



**SNACKS VENDING MACHINE**  
**models FOODBOX, FOODBOX LONG**  
**USER MANUAL**



**Version 3.4 / November 2016**



Change

Version	Date	Brief description	Pages
3.0	03.2015	Document creation Update of maintenance menu to version 0.49	All
3.1	11.2015	Changing items in the service menu Operator	57
3.2	12.2015	Changing items in the service menu Operator	49,53
3.3	10.2016	Replacing door lock machine model	15,16
3.4	11.2016	Adding an item "Manufacturer's warranty"	7


**COMPLIANCE DATA**

Snack vending machines models FOODBOX and FOODBOX LONG are compliant with the requirements of the European Directives and Standards, listed in the following table:

Directive	Description
2004/108/CE	Electromagnetic compatibility directive
2006/95/CE	Low voltage directive
2006/42/CE	Machinery Directive
1999/5/CE	Artical No 3(1) (b) R&TTE Directive
2011/65/CE	Directive of the European parliament and of the Council of 8 june 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

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## INTRODUCTION

### General information

This user manual (hereinafter called the “Manual”) covers snack vending machines type FOODBOX models:

*FOODBOX*, *FOODBOX LONG* (hereinafter called the “Machine”).

The manual contains basic information about the Machine and its software. It includes the information, necessary for preparation for use, use and technical servicing of the Machine, as well as basic information about the Machine’s software.

This Manual is for the technical and engineering personnel, who provide technical servicing for the Machine and are permitted to handle electrical units of similar category.

Breach of the requirements of the current Manual can lead to trauma, device damage and renders the warranty ineffective. You must read and understand the requirements indicated in the current Manual, before installing and using the Machine, because it contains important information regarding unit safety, and servicing and usage instructions.

The knowledge of safety requirements is necessary to instruct the users to properly use the Machine.

The Machine buyer is responsible to make sure that the serving personnel had undergone needed training and was informed properly and that the instructions of the technical documents were fully observed.

The Machine manufacturer carries no responsibility for damage or loss incurred under the following circumstances:

- In case of unsanctioned modernization;
- In case of improper installation;
- In case of improper power connection;
- In case of cleaning and servicing contrary to the requirements;
- In case of improper operations or use of Machine’s equipment;
- In case of use of non-genuine spare parts.

The manufacturer of the Machine is in no case liable for any possible losses, which might result from interruption of business due to Machine breakdown.

### Supplementary documentation

To better understand the workings of the Machine with peripheral devices, such as cheque printer, Bank Note Acceptor (BNA), coin slot and other devices, which are included in the base composition of the Machine, we recommend that you read the user manuals for these devices and other related documentation.

### Terms of use

The Machine software described in this Manual is only for use in Machine models FOODBOX / FOODBOX LONG. The observation of all the requirements of this Manual is mandatory for the proper functioning of the software.

This Manual is for a certain version of vending machine software, which is current at the time of printing of this Manual.

All possible modifications, modernizations and/or adaptations, which are effected or will be executed in future for following sales, do not mandate the manufacturer to conduct similar modernization of software for the earlier sold Machines, as well as it does not mandate the manufacturer to amend the user documentation, which is a part of the Machine’s package.

The developer of the Machine and regulatory software have the right to make necessary changes to the Machine’s structure, software’s flow and in the documentation for its use without notice to the user.



### **Safety requirements**

It is important and necessary, before the installation and use of the Machine, to read and understand the instructions contained in this Manual, which address important issues related to Machine's safety in use and it's servicing.

Main types of safety that can pose threat to life:



Threat of electrocution – The Machines operate on dangerous for life ~230V. During servicing (use) of Machines, it is necessary to observe safety measures, which are specific for use of electrical units of the given type.



Trauma caused by Machine tipping/falling! The Machines are pretty heavy and large. In case of improper installation of the Machine it can tip/fall on a person. To avoid this, it is necessary to observe the installation requirements and use all necessary or additional fittings for Machine installation.



Gas poisoning due to leakage of coolant! The Machine has a refrigeration unit fitted in it. This refrigeration unit works on coolant type R134a. During technical servicing, it is important to make sure that the refrigeration unit's joints are not leaking and to observe the requirements of storage and transportation. In case of leakage of it is necessary to immediately vent the premises, evacuate everyone from the premises and call the technical personnel.

The Machine installation specialist must know the structure and operating principles of the Machine very nicely.

The manufacturer guarantees the functional dependability and efficiency of technical servicing of Machines only in case of use of genuine spare parts.

Only use food products in the Machine, which are properly packed for use in vending machines.

Vending machines of this type are not meant for outside use.

The Machines must be installed in dry location, where the air temperature does not fall below 1 °C and does not exceed 35 °C.

Due to a non-stop improvement process for the Machines their structure can be changed (amended), in ways not affecting the type of their functioning and such amendments may not be covered in this Manual.

Some descriptions, contained in the current Manual, may not be valid for certain models of bank note acceptors and other peripheral devices, which are part of the Machine.

When servicing the peripheral devices it is necessary to follow their documentation, which is included in the user documentation and is supplied with the Machine.



Hazardous for the Machine! Do not use water jet devices, such as hose pipes, for washing the Machine.

### **Manufacturer's warranty**

The manufacturer's warranty during the warranty period covers all vending machine units and assemblies, except for malfunctions, arising from non-observance of current maintenance documentation requirements by the customer or due to any mechanical failures.

The following components are excluded from the manufacturer's warranty:

- Fuses;
- Control board batteries.



## 1.0 DESCRIPTION AND FUNCTIONING OF THE MACHINE

### 1.1 OPERATION OF THE MACHINE

Snacks vending machines, models FOODBOX and FOODBOX LONG are meant for retail sales and storage under set temperature of preliminarily packed food items and cold drinks (snacks).

**The food items recommended for loading in the Machine:**

- Per piece products in air-tight packing, which prevents leakage and spillage (chips, dry breakfast, meat snacks, rusks, chocolate bars, packed biscuits, nuts, packed croissants etc.);
- Drinks in plastic packing or in tetra-packs of up to 0.5l;
- Drinks in aluminium cans of volume up to 0.33l;
- Drinks in plastic bottles of volumes up to 0.5...0.6l.

**The following should not be loaded in the Machine:**

- Food or drinks in glass containers;
- Food products packed in materials, which do not guarantee no spillage of contents;
- Food without packing;
- Milk products in soft pack.

The FOODBOX type vending machines are compliant with mandatory requirements, enforced in the countries, where their use is permitted.

The vending machines are designed and manufactured in accordance with the applicable safety standards.



**ATTENTION!** Please follow the manufacturer's instructions regarding validity of food and its storage temperature!



## 1.2 THE BASIC WORKING PRINCIPLE OF VENDING MACHINE

Most of the time the vending machines are operational and dispense food.

After the selection of the needed product using the keyboard, payment according to the price tag and after pressing the button to confirm the selected product, the product dispensing process starts.

### Algorithm of getting the selected product:

1. Pay the required amount for the selected product, feeding bank note in the Bank Note Acceptor (BNA) and/or coins in the coin slot;
2. Using the keyboard type the number, corresponding to the cell containing the needed product;
3. Press the confirmation key on the keyboard (for most of the models this key is labelled “**Product**”).
4. The electrical motor which moves the spiral in the cell containing the selected product makes a full turn of 360° dropping the product into the discharge (dispensing) tray (see fig 1);
5. Push the door on the dispensing tray and take your purchase;
6. To receive remainder of money press the “**Change**” button and collect your change from the coin tray.

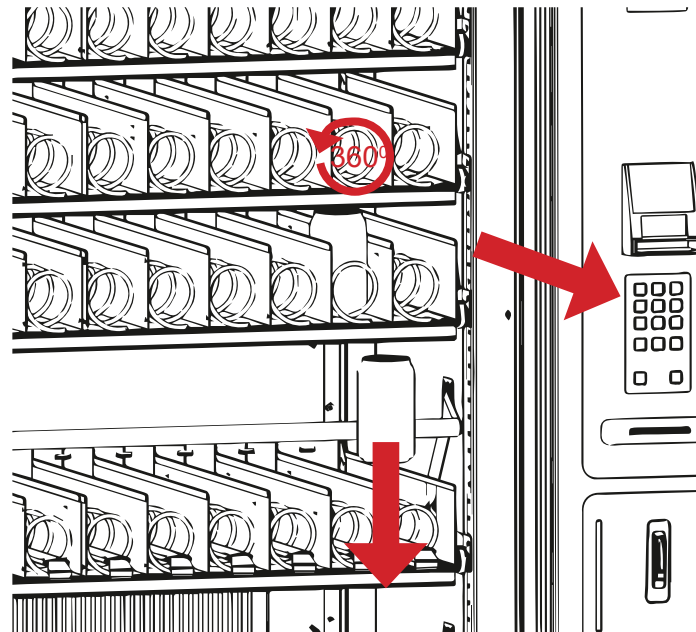


Fig. 1 - Working principle



### 1.3 TECHNICAL FEATURES

Vending machine initialization time – maximum 5 minutes.

The Machines are powered through single phase mains with 230 V AC at 50 Hz.

The vending machines stay operational within the voltage range of 207 to 253 V Ac.

Maximum power consumption – maximum 700 W.

The Machines' mass and dimensions without the packing are shown in table 1.

Table 1

<b>Model</b>	<b>Mass (kg), max (without load)</b>	<b>Width (mm), max</b>	<b>Depth (mm), max</b>	<b>Height (mm), max</b>
FOODBOX without add-ons	300	980	820	1850
FOODBOX with add-ons	320	980	820	2250
FOODBOX LONG without add-ons	370	1300	820	1850
FOODBOX LONG with add-ons	390	1300	820	2250

The machine is designed for operation at ambient temperatures between 10 to 35 °C, relative humidity not more than 80% at 25 °C, atmospheric pressure from 84 to 106,7 kPa. The vending machines comply with IEC 61140:2009 requirements for electrical safety.

The structure of the vending machines provides for safety against the penetration of hard objects and water, according to code IP30 IEC 60529:2013, into places, which have current. Otherwise the level of protection is IP20.

#### **Refrigeration unit:**

- Cooling gas (Coolant) - R134a;
- Evaporator with fan;
- Variable temperature in the refrigerated area: from plus 4° to plus 10° C

#### **Terms of usage:**

Covered, air-conditioned room.



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**1.4 GENERAL INFORMATION ABOUT THE MACHINE AND ITS COMPOSITION**

- **FOODBOX** - basic configuration;
- **FOODBOX LONG** - this is an extended configuration, which allows the placement of a greater number of cells on each shelf;

Figure 2 shows the detailed composition of FOODBOX type of vending machine.

**Note:** You can always find more detailed information about the price, look, technical documentation and basic characteristics of all models of FOODBOX on our corporate site: <http://www.unicum.ru/en/>

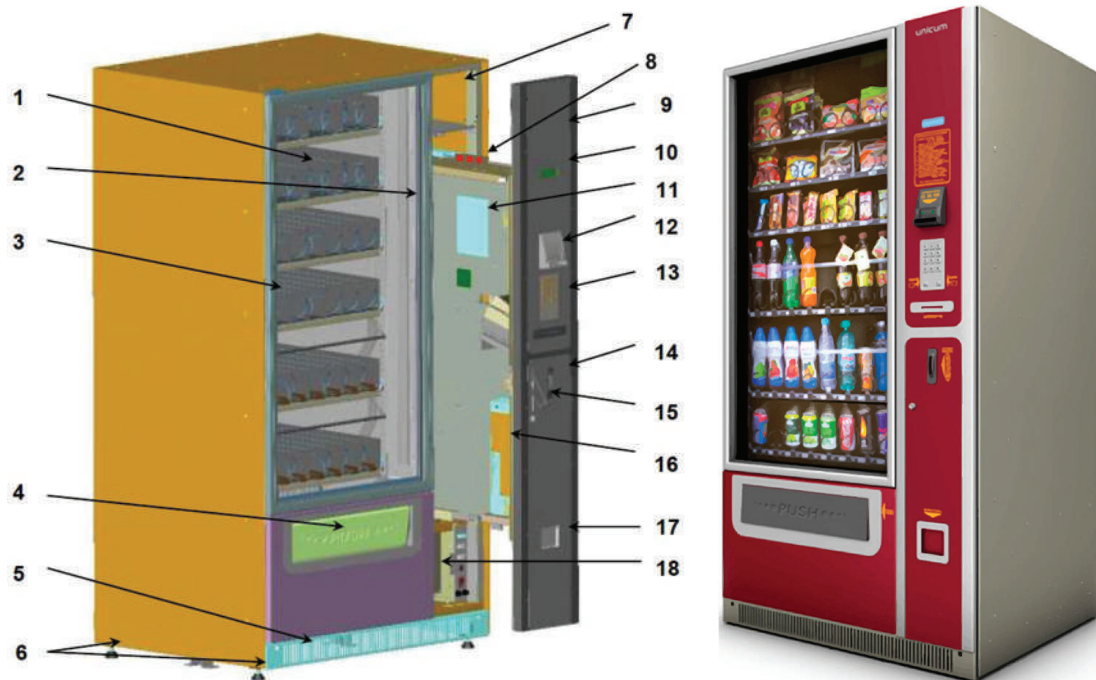


Fig. 2a - Model FOODBOX

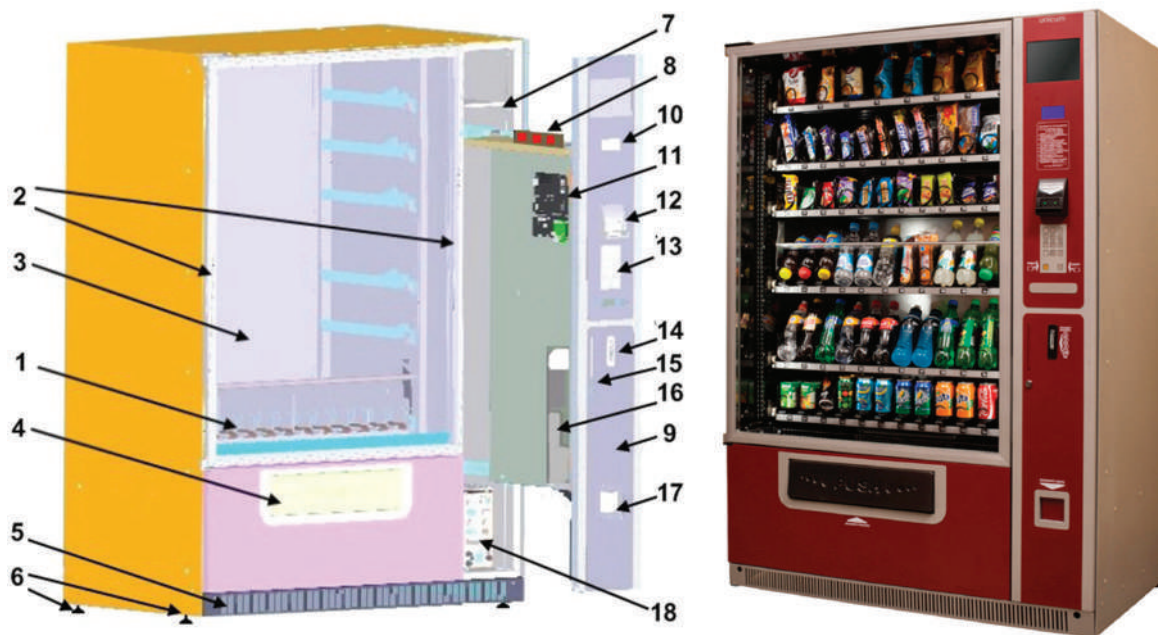


Fig. 2b - Model FOODBOX LONG

Figure 2 (description):

- |   |   |
|---|---|
| 1 - Product display shelf                 | 2 - LED lighting  |
| 3 - Glazed door                           | 4 - Product dispensing tray                             |
| 5 - Ventilation cover                     | 6 - Support pegs  |
| 7 - Management section                    | 8 - Keyboard for quick access to the maintenance menu   |
| 9 - Slide-out panel of management section | 10 - Liquid Crystal Display (LCD)                       |
| 11 - Main Board (019-02)                  | 12 - BNA (Bank Note Acceptor)                           |
| 13 - Keyboard                             | 14 - Coin slot  |
| 15 - Lock                                 | 16 - Coin slot with built-in change dispensing function |
| 17 - Change dispensing tray               | 18 - Power supply                                       |



### **1.4.1 Product dispensing section**

The product dispensing section covers most of the space in the Machine. It is closed behind a glass door, which is blocked by the moveable management section panel.

The dimensions of the product dispensing section provide for the installation of up to 6 (optionally up to 8) shelves with various sized cells:

- Cells for products in wider packing with two simultaneously rotating spirals (double cells);
- Singular cells with one spiral;
- Extended cells with one spiral.

The shelves are structured in such a way that makes it possible to easily move them out or in for quicker loading/dispensing of goods. The shelves are behind a glazed door (see figure 2, position 3). The products are dispensed from the shelves, using the spirals, into the dispensing tray (see figure 2 position 4).

Optical sensors, located near the dispensing tray, register the dispensing of goods. The customer collects the product from the tray. The lower part of the vending machine contains the ventilation cover (body) see figure 2, position 5).

The lower part of the product dispensing section is fitted with the refrigeration unit, which maintains the set temperature of goods. The temperature is controlled using the readings of 3 temperature sensors, which are located in the lower part (sensor №1), upper part (sensor №2) and on the refrigeration unit's evaporator (sensor №3).

### **1.4.2 Management compartment**

The management compartment is a metallic rectangular compartment, insulated from the product-dispensing

compartment. The management compartment is closed using a moveable panel (see figure 2, position 9). The management (control) compartment holds the main controlling circuit board (hereinafter called the "Regulator") (see figure 2, position 11).

Located in the upper part of the moveable panel is the BNA (see figure 2, position 12) with the acceptor part facing outwards from the Machine. The cash drawer (hereinafter called the "Stacker") of the BNA is located inside the vending machine, behind the front part of the BNA.

Located above the BNA is the liquid crystal display (see figure 2, position 10), which displays the information for customer or the serving personnel, regarding the state of the Machine and the actions that can be executed using the keyboard (see figure 2, position 13) etc.

The keyboard allows you to enter information for purchases or to enter data while servicing the Machine.

The Regulator (see figure 2, position 11) performs the management, data transfer and control of the Machine's functioning.

**NOTE:** It is possible that the BNA, LCD and keyboard might be placed differently in the modifications of the Machine, which have BNA suited for acceptance and dispensing of change.

Located in the lower part of the moveable panel of the management section is the coin slot, which also dispenses change (see figure 2, position 14). The dispensing of change and return of unrecognized coins is performed in the coin dispensing tray (see figure 2, position 17).

The coin box is located in the lower part of the management compartment (see figure 2, position 7). The coin box is used to collect the coins accepted by the coin slot. The coins gathered in the coin box are not used for dispensing change. The coin slot disposes of the coins in case when the tube is full, unless the given type of Machine does not have the tube installed in it.

The management compartment's panel and the compartment door are closed using a lock (see figure 2, position 15).

For better balancing the Machine is fitted with adjustable pegs (see figure 2, position 6), which are installed

on the bottom of Machine in the corners.



The Machines are fitted with three button keyboard (see figure 2, position 8), which provides quick access to the following functions:

- Operator's menu – access to the operator's menu;
- Technician's menu – access to the technician's menu;
- Test – product dispensing mode, without payment, used to check the Machine.

### **1.4.3 Keyboard**

The keyboard (see figure 2, position 13, figure 3) is a singular anti-vandal suitable module with buttons. Depending on the mode of operations the buyer or the serving personnel (operator, technician) enter, by pressing the buttons, information, which is used by the Regulator to execute certain actions.

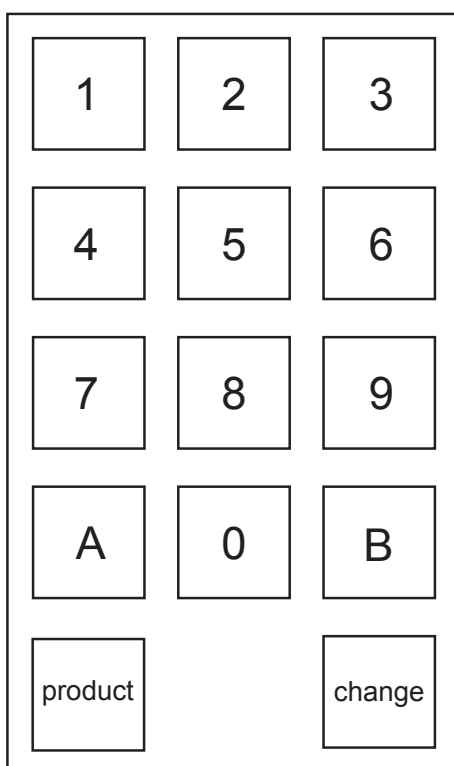


Fig. 3 - The exterior look of the keyboard

#### 1.4.4 RIELDA lock set

Locks type RIELDA allow you to program the lock to the correct set of keys, what makes it possible to use one working key for multiple locks RIELDA and easily change the combination of the lock under the new working key with loss, theft or damage to the old key.

The lock comes complete with three keys (see. figure 5):

- one master key - **GOLDEN** key is used only for the lock programming;
- two operating **SILVER** key - used for opening / closing machine door.

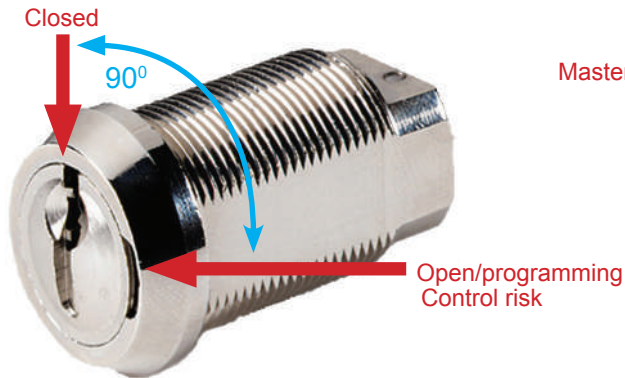


Fig. 4



Fig. 5

The lock can be located in two positions:

- operating position ("closed" position - see figure 4);
- position for the programming (the "open" position - see figure 4);

The machine is supplied with pre-programmed lock. To open / close the door machine, insert the operating **SILVER** (see figure 5) key lock and turn it in the lock 90 degrees to the right to marry (see figure 4).



**WARNING! Programming lock operations must be performed only when the machine door is open! Otherwise, there will be lock (lock) the door latch.**

To program the lock by other working key (for example, to use one working key for multiple machines or operating loss of key) you must perform the following operations when you open the door machine:

- Insert the master key lock ("closed" position - see figure 4) in which the castle was the last time that programmed or is supplied with a lock (for primary programming). Lock master key in the lock at least one second. Then turn 90 degrees in the direction of the control key risk (see figure 4).
- While holding shutting off device of the door in order to avoid a spontaneous turn of the lock, remove the master key from the lock and insert them into the new master key , which you want to program the lock.If you want to program the lock on the same master key, don't remove the master key from the lock.
- Then turn the master key 90 degrees in the opposite direction (the "closed" position -see figure 4).



- Remove the master key from the lock and put it in a safe place. To open / close the lock, use the operating keys, coming complete with a new master key.



***WARNING! Return the switch to the programming can only be the master key to which the lock has been programmed the last time!***



### 1.4.5 Refrigeration unit

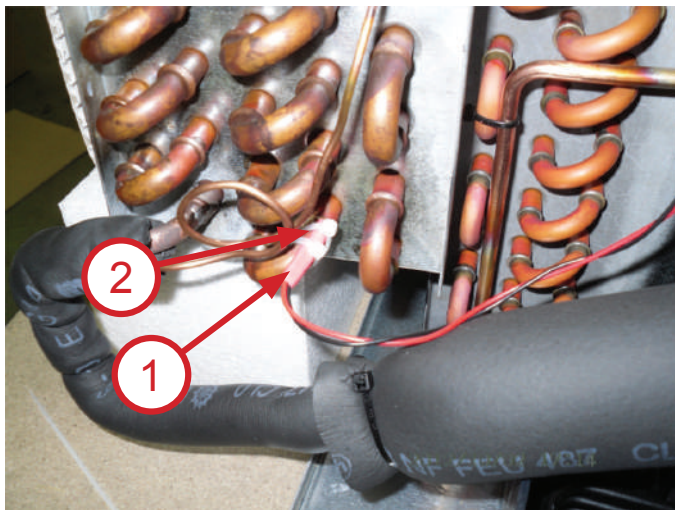
#### 1.4.5.1 Operational modes

In the lower part of the dispensing section installed is the refrigeration unit, which maintains the set temperature. The temperature is maintained using the readings from 3 temperature sensors:

- Sensor №1 – Located in the lower part of the dispensing compartment;
- Sensor №2 – located in the upper part of the dispensing compartment;
- Sensor №3 – located on the refrigeration unit's evaporator (see figure 6).

**Note: Recommended temperature settings:**

- Minimum temperature  $4 \pm 2^{\circ} \text{C}$
- Maximum temperature –  $10 \pm 2^{\circ} \text{C}$
- Minimum evaporator temperature minus  $1 \pm 1^{\circ} \text{C}$
- Maximum evaporator temperature  $5 \pm 1^{\circ} \text{C}$



- 1 - Temperature sensor
- 2 - Clamping bands

Fig.6 - Location of temperature sensor №3



**ATTENTION!** To maintain proper settings for the refrigeration unit it is important that temperature sensor 3 should be installed properly. It should be properly clamped on the second last bend of the evaporator, as shown in figure 7. The sensor must be installed before the refrigeration unit is fitted in the Machine. After the placement of the refrigeration unit inside the Machine the Sensor's connector must be connected to the sensor connection strip.

The refrigeration unit's operational modes are controlled using the Regulator. The refrigeration unit can operate in 4 modes:

- Standby
- Defrosting
- Cooling
- Anti-icing



The refrigeration unit turns ON or OFF in each of the operational modes. It also includes turning ON or OFF of evaporator fan and regulation of temperature sensors.

When the Machine is turned ON the refrigeration unit switches to standby mode for two minutes, further working according to the algorithm of the set mode.

If at the time of turning ON of the Machine the evaporator's temperature (sensor №3) is below the minimum temperature setting, the regulator switches the Machine into **DEFROSTING** mode. When the temperature for Sensor 3 reaches minimum or above minimum value the refrigeration unit is switched to **STANDBY** mode.

#### 1.4.5.2 Standby

In the Standby mode the refrigeration unit is in fact turned OFF, the evaporator's fan works as per the mode set by the user and the sensor readings are obtained.

If the temperature for sensor 1 exceeds the "**Max Temperature**" settings and the defrosting time is over – the unit switches to **COOLING** mode.

#### 1.4.5.3 Defrosting

In the defrosting mode the refrigeration unit is turned OFF, the evaporator's fan works in accordance with the user given temperature settings and the temperature sensor readings are noted.

The length of defrosting time depends on the time of defrosting, which is set in the menu item "**Defrosting time**". At the end of the set time interval the refrigeration unit switches to the Standby mode. The length of Defrosting time also depends on the readings of Sensor 3 – if the temperature of the evaporator would be below the minimum temperature settings the unit switches to Defrosting mode, or remains in this mode, until the evaporator's temperature would not exceed the minimum temperature value.

#### 1.4.5.4 Cooling mode

In the cooling mode the unit is turned ON, the evaporator fan works in accordance with the user settings and the temperature sensor readings are noted.

The duration of refrigeration unit's working cannot exceed 30 minutes. At the end of the given period the unit turns OFF and after an additional period of two minutes the Regulator switches to STANDBY mode. If during the working of the refrigeration unit the temperature of sensor 1 drops below the value set in "**Min. Temperature**" setting – the refrigeration unit turns OFF and after two minutes switches to STANDBY mode.

If the temperature for sensor 3 goes below the value set in "**Min. Evaporator Temperature**" settings – the refrigeration unit turns OFF and switches to ANTI ICING mode

#### 1.4.5.5 Anti-icing mode

The Anti-icing mode helps avoid the icing (freezing) of the refrigeration unit. In the given mode the refrigeration unit is turned OFF and the temperature readings of the sensor 3 are noted.

When the "**Max. Evaporator Temperature**" is reached – the Regulator switches to STANDBY mode. To avoid possible icing, please use the recommended values for temperature settings.



#### 1.4.5.6 Evaporator fan

The operational mode of the evaporator fan can be changed by the operator by selecting required settings in the maintenance menu (Menu item – **“Fan regulation”**):

- Always ON (Menu item **“Always ON”**)
- On only during cooling mode (Menu item 0 **“Only during cooling”**)
- The fan works during the cooling and defrosting modes (Menu item **“Cooling and defrosting modes”**)

When the vending machine is turned ON the evaporator fan turns ON automatically, independent of its settings. When the refrigeration unit switches to **COOLING** mode or **DEFROSTING** mode the fan works according to the settings selected in the menu item.

#### 1.4.6 Main Board (controller)

The operations of the units and devices of the Machine are controlled using the Regulator.

The vending machine can operate in two modes according to the algorithm of the built-in software – control software (hereinafter called the “Firmware”):

- Vending mode (Main operational mode)
- Servicing mode (for specialists only)

The main mode, in which the Machine operates – vending mode. In this mode the vending machine serves the customers (sale, storage and dispensing of products). The Machine switches to this mode right after it is turned ON.

Servicing mode – this mode is meant for testing the Machine’s equipment, parameter settings for nodes and devices, regulation of Machine’s parameters and price regulation. The Machine switches to the Servicing mode upon the pressing and holding for 2-3 seconds of the relevant button (see section 3.4.7).

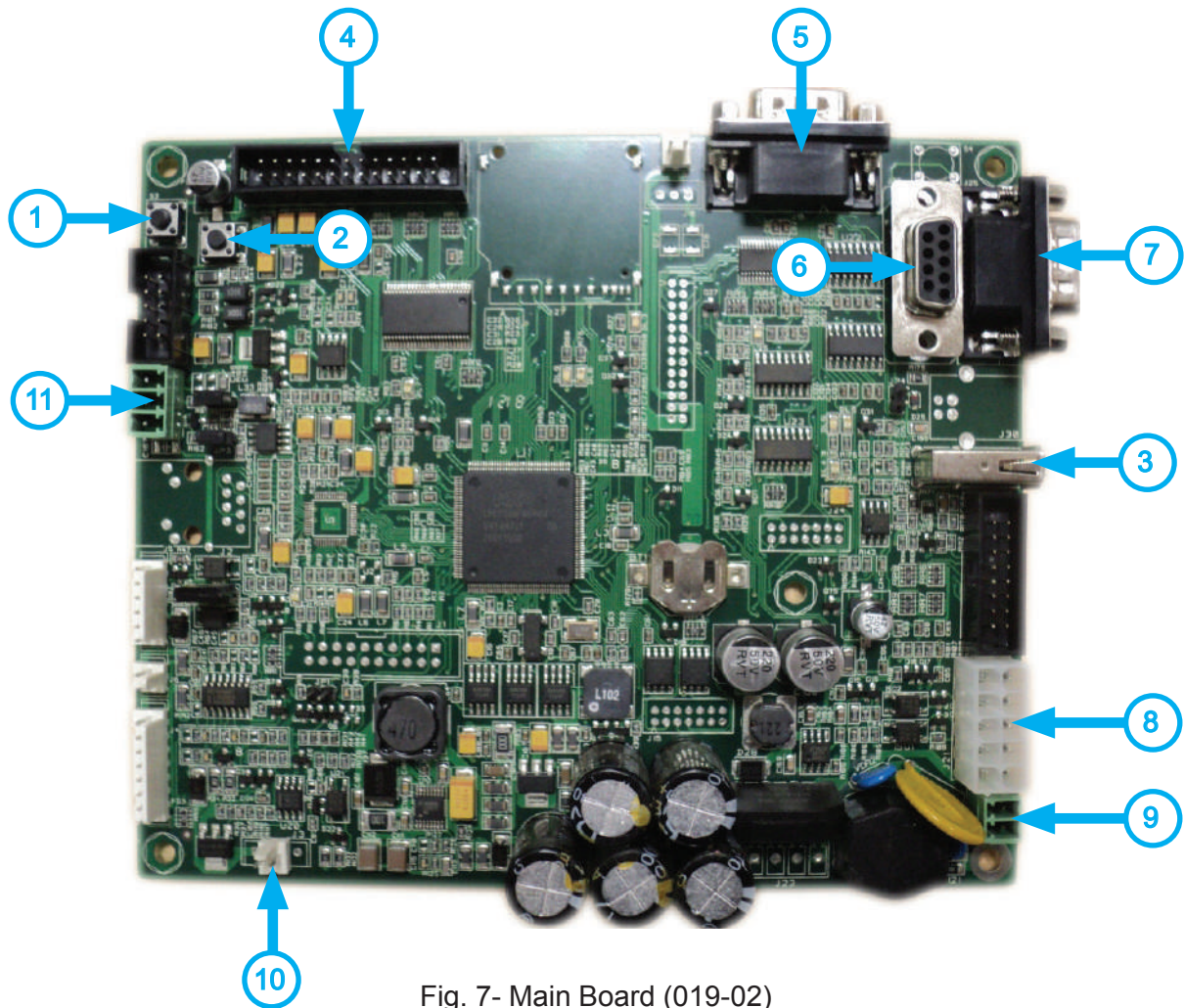


Fig. 7- Main Board (019-02)

1. Button to access the operator's menu (is used as a Reserve in case the button corresponding button keyboard shortcut faulty -See section 1.4.8)
2. Button to access the Technician's menu (is used as a Reserve in case the button corresponding button keyboard shortcut faulty -See section 1.4.8)
3. USB-drive slot
4. LCD connection slot
5. Modem connector
6. Programming and RS232 connection slot
7. Cash register connection slot (check printer)
8. MDB payment system connection slot
9. Power supply connection slot
10. Dispensing motor slot
11. CAN-BUS connection slot



#### 1.4.7 Removable LCD board

The Removable LCD control board (see figure 8) is meant to set the brightness of the Machine's LCD. The LCD's brightness might need to be regulated in the following situations:

- Changing the display with a new one
- Resetting of display's brightness settings (for example in case of transportation of the Machine)
- To regulate LCD brightness during operations.

The brightness should be set when the Machine is switched ON, carefully turning the brightness kerf in the required direction, to achieve optimum brightness settings for the LCD.



**ATTENTION! Brightness should be regulated only by the technician(s), who are well-versed in the Machine's functioning.**

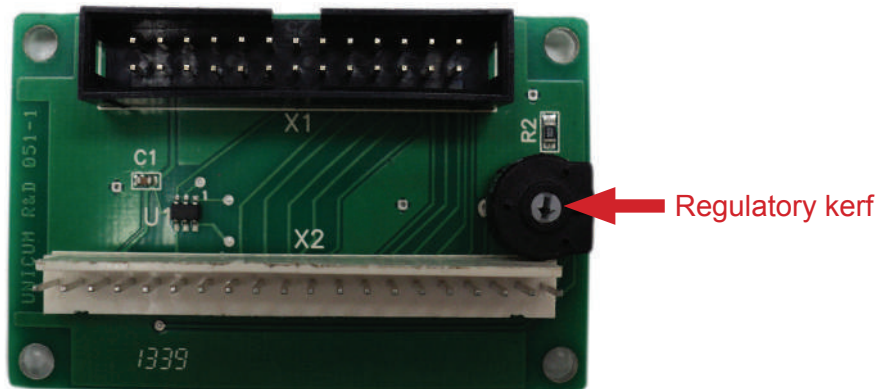


Fig.8 - LCD board, removable

#### 1.4.8 Keyboard shortcuts

The machine is equipped with a 3-button keypad located in the control compartment machine (see figure 2 position 8), for quick access to the following

- **Operator's menu** – access to operator's menu
- **Technician's menu** – access to technician's menu / service engineer
- **Test** – provides for product selection without payment

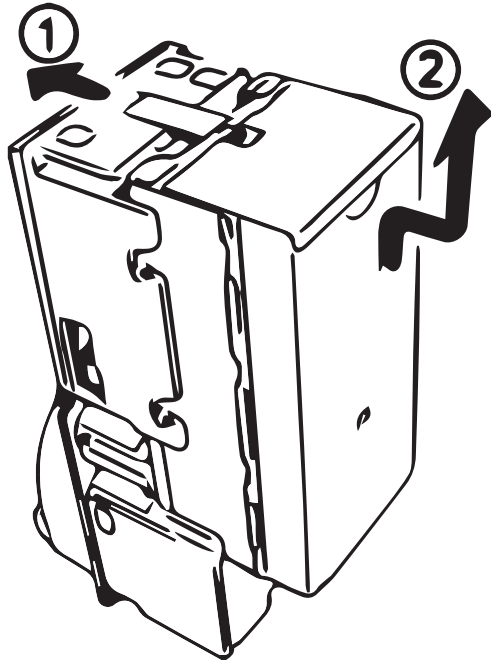


Fig.9

### 1.4.9 Bank Note Acceptor (BNA)

The banknotes are accepted by the Bank Note Acceptor (BNA). The accepted banknotes are stored in a special slot (Stacker).

The removal and emptying process for the stacker is shown in figure 10.

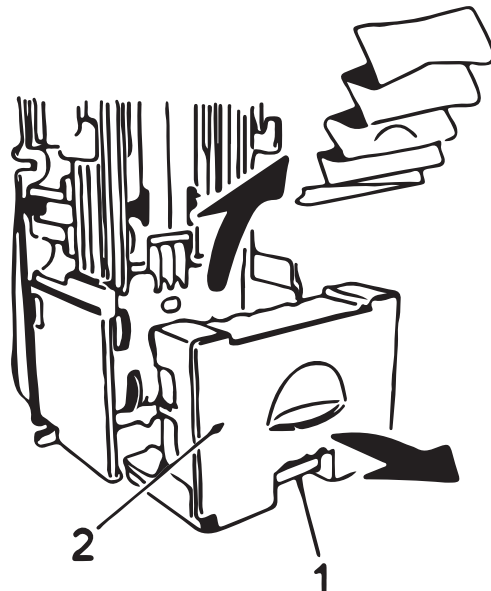


a) To remove the stacker and remove the banknotes (see figure 10):

1. Move the fixer;
2. Remove the stacker, moving it vertically upwards;
3. Open the stacker cover;
4. Remove the banknotes;
5. The stacker can be replaced following the above sequence in reverse order.

Fig.10 - Removal and emptying of the Stacker

b) To remove the jammed banknotes from the Bank Note Acceptor (BNA)'s inlet (see figure 11):

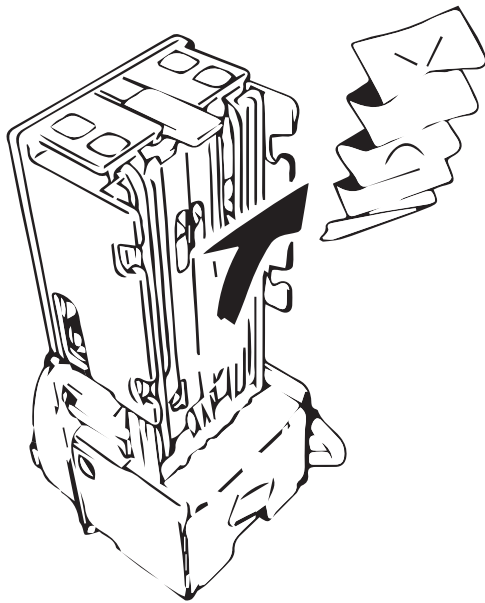


1. Press the fixator lever
2. Remove the front panel of the Bank Note Acceptor (BNA) from the rest of the Bank Note Acceptor (BNA)
3. Remove the jammed bill
4. Replace back the front panel of the Bank Note Acceptor (BNA)

- 1 - Front panel of the Bank Note Acceptor (BNA)  
2 - Fixator lever

Fig.11 - Removal of jammed banknotes from the Bank Note Acceptor (BNA) inlet

c) To remove the jammed bank note from the body of the Bank Note Acceptor (BNA) (see figure 12):



1. Remove the stacker (see figure 10, section a)
2. Remove the jammed bill
3. Replace the stacker inside the Bank Note Acceptor (BNA).

Fig.12 - Removal of jammed banknotes from the body of the Bank Note Acceptor (BNA)

#### **1.4.10 Coin slot with change dispensing function**

The coins slot is used to accept payment with coins and to dispense change. The accepted coins are placed as per their denomination in the coin slot's tubes.

When servicing the coin slot turn OFF the Machine and open the door to the management compartment. To remove the jammed coin or to clean it remove and turn over the coin slot as shown in figure 13.

To remove the coin press and hold the return lever, open the validator cover (see figure 14). Clean the validator, keeping the cover open.

Press on the control panel and open the panel. Clean the panel. The procedure for the cleaning of the coin slot is described in detail in section 3.4 of the given Manual. After finishing work close all covers (lids) on the coin slot, replace the coin slot back (see figure 13) and close the management compartment using the key.

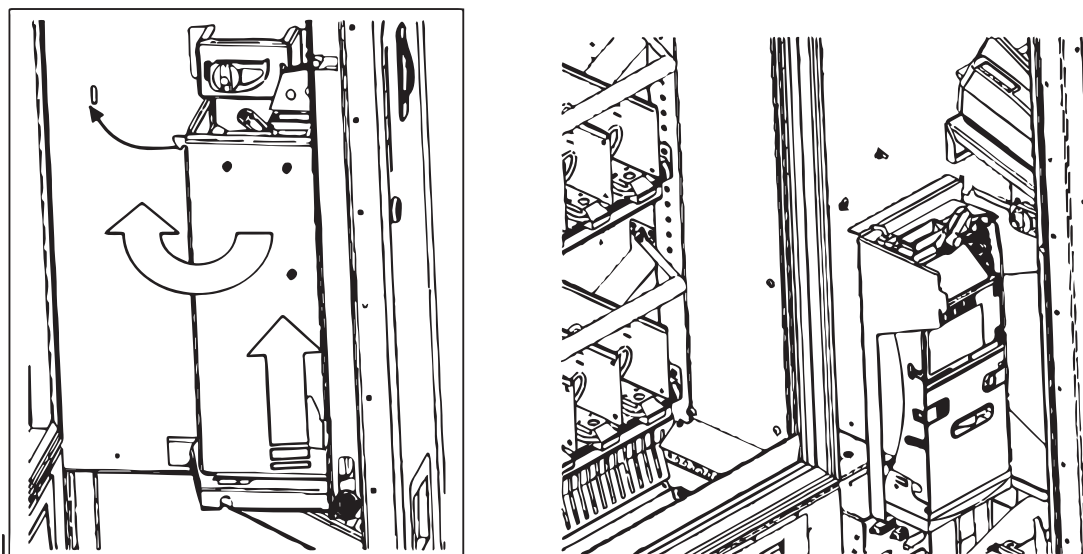


Fig.13 - Removal of coin slot

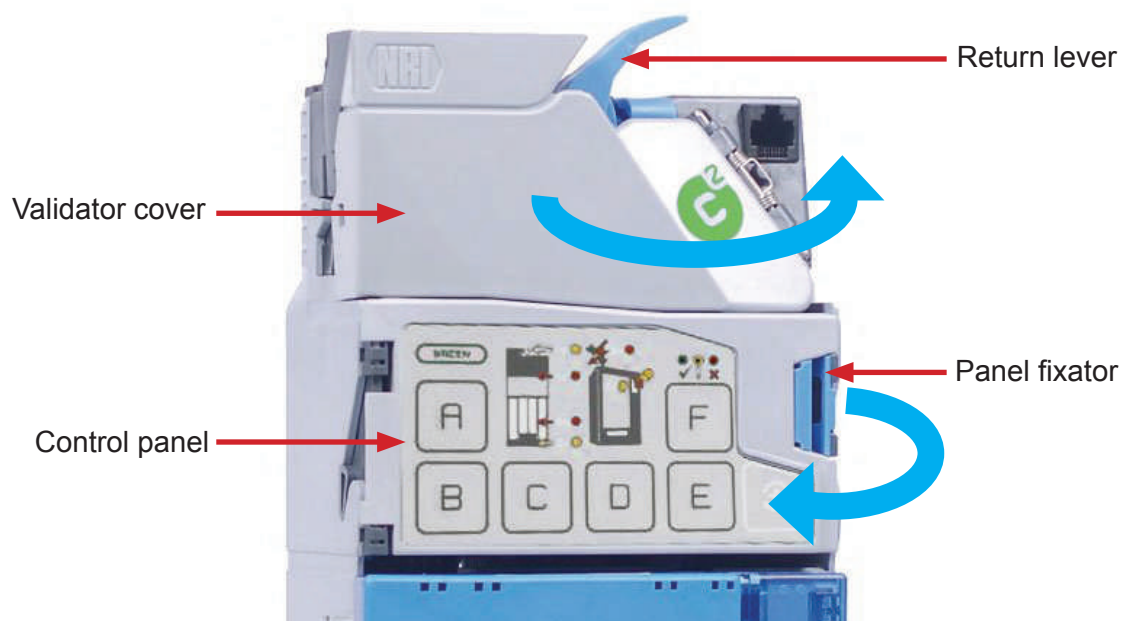


Fig.14 - Opening and closing of the inlet of coin slot NRI Currenza Green



## 1.5 MARKINGS

The Machine's markings comply with the requirements of the structural documentations for the relevant Machine model.

The markings for the Machine are applied using our fixed plate, which is fitted to the rear panel on the outer side of the Machine (see figure 15)

The plate carries the following information (see figure 15):

1. Manufacturer's trademark;
2. Name and/or nominal symbol of the product
3. Factory (serial) number
4. Power supply and consumption parameters;
5. Date of manufacturing;
6. Unit weight;
7. Type of coolant
8. Safety level as per IP code;
9. Symbol of compliance of the Machine with the applicable standards of the countries of the Custom Union;
10. Symbol of compliance of the Machine with the applicable standards of the countries of the European Union;
11. Country of origin.

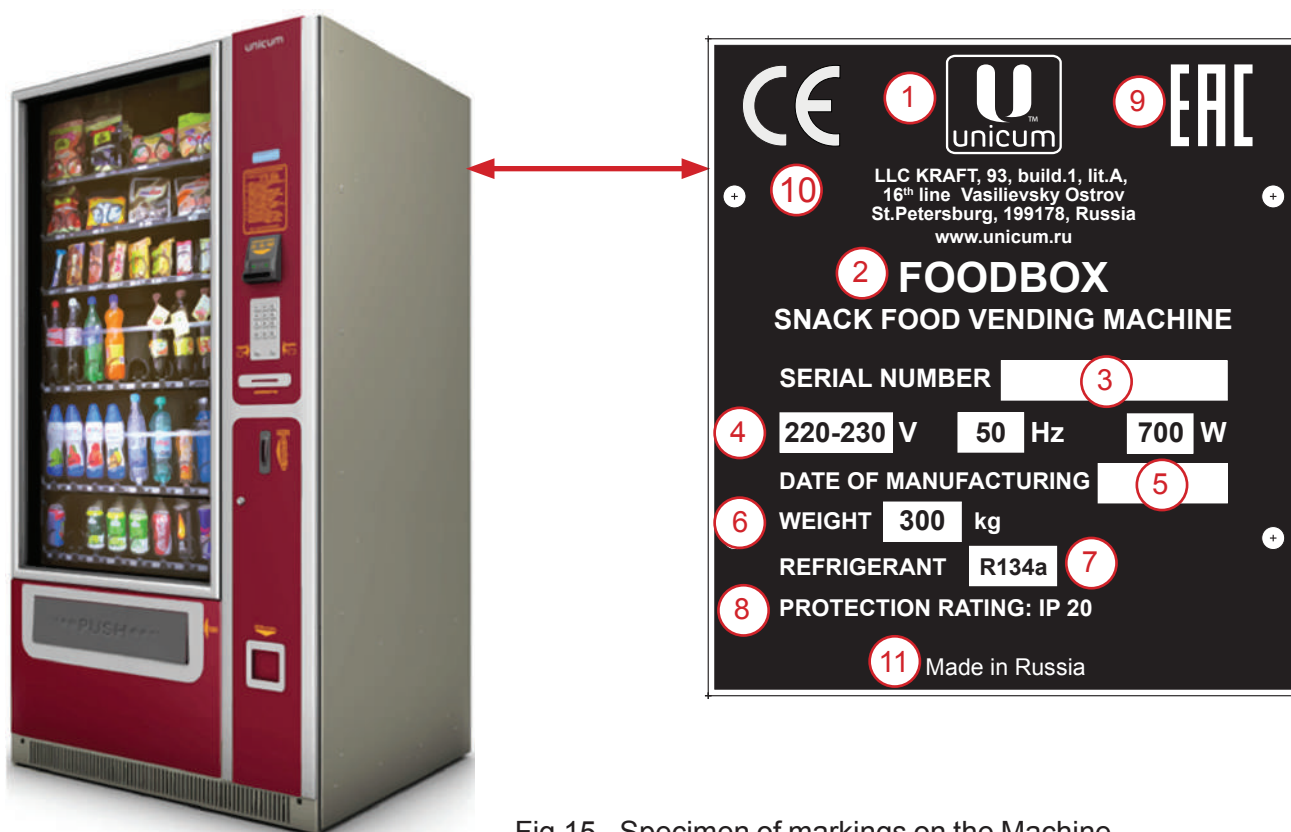


Fig.15 - Specimen of markings on the Machine



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**1.6 PACKING**

The Machine is packed at the manufacturer's facility in accordance with the requirements, stipulated by the applicable design documentation.

User documentation is packed in a plastic bag compliant with and then replaced inside the Machine.

The transportation packing (tare) complies with the design documentation for packing and provides for the Machines' tight fitting in it, preventing the movement of the Machine inside the tare.



## 2.0 OPERATION

### 2.1 VISUAL INSPECTION AT THE TIME OF RECEIVING THE DELIVERY

To inspect the vending machine it is necessary to remove the transportation tare and make sure that has no apparent damage. If you discover any damage during inspection, please inform the manufacturer about such defects.

The Machine should not have the following defects after transportation:

- Dents, traces of impacts, deformations and damage to packing;
- Moist or humid spots or traces of the same.

Make sure that the Machine is in on its base in perfectly vertical position.

### 2.2 OPERATIONAL LIMITATIONS

The Machine should be used in strict compliance of its technical characteristics and purpose.

Requirements regarding the installation of the Machine:

- It is prohibited to install the Machine with a tilt of more than 2° (see figure 16a);
- It is prohibited to install the Machine on carpet or any other electrostatic surfaces;
- It is prohibited to cover ventilation outlets, located within the Machine's body;
- The power socket, where the Machine is plugged in, should be easily accessible to enable quick disconnection of the Machine;
- If the Machine is installed in heated premises, make sure that the distance between the Machine and the source of heating is no less than 1 meter.
- There should be a minimum distance of 0.1 meter between the Machine's rear panel and other objects (see figure 16b, c);

Requirements for electrical connection:

Before installing the Machine please make sure that:

- The voltage in the power socket is no more than  $\pm 10\%$  from the nominal voltage, which is indicated on the plate carrying Machine's information.
- The power supply has grounding.

The vending machine must be grounded (earth) according to the applicable requirements of technical safety and rules of usage of similar electrical devices.



Electrical hazard! Do not connect the Machine to a power supply without earth!



It is prohibited to use extensions, adopters and multi contact plugs (see figure 17) to connect the Machine to the power mains.

## Requirements regarding the location of Machine's installation:

- The Machine must be installed in dry premises with artificially controlled climate (air-conditioning);
- The air temperature of the location of installation must not be below 1°C;
- The Machine must not be exposed to precipitation (rain, snow etc.).
- The Machine must not be installed at places where jets of water are used for cleaning.



ATTENTION! In case if you discover damage to the power cable, please immediately disconnect the Machine and contact the maintenance center. The power cable can only be changed by the manufacturer's qualified personnel.



ATTENTION! It is prohibited to connect several Machines through a single switch – this might lead to breaking down of the Machines!

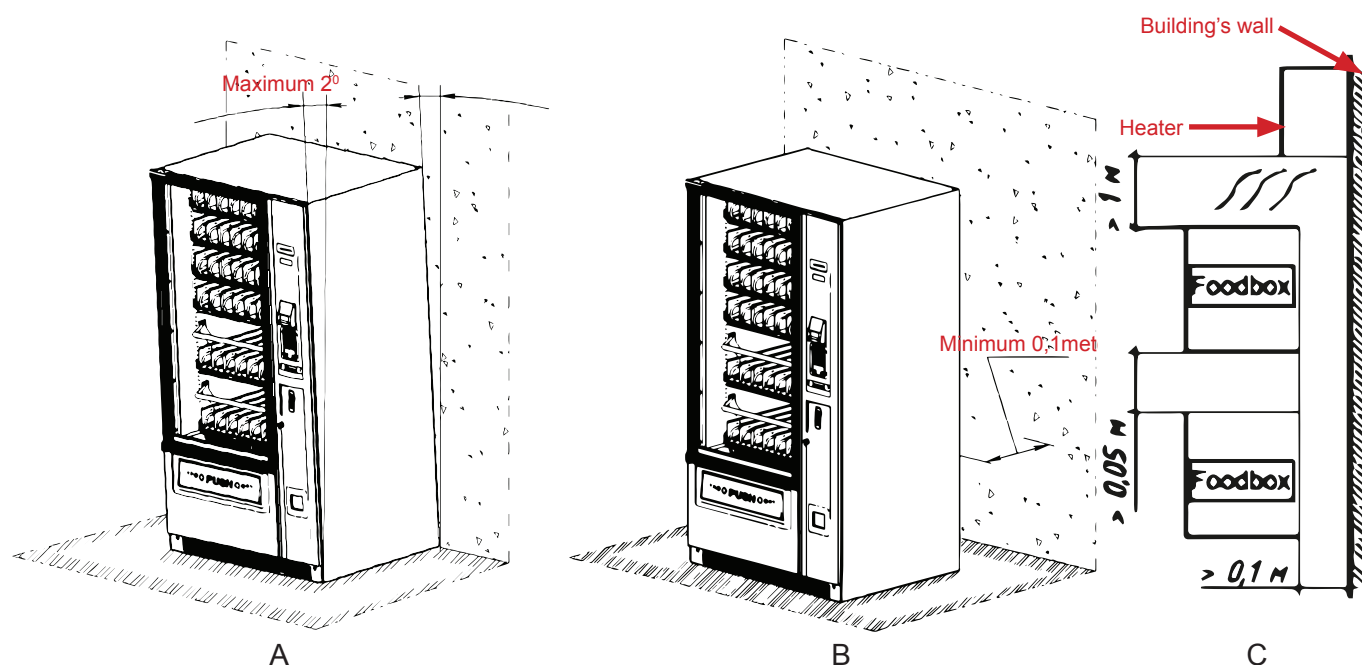


Fig.16 - Vending machine installation

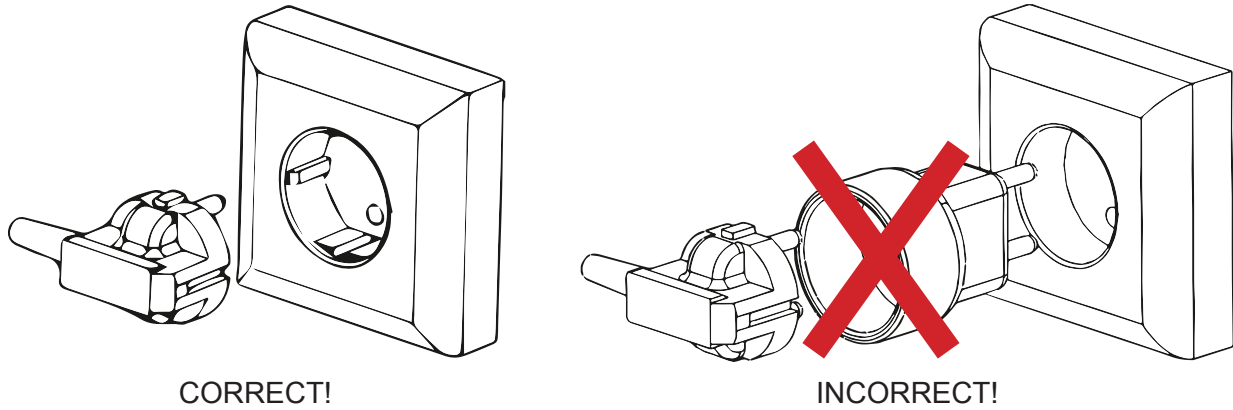


Fig.17 - Machine's power connection

## 2.3 PREPARING THE PRODUCT FOR USE

### 2.3.1 Safety measures while preparing the product for use

The Machine operates on voltages, which are hazardous for life! The Machine should be prepared for operations only by qualified personnel, who are allowed to handle similar electrical devices.

When preparing the Machine for use it is necessary to adhere by all the usage limitations (restrictions), which are indicated in section 2.2 of this Manual.

Please avoid the tipping over or hard tilting of the Machine during transportation, installation, storage and use. To transport the Machine to the location of installation use mechanical or automatic fork lift. Insert the lifter's forks approximately in the middle of the tray carrying the Machine (see figure 18).

During the dislocation and installation of the Machine:

- The Machine must be placed on its own base in strictly vertical position;
- Do not drop the Machine;
- Do not use ropes, cables, belts etc. for Machine's transportation.

Before any kind of movement of the Machine you must make sure that the power cable is disconnected.

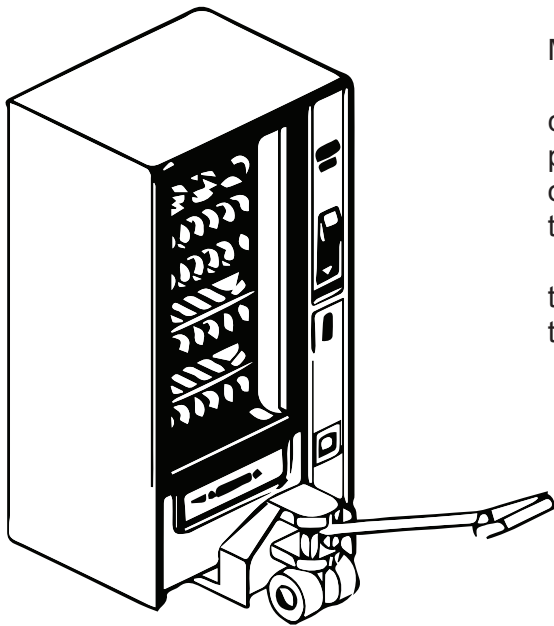


Fig.18 - Transporting the Machine

You can only conduct maintenance or repair works on the Machine only after disconnecting it from the mains.

After long distance or extended transportation of the Machine, where it undergoes vibrations, shoves and impacts, please check the integrity of joints of the components to each other and with functional components, as well as the fitting of the components and functional nodes.

Before turning ON the Machine please make sure that the internal components are not covered with condensate, especially the front glass.

### **2.3.2 Installation**

After the transportation and/or storage of the Machine:

- Remove the transport packing and remove all packing materials from the Machine (see figure 19);
- If you discover any visually notable damages to the exterior of the Machine, please inform the manufacturer (supplier);
- Let the Machine rest idle for at least 5 hours, before turning it ON. The Machine should rest in premises with normal room temperature.

1. Carefully bring the Machine, using a fork lift, to the place of installation and raise it by 20...30 cm;
2. Steady the lifter;
3. Using S=10mm wrench (spanner) remove the fixing bolts and remove the wooden pegs (see figure 19). The bolts with nuts and pegs should be placed in the bag along with the storage packing;
4. Take out the four support pegs, packed for transportation in the dispensing tray, unpack them and screw it in the corners of the base;
5. Place the Machine on spot and remove the forklift from under it;
6. Using S=34mm spanner adjust the support pegs, to even out the Machine in horizontal plane;
7. To make sure that the installation is even use a level.

**NOTE:** A tilt of maximum 2° (see figure 16a) is permissible. A tilt of more than 2° can cause troubles with the Machine's operations!

After installing the Machine and levelling it, take out the ventilation cover, which is packed inside the dispensing tray for transportation and install it on the Machine using the screws provided with the package (see figure 21).

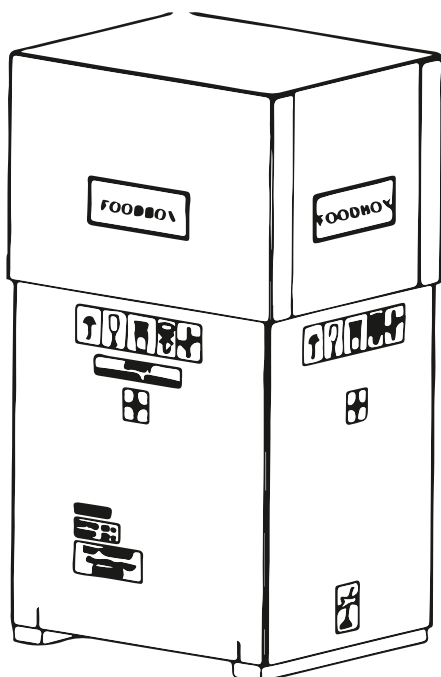


Fig.19 - Unpacking the Machine

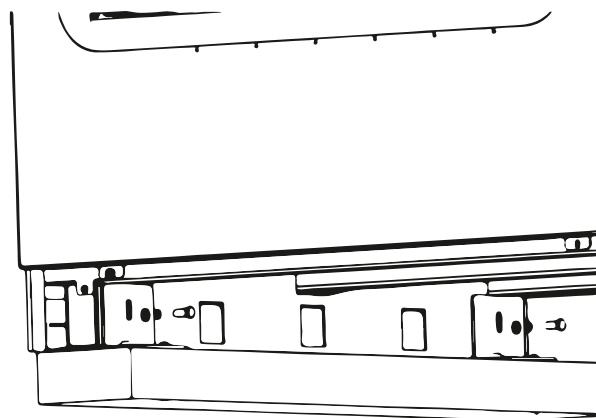


Fig.20 - Removal of wooden pegs



**ATTENTION!** To avoid tipping over of the Machine, it is prohibited to open the Machine's door and move the shelves until the vending machine is completely fixed to the installation platform!

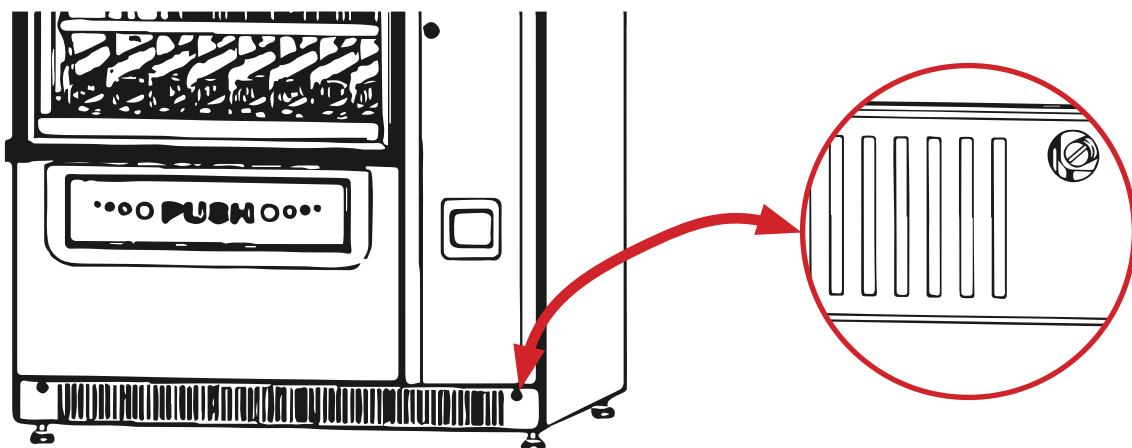


Fig.21- Installation of ventilation cover



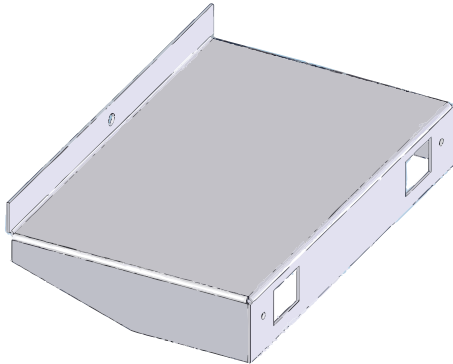
As per the structural design of the Machine it is possible to fix the Machine to the wall (relevant set of fixings is included in the base package).

The manufacturer recommends, if possible, to use this set of fasteners.

The fitting of the Machine to the wall can be the only fitting or can act as the supplementary fitting, which can help avoid tipping over of the Machine in case of attempts of vandalism.

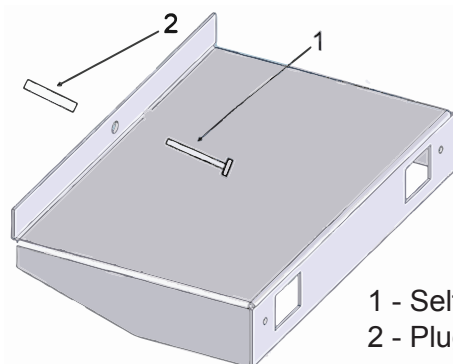
## Fixing the Machine to the wall:

1. Remove the transportation pegs (see figure 22) and self-tapping screws from the dispensing tray;
2. Screw on the pegs with four screws (see figure 23);



3. Displace the Machine to the wall;
4. Mark the holes for fixing the Machine;
5. Pull away the Machine from the wall and drill dead holes for installing the plugs;
6. Install the plugs and again move the Machine to the wall so that the holes in the wall would coincide with the holes in the pegs, then fix the Machine using self-tapping screws (see figure 24).

Fig.22 - Supports for fixation to the wall



- 1 - Self-tapping screws  
2 - Plug

Fig.23 - Fixing the Machine to the wall

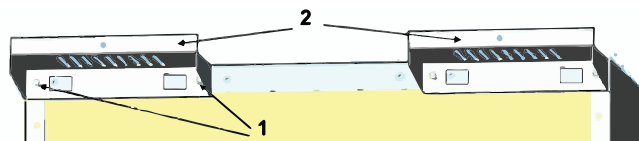


Fig.24 - Installation of supports on the given wall of the Machine



**ATTENTION! In case if you fix the Machine to the floor and the wall, it is necessary to first fix the Machine to the wall and only then fit it to the floor!**



## 2.4 USING THE PRODUCT

### 2.4.1 Safety measures

It is important to adhere to electrical safety measures, while the Machine is operational:

- It is prohibited to operate a free standing and out of order Machine
- It is prohibited to turn ON and use the Machine if there is condensate or any other liquids on any parts of it;
- It is prohibited to operate the Machine if the power cable or the power plug are damaged;
- It is prohibited to connect the Machine to a damaged or unfixed power socket;
- The power outlet to which the Machine is connected must have proper earthing connection;
- The Machine should only be disconnected from the power source by removing its plug;
- It is prohibited to pull, stretch or bend the power cable;
- It is prohibited to place any objects on the power cable;
- In case of the Machine catching fire it is necessary to first disconnect it then put out the fire using a thick fabric or carbon dioxide type fire extinguisher

### 2.4.2 The turning ON procedure

Before turning ON the Machine it is necessary to be sure that all the operating limitations are being met (see the previous sections).

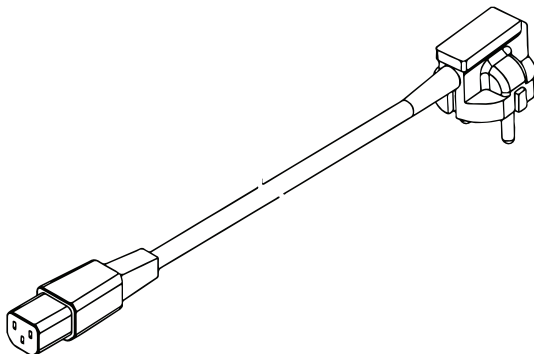


Fig.25 - The power cable

#### **To turn ON the Machine:**

- Plug the power cable connector (see figure 25) to the relevant connector on the Machine's rear panel (see figure 26)
- Connect the power cable's plug to the nearest power socket in the premises
- Open the management compartment's door;
- Turn the **POWER** switch to **ON** position
- Close the management compartment's door.

### 2.4.3 Turning OFF procedure

#### **To turn the Machine OFF:**

- Open the Machine's management compartment door;
- Turn the power switch, of the power supply, to the OFF position;
- Close the management compartment's door;
- Unplug the Machine.

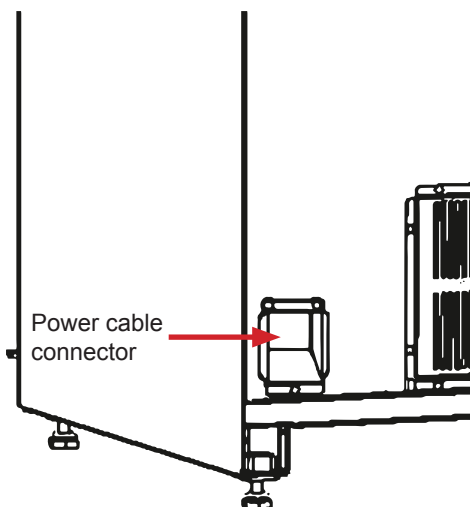


Fig.26- Machine's rear view

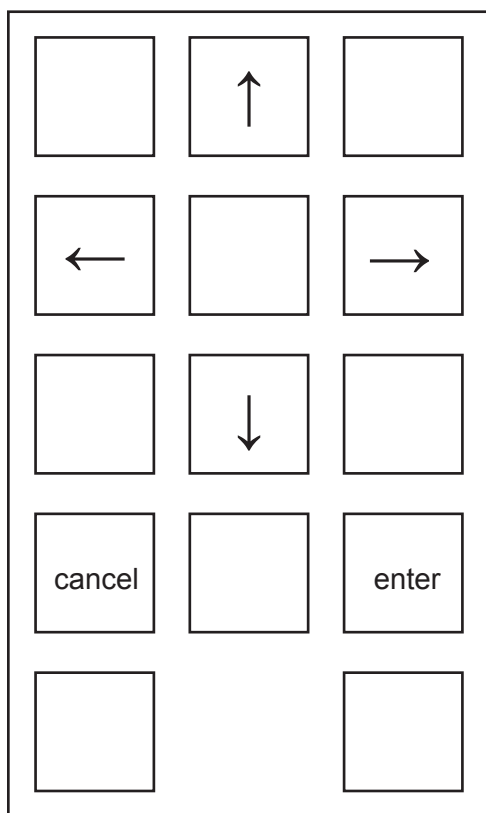


## 2.4.4 Servicing mode

The Machine is to be serviced, when it is in the MAINTENANCE mode. For optimum servicing the Machine comes with two types of MAINTENANCE MENUS.

- **The technician's menu:** Machine configuration, control of machine's equipment and monitoring the products. To enter this mode press the 2<sup>nd</sup> button from the left of the "Technician" on the quick access keyboard. To find the control panel please see section 1.4.7. To find the quick access buttons see figure 9.
- **Operator's menu:** Controlling the equipment's operations, display of detailed information about the Machine's working and monitoring funds.  
To enter the "Operator's menu" press button №1 to the left of the Operator on the control panel. To find the control panel please see section 1.4.7. The quick access buttons can be seen in figure 9.

After entering the required menu use the buttons on the keyboard (see the following figure) to navigate through the menu and to edit the parameter values.



Button 2 – the UP key to shift one position up in the menu or to select the previous parameter in the editing menu;

Button 8 – the DOWN key to shift one position down the menu or to select the next parameter in the editing mode;

Button 6 – to enter the sub-menu / shift right of the edited parameter;

Button 4 – shift left of the edited parameter;

Button ENTER – to enter the editing mode / to confirm and exit editing mode;

Button CANCEL – exiting the editing mode cancelling changes / exiting current menu item / exiting the menu

(image) Navigation buttons on the keyboard:



#### 2.4.4.1 Technician's menu (Service engineer's menu)

This menu provides access to all functional parameters of the Regulator's software. This menu is marked as "1" among the menu items to clearly mark the menu item as Technician's menu.

##### 2.4.4.1.1 Menu item [1.1 SYSTEM]

Sub-menu	Description	Value
1.1.1 Language	The language of display	English Russian Italian French
1.1.2 Machine Number	Arbitrary number to identify the Machine. This number is used to name the configuration files, which makes it possible to consider this number as the number of the given group of Machines. Numbering several machines with a single number enables you to create configuration files for the given group of Machines.	Digit entry
1.1.3 Time / Date	Setting the internal clock (this menu item is hidden if franchising is activated, see sub-section 1.1.7)	
1.1.3.1 Set clock	Setting time/date for the internal clock	
1.1.3.2 Daylight saving	Summer/Winter time shift parameters: <ul style="list-style-type: none"> <li>• No daylight;</li> <li>• Western Europe;</li> <li>• Central Europe;</li> <li>• Eastern Europe;</li> <li>• CIS;</li> <li>• C.Europe / Russia</li> </ul>	
1.1.3.3 Date format	Date formats: <ul style="list-style-type: none"> <li>• YYYY/MM/DD (Year / Month / Day)</li> <li>• DD/MM/YYYY (Day / Month / Year)</li> </ul>	
1.1.4 Password Tech	Password to access the Technician's menu	Entering numbers  0 - No password
1.1.5 Password Filler	Password to access the Operator's menu	Entering numbers  0 - No password
1.1.6 Filler rights	Access to set Operator's privileges	
1.1.6.1 Enable filler price	Access to price alteration in the Operator's menu/ clause 2.9 "Prices/planograms"	Yes / No
1.1.6.2 Enable filler reset	Privilege to reset temporary meters from Operator's menu/ clause 2.8	Yes / No
1.1.6.3 Coins dispense	Allowing Operator's access to coins through Operator's menu	Yes / No



Sub-menu	Description	Value
1.1.7 Franchising	Machine rental parameters	
1.1.7.1 Expiring date	Date until which the Machine can be used (on the given date the Machine will seize to operate until the extension of rental period)	
1.1.7.2 Set new	Entering date in encoded format	16 characters 0...F
1.1.8 Volume buzzer	Level of volume of Machine's in-built speaker	Number entry 0...4
1.1.9 Enter after sel.	If set to "Yes" – the product is dispensed from the cell upon pressing the "PRODUCT" button. If set to NO, product will fall after entering product number.	Yes / No
1.1.10 Coffee double sel. (for Coffee servers)	If set to YES to select drink it is necessary to press the selection key, on the keyboard, twice	Yes / No
1.1.11 Selection timeout	Time, during which the information about your selection is displayed	Number entry 0...30 seconds
1.1.12 Snack number	Number of snack vending machines. Here the value must be "1"	1
1.1.13 Hot number	This item is displayed but no active. It is necessary to enter "0" as value in this item	0
1.1.14 Reset	Nullification of all statistical data	
1.1.14.1 Reset interim Data	Reset temporary audit statistics	Yes / No
1.1.14.2 Re-configure	Reset to factory defaults	Yes / No
1.1.14.3 Re-Initialize	Password required after which it is possible to reset all configurations and data to factory default (it is not recommended to use this)	Yes / No
1.1.14.4 Reset Total Data	Password required after which it is possible to reset all data and clear history	Yes / No
1.1.15 Power saving	Setting power saving parameters	No Yes - to sub-menu
1.1.15.1 Start time	Time when the Machine automatically switches to power saving mode	0:00:00 (hh:mm:ss)
1.1.15.2 End time	Time when the Machine automatically switches out of power saving mode	0:00:00 (hh:mm:ss)
1.1.15.3 Key wakeup	Allow the Machine to escape power saving mode upon the press of any key on the keyboard	Yes / No



Sub-menu	Description	Value
1.1.16 EVA settings	Parameters of statistical data	
1.1.16.1 Reset interim Data	Reset temporary data after saving (copying) of files to USB drive	Yes / No
1.1.16.2 Switch Ids	If set to YES, the output (configuration and audit) files will carry the Machine number set in 1.1.2 instead of the Machine's serial number	Yes / No
1.1.16.3 Load CONF_GEN only	- NO enables loading all files from USB; - YES enables loading only CONF_GEN extension files	Yes / No
1.1.16.4 Enable USB prices	Allow/prohibit change of prices using a USB drive	Yes / No
1.1.16.5 Audit file version	Selecting the version of EVA-DTS file	6.0 6.1
1.1.17 Header message	Header caption, which is displayed on the LCD	Line entry
1.1.18 LAN	Internet access configuration	No Yes - to sub-menu
1.1.18.1 Local MAC	Allow/restrict the use of MAC address	No Yes - to sub-menu
1.1.18.1.1 Local MAC	Setting MAC address. The MAC address is set using the menu. It can comprise of any values with only two limitations: 1) The first digit must be less than 8 (best practice is to set it to 0). If the first character will be 8...F the Machine cannot go online. 2) Within the LAN to which the Machine is connected, the given MAC address must be unique. Violation of this requirement can cause the LAN to malfunction	Enter 12 characters 0...F
1.1.18.2 IP address	Setting IP address for the Machine. This displays the internal IP, assigned by the network administrator. Within the LAN this address must be unique. The leading part of the address (which is determined by the subnet-mask, see below) must be the same as the leading part of addresses of all connected devices.	12 characters



Sub-menu	Description	Value
1.1.18.3 Subnet mask	<p>Setting the subnet-mask.</p> <p>Here we set the subnet-mask, from which the Machine understands if any given IP address is local (part of LAN with direct communication) or if it is external (Out of the LAN. Communication through the gateway, see below).</p> <p>The subnet-mask is set by the network administrator.</p> <p>For example if the subnet-mask is 0.0.0.0 all the IP address would be treated as external. If the subnet mask is 255.0.0.0 only the IP addresses which will have the same number as the first number of the Machine's IP address will be treated as local. Different LANs use different subnet-masks, but usually one of the following is used:</p> <p>255.255.0.0 (large LAN which can comprise of up to 65536 devices)</p> <p>255.255.255.0 (medium size LAN which can comprise of up to 256 networking devices)</p> <p>255.255.255.128 (small LAN, which can comprise of up to 128 devices)</p>	Four numbers 0...255
1.1.18.4 Gateway	<p>Setting the gateway address.</p> <p>Here we set the IP address of the Gateway, through which the Machine will access the external IP addresses.</p> <p>This is set by the network administrator.</p> <p>Except for accessing external IP addresses the Machine will ping the Gateway for its MAC address every 10 seconds after coming online, until it gets a response from the Gateway.</p> <p>Therefore, even if you don't intend to allow access to the outside world, it is recommended that you set this address, pointing it to some computer which is always available in the LAN.</p> <p>Without this IP address the Machine will keep on dispatching waste packets every 10 seconds</p>	
1.1.18.5 Remote IP	<p>Here we set the Server's IP address which is used to handle card data, saving balance information on the server (not on the card).</p> <p>When such card is swiped (and when it is recharged or when used for purchases) the Machine connects to the given server and asks for permission to perform the action (or will check current balance).</p> <p>This address can be local (for the Machine) or external. If we don't use card system with balance information on the server, we do not set this field</p>	3 digits 0...9
1.1.18.6 Remote port	<p>Setting the Server's port.</p> <p>Here we set the port for the Server, which was set in the previous section</p>	5 digits 0...65535
1.1.18.7 Allow eth. control	<p>Here we can set YES for touch screen or NO for other Machines.</p> <p>If set to YES the Machine opens port 999, through which the Machine can be controlled, similarly as done with the touch-screen computer.</p> <p>If set to YES, when the Machine is hooked to LAN, which is not limited to the Machine, it is recommended that you hook up a router to the Machine, which will remote access to the Machine.</p> <p>Otherwise the Machine can be hacked from the LAN (access to Machine's status, execute sales etc.)</p>	



Sub-menu	Description	Value
1.1.19 Snack cell input	Method of entering product cell	2 digits/letters 3 digits
1.1.20 Secondary language	The second language of display in addition to the main language (clause 1.1.1)	No English Russian Italian French
1.1.21 Auto-collections	Settings to configure automatic dispatch of collection data to the server	
1.1.21.1 Monday	Execution of Automatic-collection on Monday	No Yes - to sub-menu
1.1.21.1.1 Start time	Time when Automatic-collection starts on Monday	00:00:00 (hh:mm:ss)
1.1.21.2 Tuesday	Execution of Automatic-collection on Tuesday	No Yes - to sub-menu
1.1.21.2.1 Start time	Time when Automatic-collection starts on Tuesday	00:00:00 (hh:mm:ss)
1.1.21.3 Wednesday	Execution of Automatic-collection on Wednesday	No Yes - to sub-menu
1.1.21.3.1 Start time	Time when Automatic-collection starts on Wednesday	00:00:00 (hh:mm:ss)
1.1.21.4 Thursday	Execution of Automatic-collection on Thursday	No Yes - to sub-menu
1.1.21.4.1 Start time	Time when Automatic-collection starts on Thursday	00:00:00 (hh:mm:ss)
1.1.21.5 Friday	Execution of Automatic-collection on Friday	No Yes - to sub-menu
1.1.21.5.1 Start time	Time when Automatic-collection starts on Friday	00:00:00 (hh:mm:ss)
1.1.21.6 Saturday	Execution of Automatic-collection on Saturday	No Yes - to sub-menu
1.1.21.6.1 Start time	Time when Automatic-collection starts on Saturday	00:00:00 (hh:mm:ss)
1.1.21.7 Sunday	Execution of Automatic-collection on Sunday	No Yes - to sub-menu
1.1.21.7.1 Start time	Time when Automatic-collection starts on Sunday	00:00:00 (hh:mm:ss)


**2.4.4.1.2 Menu item [1.2 PAYMENT SYSTEMS]**

Sub-menu	Description	Value
1.2.1 Decimal posit.	Determines the number of decimal places in prices and amounts of sale	Enter digits 0...3
1.2.2 Overpay time	Number of seconds after which the deposited credit is nullified	Enter number 0...65535
1.2.3 Retund	Sets the operational algorithm in case of cancellation of transaction – refund/not refund the deposit	Yes / No
1.2.4 Unknown state retund	Sets the operational algorithm in case of loss of connection to the power board during execution of sales – refund/no-refund of deposit. If usinf FOODBOX SLAVE it is recommended to set this to NO to avoid theft of products by turning power off at the moment of release of product	Yes / No
1.2.5 Protocol	Selecting the protocol for the system of payment	None MDB
1.2.6 Coin acceptor	Configuring the coin slot without the option of dispensing change (if set). For the normal functioning of the MD-coin slot this must be set to NO	No Yes - to sub-menu
1.2.6.1 Type	Set the type of coin slot	Papallel Binary
1.2.6.2 Interface	Setting coin slot's interface	Italian German
1.2.6.3 Inhibit	Restriction	Standart Reverse
1.2.6.4 Coin Type	Here we set the coin denomination	Yes / No
1.2.6.4.1 Coin Type (16 coins)	Permission/restriction of 16 coins of PARALLEL coin slot. Does not affect the MDB coin slot	Coin selection 0...15 And entering its value/price
1.2.7 Option	Sales configuration	
1.2.7.1 Exact change	Determines the algorithm of acceptance of payment by the Machine, when set to "No change": <ul style="list-style-type: none"> <li>• "Accept all" – accept money without limits</li> <li>• "Only in tube" – accept only the coins, which can find free space in tubes, while the acceptance of bills and cashbox is restricted.</li> <li>• "Quantity in tubes" – Acceptance of coins and bills for an amount equivalent to the amount of coins in the tubes of the coin slot</li> </ul>	All Only tube Tubes value



Sub-menu	Description	Value
1.2.7.2 Max excchange value	Only when set to "No change" + "Quantity in tubes". Limit the acceptable amount of money to the amount equal to the set value plus the amount of coins in the tubes	Enter amount
1.2.7.3 Ex Change Condition	Determines the condition in which the Machine switches to NO CHANGE state: <ul style="list-style-type: none"> <li>Standard – if at least one of the tubes contains less than 10 coins</li> <li>As per the Max Change level – If it is not possible to dispense maximum amount of change and the tube with the highest denomination of coins has less than 3 coins in it (see s.c.1.2.8.2)</li> </ul>	Standart Max change
1.2.7.4 Country code	Currency code in MDB format	4 characters 0...F 0 or FFFF - no checking
1.2.7.5 No change	Disallow dispensing change	Yes / No
1.2.7.6 Commit to vend	Not allow dispensing change without the selection of purchase (loose change)	Yes / No
1.2.7.7 Bill with card	Only accept banknotes if have card (cashless)	Yes / No
1.2.7.8 Coin with card	Accept coins only when have card (cashless)	Yes / No
1.2.7.9 Multi vend	<ul style="list-style-type: none"> <li>NO – Machine automatically dispenses change after dispensing the produc</li> <li>YES – no automatic change dispensing. To finish the transaction you must press the "CHANGE" button</li> </ul>	Yes / No
1.2.7.10 Immediate change	Enables the dispensing of change during the execution of sale. This shortens the time of service. If you want to disable the dispensing of change in case of malfunction, this must be set to NO	Yes / No
1.2.7.11 Change motor	Enables the use of change motor	No Yes - to sub-menu
1.2.7.11.1 Every time	Set the mode of operation of change motor: <ul style="list-style-type: none"> <li>YES – at any time after the pressing of the CHANGE button</li> <li>NO – only when dispensing of change is allowed</li> </ul>	Yes / No
1.2.7.12 Payout method	Determines the algorithm of dispensing of change by the Machine: <ul style="list-style-type: none"> <li>"Standard" (default) – Minimum number of coins are selected for change, to match the amount of change (the largest available denomination if dispensed first)</li> <li>"As per quantity" (equal tube level) – the Machine dispenses change trying to maintain an equal amount of coins in each of the tubes.</li> <li>"Considering the empty tubes" (min coin) – similar to the "As per quantity" algorithm taking the missing denominations into account.</li> <li>"Alternative" – The Machine dispenses change as per the built-in algorithms of the coin slot</li> </ul>	Standart As per quantity Considering Alternative



Sub-menu	Description	Value
1.2.7.13 Single coin	<ul style="list-style-type: none"> <li>YES – the amount of change is dispensed as per the set algorithm (s.c.1.2.7.12) by sending commands in a sequence to the coin slot. This increases the time of dispensing change, but reduces the chances of errors in calculation</li> </ul>	Yes / No
1.2.7.14 MDB peripherals	Connection/disconnection of MDB devices	
1.2.7.14.1 Disable change giver	Connection/disconnection of coin slot. If the coin slot is installed you must select NO, otherwise select YES	Yes / No
1.2.7.14.2 Disable bill valid.	Connection/disconnection of Bank Note Acceptor (BNA). If the BNA is installed you must select NO, otherwise select YES	Yes / No
1.2.7.14.3 Disable cashless	Connection/disconnection of card reader for contactless cards (smart cards). If the card reader is installed you must select NO, otherwise select YES	Yes / No
1.2.7.14.4 Disable cashless 2	Connection/disconnection of card reader 2 for smart cards. If it is installed you must select NO otherwise select YES	Yes / No
1.2.8 Cash option	Configuration of parameters for credit	
1.2.8.1 Max. credit	Maximum amount of acceptable deposit	Enter amount
1.2.8.2 Max. change	Maximum amount of change that a customer can get for each transaction	Enter amount
1.2.8.3 Coin all enabled	<ul style="list-style-type: none"> <li>YES – accept coins of all denominations. If restricted, you can set criteria for acceptable coins (16 coins) according to denominations</li> </ul>	No Yes - to sub-menu
1.2.8.3.1 Coin Type	Coin selection (0-15) and entering its value	
1.2.8.4 Bill all enabled	<ul style="list-style-type: none"> <li>YES accept all denominations of banknotes. If restricted you can separately configure acceptability for each type of banknote according to denomination</li> </ul>	No Yes - to sub-menu
1.2.8.4.1 Bill type	Selection of banknotes (0...15) and entering their values/prices	0..15
1.2.8.5 Tokens	Token configuration	No Yes - to sub-menu
1.2.8.5.1 Token 1	Configurations for Token 1	
1.2.8.5.1.1 Enable	Allow/restrict the use of tokens	Yes / No
1.2.8.5.1.2 Free vend	<ul style="list-style-type: none"> <li>NO – the Machine will recognize the token as a coin (denomination)</li> <li>YES – the Machine will recognize the token without any denomination</li> </ul>	No Yes - to sub-menu
1.2.8.5.1.2.1 Max. price (YES s.c.1.2.8.5.1.2) Value (NO s.c.1.2.8.5.1.2)	<ul style="list-style-type: none"> <li>Maximum price for free tokens: If the price of the product is higher than the indicated price of the token the sale will not be executed</li> <li>Value – For paid tokens you have a denomination of the token</li> </ul>	Number



Sub-menu		Description	Value
	1.2.8.5.1.2.2 Use for change (NO s.c.1.2.8.5.1.2)  Snack 1 (YES s.c.1.2.8.5.1.2)	<ul style="list-style-type: none"> <li>For paid tokens – use for change</li> <li>For free tokens – use to dispense one product (for snacks vending machines)</li> </ul>	Yes / No
	1.2.8.5.1.2.3 Snack 2 (if YES to s.c.1.2.8.5.1.2)	This item is displayed if s.c.1.1.12=2, but not used. You must select NO here	Yes / No
	1.2.8.5.1.2.4 Hot 1	This item is displayed if s.c.1.1.13=1 but not used. You must select NO here	No
	1.2.8.5.1.2.5 Hot 2	This item is displayed if s.c.1.1.13=1 but not used. You must select NO here	No
<b>Note:</b> sub-clause 1.2.8.5.2 ... 1.2.8.5.4 are similar to s.c.1.2.8.5.1 for tokens 2...4 respectively.			
1.2.9 Card option		Machine's configurations to work with payment cards	
	1.2.9.1 Disable recharge	Restriction to recharge balance using non-cash payments	Yes / No
	1.2.9.2 Max.Card rech.	Maximum amount of recharge of balance for non-cash payment cards. Limit of total credit for the card, which can be reached after recharge. For expel if it says 100 euro and the card still has 80 euro in balance, the card cannot be recharged for more than 20 euro. The amount in this section must be no more than the amount in clause 1.2.9.3	Enter amount
	1.2.9.3 Max.Card Value	Maximum amount that can be used with a card. in case of over draft the card will be blocked	Enter amount
	1.2.9.4 Bonus rec threshold	Amount of card recharge after which you get bonus	Enter amount
	1.2.9.4.1 Bonus rec percentage	The percentage of bonus against the amount of funds added to the card using coins and banknotes	Enter number 0...100
	1.2.9.5 Request timeout	The waiting time during which the Machine awaits card reader's response regarding withdrawal of funds	5 seconds 1 minute 5 minutes
	1.2.9.6 Transaction	<ul style="list-style-type: none"> <li>YES – Combines all purchases into one transaction. To purchase several products you just need to swipe your card once</li> <li>NO – One transaction for each product. It is necessary to swipe the card to pay for each purchase</li> </ul>	Yes / No



Sub-menu		Description	Value
1.2.10 Serial cashless		Allow/disallow the use of external card system	No Yes - to sub-menu
	1.2.10.1 Ethernet key	Secret key for access to Machine's interaction with the service. The server and Machine key should be the same	Enter 16 characters 0...F
	1.2.10.2 Ethernet vector	Secret key for access to Machine's interaction with the service. The server and Machine key should be the same	Enter 16 characters 0...F
	1.2.10.3 Card system type	Selection of the card payment system used. Each selection leads to a different sub-menu	Ethernet based NFC Sberbank
	1.2.10.3.1 Hold phone (for NFC)	Determines if it is needed to hold the phone near the card reader during the whole duration of transaction (Hold) or short time holding of phone for deduction of funds before the sale and repeat short holding after the purchase to return change (Not hold)	Yes / No
	1.2.10.3.1 Terminal number (for SBERBANK)	Enter SBERBANK terminal's identification number	No Yes - to sub-menu
	1.2.10.3.1.1 Terminal number	Enter the SBERBANK terminal's identification number for correct exchange of information between the terminal and the Machine. This is to be entered only if the number was not upgraded in the SBERBANK terminal before its installation in the Machine.	Enter 8 digits
	1.2.10.3.2 Merchant number (for SBERBANK)	Enter merchant number for the SBERBANK terminal	No Yes - to sub-menu
	1.2.10.3.2.1 Merchant number (for SBERBANK)	Enter the SBERBANK terminal's merchant number for correct exchange of information between the terminal and the Machine. This is to be entered only if the number was not upgraded in the SBERBANK terminal before its installation in the Machine.	Enter 12 digits
	1.2.10.3.3 Port number (for SBERBANK)	Enter SBERBANK terminal's server port number	No Yes - to sub-menu
	1.2.10.3.3.1 Port number	Enter SBERBANK terminal's server port number	Enter number 0...65535
	1.2.10.3.4 Greeting string (for SBERBANK)	Enter welcome message, which will be displayed on SBERBANK's terminal	Enter text
	1.2.10.3.5 Greeting string (for SBERBANK)	Enter second welcome message, which will be displayed on SBERBANK's terminal. Displayed under the first welcome message. Usually entered in a language other than the language of the first welcome message	Enter text
	1.2.10.3.6 Make select. string (for SBERBANK)	Enter a caption requesting the selection of product (purchase). Displayed on SBERBANK terminal in place of the welcome message, after the customer will insert his card in the terminal	Enter text



Sub-menu		Description	Value
	1.2.10.3.7 Make select. string (for SBERBANK)	Enter second caption requesting product selection. Placed under the first caption. Usually entered in a language other than the language of the first caption. Displayed on SBERBANK terminal instead of the welcome message after the customer inserts his card into the terminal	Enter text
	1.2.10.3.8 Check sumary (for SBERBANK)	Summary collation by the SBERBANK terminal. Usually done at least once a day automatically. This menu item performs this function manually. Manual summary collation must be performed only if needed under the terms dictated by SBERBANK	No Yes - to sub-menu
	1.2.10.4 Pricelist number	Selection of pricelist number for payment card	Enter digits 0...3
	1.2.10.5 Overpay time	Setting time after which the deposited credit is nullified	Enter number 0...65535


**2.4.4.1.3 Menu item [1.3 TIME INTERVALS]**

Menu item “1.3 Time intervals” determines time intervals during which a product can be sold through the vending machine at a discount, be available for sale or blocked as per the parameters (discounted products, blocking of cell) presented in clause “1.6 Price”.

The Machine can handle 7 time intervals. each interval has its own end time.

The start time of an interval coincides with the end time of the previous interval.

The start time for an interval is set at the ned of the previous interval or at 00:00:00.

Sub-menu	Description	Value
1.3 Time zones	Configuration of time intervals (see above)	
1.3.1 Time zone 1	Configuration of time for interval 1	Enter time
1.3.2 Time zone 2	Configuration of time for interval 2	Enter time
1.3.3 Time zone 3	Configuration of time for interval 3	Enter time
1.3.4 Time zone 4	Configuration of time for interval 4	Enter time
1.3.5 Time zone 5	Configuration of time for interval 5	Enter time
1.3.6 Time zone 6	Configuration of time for interval 6	Enter time

Example:

Interval 1 - 10:00:00

Interval 2 - 18:30:00

Intervals 3,4,5,6 - 00:00:00

The machine will function during three time intervals from 00:00:00 to 10:00:00 – interval 1, then from 10:00:01 till 18:30:00 – interval 2 and Interval 3 from 18:30:01 to 00:00:00.



#### **2.4.4.1.4 Menu item [1.4 CASH REGISTER]**

The menu item “1.4 Cash register” enable you to use a cash register (cheque printer) as part of the Machine. Before configuring it, please read the manual for the cash register.

This menu item is not available if the Machine’s configuration includes printer password, which was wrongly entered or if the cash register was not installed.

Sub-menu		Description	Value	
1.4 Printer menu		Configurations for the cash register (printer checks)	No Yes - to sub-menu	
	1.4.1 Printer protocol	Installation of cash register’s functional protocol	ATOL DATECS RU.OFD	
	1.4.2 Printer baud rate (for ATOL, DATECS)	Data transfer rate for exchange with the cash register	ATOL 1200 2400 4800 9600 14400 38400 57600 115200	DATECS 9600 19200 57600 115200
	1.4.3 Printer access code (for ATOL)	Enter code for access to the cash register’s special functions	Enter 4 digits	
	1.4.4 Cashier password	Enter password to access the main operational mode of the cash register	Enter 8 digits	
	1.4.5 Admin password	Enter password for additional operational modes of the cash register	Enter 8 digits	
	1.4.6 Print Z-report(s)	Displays the cash register’s status, with touch on the ENTER key – closes the shift/ prints Z-reports		
	1.4.7 Delayed Z-reports (for ATOL)	Displays the status/memory support for deferred Z-reports		
	1.4.8 Scaling(zeros count) (for ATOL, DATECS)	Configuration of number of zeroes in prices and printed cheques	Enter digits 0...3	
	1.4.9 Auto print Z-reports (for ATOL)	• YES – the cash register automatically prints Z-reports	Yes / No	


**2.4.4.1.5 Menu item [1.5 MODEM]**

Menu item "1.5 Modem" enable you to use the modem with the Machine for data transfer to telemetry server. Available in Machines with modem. In case of permission to use modem, the transferred data is nullified after each emptying of stacker.

Sub-menu	Description	Value
1.5 GPRS menu	Modem configuration	No Yes - to sub-menu
1.5.1 SMS Password	Enter an 8 digit code, using which the server can carry out initial connection through SMS (manual connection). In case of manual connection of the Machine the server asks for access code. The entered code must correspond with the code indicated in this menu item, otherwise connection will not be established	Enter an 8 character code (strict)
1.5.2 ServerIP address 1	Enter IP address and port number for server to which the Machine would connect. For the first manual connection to the server (via SMS) this parameter is set automatically by the server	Enter IP address and port number
1.5.3 ServerIP address 2	Enter IP address of the server to which the Machine would connect in case of inability to connect to server 1. If the server does not have reserve line the second address must be the same as the first one. When making first manual connection to the server this parameter is set automatically by the server	Enter IP address
1.5.4 SIM-cadr PIN code	Enter SIM's PIN code. This parameter does not change SIM's PIN code. If the SIM's PIN code is activated, you must enter the PIN code here, which corresponds with the SIM's PIN code. It is not recommended to use PIN code, because in case of wrong PIN entry the SIM can be blocked	Enter up to 8 characters
1.5.5 GPRS APN	This parameter sets the access point, which will be used to establish internet connection. The value of this parameter can be known from the mobile operator	Enter up to 40 characters
1.5.6 GPRS login	Sets login for connection to the mobile provider's access point. You can ask for this parameter from your provider	Enter up to 20 characters
1.5.7 GPRS password	Sets the password to connect to the access point of your mobile provider. You can know the value for this parameter from your operator	Enter up to 20 symbols
1.5.8 Conn.initiat. phone	Sets the telephone number. Which will be dialled to establish server connection. To make this parameter effective you must turn on CLI for the Machine's SIM card	--ANY PHONE NUMBER-- Enter up to 16 characters



Sub-menu	Description	Value
1.5.9 Machine GUID	This parameter is read only. It allows the reading of GUID assigned to the given Machine by the telemetry server. In scrolling mode the GUID menu is not fully displayed. To see complete GUID menu it is necessary to enter sub-menu	Displays 32 characters 0...F
1.5.10 Modem IMEI	This menu item is read-only. Shows IMEI (Unique identifier) of the modem connected to the Machine. With IMEI you can identify the Machine from the server side	Display of the modem's serial number or error message
1.5.11 Modem SW version	This menu item is read-only. If the modem is ON it displays the modem's type and it's software version	Displays modem's version or error message
1.5.12 Signal quality	Menu item is read-only. Shows the Cellular signal's strength and availability of GPRS net.	Displays the state of connection and signal strength



### 2.4.4.1.6 Menu item [1.6 PRICES]

Menu item “1.6 Prices” is used to configure product price and placement parameters.

Making use of the Regulator’s extended capabilities to handle slave devices, there are several menu items: “All prices”, “Hot 1”, “Snack 1”.

Use menu item s.c. “1.6.2 Snack 1” (s.c.”1.6.3 Snack 2”) for detailed configuration of price of each product.

When entering the given menu item it is necessary to enter cell number, which you want to edit. The selection is entered using the ENTER key and the cell number is selected using direction keys. After selecting the required cell you can enter the sub-menu by pressing the right directional key.

Sub-menu	Description	Value
1.6 PRICES	Configuration of product prices	
1.6.1 All Prices	To set similar prices for the products sold from the Machine	
1.6.1.1 Name	Name of the product for certain cell. This name is displayed on the LCD after the relevant button is pressed on the selection keyboard	Enter text
1.6.1.2 Cash Price	Setting price for cash sales	
1.6.1.2.1 Price	Product price	Enter amount
1.6.1.2.2 Discount	Discount on product price in percentage points. When this value is set then the value in s.c.1.6.1.2.3 is overridden	0...100
1.6.1.2.3 Surcharge	Retail margin in percentage points. When this value is set the value in s.c.1.6.1.2.2 is overridden	0...100
1.6.1.2.4 Time zone%	Time intervals for which the discount or retail margin is calculated for the given price list and the given product. Example: NNYNNN The discounts or margins are effective for this pricelist in the 3 <sup>rd</sup> and 5 <sup>th</sup> time intervals	Selection of seven positions from the given line NNNNNNN YYYYYYY
1.6.1.2.5 Day	The days of the week for which the discount is effective for the given price list and for the given position. Example:0000011 Discount or margin for the given pricelist is effective on Saturday and Sunday	
1.6.1.2.6 Time zone block	Restriction on time intervals	
1.6.1.2.6.1 Always blocked	Not sold under the given price list	Yes / No
1.6.1.2.6.2 Time zone	Not sold under the given price list in the given interval. Set 0 or 1 in each time interval. Example: NNYNNN Not sold under the given price list in the 3 <sup>rd</sup> and 5 <sup>th</sup> time intervals	Selection of 7 symbols from the following line NNNNNNN YYYYYYY



Sub-menu		Description	Value
	1.6.1.2.7 Day block	Not sold under the given price list on the given days of the week. Example: 0000011 Not sold under the given price list on Saturday and Sunday	Selection of 7 symbols from the row smtwtfs SMTWTFS
	1.6.1.3 Cashless Price 1	Set product price for sale using card 1 (s.c.1.6.1.3.1...1.6.1.3.7 are similar to s.c.1.6.1.2.1...1.6.1.2.1)	
	1.6.1.4 Cashless Price 2	Set product price for sale using card 2 (s.c.1.6.1.3.1...1.6.1.3.7 are similar to s.c.1.6.1.2.1...1.6.1.2.1)	
	1.6.1.5 Cashless Price 3	Set product price for sale using card 3 (s.c.1.6.1.3.1...1.6.1.3.7 are similar to s.c.1.6.1.2.1...1.6.1.2.1)	
	1.6.1.6 Expiring date	Set product validity date	No Set Date
	1.6.1.7 Not installed	Switching OFF of motor and product cell. The sale of the given product is blocked	Yes / No
	1.6.1.8 Article identifier	Set product article number which should be from 1 to 65535. This article number is used to track the product in the database (to display product name in various languages, information about the product etc.). The cells with similar products are connected to each other (if the product is depleted in one cell, it is sold off the other cell)	Enter a number from 1 to 65535
	1.6.1.9 Selection priority	Set priority for cells with same product (article). The products from different cells will be sold turn by turn (evenly). The products out of the cells with different priority levels will be sold in the order of least priority cells first (lowest number goes first). For example: if for one of the cells the priority level is set to 1 and for the other it is 2, then the cell with priority level 1 will be sold out first	Enter a number 0...255
	1.6.1.10 Fresh product (short-lived)	Product temperature condition selection	Yes / No
	<b>1.6.1.11 Icon ID (not used)</b>	<b><i>This sub-clause is displayed on the monitor, but it is not working</i></b>	
	1.6.2 Shack 1	Similar to s.c.1.6.1 "General prices", but used only for snacks. This menu item is hidden if the number of snacks in s.c.1.1.12 = 0. Menu items 1.6.2.1...1.6.2.10 are similar to relevant s.c. of menu 1.6.1.1...1.6.1.10	
	1.6.3 Shack 2	<b><i>This menu item is displayed only if s.c. 1.1.12 = 2 . It is only used when connecting slave vending machine snacks</i></b>	
	<b>1.6.4 Not 1 (not used)</b>	<b><i>This menu item is displayed only if s.c. 1.1.13 = 1 but is not used</i></b>	
	<b>1.6.5 Not 2 (not used)</b>	<b><i>This menu item is displayed only if s.c. 1.1.13 = 2 but is not used</i></b>	
	1.6.6 Double selection 99	Configuration for the first combinational sale (sale of several products in one transaction)	No Yes - to sub-menu
	<b>1.6.6.1 Button not (not used)</b>	<b><i>This menu item is not used</i></b>	



Sub-menu	Description	Value
1.6.6.2 Product 1 type	Configuration of the type of product 1, which is part of the combinational sale. This menu item must be selected as "Snack 1"	Shack 1
1.6.6.3 Product 1 number	Configuration of the cell number, which holds the first product, which is sold as part of the combinational sale	10...8B
1.6.6.4 Product 2 type	Configuration of the type of second product, which is sold as part of the combinational sale. This menu item must be set as "Snack 1"	Shack 1
1.6.6.5 Product 2 number	Configuration of cell number, which holds the second product, which is sold as part of the combinational sale	10...8B
1.6.6.6 Product 3 type	Configuration of the type of the third product, which is sold as part of the combinational sale.	Shack 1 Shack 2 No
1.6.6.7 Product 3 number	Configuration of the number of cell, which holds the third product, which is sold as part of combinational sale. This menu item is not shown if s.c.1.6.6.6 = NO	10...8B
1.6.6.8 Product 4 type	Configuration of the type of the fourth product, which is sold as part of the combo-sale. This item must be set as "Snack 1". This item is hidden if s.c.1.6.6.6=NO	Shack 1
1.6.6.9 Product 4 number	Configuration of the cell number, which holds product four which is a part of the combo-sale. This item is hidden if s.c.1.6.6.6=NO	10...8B
1.6.6.10 Price	Similar to s.c.1.6.1...	



Sub-menu	Description	Value
1.6.7 Double selection 98	Configuration of the second combo-sale (sale of several products in one transaction) s.c.1.6.7...1.6.7.10 are similar to the relevant s.c.1.6.6...1.6.6.10	No Yes - to sub-menu
1.6.8 Double selection 97	Configuration of the second combo-sale (sale of several products in one transaction) s.c.1.6.8...1.6.8.10 are similar to the relevant s.c.1.6.6...1.6.6.10	No Yes - to sub-menu
1.6.9 Double selection 96	Configuration of the second combo-sale (sale of several products in one transaction) s.c.1.6.9...1.6.9.10 are similar to the relevant s.c.1.6.6...1.6.6.10	No Yes - to sub-menu

**Note:** To execute combinational sale (if configured) it is necessary during sales operations to enter cell numbers 99, 98, 97, 96 (each of them is a single combo-sale).


**2.4.4.1.7 Menu item [1.7 SNACK 1]**

Menu item “1.7 Snack 1” is used to configure the machine.

This menu item is hidden if s.c. “1.1.12 Snack number ” = 0.

Sub-menu	Description	Value
1.7 Snack 1	Setting machine	
1.7.1 Cooling control	Configuration of the type of control of the refrigeration unit of the given machine: <ul style="list-style-type: none"> <li>• Triac (SVM-2, slave) – Regulation of the refrigeration unit using the Machine's regulator;</li> <li>• Danfos (SVM-1) – In case of connection of SVM-1 with the fitted FOODBOX Regulator. The refrigerator unit is controlled with the autonomous thermo-regulator.</li> <li>• Outdoor (Thermo-box) – for Machine model FOODBOX STREET</li> </ul>	Triac Danfos Outdoor
1.7.2 Temperature min	Set the minimum temperature for the lower area of the dispensing compartment	Enter temperature -10...+60
1.7.3 Temperature max	Set maximum temperature for the lower part of the dispensing compartment	Enter temperature -10...+60
1.7.4 Evaporator min temp	Set minimum temperature for the evaporator in the refrigeration unit	Enter temperature -10...+60
1.7.5 Evaporator max temp	Set maximum temperature for the evaporator in the refrigeration unit	Enter temperature -10...+60
1.7.6 Control Sensor	Select the sensor, which will be used as bench mark to control refrigeration unit's temperature	Sensor 1-3 Sensor 3
1.7.7 Defrost time	Set time (duration) for the defrosting of the refrigeration unit (in minutes)	Enter number 0...255 0-no defrost
1.7.8 Defrost period	Set the interval between defrosting (in hours)	Enter number 0...255 0-no defrost
<b>1.7.9 Outdoor machine (not used)</b>	<b>Set temperature range for the management compartment of the Machine, in case of outside use (only for Machines type FOODBOX STREET)</b>	
<b>1.7.9.1 Box min temperature</b>	<b>This menu items not used</b>	
<b>1.7.9.2 Box max temperature</b>	<b>This menu items not used</b>	



Sub-menu	Description	Value
1.7.10 Fan control	Select the operational mode of the refrigeration unit's fan: <ul style="list-style-type: none"> <li>• Always ON – working always</li> <li>• Only when cooling – works only when in cooling mode</li> <li>• Cooling and defrosting – works when cooling and de-freezing</li> </ul>	Always on Only cooling Cooling & defrosting
1.7.11 Temp events	Set range of monitored values for temperature sensors	
1.7.11.1 Temp 1 min	Set minimum temperature for sensor 1, upon reaching which the event is logged	Enter temperature -10...+60
1.7.11.2 Temp 1 max	Set maximum temperature for sensor 1, upon reaching which the event is logged	Enter temperature -10...+60
1.7.11.3 Temp 2 min	Set minimum temperature for sensor 2, upon reaching which the event is logged	Enter temperature -10...+60
1.7.11.4 Temp 2 max	Set maximum temperature for sensor 2, upon reaching which the event is logged	Enter temperature -10...+60
1.7.11.5 Temp 3 min	Set minimum temperature for sensor 3, upon reaching which the event is logged.	Enter temperature -10...+60
1.7.11.6 Temp 3 max	Set maximum temperature for sensor 3, upon reaching which the event is logged.	Enter temperature -10...+60
1.7.11.7 Fresh temp. timeout	Maximal temperature sensor 1 out of range duration (in minutes)	Enter number 0...65000
1.7.12 Optical sensor	Configures optical sensors, used to record the dispensing of products	No Yes - to sub-menu
1.7.12.1 Max failure	Set the number of failures in attempting to dispense the product from all cells in the Machine, upon reaching this number the Machine reacts as per the settings in s.c.1.7.12.1.1	Enter number 0...255 0=turns OFF the option
1.7.12.1.1 Max failure option	The Machine's reaction to failures set in s.c.1.7.12.1: <ul style="list-style-type: none"> <li>• Machine block – restrict sales from all the cells;</li> <li>• Disable refund – No refund of deposited credit</li> </ul>	Machine block Disable refund
1.7.12.2 Max sel. failure	Set the maximum number of failures to dispense product from a single cell. Upon reaching this number the Machine reacts, as per the settings of 1.7.12.2.1	Enter number from 0...255 0=Disable option
1.7.12.2.1 Max failure option	Machine's actions upon reaching the maximum number of failed attempts at dispensing the product set in s.c.1.7.12.2: <ul style="list-style-type: none"> <li>• Machine block – stop sales from the given cell;</li> <li>• Disable refund – no refund of credit deposited</li> </ul>	Machine block Disable refund
1.7.12.3 Additional turn max	Maximum additional turn of spiral in case of failure (to dispense product)	1/2 3/8 1/4 1/8
1.7.12.4 Additional turn step	The step of additional turn of spiral monitored by the optical sensors	1/2 1/4 1/8



Sub-menu	Description	Value
1.7.13 Alarms	Configuration of Machine's siren (alarm)	
1.7.13.1 Optical sensor alarm	<ul style="list-style-type: none"> <li>YES – Sound alarm in case of blockage of optical sensors, when not dispensing products</li> </ul>	Yes / No
1.7.13.2 Tilt sensor alarm	<ul style="list-style-type: none"> <li>YES – Sound alarm if the sensors indicate that the machine had been hit or tilted</li> </ul>	Yes / No
1.7.13.3 Alarm last	The time length of alarm (in seconds)	Enter number 0...60000
1.7.14 Door lock system	Determines the presence of electromagnetic lock of the dispensing compartment	Yes / No
1.7.15 Vend timeout	If there is an electromagnetic lock (YES – s.c.1.7.14), then this parameter determines the duration of time, during which the given compartment would be open for product retrieval	Enter number 0...255
1.7.16 Wide extension	<ul style="list-style-type: none"> <li>YES – for wide Machines of type LONG</li> <li>NO – for all other models</li> </ul>	Yes / No
<b>1.7.17 Lift (not used)</b>	<b><i>This menu item is displayed but not active The configurations must be set to NO</i></b>	No
1.7.18 Retry blocked motor	<ul style="list-style-type: none"> <li>YES – permission to give extra rotation to the motor of the blocked cell</li> </ul>	Yes / No
1.7.19 Debug	<ul style="list-style-type: none"> <li>YES – Machine debugging mode, with an option to record the last actions (for few hours of operations) to a USB drive. Usually used in case of malfunctions, operational errors etc. To log events and to transfer data to the manufacturer's technical support (maintenance personnel)</li> </ul>	Yes / No
1.7.20 To menu when opened	<ul style="list-style-type: none"> <li>YES – Automatically displays maintenance menu, when its door is open</li> </ul>	Yes / No
1.7.21 Keyboard test	Keyboard testing. Displays each key press on the Machine's LCD	Value of the pressed key



---

**2.4.4.1.8 Menu item [1.9 HOT 1 / 1.10 HOT 2]**

Menu items “1.9 Not 1” / “1.10 Not 2” are used for drinks vending machines and are not used in FOODBOX type vending machines.

For proper Machine configuration, in s.c.1.1.13 “Not number” you must enter a 0 value.

In this case menu items 1.9 and 1.10 will be hidden, to not mislead the customer.

**Note:** Description of the given menu items can be found in the User Manual for Drinks vending machines.

**2.4.4.1.9 Menu item [1.11 MAINTENANCE]**

This is used to enter Operator’s menu through technician’s menu.



#### 2.4.4.2 Operator's menu

This menu provides access to functional features of the Machine during periodic servicing. These features include event logs, information regarding equipment functioning and errors, access to configure information about drinks and browse through sales statistics. The menu item numbers include the digit "2", which helps clearly mark the type of maintenance menu as – Operator's menu.

##### 2.4.4.2.1 Menu item [2.1 STATUS]

This menu item provides a look into Machine's operational errors.

Most of the errors are nullified after you exit the maintenance menu. Some of the errors need to be liquidated manually and shift to menu item 2.1.2.

Sub-menu	Description	Value
2.1 Status	Display of operational errors	
2.1.1 Show error	Shows a list of errors (current and previous) upon entry to the menu item, indicating the type of equipment, number of failures, date and the time of last error, as well as the current state of error (active or not)	List of errors
2.1.2 Reset error	Resets errors upon entry	
2.1.3 Temperature	Shows the temperature of two temperature sensors of SVM-1, which was fitted with a new Regulator. This menu item is hidden if the number of snacks is 0 or if there is no temperature sensor connected to keypad 021 of SVM-1	
2.1.4 Voltage DC	Shows the DC voltage on main board (regular reading, when fed from a 220V source is 32.6V). This menu item is hidden if the first version of mainboard is installed	


**2.4.4.2.2 Menu item [2.2 CASH]**

Sub-menu	Description
2.2 Cash	Machines configurations to handle cash
2.2.1 Manual Coin In	<p>Upon entry it is allowed to load coins in tubes manually through coin entry slots, located on the front of the management compartment and loading banknotes to recharge change availability.</p> <p>At the same time the LCD shows information regarding the selected tube: denomination of the loaded coin. Letter "F" indicates that the tube is full.</p> <p>After recognizing the loaded coins, you will see information about the tube to which that given coin was deposited</p>
2.2.2 Manual Coin Out	<p>This menu item is hidden if the Machine is in Operator's menu, but Operator's privileges do not give access to coin discharge (privileges are set in technician's menu).</p> <p>In the given mode the LCD shows information about the tube selected for discharge (withdrawal) of coins: coin denomination, number of coins.</p> <p>For discharge of one coin from the selected tube press "→"</p>
2.2.3 Change motor test	At the entrance test is performed motor delivery
2.2.4 Bill cash box (provided if the modem is installed)	When entered sends a simulated stacker emptying signal to the server (collection signal) in cases when there is no Bank Note Acceptor (BNA), or the stacker sensor is broken
2.2.5 Print Z-report(s)	<p>If you press the enter key the Z-report is printed/ shift is closed (if there is a cheque printer connected to the Machine).</p> <p>Show cheque printer's status</p>


**2.4.4.2.3 Menu item [2.3 SNACK 1]**

Menu item “2.3 Snack 1” is designed for maintenance and monitoring of Machine’s main parameters.

This menu item is hidden if s.c. “1.1.12 Snack number” = 0.

Sub-menu		Description
2.3 Snack 1		Testing and monitoring of vending machine’s main features
	2.3.1 Automatic	Upon entry all motors are reset to initial state, as well as unblocking of all blocked spirals is performed (which were blocked after failure). It is MANDATORY to select this menu item before each Machine servicing and zero position adjusting.
	2.3.2 Test all	On entry tests all cells
	2.3.3 Test motor	Enter cell number. When you enter, a test sale is executed from the given cell
	2.3.4 Temperature	Shows temperature readings from all three sensors of FOODBOX
	2.3.5 Voltage DC	Shows the Voltage reading from the power supply circuit (normal value when on 220V – 29.8V)
	<b>2.3.6 Lift voltage DC (not used)</b>	<b><i>In this software version the menu item is shown, but has no parameters</i></b>
	<b>2.3.7 Lift (not used)</b>	<b><i>This menu item is shown but not used</i></b>
2.3.8 Test input		Testing the Machine’s sensors
	2.3.8.1 Optical sensor	Shows the state of optical sensors
	2.3.8.2 Door	Shows the state of door’s sensor
	2.3.8.3 Tilt	Shows the state of impact/tilt sensor
	2.3.9 Test siren	Turns ON the alarm for short time
	2.3.10 Keyboard test	Testing the keypad – shows the result of each key press on the Machine’s LCD


**2.4.4.2.4 Menu item [2.7 STATISTICS]**

Menu item “2.7 Statistics” is designed to display detailed sales data (audit).

Sub-menu		Description
2.7 Statistics		Displays sales data
2.7.1 Totals		Access to detailed info sub-menu
	2.7.1.1 Vend number	Shows information regarding the quantity of sales (number of transactions)
	2.7.1.2 Vend value	Shows the information about the amount of revenues
	2.7.1.3 Cash box	Shows information about the amount of money in the cashbox
	2.7.1.4 Cash box(coins)	Shows information about the quantity of coins in the cashbox
	2.7.1.5 Cash box (bills)	Shows information about the number of banknotes in the stacker
	2.7.1.6 Cash tubes	Shows information about the quantity of coins in the coin slot tubes
	2.7.1.7 Cash vend number	Shows information about cash sales
	2.7.1.8 Cash vend value	Shows information about the amount of cash sales
	2.7.1.9 Card recharge	Shows information about number of card recharges performed
	2.7.1.10 Cash overpay	Shows information about over payments
	2.7.1.11 Cashless vend number	Shows information about the number of card sales
	2.7.1.12 Cashless vend value	Shows information about the revenue from card sales
	2.7.1.13 Cashless incentive	Shows information about the quantity of bonuses, granted to card holders
	2.7.1.14 CL discount number	Shows information about the number of products sold on discounted rates
	2.7.1.15 CL discount value	Shows information about the amount of sales revenues from card sales at discounted rates
	2.7.1.16 Test vend number	Shows information about the number of sales tests performed
2.7.2 Details		Details of some of the items
	2.7.2.1 Cash details	Detailed information about banknotes and coins
	2.7.2.1.1 Tube level	Shows information about the received coins
	2.7.2.1.1.1 Tube level	Shows information about accepted coins
	2.7.2.1.2 Bills in	Shows information about the quantity of received banknotes
	2.7.2.1.2.1 Bills in	Shows information about the quantity of accepted banknotes
	2.7.2.2 Snack 1	Shows information about sales from each cell. This menu item is hidden, if s.c.1.1.12=0



Sub-menu		Description
	2.7.2.2.1 Vend number	Shows information about the quantity of sales
	2.7.2.2.2 Vend value	Shows the amount of sales revenues
	2.7.2.2.3 Cash vend number	Shows information about cash sales
	2.7.2.2.4 Cash vend value	Shows information about the amount of cash revenues
	2.7.2.2.5 Cashless vend number	Shows information about the number of card sales
	2.7.2.2.6 Cashless vend value	Shows information about the amount of card sales
	2.7.2.2.7 Test vend number	Shows information about the number of performed test sales
	<b>2.7.2.3 Snack 2</b>	<b><i>This item is shown if s.c.1.1.12=2. It is only used when connecting slave vending machine snacks</i></b>
	<b>2.7.2.4 Hot 1 (not used)</b>	<b><i>This menu item is displayed if s.c.1.1.13=1, but is not used</i></b>
	<b>2.7.2.5 Hot 2 (not used)</b>	<b><i>This menu item is displayed if s.c.1.1.13=2, but is not used</i></b>
	2.7.3 Reset	This menu item is not available in Operator's menu if "Operator's privileges" configured in the Technician's menu restricted resets for Operator. If reset was allowed – all reset parameters are nullified


**2.4.4.2.5 Menu item [2.8 DATA]**

Menu item “2.8 DATA” is designed to display equipment related information.

Sub-menu	Description
2.8 Data	Shows information about the Machine's equipment
2.8.1 Serial Number	Shows the Regulator's serial number
2.8.2 Version	Shows Regulator software's version
2.8.3 ChkSum	Shows Regulator software's checksum (to identify Machine's equipment)
2.8.4 Changer S/N	Shows the serial number of the Bank Note Acceptor (BNA)
2.8.5 Changer Version	Shows the version of the coin slot's software
2.8.6 Changer Model	Shows the type (model) of the coin slot
2.8.7 Bill Serial Number	Shows the Bank Note Acceptor (BNA)'s serial number
2.8.8 Bill Version	Shows Bank Note Acceptor (BNA) software's version
2.8.9 Bill Model	Shows the type (model) of Bank Note Acceptor (BNA)
2.8.10 CashLess S/N	Shows the card reader's serial number
2.8.11 CashLess Version	Shows the version of card reader's software
2.8.12 CashLess Model	Shows the type (model) of card reader
2.8.13 Snack 1 S/N	Shows the serial number of the Machine's power board. This menu item is hidden if s.c.1.1.12=0
2.8.14 Snack 1 Version	Shows the software version of the Machine's power board. This menu item is hidden if s.c.1.1.12=0
2.8.15 Snack 1 ChkSum	Shows checksum for the Machine's software (to identify the Machine's equipment). This menu item is hidden if s.c.1.1.12=0
2.8.16 Snack 2 S/N	This menu item is displayed if s.c.1.1.12=2 (only used when connected SLAVE-machine)
2.8.17 Snack 2 Version	This menu item is visible if s.c.1.1.12=2 (only used when connected SLAVE-machine)
2.8.18 Snack 2 ChkSum	This menu item is visible if s.c.1.1.12=2 (only used when connected SLAVE-machine)



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**2.4.4.2.6 Menu item [2.9 PRICES]**

Menu item “2.9 Prices” is designed to configure prices for the products, which the machine sells, in Operator’s menu. This menu item is hidden if s.c.1.1.6.1 is set to NO.

When you enter this menu, you must enter the cell number, which you want to edit. To enter the given menu item press the ENTER key. Once inside the menu you can select drink number using the direction keys.

After selecting the required drink you can access the sub-menu, by pressing the → key.

All the menu items in 2.9 are similar to menus of 1.6 (see sub-section 2.4.4.1.6).

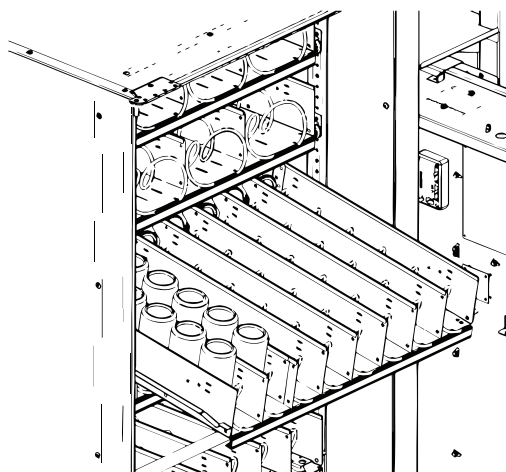
## 2.5 PRODUCT LOADING (REPLENISHMENT) AND PRICE TAGGING

To load products into the cells on the shelves it is necessary to open the management compartment's door and open the product dispensing compartment's door in such a way that the doors would not hinder the movement of shelves.

Pull the shelf fixator, which is located to the left. After this pull out the shelf to the maximum.



**ATTENTION!** To avoid Machine tipping over it is recommended that you pull out one shelf at a time. The products should be placed on the shelves in such a way that none of the products would hinder the passage of products from the cells to the dispensing tray. Make sure the shelf is pushed back completely after product loading!



For operator's convenience, some of the upper shelves, when pulled out have a downward tilt (see figure 27).

Load the products into the gaps between the spiral turns.

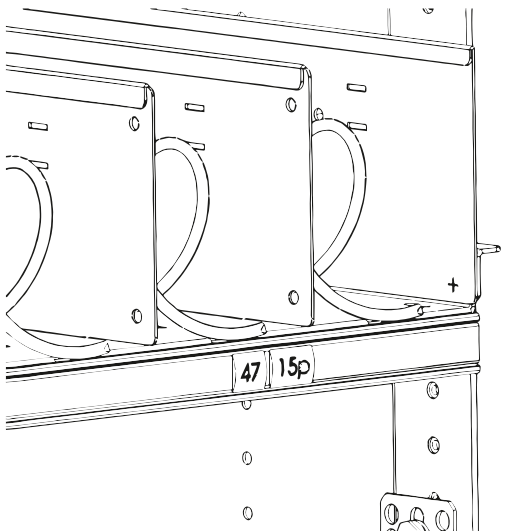
It is recommended to start filling the cells from the farthest to the nearest.

Do not leave empty cells.

After loading move back the shelf until it is fixed in the fixator. The products should not be cramped inside the spirals.

To avoid product cramping between the spiral turns, change the product packaging to smaller sizes or change the spiral.

Fig.27 - Loading the products on the Machine's shelves



The Machine's package includes inserts with digits.

Separate the tag with the required digits from the sheet and stick in the space designated for price tags (see figure 28).

Fig.28 - Price tagging



### 3.0 WORKING WITH USB FLASH DRIVE

The machine's Regulator allows Machine's configuration, software updates and data recovery by exchanging files using a USB drive (flash drive).

The drive is connected to the USB connector on the Regulator's board (see figure 7, position 3). The USB must be connected while in sales mode. When you connect the USB drive the Machine's display will show relevant information about the drive.

**ATTENTION!** To work with the machine is only suitable USB-flash drives! Disk drives and flash drives are not supported. Supports USB-flash drives with FAT16 or FAT32. Other file systems (including NTFS) not supported.

#### Information that can be read on the USB-flash drive with the machine:

- **Statistical data (Audit):** Information about the Machine's operations, sales, equipment functioning and logs. Stored in a file format EVA-DTS, file name: Axxmmddi.DTS. If the Machine's clock's not working the file name will be Axx\_i.DTS.
  - xx = last two digits of the serial number, set in clause 1.1.2 of the Technician's menu.
  - mm = Month (if date and time are set for the Machine)
  - dd = Day (if date and time are set)
  - i = digit from 0 to 9. You can save up to 10 files with different names in 24 hours.

To read the information you want to insert USB-flash drive into the connector of the controller board in the trade mode and confirm the request: **"Save audit?"**

- **The current configuration:** File format EVA-DTS. File name: Cxxxxxxx.DTS, C then the 7-digit serial number of the machine, specified in clause 1.1.2 of the Technician's menu (for example: C0000123.DTS).

This file contains equipment configuration information, as well as information about the names, placements and prices of products.

To read the information you want to insert USB-flash drive into the connector of the controller board in the trade mode and confirm the request: **"Write Configuration?"**



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**Information that can be downloaded from the USB-flash drive into the machine:**

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- **Configuration of a certain Machine:** File format EVA-DTS. File name: Cxxxxxxx.DTS, C then the 7-digit serial number of the machine, specified in clause 1.1.2 of the Technician's menu. The file will be loaded into the machine only when the coincidence of numbers specified in clause 1.1.2 and in the file name. This allows you to load from one USB-flash drive different configurations for different machines.

To download the information you want to insert USB-flash drive into the connector of the controller board in the trade mode and confirm the request: **“Load Configuration?”**

- **General configuration:** File format EVA-DTS. File name: CONF\_GEN.DTS. The file can be downloaded to the machine with any number specified in clause 1.1.2.

To download the information you want to insert USB-flash drive into the connector of the controller board in the trade mode and confirm the request: **“Load Gen. Config.?”**

**“Update Config.?”** - Confirm the command to update or create a new configuration file from machine to USB-flash drive in technical mode. This command appears when you put USB-flash drive into the controller board in technical mode.

- **Software update:** To update the machine software should visit the manufacturer's website under the link <http://www.unicum.ru/en/support> and on the next page, choose the appropriate model for automatic software updates. Then, on the next page, select the link FIRMWARE CONTROLLER, after which it starts the automatic download of files to your computer. The files are downloaded to the archive folder, for write files on USB flash drive, unzip the folder and save the contents of a folder in the root directory of USB flash drive. The archive folder contains software update files machine with explanatory text files.

To update software the machine you want to insert USB flash drive with saved the files in the USB connector of the controller board machine. When these files are stored on a USB-stick determined by the controller is displayed proposal to update the software.

To download the power board must confirm the request: **“Load Snack Firmware?”**

To download the software of the main board machine must confirm the request: **“Load Firmware?”**

Editing configuration files, and view audit files by using a special program “Unicum Vending Machine Tools, which can be downloaded here:

<https://uonline.unicum.ru/ef/tools/uVMTools.msi>



## 4.0 MAINTENANCE

### 4.1 SAFETY MEASURES

During maintenance works you must adhere to the safety measures indicated in the previous sections. All maintenance works must be performed when the Machine is switched OFF and is unplugged. Do not allow any liquid spills inside the Machine.



**ATTENTION!** Any independent maintenance works, disassembly of the Machine and its components, except for the cases described in this Manual and in the Bank Note Acceptor (BNA)'s user Manual and other equipment's manuals, are prohibited and if executed such maintenance works automatically render manufacturer's warranty ineffective! For repairs and technical support it is necessary to contact the company's regional service center or central service center. These addresses are shown in the manufacturer's information.

### 4.2 DUSTING AND CLEANING

The compartment bodies and doors must be dusted and cleaned at least once every 6 months or as conditions dictate.



**ATTENTION!** It is prohibited to use abrasive materials, solvents, whiteners or substances containing chlorine!

The cleaning staff assigned to maintain the vending machines, before opening the Machine, must make sure that there are no air polluting substances or items nearby. After this the person must install a sign informing the customers that the Machine is out of service for maintenance.



**ATTENTION!** It is prohibited to turn ON the Machine during cleaning!

### 4.3 CLEANING THE BANK NOTE ACCEPTOR (BNA)

The Bank Note Acceptor (BNA) should be cleaned once every 3 months or in case if it has problems accepting the bills.

To clean and dust the Bank Note Acceptor (BNA):

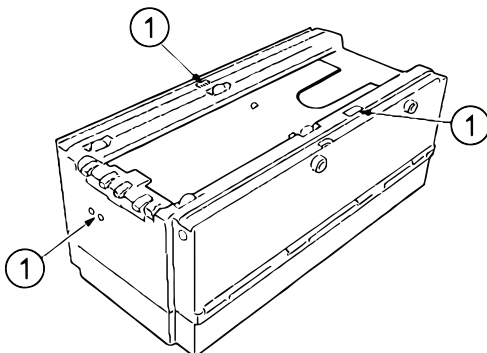
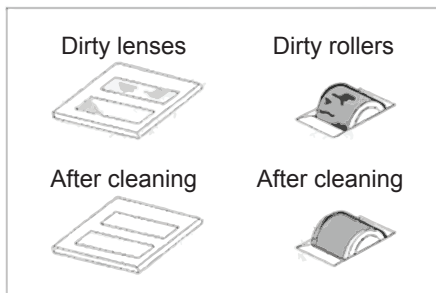
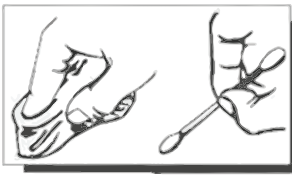
- Turn OFF the machine
- To access the Bank Note Acceptor (BNA) open the door to the management compartment and remove the bracket which holds the Regulator board, unscrewing the bracket;
- Remove the stacker (see figure 10);
- Remove the optical part of the BNA (see fig 34) and use a brush to dust the receptor channel;



- Wipe clean with soft moist fabric or cotton bud and then dry the following components: Lens sensors (1), the lenses are made of transparent polymers, therefore, it is necessary that you perform this action very carefully (fig 29). Clean the wheels (2) AND THE BELTS (3);
- Then clean the BNA's stacker, in the similar fashion;
- Replace the optic part back, fit the stacker back, reinstall the bracket in its place and screw tight the bracket.



**ATTENTION! It is prohibited to use spirit, acetone, solvents and corrosive liquids for cleaning!**



1 - Sensor; 2 - Roller; 3 - Belt

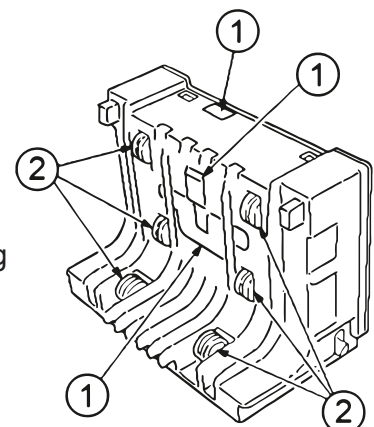
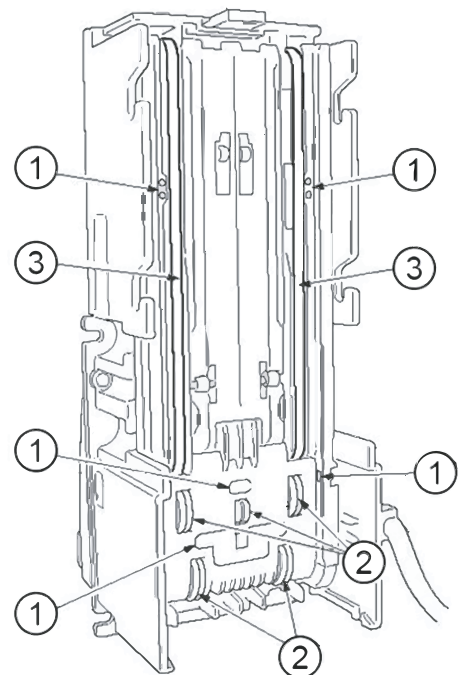


Fig.29 - Place of Bank Note Acceptor components which needs cleaning



#### 4.4 CLEANING THE COIN SLOT

The coin slot must be cleaned once every three months or if it seizes to function properly.

To clean the coin slot:

- Turn OFF the machine;
- Unblock the user interface door, pushing on the panel's fixator (see fig 13) and open it;
- Holding the door open, remove all the dirt using a brush;
- Close the door;
- Press the return level (see fig 13) and open the door of the receptacle;
- Using moist fabric remove or a brush clean the inlet channel;
- Close the door.

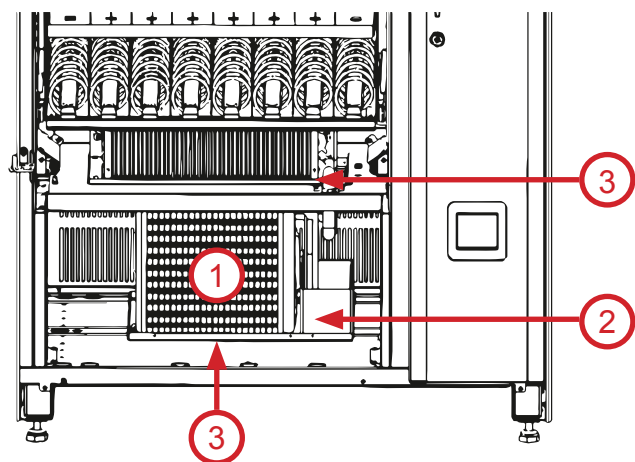


**ATTENTION! It is prohibited to use cleaning liquids which can harm plastic parts!**

#### 4.5 MAINTENANCE OF REFRIGERATION UNIT

To access the inner parts of the refrigeration unit:

- Turn OFF the Machine;
- Open the management compartment door
- Using a tool remove the product dispensing tray (page 31 section 5)
- The condenser (see figure 30 position 1) and the ventilation radiator must be cleaned using a vacuum cleaner, narrow brush and cotton fabric.



- 1 - Condenser
- 2 - Condenser container
- 3 - Tray

Fig.30 - Machine without the dispensing tray

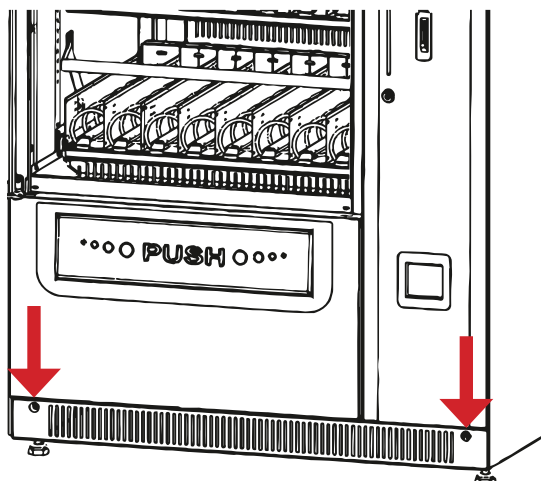


Fig.31 - Removal of vertical cover

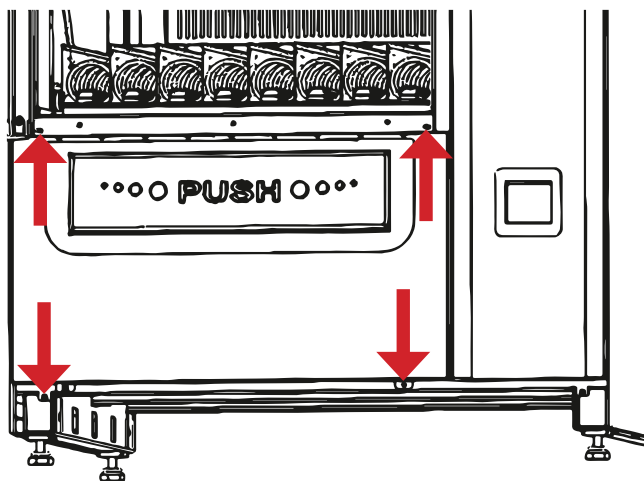


Fig.32 - Fixing the dispensing tray

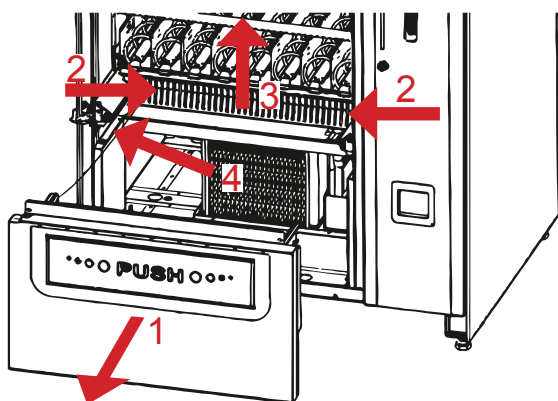


Fig.33 - Removing the dispensing tray

- Remove the dispensing tray (see figure 31 ... 33) in the following manner:
    - Unscrew the nuts as per figure 31 and remove the ventilation cover;
    - According to figure 32 unscrew the upper and lower nuts which secure the tray.
    - Carefully pull out the tray (see figure 33 position 1);
    - Loosen the nuts (see figure 33, position 2), raise a bit and remove the cover (see figure 33 position 3)
    - Disconnect the tray earthing wire from the Machine's body (see figure 33 position 4);
  - Check the condensate container (see fig 33, position 2). If it is full with water, empty it using available means (sponge, fabric, syringe, wet vacuum cleaner);
  - Clean the container using fabric;
  - There should be no water in the trays (see fig 33, position 3) and on the electric wire casing. If there is water you must dry it out using a dry cloth and let everything dry before turning ON the Machine.
- After maintenance works and cleaning of the refrigeration unit carefully check the unit's integrity, then carefully reinstall the dispensing tray and the cover in the dispensing compartment. Doing so make sure that the earthing wire and refrigerator's tubes are not pressed against anything or damaged.



Setting the dispensing tray to the machine:

- Install back the dispensing tray in the Machine, by placing it in-between the guides, which are installed on the side walls of the body. Be careful to make sure that the earthing cable would not be damaged or pressed during this process;
- Connect the tray's earthing to the Machine's body (see figure 33 position 4);
- Reinstall the cover (see figure 25 position 3) and fix it using the bolts (see figure 33 position 2);
- Reinstall the dispensing tray, tightening the upper and lower fixtures (see figure 32);
- Install and fit the ventilation cover, tightening the fixtures (see figure 31).



**ATTENTION!** It is prohibited to allow damage to the pipes, condenser screens, evaporator and other parts of the refrigeration unit, which violate the unit's integrity and airtightness. If you discover any such damage it is prohibited to turn the Machine ON! In this case open all the windows and ventilators in the premises. To repair the damage please contact the service center. It is prohibited to let the earthing cables be damaged.

#### 4.6 CHANGING SHELF CONFIGURATION

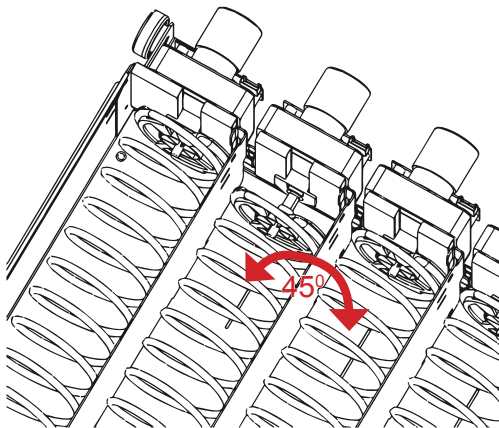


Fig.34

Pull-out the shelf and vacate it.

To give optimum positioning to the spiral ends, according to figure 36 pull the spiral and turn it by 45° or greater angle (45° multiple) and release it.

##### 4.6.1 Changing the spirals

Disconnect the electric motors' connectors (see fig 35 position 1) and pull out the shelf (see fig.35)

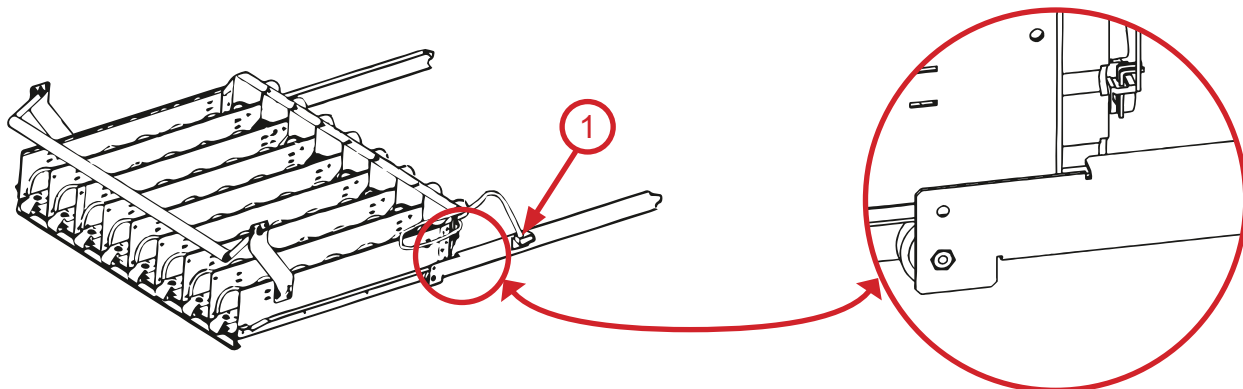
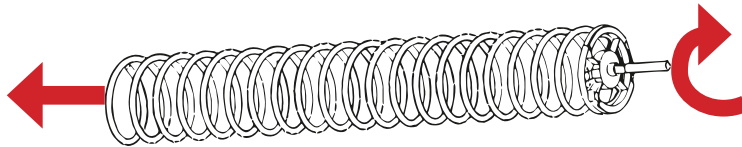


Fig.35- Dispensing compartment shelf



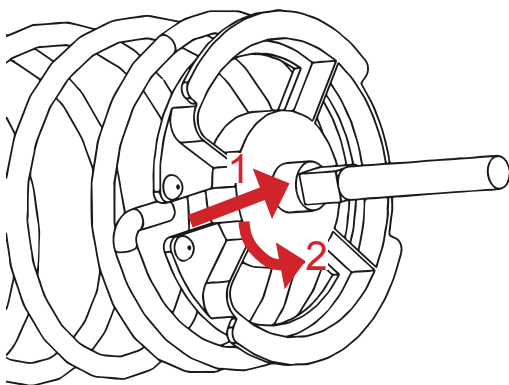
**ATTENTION!** To avoid the Machine's tipping over, do not remove all shelves simultaneously.

If the spiral, which are included in the Machine, are not fit for the products that you offer, you can select other spirals, which have proper sizes and can replace the factory installed spirals.



Rotate the spiral's left hinge counter-clockwise (right hinge should rotate clockwise) until the spiral goes free and then remove the spiral (see figure 36)

Fig.36 - Spiral holder with spiral



Install the required spiral on the spiral holder (see figure 37) and rotate it to fix the spiral.

The spiral in figure 36 shows the left holder. When using spirals with right hinges, the end of spiral fixes on the upper groove.

Fig.37 - Installing the holder on the new spiral

After changing the spiral replace back the shelf and connect the motors to the connector.



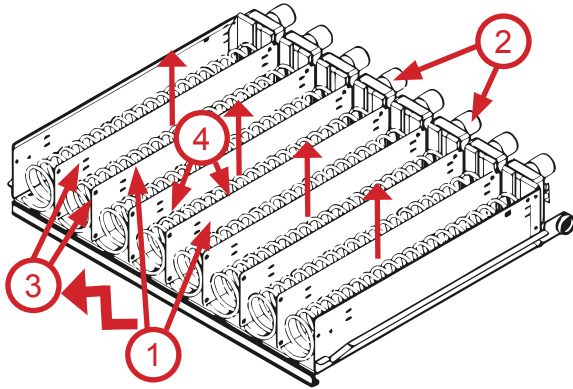
#### **4.6.2 Changing shelf configuration**

Disconnect the motors and remove the shelf (see section 4.6.1).

##### **4.6.2.1 Replacing a single cell shelf with a double cell shelf**

You can see double space shelf, for offering wide dimension products, in figure 41.

To change the shelf configuration you will need 4 motors for two spirals and in addition to the 4 factory supplied spirals with left hinge, you will need 4 spirals with right hinges. Do as shown in figures 38...39:



- Remove 4 separators by lifting them as shown in figure 38.

Fig.38 - Shelf with single size cells (FOODBOX)

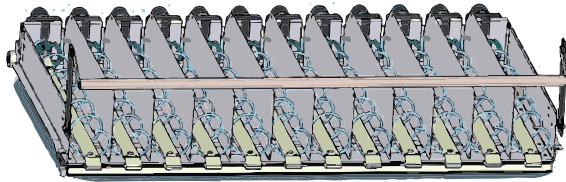
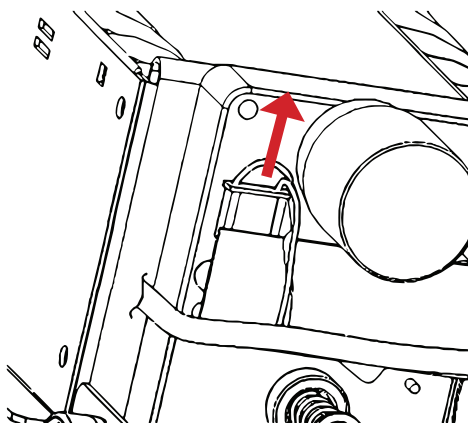


Fig.39 - Shelf with singular cells (FOODBOX LONG)



- Disconnect the motors (see figure 40) and remove all motors with spirals;
- Remove any four spirals with hinges (see section 4.6.1);
- Install the spirals on the motor holder (see section 4.6.1), notably on one motor – two spirals two spirals with opposite hinge directions and with similar spool size;
- Install the motors on the shelf and connect them (see figure 40).

Fig.40 - Separating the motor connector

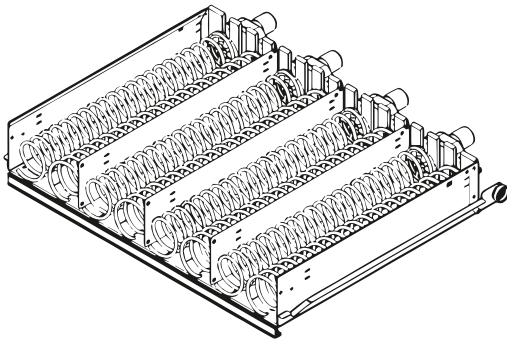


Fig.41 - Shelf with double width cells

After changing the shelf configuration it is important to test the operational status of the motors. For the purpose enter Operator's menu and select menu item SNACK/MOTOR TEST (input cell number) – see section MAINTENANCE MODE.



**ATTENTION!** This test assumes the dispensing of product from the tested cell into the dispenser tray. If this would not happen following a complete turn of the motor, the spiral will be rotated completely and the test will end with "FAILURE" notice.

#### 4.6.2.2 Alteration of shelf configuration to convert single space cells into 1½ width cells

Figure 42 shows the overall view of the shelf with 1½ space cells for selling medium width products.

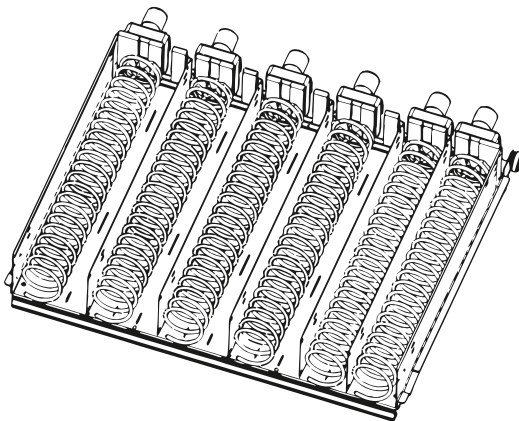


Fig.42 - Shelf with 1½ width cells

- Remove two spacers (see fig 38 position 1);
- Disconnect and remove two motors with spirals (see fig 38, position 2) – see section 4.6.2.1;
- Reset two spacers and two motors with spirals (see fig 38 position 3,4) one step in the installation spot on the shelves.

#### 4.6.2.3 Additional accessories

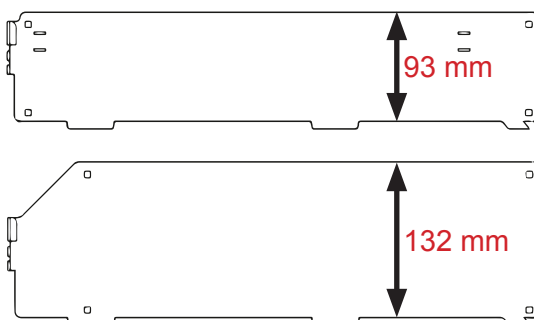


Fig.43 - Spacers

When selling wide dimensional products, it is recommended to use higher vertical spacers (see fig 43).

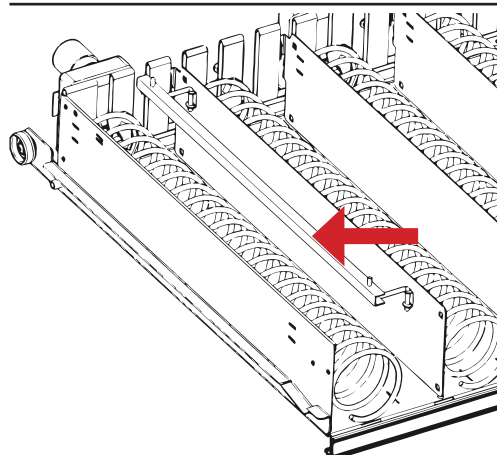


Fig.44 - Spacer

When selling less width products, it is recommended to use extra spacers in the cells (see figure 44).

When selling products packed in cans and bottles, it is recommended to buy a set of guides and a set of spacers for bottles and perform the following operations (fig 45):

- Insert the spacer (1) installing it in the groove (2), aligning the guide's hole (3) with the spacer's axis;
- Fix the guide using self-tapping screw (4), which came with the guide.

For high bottles or cans there are additional mechanisms to protect against chance tipping over and product jamming, which is closer to the front window – bottle spacer (5) with a set of fixtures (see figure 46).

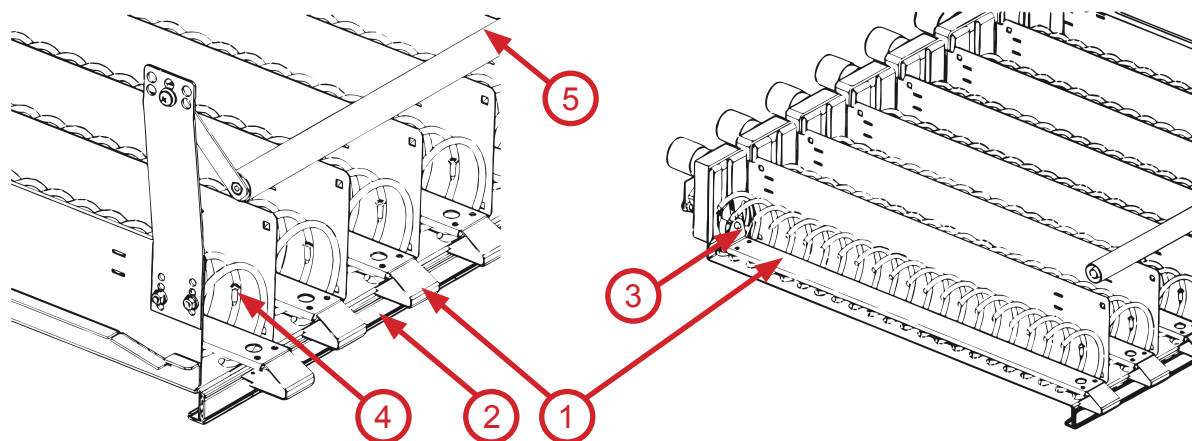


Fig.45- Installation of guides

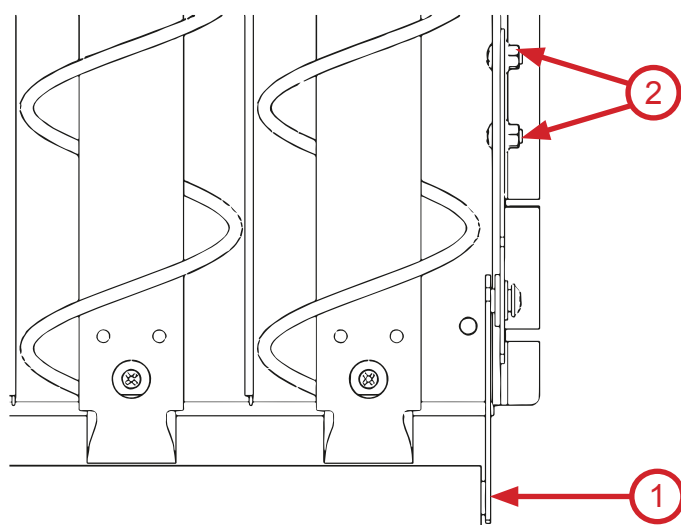


Fig.46 - Installation of spacer

- 1 - Bottle spacer
- 2 - Fixtures

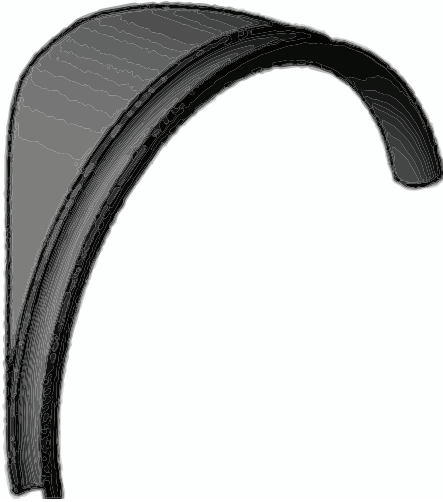


Fig.47 - Pusher

To enhance the pushing effect by the rotating spiral and reduction of probability of its tipping over, the spiral can be equipped with a special pusher, which is fitted to the front of it (see figure 47).

#### 4.7 ADJUSTING THE SHELF HEIGHT

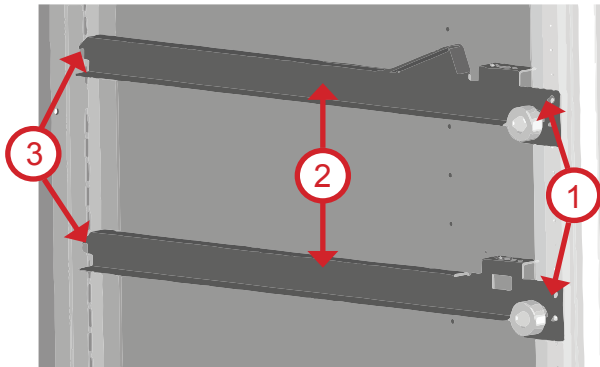


Fig.48 - Installing the shelf guide

- Remove all products from the shelves and then remove shelves one by one (see figure 4.6.1);
- Unscrew the screw (see figure 48, position 1) of the guide, which needs to be removed;
- Remove the guide (see figure 48, position 2) from the groove (see figure 48, position 3);
- Install the guide at its new spot, setting it in the groove and tightening the screw (see figure 48, position 1).

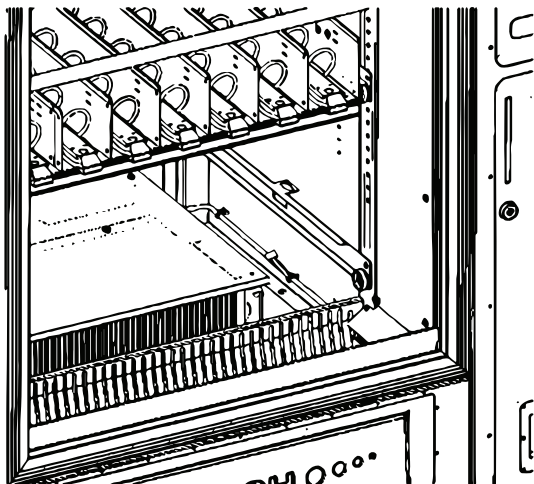


Fig.49 - Location of the connector for the 7<sup>th</sup> shelf

The Machine has 7 motors for 7 shelves.

The connector is under the lower shelf, which is fixed to the right wall of the dispensing compartment (see figure 49).

To install the seventh shelf you will need to order:

- 1 - Set of shelves;
- 2 - Complete guides (left and right)

#### 4.8 CONSERVATION

This Machine cannot be conserved.



## 5.0 RUNNING MAINTENANCE

The Machine's average faultless span is 8000hours.

The average lifespan is no less than 8 years.

The indicated time periods are valid only if the user adheres to the requirements stipulated by the current Manuals and documentation.

Only the engineering personnel of authorized service centers have the right to diagnose and repair the Machine.

## 6.0 STORAGE

The Machine should be stored on a tray in manufacturer's packing in vertical position, at the same time it is prohibited to stack the Machines on each other.

The distance between the packed Machine and the source of heating should not be less than 0.5 meters.

The Machines should be stored under the following conditions:

- the air temperature should be from plus 5 to plus 40° C;
- relative humidity at plus 25° C should not be more than 85%

The air in the storage facility should not be dusty and should not have acidic vapours and alkali in it, as well as gases, which cause corrosion.

The information about the Machine's storage must be added in the product certificate, which is included in the documentation, supplied with the Machine by the manufacturer.

## 7.0 TRANSPORTATION

The Machine should be transported in the transportation packing, by any means of transport, except for air transport in accordance with the terms of transportation:

Direct shipment by automobiles for distances of up to 1000 km on asphalt or concrete roads (first category roads) without any speed limits or at a speed of up to 40 km/h for distances of up to 250 km over pebble roads or gravel roads (second and third category roads);

Combined transportation using trains, river transport, and also on automobiles, as well sea transport in hull.

Placement and fixing of the Machine in means of transport should be such that the Machine should not fall, move around and hitting something or impacting with other objects or with each other.

Conditions of transportation machines in terms of the impact of climatic factors must be carried out at an ambient temperature range from minus 35° to plus 50° C.

Transportation of the Machine must should be carried-out by trained personnel. The Machine must be placed on a tray. You should use fork lifts for moving the Machine all around (see figure 18).

The Machine should be moved using the fork lift very slowly, to avoid its fall or dangerous movement.

Protect the Machine against:

- Impacts;
- Effects of external factors;
- Storage of Machines in highly humid premises.

The Machine should not be used for any other purpose other than the designated one.

The manufacturer bears no liability for damage, caused by partial or complete non-compliance with the above mentioned requirements.

Storage – It is prohibited to stack the Machines on each other.



## 8.0 UTILIZATION



This symbol means that the Machine cannot be discarded as common domestic waste. It must be utilized in accordance with the national laws of the country, in which it is installed, to avoid any possible unpleasant consequences because of effect on environment and human health (Direct EC 2002/96/EC).

The decision of decommissioning and utilization id to be made by the owner of the Machine, considering its lifespan expectations (see section 5.0).

All the materials used to make the Machine and all its components, contain no hazardous for health substances.