electro-valves that control the passage of water from the external potable water circuit or a standalone tank to the cleaning gun and the pressing unit. To access this element, the glass dispenser must be removed.



23º.-<u>Safety Switch for Door Opening:</u>

This switch cuts off electrical power if the door is opened. To re-establish power supply

and be able to access the different control keyboard modes, you must insert the special key that is found on the upper right corner of the cabinet frame and turn it 90°to the right.



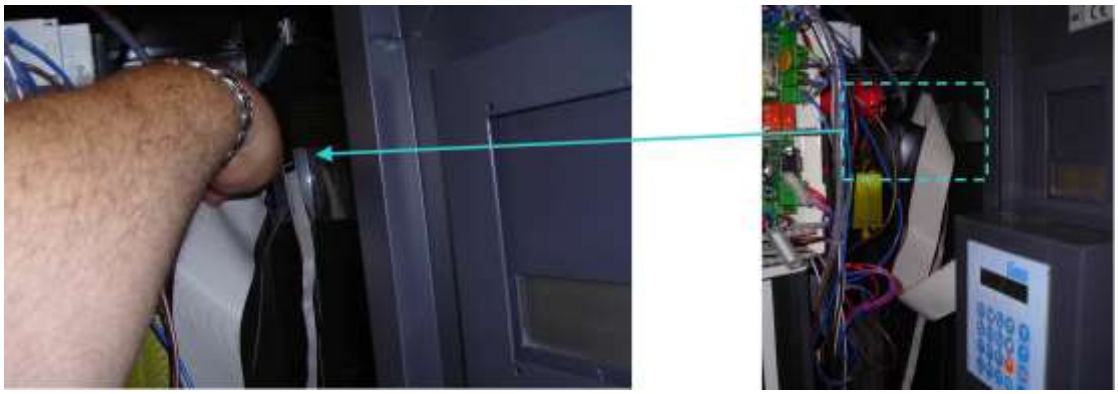
24º.-*Ventilation Grills:*

Ventilation windows are provided for control electronics and refrigeration unit (the minimum distance from the rear of the machine to the wall must be 200 mm).



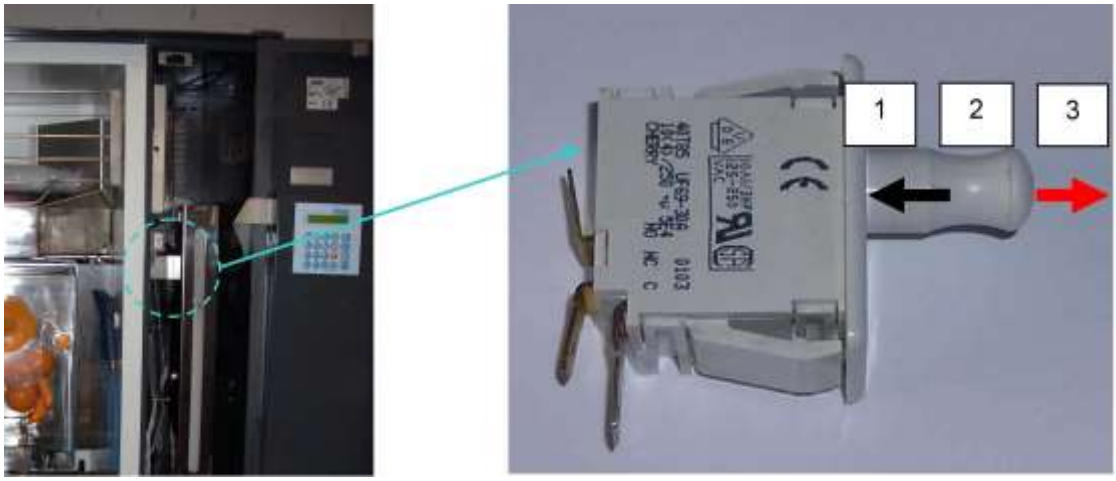
25º.-*Bracket Mounting for Buses:*

If it is necessary to unhook the communication buses from the Optos system or from the outside display, the machine includes a bracket for hanging these elements to keep them from being splashed with water or juice, thereby preventing rusting of the connections when dismounting is done.



26º.-<u>Door Switch:</u>

The role of this three-position switch is to detect whether the door of the cabinet is open (resting position – 2), allowing access to the functions of the inside keyboard, or closed (switch pushed in – 1). This switch has a third position (switch pulled out – 3), which is used by maintenance technicians to simulate a closed door and check the operation of different pieces of equipment.



27º.-<u>Pressing Unit Guides and Mounting Bracket:</u>

The pressing unit is positioned on two sliding guide rails to facilitate mounting and maintenance of the elements assembled in the juicer and the lower area of the feeder. To prevent movement of this unit during transportation, the juicer is held by a fold-down bracket that attaches it to the cabinet with a screw knob, which is found behind the trim on the left side.

To easily move the pressing unit to the outside, it is necessary to remove the silicon tube from the juice tray.

6.5. CONSUMABLES

6.5.1. ORANGES, FEEDER AND SQUEEZER CONSIDERATIONS

REMEMBER: Do not use oranges with diameter larger than 81mm or lower than 65mm. Recommended diameter size range: 65-78mm.	

• To **load oranges**, remember that:

- The storage area contains a lid that can and should be removed for filling.
- When the storage bin is filled half-way, the lid can be put back in place.
- Once the lid is in place, filling can be continued until a maximum of 50 Kg of oranges has been loaded. For this part of filling, the opening located on the front lid of the storage area and designed for loading can be used.
- When the machine door is closed, the opening in the front lid will be covered by the door; this keeps oranges from falling outside and allows complete filling.

CAUTION
Always leave 5 cm of space in the upper part of the feeding bin to allow the stored oranges to rotate without pushing against each other. For proper functioning of the feeder in FAST SERVICE mode, it is IMPORTANT to clean the feeder barrier each time the machine is loaded.

Always leave 5 cm of space in the upper part of the feeding bin to allow the stored oranges to rotate without pushing against each other.
For proper functioning of the feeder in FAST SERVICE mode, it is IMPORTANT to clean the feeder barrier each time the machine is loaded.

5 cm space

1º.-Proceed to clean the barrier on both sending and receiving ends (fig. 1 and fig. 2).

Fig 1

Fig 2

2º.-When loading the feeder with oranges, check to see that none of the oranges is spoiled (this could cause the barrier to function incorrectly when the orange is squeezed, figs. 3 and 4) and that no oranges are left in the barrier opening. If this happens (figs. 5 and 7), and depending on the position of the orange, remove it manually from the feeder through the bottom part (fig. 6) or by moving the feeder with key number 1 (fig. 8). This will open up the hole that is above the barrier (fig. 9 and fig. 10).

Fig3 Fig4 Fig5 Fig6


Fig7 Fig8


Fig9 Fig10

WARNING! If the machine is improperly loaded and one of the oranges remains in the barrier (see fig. 5), the feeder will remain stopped for safety reasons even though the juicer is in operation; this is to avoid possible blocking of the juicer.

3º.-Manually remove the whole oranges that are found in the juicer (fig. 11) and remove the ones that have been cut (fig. 13) by pressing “KEY **2**” (fig. 12).

Fig 11

Fig 12

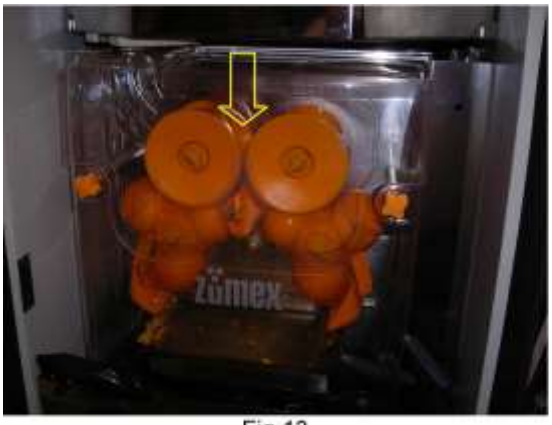


Fig 13

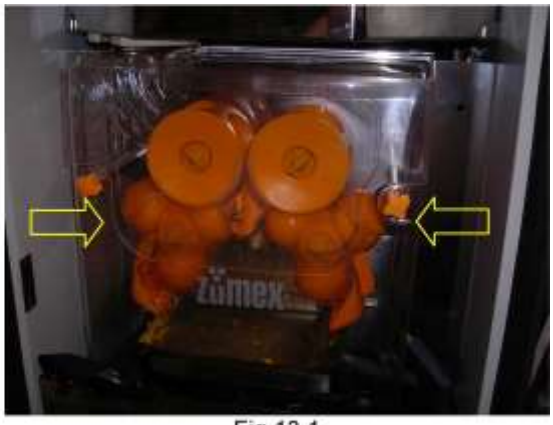


Fig 13.1

6.5.2. GLASSES

We recommend **200/220 cc**, **translucent** glasses with **anti-static treatment** and a gauge thickness of approximately **12 microns**, a 70-mm **exterior rim diameter** and a **maximum height of 94 mm**. We can supply this type of glass in minimum units of one box containing 3,000 glasses.

After placing the glasses on its storage compartment, we suggest you to run your thumb along the length of the stack from bottom to top to loosen the glasses and remove any static electricity that might cause the glasses to stick together.

6.5.3. PEEL WASTE BUCKET BAGS

Bags should measure 105 x 85 cm. In order to avoid tearing, they should be 270-gauge quality (like the bags supplied when the machine is delivered).

6.5.4. PAYMENT SYSTEMS

ZUMEX VENDING can be fitted with any model of coin acceptor, bill validator or card holder which operates with **MDB/ICP version 3.0 24V. A.C**. communication protocol. Multiprotocol models are not allowed.The way it operates is described as follows:

Payment is collected when juice has been served (except for card holders; see section 4.3 MACHINE OPERATION / Comments).

If juice has not been served or there is another type of incident, money can be recovered by pushing the return button.

Price per serving can be indicated on the machine (see section 5 on programming).

ZUMEX GROUP S.A. recommends installing any of the payment solutions mentioned in the table above. Although most MDB monoprotocol version 3.0 systems should operate correctly with our Zumex vending; continuous modifications on the protocol programming by the payment systems manufacturers, which are out of Zumex control, bring Zumex to suggest to its customers a list of payment systems mentioned below (subject to periodical updates).

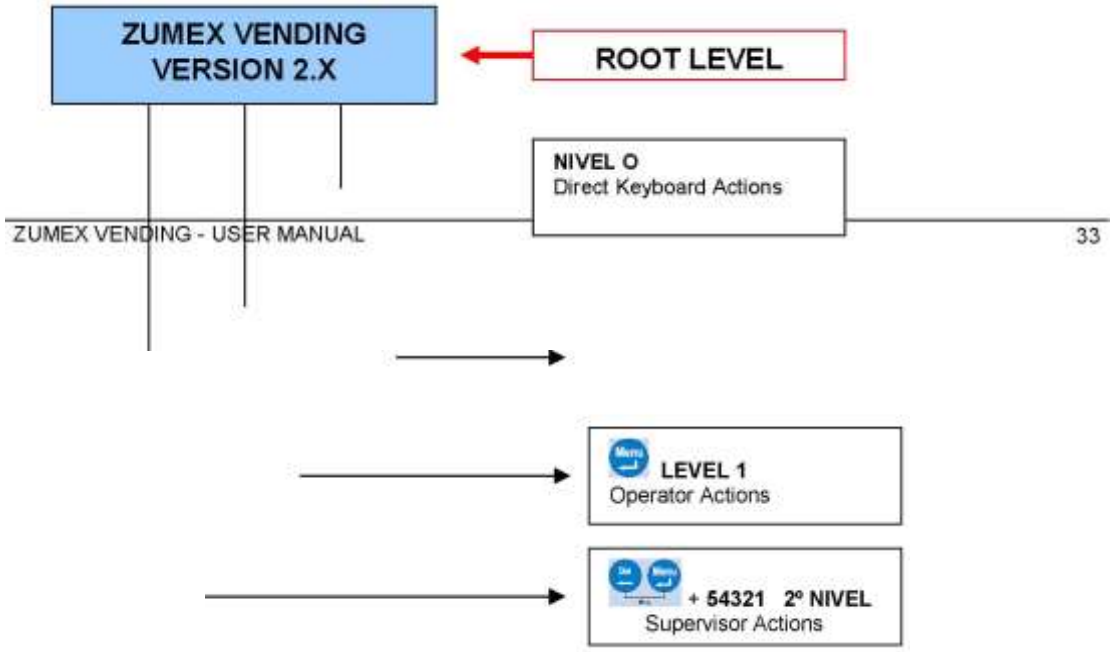
PAYMENT SYSTEMS RECOMMENDED BY ZUMEX GROUP S.A.		
Coin acceptor MDB	**Bill validator MDB**	**Cashless MDB**
Jofemar J2000 MDB	Jofemar BT10	NRI Currenza clip lector MDB
MEI Cashflow 700	NRI CRANE MSMR, Cassette CSTR300	COMESTEROS Eurokey plus MDB
MEI Cashflow 7900	MEI	MARK unikey
MEI Cashflow 690	ICT (ITALY)	Impulsa Flash Cash
MEI EC6000 MDB	ASTRO GBA ST01	Impulsa EMV
Fage Jedy MDB		N&W (MIZIP PLUS) V 2.14
Jedy 5400 MDB		COGES E.C.S. CL Full XL V 2.14
NRI E66		COGES E.C.S. Platinum V 2.14
NRI currenza C2 MDB		
SANDEN SC5E MDB		

7. PROGRAMMING

In this section, we will describe the functions and programming parameters for the machine. We will describe how to use the MICROPROCESSOR programming keyboard, and will show, step by step and in a simple, visual way, how to adapt the machine to specific needs. When the machine is turned on, the inside display (programming keyboard) will show this message:

ZUMEX VENDING
VERSION 2.X

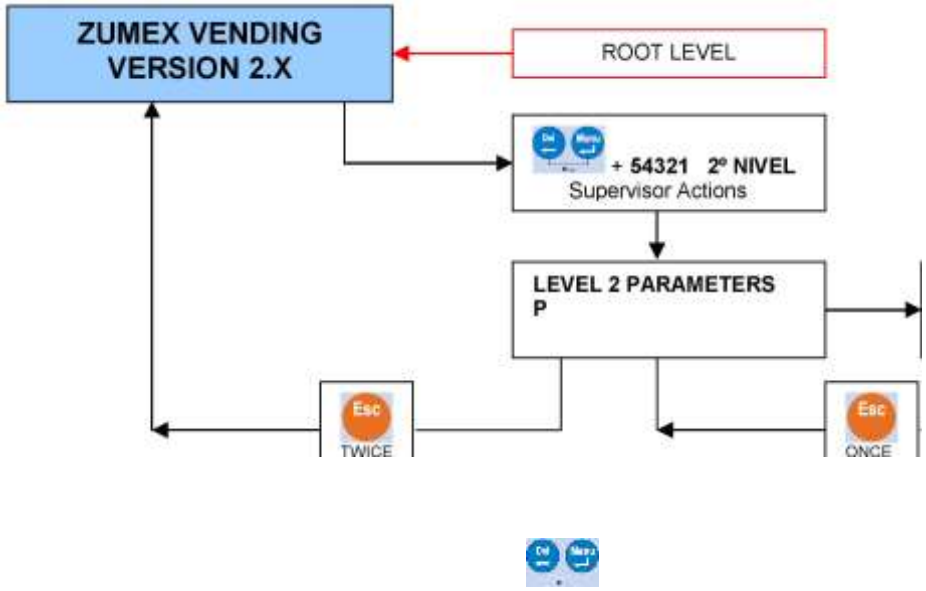
The communication interface has four levels of communication or programming. The most frequently used levels can be accessed by pressing directly on the keyboard. More specific operating instructions or protected operations are obtained using MENU access or through a password at LEVEL 2:



LEVEL 0: (*Operator*) Direct keyboard actions (cleaning, accounting, juices, etc.).

LEVEL 1: (*Operator*) Access by pressing on the MENU key and then on the

parameter P (0, ...,17) to be modified. **LEVEL 2:** (*Supervisor*) Access by pressing on the MENU key and then pressing on the DEL key, which will request a password that, according to the code entered, will provide access to LEVEL 2 (juice price, free juice, Optos off, barrier off, coldness of juice, etc.).



CURRENCY UNIT (€)

7.1. LEVEL 0: DIRECT ACCESS KEYS (operator level)

With this ***"MENU" or "ENTER"*** key, together with "DEL," you can access the PROGRAMMING PARAMETERS. The key acts as "ENTER" for accepting the values you have indicated.

The **"DEL"** key is used to **"ERASE"**, or, if the MENU key has previously been pressed, it will allow entering a password to access programming parameters.

This key, which is among the programmable parameters of Levels 1 and 2, functions as a **DECIMAL POINT** or parenthesis, as well as to obtain special symbols.

The "full glass" key carries out complete juice processing. Among the programmable parameters of Levels 1 and 2, it has the "move ahead one space on the screen" function.

The "shower" key carries out the cleaning process using the two diffusers located strategically for maximum results that spray pressurized water to remove any orange waste that might have been left after the preparation of a series of servings. In this process, the pressing unit starts operation each time the diffusers are activated and the feeder remains motionless.

With the **ESCAPE** key, you terminate actions and return to the main menu.

Test Feeder Motor: By holding down Key 1, you start up the orange feeder or supply bin motor, which causes the bin to turn.

Test Juicer Motor: By holding down Key 2, you start up the juicer system, which makes the drums turn.

Test Sweeper Motor: By holding down Key 3, you start up the sweeping system, which causes the brush to move and clean the filter of bits of peel or pulp that remain in it.

Glass Ejector**:** Pressing on this icon will cause a glass to drop. If a glass does not drop, try two more times.

Water Gun: Pressing on this button readies the water gun for operation (it must be connected to a water intake through the double-body electro-valve) and causes the pump to work for the length of time programmed.

Test Refrigeration Motor: Pressing key 4 will start up the refrigeration motor, which will chill the oranges (wait 10 seconds after pushing key 4 before accessing another function).

Visualize Temperature: Pressing on key 5 will display machine temperature at start-up.

Count Number of Servings: Pressing on this icon will indicate the number of servings that have been prepared. It gives two values:

Count No. Servings:

(1) TOTAL (2) PARTIAL

(1) TOTAL: If KEY 1 is pressed, the total number of servings that have been prepared since the moment the machine was started for the first time will be indicated. Values are represented in the following way:

a. **OK:** complete juice servings.
b. **BAD:** defective servings (glass not filled, not enough oranges, glass taken away, etc.)

TOTAL:
OK000.000 BAD000.000

To leave the serving count screen, press **ENTER**

(2) PARTIAL: If KEY 2 is pressed, it will carry out the same function as above, except that this option can be set at zero for a partial time period; ***the last date of partial count initiation will be shown at the right between parentheses.***

PARTIAL (09.12.2006):
OK000.000 BAD000.000

To set the serving counter at zero, press the DEL key to erase data stored since the previous setting at zero. To leave the screen for counting partial servings WITHOUT ERASING THE FIGURES, press **ENTER**

***Count Receipts*:** As in the previous paragraph, pressing on this icon will show both total (KEY 1) and partial (KEY 2) receipts.

Count Receipts:
(1) TOTAL (2) PARTIAL

If KEY 1 is pressed:

TOTAL:
00.000.000 **€**

If KEY 2 is pressed:

PARTIAL (09.12.2006):
00.000.000 **€**

To set the receipt ***counter at zero***, press the **DEL**

key to erase data stored since the previous setting at zero. To leave the screen for counting receipts WITHOUT

ERASING PARTIAL FIGURES, press **ENTER N.B.:** The sign that appears next to money amounts will be the one programmed in the personalization done using parameter **P21**.

Count Money Tubes: If the key is pressed again from the ***"Count Receipts"*** screen, the contents of each of the money tubes will appear without taking into account the level of security.

Count Receipts: (1)TOTAL (2)PARTIAL

If the key is pressed again from this screen:

0.05 € = 1.25
0.10 € = 0.40

If **ENTER** is pressed again, the following screen will be shown:

0.20 € = 1.80
0.50 € = 2.00

If **ENTER** is pressed again, the next screen is shown (Main Menu). This operation can be repeated as many times as necessary to obtain information about the amount contained in the tubes; you can return to the main menu from any screen by pressing **ESC**

Test Optos: This function checks the photocells (Optos) of the glass dispenser and shows an "OK" message on the inside display screen if emission and reception in the glass dispenser is

correct. If another message is shown, consult the section on error messages (Out of Order).

Optos OK

Optos ERROR

7.2. LEVEL 1: 1st LEVEL PARAMETERS (operator level)

We will have a look at how to program **1st Level** parameters in the MICROPROCESSOR memory. These parameters control values and actions, both internal and external, which determine the conditions and type of service. Parameters are as follows:

P0 CHANGE LANGUAGE **P9** CLEAN DRAIN (WARNING)
P1 NAME **P10** CLEAN GRILL (WARNING)
P2 DATE AND TIME **P11** ORANGE TYPE
P3 TELEPHONE NUMBER **P12** JUICE LEVEL

P4 REFRIGERATION CONTROL	**P13** SERVING TYPE
P5 TEMPERATURE	**P15** PROGRAM LIGHTS
P6 CLEANING TYPE	**P16** VERIFY DISPENSER OPTOS
P7 WATER FEED MODE	**P17** DEFROSING CONTROL
P8 GENERAL CLEANING NO. DAYS (WARNING)	

These parameters are always accessed using the **"MENU"** key in the inside display; the word **"1 st LEVEL PARAMETERS"** and the letter **P**_ with a blinking cursor on the lower line indicate that this is the parameter area. Once inside this area, use the number keys to access the different parameters (from 0 to 9 and the alphanumeric key with the decimal point and always confirm with the  **(ENTER)** key.

Key funtions:

The sequence for showing characters is the one presented as an example for key 1:

A, B,C,a,b,c. Keys to use are: numerical characters for writing, validated using ENTER

and **ERASED** using DEL . If new numerical values must be entered (and not selected from an existing list), the programmed value will appear between parentheses; to the right of the parentheses a blinking cursor indicates that this is where the new value should be entered.

P0 – CHANGE LANGUAGE

The s
preser

With this parameter, you can personalize the language used for communication on the Outside Display (user), as well as for the two programming levels (Operator and Supervisor). The default language is English (2), and other languages can be selected from the menu: 1º.-spa (Spanish) Screen messages 7º.-russian

2º.- eng (English **by default**)
3º.- fre (French)
4º.- ger (German)
5º.- ita (Italian)
6º.- ukranian

IDIOMA/LANGUAGE 1/7:
1.SPA

↓

IDIOMA/ LANGUAGE 5/7:
5.ita

For this parameter, the  keys are used to move up or down the list and the ENTER  key is used to select a language. *The option selected will blink.*

P1 -NAME

With this parameter, you can personalize the name appearing on the machine's Outside Display. Types of characters that can be entered are: alphanumeric or blank spaces.

COMPANY NAME:

The maximum number of characters allowed for indicating a company name is 16.

P2 – DATE AND TIME

With this parameter, you can personalize the date and time, as well as their presentation, according to the target market. Screen messages obtained are:

New Year (2008-2999): (2008) NEW:

New Month(1-12):
(01) NEW:
New Day (1-31):
(01) NEW:

A message will be shown for entering the type of date representation.

1 DD.MM.Y 2 mm.dd.y

The selected option will blink.

The symbol used to separate day, month and year is the period, ".":

Example: **01.12.200**7

The message shown for entering hour and minutes is:

New Hour (0-23):
(00) NEW:
New Minute (0-59):
(00) NEW:
Hour Format
(1) AM-PM (2) 0-24h

The selected option will blink

P3 – TELEPHONE NUMBER

With this parameter, you can personalize the telephone number that will be seen on the Outside Display:

Telephone Number:
(00) 00.000.00.00

To enter the telephone number, press each number one by one in order, allowing the introduction of parentheses and separating with periods. Validate with the ENTER key, and **ERASE** or move to a mistaken character with the DEL and keys. To enter a "New Telephone Number," first erase the existing number with the DEL key, and then proceed to entering the new number.

P4 – REFRIGERATION CONTROL

With the combined "Temperature + Time" program, you can program the way the refrigeration units operates ("on" and "off" time for the compressor), in this way prolonging the life of the refrigeration unit. Under normal conditions, select (1).

1.-TEMP+TIME:Temperature and time.

2.-TEMP (Temperature Only): It is possible to select this option only in case the control card clock is not working and use it until the clock is back to normal.

CONTROL REFRIG UNIT

1.TEMP+TIME 2.temp

The selected option will blink.

P5 -TEMPERATURE

With this parameter, you can adjust the temperature between 5 and 15º C (41 and 59º F), which will be the average temperature inside the machine. **The temperature appearing on the display** (between parentheses) **is the current temperature of the refrigeration circuit.** The first screen message allows you to select the type of temperature unit to use:

TEMPERATURE UNIT
1. ºCENT 2. ºFahren

The selected option will blink; the default temperature shown is 1. CENT (ºC).

When the temperature unit measurement has been selected (in the case where ºC has been chosen), you should enter the refrigeration circuit temperature:

TEMPERATURE (5 ÷15 ºC) (**9** ºC) NEW:

P6 – CLEANING TYPE

With this parameter, you can personalize the type of cleaning that will be done using the water nozzles installed in the pressing unit housing; two types of cleaning are offered:

(1) Cleaning by number of servings (40).

(2) Cleaning at a specific hour (17:00). You

will see the following message on the screen:

CLEANING TYPE (1)No. SERVINGS (2)hour

The selected option will blink on the display screen. In our example, the option selected concerns the number of servings.

When the NUMBER OF SERVINGS option has been chosen, the following message will be shown:

NUMBER OF SERVINGS Number : (40)

If this option is chosen, the default number of servings is 40. If the HOUR option is chosen, the message shown will be:

CLEANING HOUR

If this option is chosen, the default time is 17:00.

WARNING: When the machine is connected for the first time or if the electrical power supply has been interrupted, an automatic cleaning will be carried out for safety reasons.

P7-WATER FEED MODE

This adjusts the operating mode for machine cleaning according to the cleaning program chosen and to whether or not the machine is connected to a **network** or is **standalone**.

The default option is (2) Standalone.

WATER FEED

The option chosen will blink.

(1) Network (2) Stand-alone If neither option has been programmed, the Outside Display will show an out-of-order message: **OFF 14**.

P8 -GENERAL CLEANING NO. DAYS

With this parameter, you can personalize the period after which the operator should carry out a general cleaning of the machine. The default value is (7); i.e., EVERY SEVEN DAYS THE MESSAGE WILL APPEAR accompanied by the date of execution. The screen message is as follows:

GENERAL CLEANING DAYS (7) NEW:

This message appears every time the door is opened and will disappear only if its reading has been confirmed by pressing the

DEL asterisk key once.

The date found on this parameter indicates the last date on which a general cleaning was done and the message shown only on the INSIDE DISPLAY is:

GENERAL CLEANING
00.00.0000

P9 – CLEAN DRAIN AND DISPENSER TUBE

With this parameter, you can personalize the period after which the operator should clean the machine drain to avoid clogging. The default value is (2); i.e., every TWO MONTHS THE MESSAGE WILL APPEAR accompanied by the date of execution.

CLEAN DRAIN (1-6) Months(2) NEW:

The date accompanying this parameter, every **P9** MONTHS, indicates the last date on which drain cleaning was done and the message shown only on the INTERIOR DISPLAY is:

CLEAN DRAIN
00.00.0000

This message will appear every time the door is opened and will disappear only if its reading is confirmed by pressing the

DEL asterisk key once.

P10 – CLEAN GRILL

With this parameter, you can personalize the period after which the operator should clean the dispenser grill to avoid bad smells. The default value is (120); i.e., EVERY 120 SERVINGS THE MESSAGE APPEARS accompanied by the date of execution. The message EVERY 120 SERVINGS is obtained using the following screen:

CLEAN GRILL (1-120)
Servings(120) NEW:

The date accompanying this parameter, every **P10** SERVINGS, indicates the last date on which the grill was cleaned. The message shown on the INTERIOR DISPLAY only is:

CLEAN GRILL
00.00.0000

P11 – ORANGE TYPE :

Here, you can determine the size of oranges to be used, choosing from three types, which can be selected as follows:

- **1. lge:** Large Orange.
- **2. med:** Medium Orange.
- **3. sml:** Small Orange. The

message seen on the screen is:

ORANGE TYPE 1.lge 2.**med** 3.sml

The type **that is blinking (2.med)** is the currently selected typed. Proceed as usual, using alphanumeric characters (1, 2 and 3 only); entering any other value will cancel the action and the program will wait for a new value.

ORANGE TYPE	DIAMETER (mm)
1. LARGE	76 -81
2. MEDIUM	71 -75
2. SMALL	65 -70

WARNING: VERIFY AT EACH LOADING OF THE FEEDER THAT ORANGE DIAMETER IS UNIFORM AND THAT THERE ARE NO DIAMETER DISPARITIES. THIS WILL ENSURE OPTIMAL SERVICE.

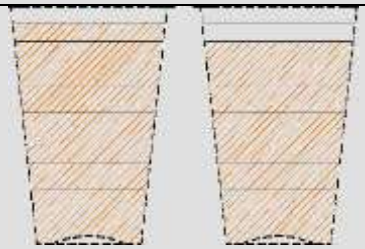
P12 – JUICE LEVEL

With this parameter, you can control the type of serving you want: either *Normal Juice Level* or *Extra Juice Level*, which is monitored with the Optos.

1 **NORMAL JUICE LEVEL:** Final reading of juice level (END OF SERVICE) at **OPTO 5**; juice level is approximately 15 mm from the edge of the glass.

2 **EXTRA JUICE LEVEL:** Final reading of juice level (END OF SERVICE) at **OPTO 6**; juice level is approximately 5 mm from the edge of the glass.

JUICE LEVEL **1.NORMAL** 2.Extra

P12 NORMAL SERVING			P12 EXTRA SERVING			SERVING TYPES
OPTO	READ	% SCREEN	OPTO	READ	% SCREEN	
6			6	SI	100	
5	SI	100	5	SI	85	
4	SI	80	4	SI	68	
3	SI	60	3	SI	51	
2	SI	40	2	SI	34	
1	SI	20	1	SI	17	
0	SI		0	SI		

The currently selected type is the one that **blinks**. Proceed as usual using alphanumeric characters (1 and 2 only). The default JUICE LEVEL for this parameter is **(1).NORMAL**.

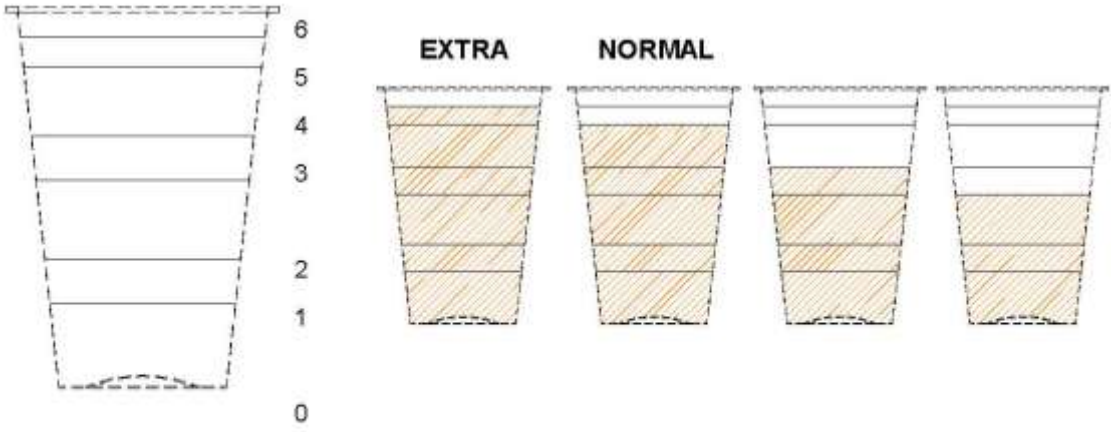
P13 – SERVING TYPE

With this parameter, you can select the quality of juice dosage, since stopping at "OPTO 3" produces finer adjustment that stopping at "**OPTO 4**". When large oranges are used, stopping is always at "**OPTO 2**", independently of desired juice level (NORMAL or EXTRA). You can also program what we call a *Fast Service*, where juice level will depend only on the size and number of oranges programmed. In this mode, *Optos will detect glass presence and glass removal, but not juice level.*

3. FINE-TUNED service (Level WITH OPTOS): Slower service and more finely tuned juice level; start *reading at Opto 3.*

SERVICE TYPE
1.Fast 2.Norm 3.Fine

The current selection **blinks**. Proceed in the usual way using alphanumeric characters (1, 2 and 3 only).
The default SERVICE TYPE for this parameter is **(2).NORMAL**.



Recommendation: With medium and small oranges (P11=small/med) use NORMAL service and with large oranges (P11=large) use FINE service. If you do not want it to work with OPTOS (level sensing), select FAST service (P13="1.FAST").

When P13 = "1.FAST", you can determine the quantity of oranges that are squeezed for each serving. The message seen on the screen is the following:

JUICE ORANGES
LGE(M) NEW(K-L) X

---

1 **FAST service (Level WITHOUT OPTOS):** Juice obtained for each serving depends only on the number of oranges programmed to be squeezed per serving. In this case, a new screen will be presented that asks for the number of oranges to be used per serving.
2 **NORMAL service (Level WITH OPTOS):** Faster service and adjustment of juice at normal level; start *reading at Opto 4.*
3 **FINE-TUNED service (Level WITH OPTOS):** Slower service and more finely tuned juice level; start *reading at Opto 3.*

SERVICE TYPE 1.Fast 2.Norm 3.Fine

The current selection **blinks**. Proceed in the usual way using alphanumeric characters (1, 2 and 3 only).
The default SERVICE TYPE for this parameter is **(2).NORMAL**.

EXTRA NORMAL

Recommendation: With medium and small oranges (P11=small/med) use NORMAL service and with large oranges (P11=large) use FINE service. If you do not want it to work with OPTOS (level sensing), select FAST service (P13="1.FAST").

When P13 = "1.FAST", you can determine the quantity of oranges that are squeezed for each serving. The message seen on the screen is the following:

JUICE ORANGES
LGE(**M**) NEW(**K**-**L**) X

The first three letters on the lower line list the type of orange programmed in parameter **P11** (small = sml; medium = med; large = lge), followed by the size programmed (M) and the new number of oranges to be squeezed (X).

The K to L interval indicates the minimum and maximum number of oranges that can be programmed for each orange size.

Next, you will be asked to confirm if the elbow should be emptied, since there is no default setting for this. If you press 2.NO, the machine will remain in its previous state of service.

EMPTY ORANGE ELBOW
1.yes 2.no

WARNING: If oranges are not removed from the elbow of the juicer or from the squeezer system, oranges will remain visible in the opening; this could cause services with too much juice, since there will be oranges which has not been counted by the barrier sensor.

P15 – PROGRAM LIGHTS

With this parameter, you can personalize when lights should be on at the machine exterior. The selection that **blinks** is the one currently selected. The screen message is the following:

EXTERIOR LIGHT **1.ON** 2.off 3.time

(1) Light on: the light will always remain on.
(2) Light off: the light will always remain off.
(3) Time: with this option, you can personalize the time the light will turn on and off every day.

-For this parameter, the default setting is **(1).O**N

-If you choose the option (3. time), the following messages will be displayed:

HOUR LIGHT ON (0-23)

(XX) NEW:

MINUTE LIGHT ON(0-59) (YY) NEW:

HOUR LIGHT OFF (0-23)
(XX) NEW:

MINUTE LIGHT OFF (0-59) (YY) NEW:

When on and off times have been programmed, you will be asked if you want the machine to be programmed to remain lighted during weekends or if you want it off.

WEEKEND
1. Yes 2.NO

P16 – VERIFY DISPENSER OPTOS

This is used only as indicated by the Technical Service to carry out verifications on the infrared sensors operation. If you press consecutively on the MENU  key, you will obtain a reading of the different OPTOS (Opto 0, Opto 1, Opto 2, Opto 3, Opto 4, Opto 5, Opto 6). If the Opto 0 infrared sensor (the first one listed in the column below) is

working correctly, it will show a value that is random and not necessarily the same each time the **P16** parameter is checked: **this value represents a percentage of infrared beam reception.**

Pressing you obtain reading of Opto 0

Pressing you obtain reading of Opto 1

Pressing you obtain reading of Opto 2

Pressing you obtain reading of Opto 3

Pressing you obtain reading of Opto 4

Pressing you obtain reading of Opto 5

Pressing you obtain reading of Opto 6

P17 – DEFROSTING CONTROL

With this parameter, you can personalize how the evaporation unit that belongs to the refrigeration unit will be defrosted; the default option selected is **2.HOURS**. The first message seen on the screen will be how to select the type of defrosting to be done:

DEFROSTING 1.positive **2.TIME**

1.-POSITIVE (Natural): If you choose this option, each time there is a FRIGO OFF cycle, frost that has accumulated on the evaporator blades will melt because of an increase in temperature produced within the enclosure by the compressor. Thus, with this option, the electric resistor will never be used to defrost the equipment.

DEFROSTING

1.POSITIVE 2.time

2.-TIME (at a predetermined hour): Selecting this option *forces defrosting* of the evaporator by turning on the electric resistor for a period of time ("$t_{RESISOR}$") at a predetermined hour, in such a way that:

a) If, at the pre-programmed time, the refrigeration unit is in operation (FRIGO ON), defrosting will be done during the next FRIGO OFF.

a) If, at the pre-programmed time, the refrigeration unit is at FRIGO OFF,

defrosting will not be done until the next FRIGO OFF.

b) If the door is opened, the program will consider that defrosting has been

carried out using the resistor and will trigger defrosting at the next scheduled time.

The screen message shown when this option is selected is:

DEFROSTING 1.positive **2.TIME**

STARTING HOUR (0-23)
(03) NEW:
STARTING MINUTE (0-59)
(00) NEW:

When defrost starting time has been selected, a new screen will appear requesting the time in ***minutes*** that the electric resistor ($t_{RESISTOR}$) should be turned on.

TIME ON (1÷8) min (**6.0**) NEW:

During this time of defrosting with the electrical resistor (programmed by default at 6 minutes), the following messages will be shown in the exterior display:

WAIT
DEFROSTING

Once the defrosting process is finished, this message will appear:

DEFROSTING
ENDED

WARNING: The formation of frost on the evaporator is strongly tied to the machine's environmental conditions (high humidity, strong sunlight or radical temperature differences between day and night), excessive door opening or leaving the machine run with the door open.

7.3. LEVEL 2: 2nd LEVEL PARAMETERS (owner level)

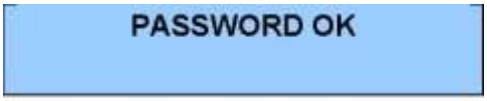
Always enter programming parameters by pressing the "**MENU**" , key; the internal display screen will indicate that parameters are available by showing the words "**1st LEVEL PARAMETERS**" and the letter P_ on the lower line with a blinking cursor.

At this level, pressing the **DEL** key will trigger a request for a “5 digit” password with the message “**CHANGE LEVEL**”. The default password is **54321**, which is indicated on the screen with hidden characters*****, that are validated with the

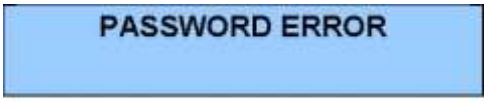
ENTER

key to access the second level.

If the password is correct, a “**PASSWORD OK**” message will appear for two seconds, giving access to ***both first and second level parameters***, and “**2nd LEVEL PARAMETERS**” with the letter **P**_ and a blinking cursor on the lower line will be shown on the screen. The “*Parameter Number*” can now be entered and validated with ENTER.



If the password is not correct, the message **“PASSWORD ERROR”** will appear and you will return to 1st LEVEL PARAMETERS.



Second Level or Supervisor parameters are the following:

P20 CHANGE CURRENCY UNIT	**P24** FREE SERVING
P21 CHANGE SERVICE PRICE	**P25** CHANGE 2ND LEVEL PASSWORD
P22 COLD JUICE CONDITION	**P26** OPTOS OFF
P23 MODEM STATUS	**P27** TURN BARRIER OFF

P20 -CHANGE CURRENCY UNIT

This parameter indicates only the text or symbol that appears next to the price; by default this will be in **euros "€"**. To change it, enter the new unit using the keyboard, following the same series of steps as for entering a name.

CURRENCY UNIT **(€)** NEW:

P21 – CHANGE SERVICE PRICE

With this parameter, you indicate to the MICROPROCESSOR what the price will be for each serving of juice; this price will be communicated to each one of the slave elements (coin, bill and card holders, etc.) in order to collect payment of the amount. The on-screen message is the following:

PRICE SERVING
(1.20)**€** NEW:

The sign that accompanies the price is indicated in P20 (by default, the euro €).
Proceed in the customary manner using alphanumeric characters (from 0 to 9 only) to enter the value; to erase, use **DE**L  and validate with **ENTER**.
N.B.: If no means of payment is connected, the machine will not allow entering a decimal point.

P22 – COLD JUICE CONDITION

With this parameter, you can program machine operation to ensure cold juice "*from the last door opening*". The parameters that intervene jointly with "*from the last door opening*" are:

COLD JUICE CONDITION: 1.yes **2.NO** 3.yes+temp

-By default, the **2.NO** option has been pre-selected.

• ***COLD JUICE CONDITION "2.NO":*** The machine will serve juice from the last door opening, independently of the temperature of the refrigeration circuit, since conditions in the refrigeration enclosure are controlled exclusively by the indicated temperature (T_1) programmed in **P5**.

COLD JUICE CONDITION: 1.yes **2.NO** 3.yes+temp

1º.-If this temperature (T_1) has not been reached after five refrigerating cycles, the

machine will send an ERROR FRIGO message to the Inside Display.
2º.-In any case, this condition **WILL ALWAYS ALLOW THE SALE OF JUICE**.

• ***COLD JUICE CONDITION "1.YES":*** **WARNING.** In this mode it is NOT possible to sell juice because the machine will remain "Out of Order" from the last time the door is opened if the programmed time of X hours (by default two) has not elapsed. This is to ensure that oranges stored inside will remain refrigerated (for example, when the storage bin is reloaded), even though this is unlikely since oranges must be refrigerated during transportation. In this way, if the programmed time period has not elapsed, independently of whether the indicated temperature has been reached, the machine will remain OUT OF ORDER and it will not be possible to sell juice.

WARNING: As an EXCEPTION, sale of juice will only be possible from door closing for a short period of time (30 minutes), independently of whether the COLD JUICE CONDITION is on "1.YES" or "3. YES+TEMP.

If the **1.YES** option has been selected, a screen will appear requesting the time in hours (t_4), which, by default, is (2) hours. Validate:

COLD JUICE CONDITION: **1.YES** 2.no 3.yes+temp

COLD JUICE YES
HOURS(**2**) NEW:

Next, a new screen will appear requesting (T_2), which is, by default, (14)º C. Validate:

INDICATED TEMPERATURE (**14 ºC**) NEW:

When the TWO-HOUR safety time has elapsed, to ensure that oranges are cold the enclosure temperature, Tx, will provoke either of two actions: • If $T_x \geq T_2$ = the machine will remain OUT OF ORDER. • If $T_x \leq T_2$ = JUICE CAN BE SOLD.

• ***COLD JUICE CONDITION "3.YES +TEMP":*** **WARNING:** this condition is more restrictive than the preceding option and is used only IF THE CUSTOMER REQUESTS IT. In this condition "since the last door opening," sale of juice **will NOT be possible** unless the programmed time, t_4, of X hours (by default, 2 hours) and

the T_2 temperature have been reached. After that, if THE T_1 TEMPERATURE programmed in **P5** IS NOT ATTAINED during a refrigeration cycle, **the machine will remain OUT OF ORDER until the next time the door is opened.**

WARNING: As an EXCEPTION, sale of juice will only be possible from door closing for a short period of time (30 minutes), independently of whether the COLD JUICE CONDITION is on "1.YES" or "3. YES+TEMP.

I-When this safety time (t4) is up, in order to ensure that oranges are cold the enclosure temperature, Tx, will provoke either of two actions:

If $T_x \geq T_2$ = the machine will remain OUT OF ORDER.
If $T_x \leq T_2$ = JUICE CAN BE SOLD.

II -If the T1 temperature is NOT attained in the t3 time of FRIGO ERROR TIME, the machine will remain **OUT OF ORDER** and will send an ERROR FRIGO message to the External Display: "**OUT OF ORDER OFF 00**".

When **3.SI+TEMP** is selected, a second screen appears requesting HOURS; default for t3 is (2) hours. Validate. In any case the number of programmable hours will be:

COLD JUICE CONDITION: 1.yes 2.no **3.YES+TEMP**

COLD JUICE YES+TEMP: HORAS:(2) NUEVA:

Next, a new screen will request INDICATED TEMPERATURE (T2), which is (14)º C by default. Validate.

INDICATED TEMPERATURE (14 ºC) NEW:

P23 – MODEM STATUS

With this parameter, you can indicate whether you wish the machine's electronic system to communicate with a MODEM system, specifically the **DACHS DSK200 GSM/GPRS** model. By default, the machine is programmed for the option MODEM ACITIVE **2.NO**. The screens used to activate this parameter are:

MODEM ACTIVE 1.yes **2.NO**

• To activate the MODEM, select the option MODEM ACTIVE **1.SI**.
MODEM ACTIVE **1.YES** 2.no
Enter the PIN for the telephone card that is installed in the MODEM.

Platform No.: If there are various machine locations, enter the number of your machine's site (hospital, etc.).

Telephone number to be called by the machine.

Individual machine identification number (for example, its serial number) if there is more than one machine for each platform.

Indicate whether you want the machine to call at a specific time each day.

CALL MODEM AT SET TIME 1.YES 2.no

MODEM CALL HOUR Hour (0-23) NEW:

MODEM CALL MINUTE Minute (0-59) NEW:

• Indicate whether you want the machine to notify that the door is open.

DOOR OPEN 1.YES 2.no

• ***General MODEM specificationes:***

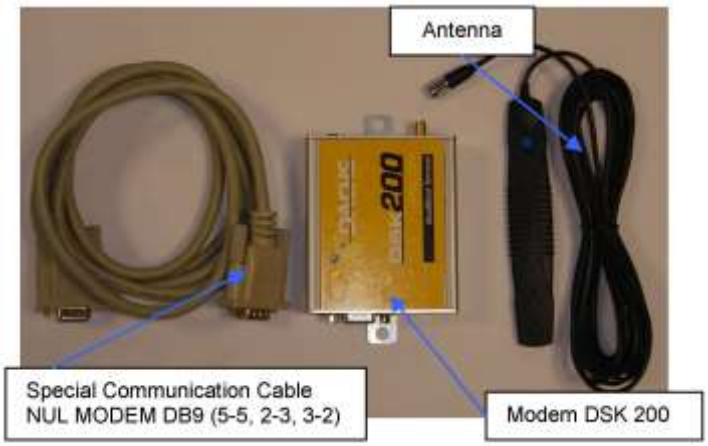
Every two minutes, it checks to see if there are new messages for the machine.

If there is a permanent OUT OF ORDER OFF XX (after three attempts to restart), it will send a programmed message to the telephone.

If the message function is activated at a set time, the machine will send a message at the programmed time.

If the DOOR OPEN option is activated, and after repowering the control card with electrical energy, every time the door is opened the machine will send a message that the door is open. For the next 30 minutes it will not transmit a DOOR OPEN message, since this temporizer is reinitialed every time the door is opened.

N.B.: The machine needs an electrical supply to carry out transmission.



The message format for replying to a message received by the machine or when a programmed message is sent or the door is opened is the following:

1.-Machine identification no., Platform no.: 378125; 25

2.-Transmission time: 20:45

3.-Machine status: If the machine is out of order, the numerical code is indicated (OFF XX). If operation is normal, this is indicated by sending OK.
4.-Temperature: Temperature of refrigeration enclosure.
5.-Total and partial serving counter (Ok): 1.280; 87
6.-Total and partial counter of improper servings (Ko): 10; 3
7.-Total and partial counter of free servings: 27; 0
8.-Door status: OPEN, CLOSED

If the machine is out of order, the message format is as follows:

1.-Machine identification number: Machine registration number.
2.-Time of transmission: Time the message was sent.
3.-Machine status: OFF Error 4.
4.-Temperature: Temperature of the refrigeration chamber.

P24 – FREE SERVICE

With this parameter, you can select the free serving option. By default, this will be inactive, 2.NO.

FREE SERVING 1.yes 2.**NO**

If the 1.YES option is chosen, servings are counted as TRIAL SERVINGS or FREE SERVINGS. When this parameter is active, the price shown on the Outside Display is 0.00 €

P25 – CHANGE 2nd LEVEL PASSWORD

With this parameter, you can personalize the password for accessing the 2nd LEVEL parameters. (We recommend that the SUPERVISOR not change the original password.) The way of proceeding is the following:

You will be asked for the CUSTOMER CODE.

CUSTOMER CODE
54321

You will be asked for a NEW PASSWORD.

NEW PASSWORD
XXXXX

You will be asked to REPEAT THE NEW PASSWORD.

REPEAT NEW PASSWORD
XXXXX

The screen indicates that the password has been saved.

PASSWORD SAVED

WARNING:

IN ORDER TO AVOID PROBLEMS WITH THE MACHINE AND ITS OPERATION, ASSURE TO KEEP THE NEW PASSWORD IN A SAFE PLACE. IF YOU LOSE IT, CONTACT YOUR TECHNICAL SERVICE.

P26 – OPTOS OFF

Here, you can **"DISCONNECT THE OPTOS SYSTEM"** if the machine is out of order because of a problem with this system. In this way, the machine can be kept in operation in "Fast Service" mode, without verifying whether glasses drop into place, until replacements are received.
If you disconnect the Optos and validate the disconnection for a second time, the **P13** parameter will activate "**Fast Service**". Next, the **P14** parameter will be activated with the **Optos OFF** message on the top line. This parameter is programmed by default at 2.NO. The screen message is as follows:

OPTOS OFF 1.yes **2.NO**

If you select 1.YES, you will be asked again whether you are sure the system is disconnected at the level of the Optos.

OPTOS REALLY OFF ?
1.ACCEPT 2.CANCEL

If you validate 1.YES again, the P14 parameter will be activated and the message on the screen will be:

ORANGES SERVING

XXX(**X**) NEW(**K**-**L**) X

In this case, proceed as indicated by the parameter.

P27 – TURN BARRIER OFF

Here, you can “DISCONNECT THE BARRIER” if the machine is out of order because of a problem with this system. In this way, the machine can be maintained in operation in “Quick Service” mode; the pressing system will be fed continuously and will be governed by time and juicing peaks until new parts are received.

WARNING: If the barrier is activated when the machine is programmed for servings by juice level (NORMAL OR MAXIMUM), this will provoke machine malfunctioning and cause the orange to be hacked up, producing servings that are insufficient or without juice.

The message shown on the screen will be:

BARRIER OFF 1.yes **2.NO**

If you select 1.YES, you will be asked again whether you are sure the feeder barrier system has been disconnected:

BARRIER REALLY OFF ?
1.ACCEPT 2.CANCEL

Accepting sends you back to a higher level.

8. SUPPORT: MAINTENANCE AND TROUBLESHOOTING

8.1. INFORMATION MESSAGES

1.1.1.1 ***NORMAL USER OPERATION*** :

FUNCTION	MESSAGE
Machine resting	ZUMEX TLF: 00.000.0000 NATURAL JUICE 00:00 AM 00ºC SERVICE PRICE PRICE 00.00 €
Machine resting without changes	ZUMEX TLF: 00.000.0000 NATURAL JUICE 00:00 AM 00ºC EXACT AMOUNT PRECIO XX.XX €

1.1.1.2

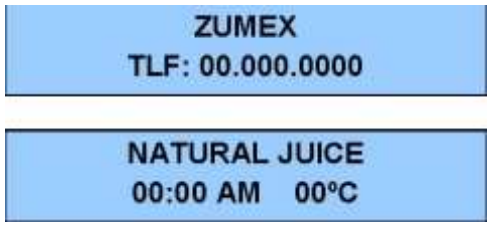
1.1.1.3 ***DURING THE JUICE SERVICE PROCESS***:

8.1. INFORMATION MESSAGES

1.1.1.1 *NORMAL USER OPERATION :*

FUNCTION MESSAGE

Machine resting



Machine resting without changes

FUNCTION MESSAGE

Squeezing oranges. Juice preparation process.

Finishing juice cycle. Sweeper on.

	SQUEEZING 100%
	PROCESS ENDING... WAIT FOR BEEP
End of juice service	TAKE YOUR CHANGE END OF SERVING
	TAKE YOUR JUICE

1.1.1.4 *DURING A CLEANING PROCESS* :

FUNCTION	MESSAGE
Cleaning process operation	WAIT CLEANING PROCESS
End of cleaning process	CLEANING PROCESS ENDED

1.1.1.5 *EVAPORATOR DEFROSTING OPERATION* :

FUNCION	MESSAGE
Defrosting operation	WAIT DEFROSTING

End of juice service

1.1.1.4 *DURING A CLEANING PROCESS* : FUNCTION MESSAGE

WAIT
CLEANING PROCESS

Cleaning process operation

End of cleaning process

CLEANING PROCESS
ENDED

1.1.1.5 *EVAPORATOR DEFROSTING OPERATION* : FUNCION MESSAGE

WAIT

Defrosting operation

DEFROSTING

End of defrosting

DEFROSTING ENDED

8.2. ERROR MESSAGES

8.2.1. EXTERNAL DISPLAY ERROR MESSAGES

The machine can detect problems on its own and announce them on the external and internal displays:

EXTERNAL DISPLAY MESSAGE	REASON	SOLUTION
Out of service OFF 00	Unknown error	Carry out overall verification
Out of service OFF 01	Glass error	Restock glasses
Out of service OFF 02	Orange error	Restock oranges
Out of service OFF 03	Bucket full	Empty bucket
Out of service OFF 09	Feeder motor error	Check feeder motor
Out of service OFF 10	Presser motor error	Check presser motor
Out of service OFF 14	1st LEVEL parameters missing	Machine not programmed (If error persist, consult technical service)

WARNING: When the machine door is opened, the complete error message will appear on the Outside Display. Once the problem has been taken care of, you MUST press the MENU key and ESC to confirm resolution to the system; otherwise, when the door is shut again the error message will persist.

8.2.2. INNER DISPLAY ERROR MESSAGES

On the inside display, different error messages are shown that will help the operator to diagnose the cause when the machine is opened for regular cleaning.

MENSAJE DISPLAY INTERIOR	SOLUCIONES
Error Optos	Thoroughly clean the side panes (left and right) of the dispenser.
Error full bucket	Remove the waste bucket.
Error glass	Refill the glass dispenser.
Error barrier	Clean the barrier photoelectric cells and check their operation
Error oranges lacking	Fill the feeder with oranges.
Error left sweeper	Check end of left sweeper run. Substitute
Error right sweeper	Check end of right sweeper run. Sustitute.
Error excessive refrigeration time	Check the status of the refrigeration unit and the temperature probe connection and verify that the door closes properly.
Error presser motor	Interchange connection with juicer motor and verify operation.
Error motor exprimidor	Interchange connection with storage bin motor and verify operation.

N.B.: To check that errors have been taken care of:

- Press the MENU key and ESC, shut and open the door
- Run a few servings.Thoroughly clean the side panes (left and right) of the dispenser.
- Verify whether operation remains constant.

WARNING: The error message will appear on the Outside Display. Open the door and you **MUST press MENU key first**, and ESC later to confirm that the problem has been solved. If MENU key is not pressed, the error will not be removed and the machine will stay "out of order".

8.3. TROUBLESHOOTING

FEEDER

☒ **1.1.1.6 Problem**

The feeder does not rotate (motor problem)

☑ **1.1.1.7 Solution**

- Verify the status of power card **LEDs**. If you press on **Key 1** and a **green** LED lights up, current passes. If the **red** LED lights up, the fuse is blown. If so, replace it.
- Check the motor connector outlet; invert the feeder connector with that of the juicer on the electronic card and test to see whether both are working. If they are working, the connection might not be making proper contact.
- If the problem persists, check sweeper status.

JUICER

☒

☑ **1.1.1.8 Problem** Nothing is working.

1.1.1.9 Solution

Verify the status of the power card **LEDs**. If you press on **Key 1** and a **green** LED lights up, current passes. If a **red** LED lights up, the fuse is blown. If so, replace it.

Check the motor connector outlet and invert the juicer connector with that of the electronic card power supply and test to see whether both are working. If they are working, the connection might not be making proper contact.

If the problem persists, check sweeper status.

SWEEPER

1.1.1.10 Problemas

Doesn't sweep or appears error message for left or right sweeper.

1.1.1.11 Solución

- Verify the status of power card **LEDs**. If you press **Key 3** and a **green** LED lights us, current passes. If a red LED lights up, the fuse is blown. If so, replace it.
- The left or right microprocessors could be out (REPLACE).
- Verify connection to the motor.

DISPENSER OPTOS UNIT

Optos are infrared photocells that provide the microprocessor with information about juice level; this information is processed and sends orders to the feeder and juicer.

1.1.1.12 Problems

The machine gives insufficient servings or excessive servings that spill over the rim of the glass.

The machine is out of order and indicates “**Error Optos**” on the display.

1.1.1.13 Solution

Clean the dispenser panes (output and input Optos).

Verify the status of Optos using Key 6.

Verify the emission value of each of the seven Optos using the P16 parameter (without a glass present).

Check the complete juicing cycle process; if the problem persists, call your technical service representative.

N.B.:

The juicing process is detected by the OPTOS photocells, which indicate to the machine when it should stop because the glass is full. There are two other operational means for detecting the juicing process: one uses the effort put out by the juicing system and the other uses maximum cycle time (when maximum serving time has elapsed, the machine stops automatically).

REFRIGERATION UNIT AND TEMPERATURE

 **Problems**

- Doesn't work.

Temperature changes abruptly.

Temperature will not lower (it is very high).

 **Solution**

Check to see that the microprocessor clock is set at the correct time and has not been erased. If the time is correct, test its status:

Press Key 5; a sound should be heard (compressor operation). Verify the status of the control card LEDs. If the green LED is on, current passes; if the red LED is on, change the fuse.

Check that evaporator fans work (air comes out of the fans).

Check that the rear of the machine is at least 200 mm from the wall (if it has been pushed against the wall, condenser ventilation will be blocked).

With the door open, pull the white switch handle out to position 3, then check to see whether the evaporator fans expel cold air. After five minutes, check to see if frost has begun to appear on the evaporator tubes.

Check to see if the condenser fan (behind the compressor) is working.

Verify the temperature probe cable located on the plate.

Check that the temperature probe found on the right side of the cabinet is in the correct position.

If the temperature probe is disconnected or broken, it will record a temperature of 33º C.

N.B.:

The microprocessor has a battery to keep time in memory if it has been erased. Check

the connections to this battery. The battery has a lifespan; if the machine has been turned off for four years and is turned on again, the battery will still be active.

DRAINAGE CONTAINER

This system includes a level sensor that will indicate when the container is full and must be emptied. When the container is full, the machine will continue to serve juice but will not carry out cleaning operations. If this is the case and the machine is opened without emptying the container, the machine will go out of order.

N.B.:

Do not disassemble the level sensor.

Problem

Full container, “Continuing Out of Order”.

Solution

Cancel this by making a bridge in the floater connector and disconnecting the pump connectors and the two electro-valves on the power card so that automatic cleaning can occur. In this way, the machine is able to remain in operation until replacement has been effected.

Cancel cleaning by disconnecting electrical power supply to the pump; if the machine is connected to a network, put it in standalone mode.

8.4. MAINTENANCE

LOCK

If it is hard to use, loosen the rear screw somewhat or check machine levelling.

WATER DISTRIBUTOR, ELECTRO-VALVE, GUNS AND NOZZLES

If water is leaking out, check the quick plugs on the tubes; in addition, you can put Teflon in the threaded joint and tighten the screw slightly. WATCH OUT! Avoid excess tightening since this could break the screw.

DRAINAGE TUBE

From time to time, depending on how much the machine is used, remove the drainage tube from the machine and clean it.

DOUBLE-BODY ELECTRO-VALVE ANTI-RETURN VALVE

Both the electro-valve and the anti-return valve have an interior filter that must be cleaned if it becomes obstructed for any reason. We recommend putting another filter between the external water inlet and this inlet to avoid sand or dirt that can be carried by the water to other machine elements.

8.5. USEFUL ADVICE

ADVICE: We recommend placing **something to cover the floor** under the machine in the area under the window where customers take out their serving of juice. This is because juice can spill out here, and, if it is not immediately cleaned up, can cause corrosion and damage floor color.

If the machine is not working for any reason, **DO NOT TURN IT OFF**. Remove the system connection buses so that the machine will not accept payment for serving. The machine will thus continue to be cooled and ensure that the oranges will not spoil while the machine is out of order.

8.6. CLEANING PROCEDURE RECOMMENDATION

There are **two types** of cleaning: **automatic** programmed cleaning that the machine carries out on its own and **periodic** cleaning by the machine operator to maintain the machine in perfect hygienic condition and in proper operation.

AUTOMATIC CLEANING AND REMINDER MESSAGES

Automatic cleaning that is done in the pressing unit using the cleaning nozzles can be personalized with first-level parameters (parameter P6) by choosing between two types:

(1) Cleaning by number of servings (40).

TYPE OF CLEANING

(2) Cleaning at a set time (17:00)

(1) no. servings (2)set time

The water collection reservoir can hold the equivalent of six automatic washings and six washings using the nozzles (this factor should be taken into account when automatic cleaning is programmed, in case there is no exterior drainage outlet).

With parameters P8, P9 and P10, you can program 3 REMINDERS, which will notify when certain parts of the machine should be cleaned. This can be used to plan for cleaning by reminding the machine operator when it is time to clean.

P8 -GENERAL CLEANING BY NUMBER OF DAYS

With this parameter, you can personalize the period after which the operator must make an overall cleaning of the machine.

P9 -CLEANING OF DISPENSER DRAINAGE AND TUBE

With this parameter, you can personalize the period after which the operator must clean the machine drainage system to avoid blockage.

P10 -CLEANING OF DISPENSER GRILL AND DOOR

With this parameter, you can personalize the period after which the operator must clean the dispenser grill and door to avoid bad smells.

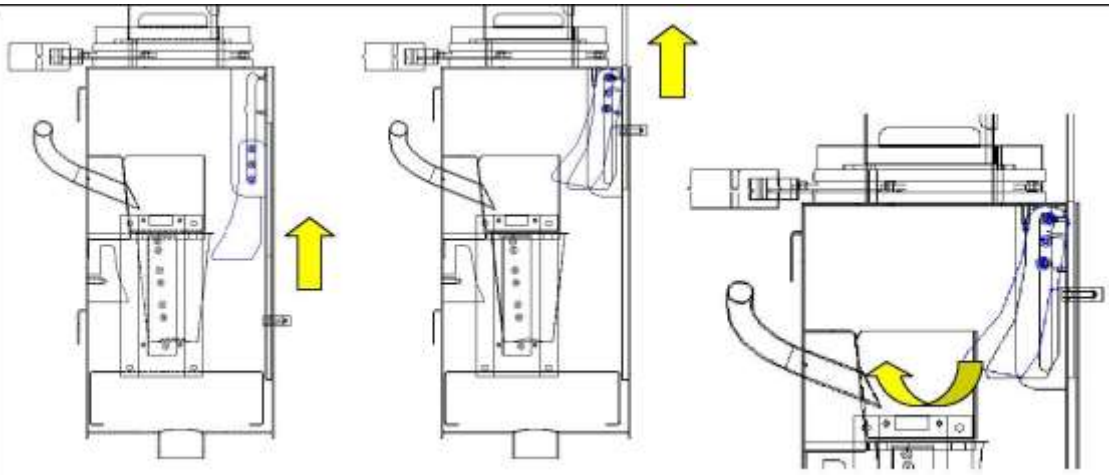
MAINTENANCE CLEANING

Maintenance cleaning is cleaning the operator should do at each visit to the machine. The machine will notify the operator of the type of cleaning to be done, and the machine can be configured to display these messages periodically. Depending on the period of time between visits, maintenance cleaning is organized as follows:

DAILY MAINTENANCE (EVERY VISIT)
The machine has a water gun that the operator can use to clean the juicer, grill and dispenser. To remove the dispenser door: keeping the machine door open, slide the dispenser door up with your right hand until it stops against the upper part. With your left hand, pivot the front stop toward the interior of the dispenser. To replace the door, raise the front stop to the upper area of the slide, pivot it toward the inside of the dispenser, and put the door in place.

The machine has a water gun that the operator can use to clean the juicer, grill and dispenser. To remove the dispenser door: keeping the machine door open, slide the

dispenser door up with your right hand until it stops against the upper part.
With your left hand, pivot the front stop toward the interior of the dispenser.
To replace the door, raise the front stop to the upper area of the slide, pivot it toward the inside of the dispenser, and put the door in place.



Concerning cleaning of the juicing system, at each visit the operator should run an automatic cleaning cycle with the help of the gun, using it on the dispenser as well.

The operator should check to see that there are no orange remains in the storage bin or in the juicer and remove any pieces that might be left.

The contents of the water collection reservoir should also be emptied, being sure to reposition it correctly: the drain tube and the condenser tube should be placed inside the reservoir, being careful to leave the position of the floater unchanged and the lid off the container.

The peel collection bag should be changed and replaced by a new one.

WEEKLY MAINTENANCE

Every week, the silicon tube should be disassembled and water run through the tube that goes from the juice bucket to the dispenser to avoid pulp build-up on the tube walls.

Once a week at minimum, the pressing drums, blade, extractors, juice bucket, filter, screen, etc., should be thoroughly cleaned to eliminate any traces of orange (see cleaning of the pressing unit) or these elements exchanged for a complete replacement set. The filter and the bucket should be cleaned using a brush to eliminate any pulp that might be deposited on the filter. **In order to optimize cleaning and assistance procedure timing, ZUMEX strongly recommends acquiring our accessorie: "13.058.000 – SQUEEZE SYSTEM CLEANING KIT". Ask for further information to our Sales Department.**
MONTHLY MAINTENANCE
Every month, the tube that drops juice into the glass and the drainage tube should be cleaned using a brush or these elements exchanged for a complete replacement set.
It is advisable to use a 5% solution of **water and bleach** to clean the drainage tube from time to time. When cleaning is finished, a number of automatic washings should be done in order to eliminate bleach vapors.

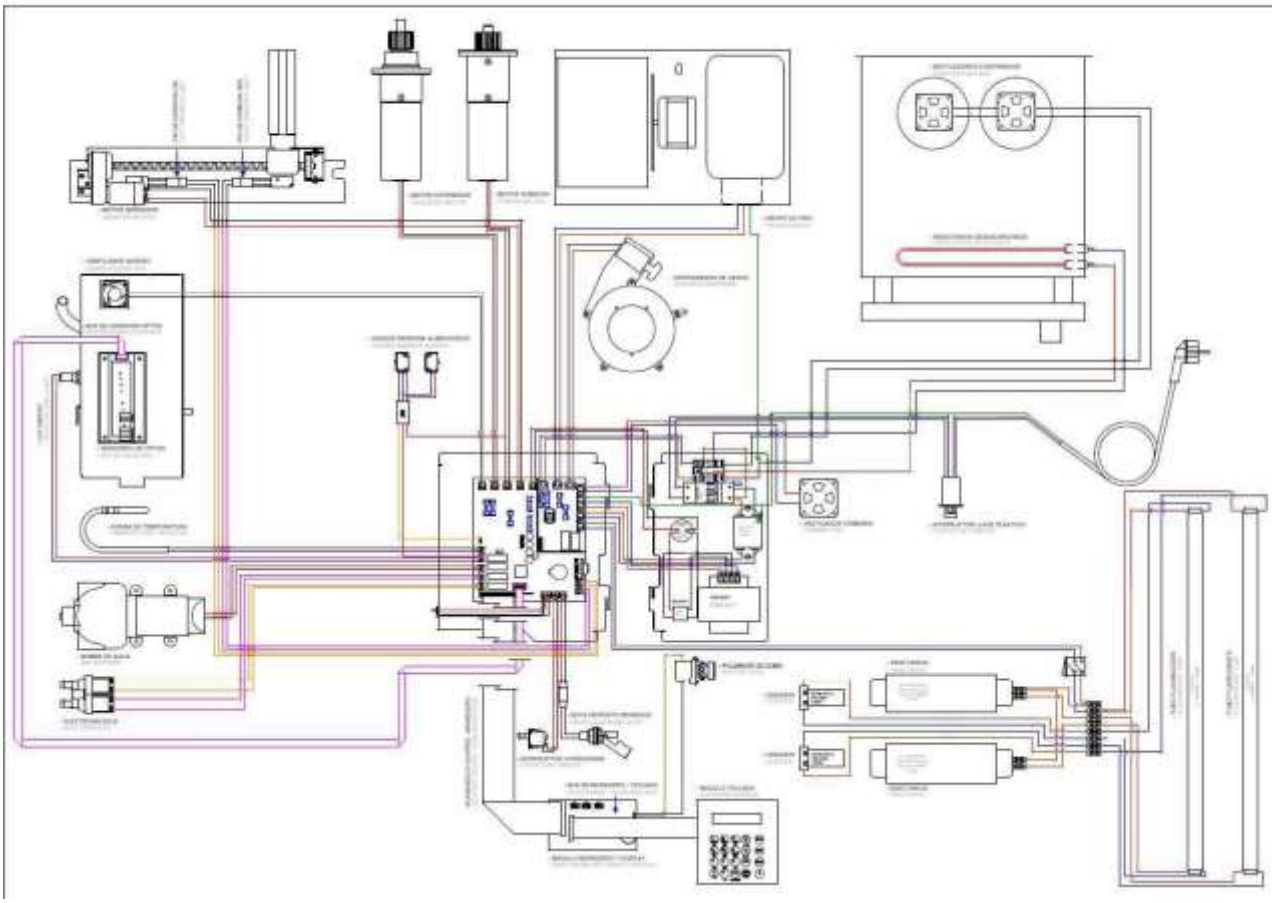
RECOMMENDATIONS FOR CLEANING THE SQUEEZER:

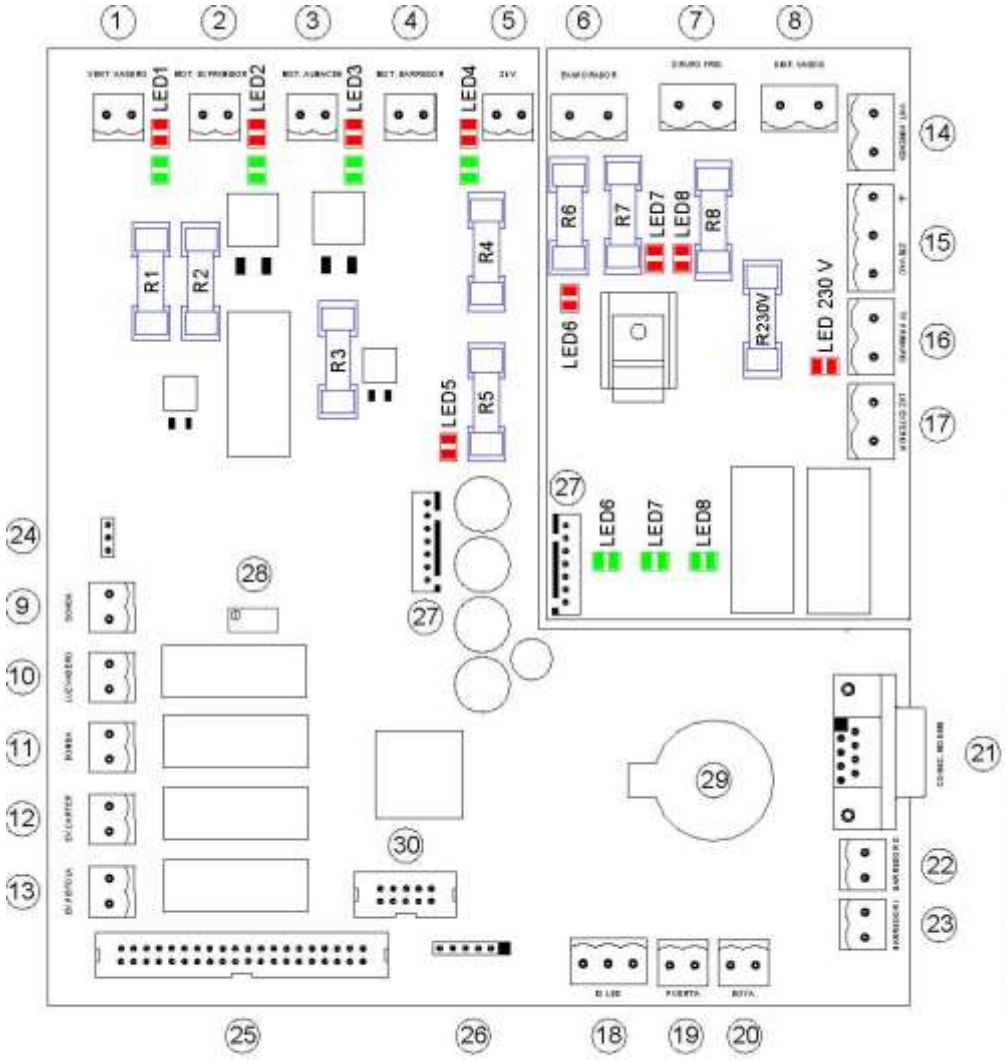
The front shield should not be cleaned with abrasive or anti-limescale products or washed in a dishwasher. In this way, the shield surface will remain shiny. Clean the unit with soapy water and rinse with potable water, then sterilize with a sanitizing solution. Do not use sharp or pointed instruments that might poke holes that will cause cavities where organic matter can lodge.

To clean the outside of the machine, always use a mild detergent and warm water; never use pressurized water.

Do not forget to clean the feeder along with the rest of the machine, using the same products and procedures indicated (if appropriate). Otherwise, a waxy layer will build up that is difficult to remove.

9. ELECTRICAL DIAGRAMS





1 GLASS HOLDE
2 SQUEEZER MO
3 FEEDER MOTO
4 SWEEPER MO
5 24VAC SUPPL
6 EVAPORATOR
7 COOLING UNIT
8 GLASS DISCHA
9 TEMPERATURE
10 GLASS DISCHA
11 PUMP
12 SQUEEZING EL
13 WATER PISTO
ELECTROVALVE
14 VENTILATION
15 SUPPLY 230V
16 EXIT 230V TRA
17 EXTERNAL LIG
18 IG LED
19 DOOR
20 LEVEL SENSO
21 COM. MODEM
22 BRUS RIGHT
23 BRUS LEFT
24 FEEDER INFRA
25 COM. DISPLAY
26 COM. RECORD
27 COM. 230V – 2
28 TEMPERATURE
29 CLOCK BATTE
30 COM. OPTICAL

FUSES:

R1 100mA 5x20F
R2 16A 5x20F
R3 5A 5x20F
R4 3.5A 5x2F
R5 3.5A 5x2F
R6 1A 5x20F
R7 7A 5x20F
R8 1A 5x20F
R 230V 11A 5x20F

LED ■ OK

LED ■ KO

CLOCK BATTERY

1 23456 78

24 V EVAPORADOR

GRUPO FRIO DISP. VASOS

1 GLASS HOLDER FAN

VENT. VASERO

LED1

LED2

LED3

MOT. BARREDOR

LED4

R5 R4

MOT. EXPRIMIDOR MOT. ALMACEN

LED6

R7

LED7 LED7 LED8

LED8

R8 R230VLED 230 V

VNT. HIMENEA230 VAC TF PRIMARIO LUZ EXTERIOR

14

15

16 17

2 SQUEEZER MOTOR 3 FEEDER MOTOR 4 SWEEPER MOTOR 5 24VAC SUPPLY 6 EVAPORATOR FAN 7 COOLING UNIT 8 GLASS DISCHARGER 9 TEMPERATURE SENSOR 10 GLASS DISCHARGER LIGHT 11 PUMP 12 SQUEEZING ELECTROVALVE 13 WATER PISTOL ELECTROVALVE 14 VENTILATION FEEDER 15 SUPPLY 230V

LED6R6

EV.PISTOLA EV.CARTERBOMBALUZ VASEROSONDA

R1

R2 R3 LED5

27

28 16 EXIT 230V TRANSFORMER 17 EXTERNAL LIGHTS

27

18 IG LED 19 DOOR 20 LEVEL SENSOR

21 COM. MODEM

CONEC. MODEM

21 22 BRUS RIGHT

23 BRUS LEFT 24 FEEDER INFRARED BARRIER 25 COM. DISPLAYS

29

30

BARREDOR I BARREDOR D

22 26 COM. RECORDING

27 COM. 230V – 24VAC

23 28 TEMPERATURE CALIBRATION 29 CLOCK BATTERY

30 COM. OPTICAL SENSOR

LED ▒ OK LED ▒ KO CLOCK BATTERY: CR2032 - 3V

IG LED PUERTA BOYA

25 26 18 19 20

FUSES: R1 100mA 5x20F R2 16A 5x20F R3 5A 5x20F R4 3.5A 5x2F R5 3.5A 5x2F R6 1A 5x20F R7 7A 5x20F R8 1A 5x20F R 230V 11A 5x20F

10. CE DECLARATION OF CONFORMITY

Our machines meet safety norms and regulations that guarantee an optimal level of operation for a long period of time and conform to the following inter-coordinated standards:

EN ISO 12100-1 Machine safety. Basic concepts, general design principles. Part 1: Basic terminology, methodology.
EN ISO 12100-2 Machine safety. Basic concepts, general design principles. Part 2: Technical principles and specifications.
EN 60335-2-75 Safety for household and similar electrical appliances. Part 2-75: Particular requirements for commercial dispensing appliances and vending machines.
EN 1672-2 Food processing machinery. Basic concepts. Part 2: Hygiene requirements.
EN 60335-1 Safety for household and similar electrical appliances. Part 1: General requirements.
EN 60335-2-75 Safety for household and similar electrical appliances. Part 2-75: Particular requirements for commercial dispensing appliances and vending machines.
EN 55014-1 Electromagnetic compatibility. Requirements for household appliances, electric tools and similar apparatus. Part 1: Emission. Product family standard.
EN 55014-2 Electromagnetic compatibility. Requirements for household appliances, electric tools and similar apparatus. Part 2: Immunity. Product family standard.
EN 61000-3-2 Electromagnetic compatibility. Part 3: Limits – Section 2: Limits for harmonic current emissions (equipment input current ≤ 16A per phase).
EN 61000-3-3 Electromagnetic compatibility. Part 3: Limits – Section 3: Limitation of voltage fluctuations and flicker in low voltage networks in equipment with input current ≤ 16A.

European Directive provisions are listed below:

98/37/EC Aproximación de legislaciones de los Estados Miembros sobre máquinas. **2002/72/CE** Directive relating to plastic materials and objects designed to come into contact with food products.
93/43/CE Directive relating to food product hygiene.
2006/95/EC Directive relating to the approximation of the laws of Member States on electric material designed for use within certain voltage limits.
2004/108/EC Directive relating to the approximation of the laws of Member States concerning electromagnetic compatibility.
89/336/EC Approximation of the laws of Member States relating to electromagnetic compatibility.