

SERIE

Elite

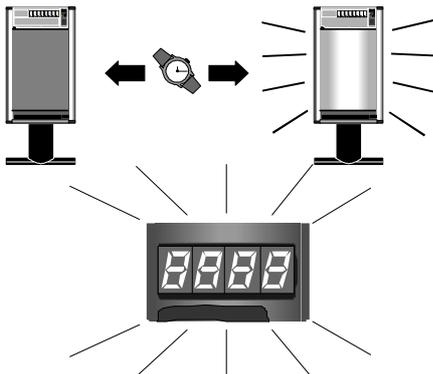


**SERVICE AND  
SPARE MANUAL**

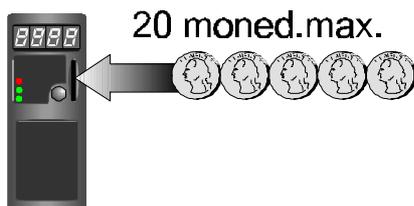
## WORKING CHARACTERISTICS.



- The alarm LED lights up every 5 seconds.
- The out of change LED indicates that the number of coins available for change is under a predetermined level.
- The out of product LED will only light up if the whole machine is empty.
- The external display can show the time or four zeros.

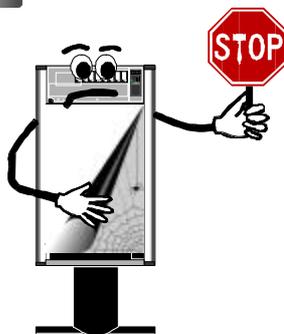


- The advertising panel light can be programmed to turn on and off at certain times during the day.



- When the machine is turned on, a self-check sequence takes place and an error code will blink on the display if any fault is detected.

- The machine admits a maximum of 20 coins for one purchase. If more coins are introduced, they are automatically returned.



- If there is no product, the machine will not admit any coins.

- If there is no change available, the machine will accept coins but will return them when the purchase is selected if the amount does not coincide exactly.
- Coins going to the coin box may be rejected if there is not sufficient change in the change chutes.
- The change chutes should not be filled or emptied manually. Programming options should always be used for these operations.
- Depending on the way they have been programmed, the machines may not return change when there is no money in the change chutes.
- Prices can be programmed in three different ways.
- If a coin is not accepted but the machine has enough change for a possible sale, check that that particular coin size has not been inhibited through programming by the client..
- If the machine is programmed for free sales, it will reject all coins and will only move those extractors that have product.

## MACHINE INSTALLATION

- **Unpack the machine.**

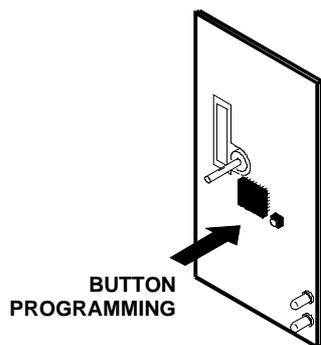
Remove outside and inside packing (Elite 24 models).

- **Level the machine properly.**

Using the levelling knobs at the bottom of the machine, adjust height until the machine is perfectly level.

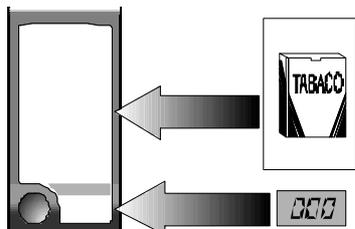
- **Plug into mains.**

Connect to a 220 Volt / 50 Hertz source. Turn the main switch on (located inside the machine, on the left hand side, at the level of the collector). If the process has been carried out properly, the V-retainer should move its paddles and the display and fluorescent light should turn on.



- **Insert tobacco and change coins.**

Put at least one cigarette pack in any slide and use the **00.00** programming option to put coins in the coin assembly so that they are available for change. To go to option **00.00** you need to push the programming button located on the display card (the card located at the top, left-hand side inside the door).



- **Set prices.**

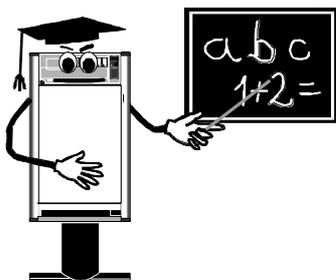
Use one of the three ways for setting prices (see programming instruction manual) to set a price for each slide depending on the brand it holds. Place brand labels in the button panel and on the front part of the extractor, as well as price labels with the adequate figures. All these labels are located in an envelope inside the machine.

- **Adjust the time.**

Using option **01.02** adjust machine clock time, month and year.

- **Fill in machine warranty card..**

Fill in machine warranty card giving the customer one copy and sending another copy to the factory.



### VERY IMPORTANT

- **Explain to the customer.**

Explain to the customer the basic working of the machine and how to use its basic functions; i.e., programming options 1 to 10.

***This completes basic machine installation. Other options which may be of interest are:***

- **Joining slides.**

Programming option **01.19** allows you to assign several buttons to several extractors and create the combinations between slides and extractors that you wish.

- **Machine lighting.**

Option **01.06** allows you to control when the machine fluorescent light turns on and off. This allows you to have it off outside opening hours.

- **Customising the machine.**

There are other programming options which allow clients to customise how the machine works.

## TESTS

- **Testing communication between cards.**

The red LED on all cards should blink, while the green LED should be continuously lit.

If you press a selection the price should appear on the display.

Inserting a pack in any one slide will remove the out of product indication.

In all cards, the green LED indicates that there is a power supply and that it is receiving commands, while the red LED indicates communication.

- **Checking the coin assembly.**

If when entering programming mode the options related to the coin assembly do not appear, this means that it is not responding to machine commands and that the machine is unaware that it is in place.

Problem	Possible cause
If there is product in the machine and the coin assembly responds to return option 00 01 and does not admit coins.	Check the coin tester and coin separator for stuck coins. Check that the coin tester hinge is properly closed.

- **Extractor test.**

When an extractor does not work, to determine whether the problem is in the extractor or in the card that controls it change its card connection with the next one and check both.

Problem	Possible cause
An extractor does not stop in the correct position.	The stop switch is not working properly.
If there is product and this is not indicated.	Check the product microswitch and the activation lever.

- **Entering programming mode..**

Problem	Possible cause
When you enter programming mode you cannot get past the first option	A button, either from the selector panel or the return switch is activated.

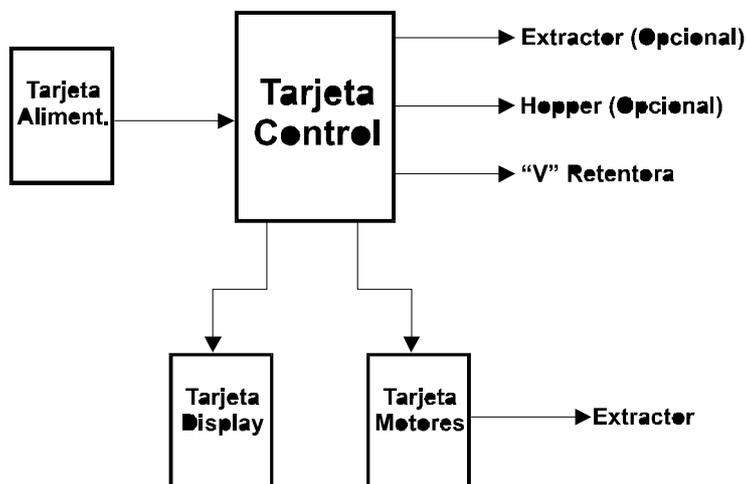
- **Sale test.**

The best way to check this is by buying a pack of cigarettes.

## CONTROL ELECTRONICS

**Control electronics** for the machines consists of several cards connected to one another through a serial bus with MDB protocol. Three of these cards have their own microprocessor and their own program that can write on the micro (Motor Card) or in a separate memory (Control and Display Cards).

### Diagrama funcional de las tarjetas.



### CARD FUNCTIONS.

- The Power Supply Card** is connected to the transformer and provides the machine with the 24 V/DC current needed by the extractors, hoppers, V-retainer and other peripheral devices, 34 for coin assembly and the 8 V/DC current needed by the cards. Drawing 57003 shows the function of each of the connection pins. The card comes equipped with two fuses.
- The Control Card** is the here the main program is located. The program is in a 512-Kb EPROM memory. In order to write into this memory you need a PC, software and a memory programmer. This card has a RAM memory with a battery and a clock where all variables are stored (Pries, sales, etc.) which the machine needs to work. There are two control card models and the only difference is the number of motors each can control. Obviously, the larger one can be installed in any machine and this is the only one supplied as a spare. There are three variants for drawing 57002 where the factory standard extractor, hopper and V-retainer connections can be seen, depending on machine model. This card also has a connection for a coin assembly with change using protocol A, but it does not work in the machine program. Each time we need to add options to the machine or modify its functioning, we need to modify and substitute the program written into the EPROM. Each time that a program is upgraded to a newer version, some variable may change in value. It is therefore necessary to either initialise the machine or check it and re-program the variables. Under normal machine working conditions the control card is continuously consulting the other cards and the coin assembly in order to know what is going on. Each request is answered with a report from each card and the coin assembly indicating what it is doing.
- The Display Card** checks the machine buttons and controls the front display. It has its own microprocessor and program which is totally independent of the machine. Drawing 57001 shows the functions of each pin of each connector. This card is always the same in all models.
- The Motor Card** monitors the motors and micro-switches connected to it and reports to the main

card.

It has its own microprocessor and program which are included in the same chip.

There are three variants for drawing 57000 where the factory standard extractor connections can be seen, depending on machine model.

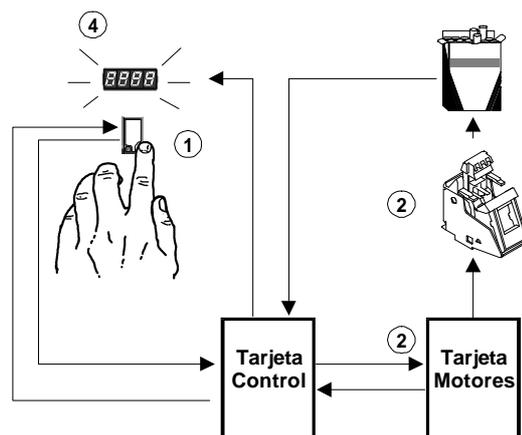
### Working example:

- **The machine is waiting for a sale ...**

The Control Card is sending the Display Card information on the current time so that the Display Card can show it. At the same time it is asking whether any button has been pushed. At the same time it is asking the coin assembly if any coin has been inserted. At the same time, it is asking the Motor Card to know its state. This cycle is repeated 20 times per second.

- **Somebody arrives and pushes a button in the selector ...**

The Control Card is sending the Display Card information on the current time so that the Display Card can show it. At the same time it is asking whether any button has been pushed. When the Display Card answers that a button has been pushed (1), the Control Card asks the Motor Card if there is product in the corresponding extractor (2), checks in RAM memory for the price of this button (3) and sends the Display Card (4) the price to be displayed and the information to light up or not the out of product LED.

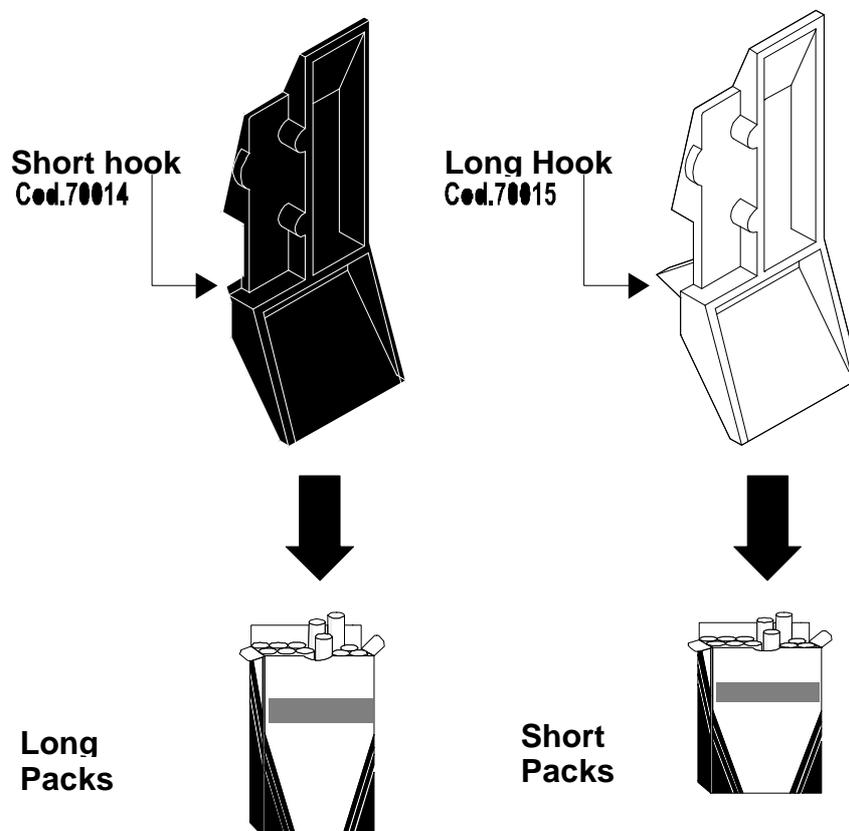


If one of the cards does not work properly, we will not be able to see the price when the button is pushed. At this time, we would check the LEDs in the cards to find out which one does not work.

## RETAINING HOOK

There are two parts with the same shape in the **Elite** machines:

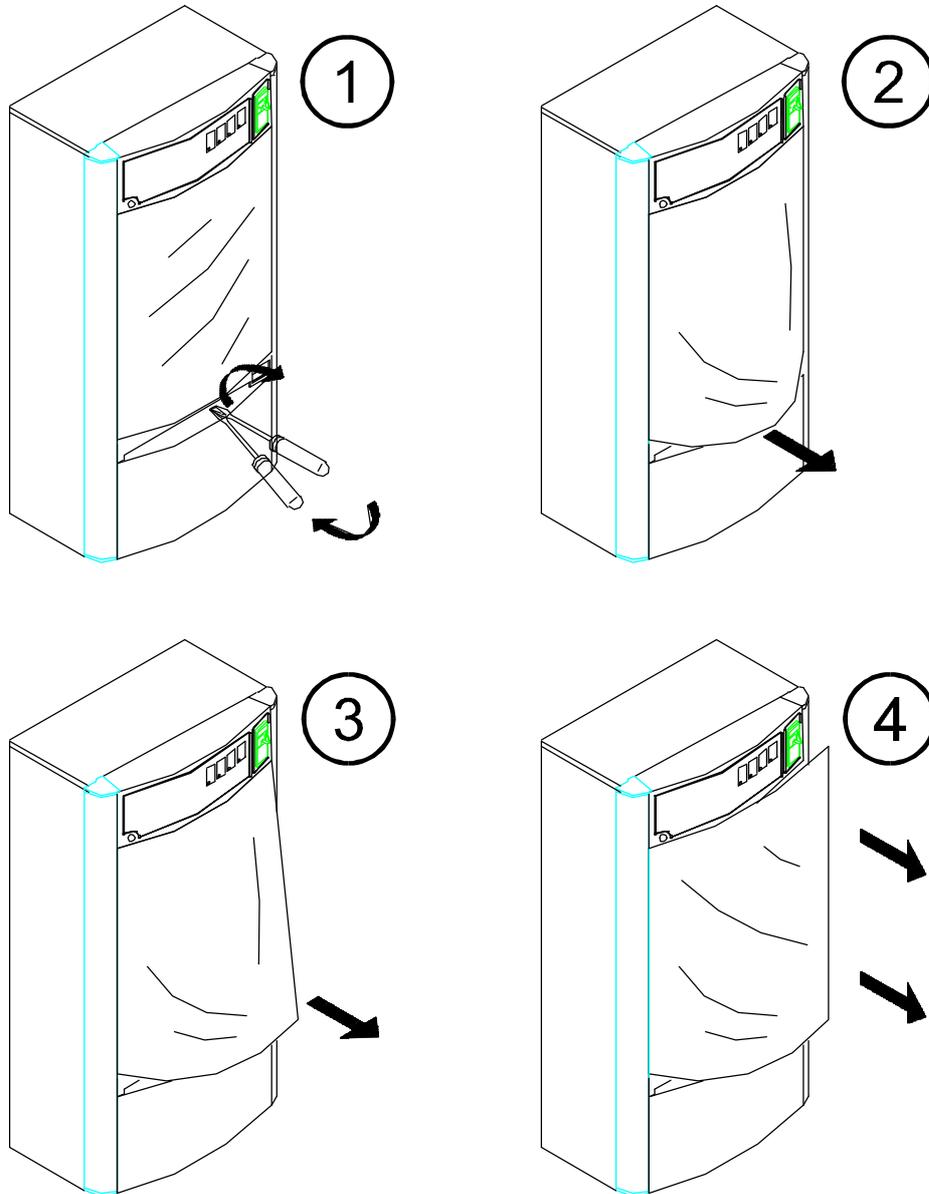
The difference between the two machines is in the retaining hook length. The short retaining hook part adapts to longer cigarette packs, such as Winston, Marlboro, Fortuna, Ducados, Camel etc. The part with the long retaining hook (white) should be used for the slides that carry Lucky Strike or similar packs.



In the machines, all slides have part 70014 (black).  
In a separate bag there are several units of part 70015 (white).

## PHOTOGRAPHY

### Photography take apart.



### Photography assembly.

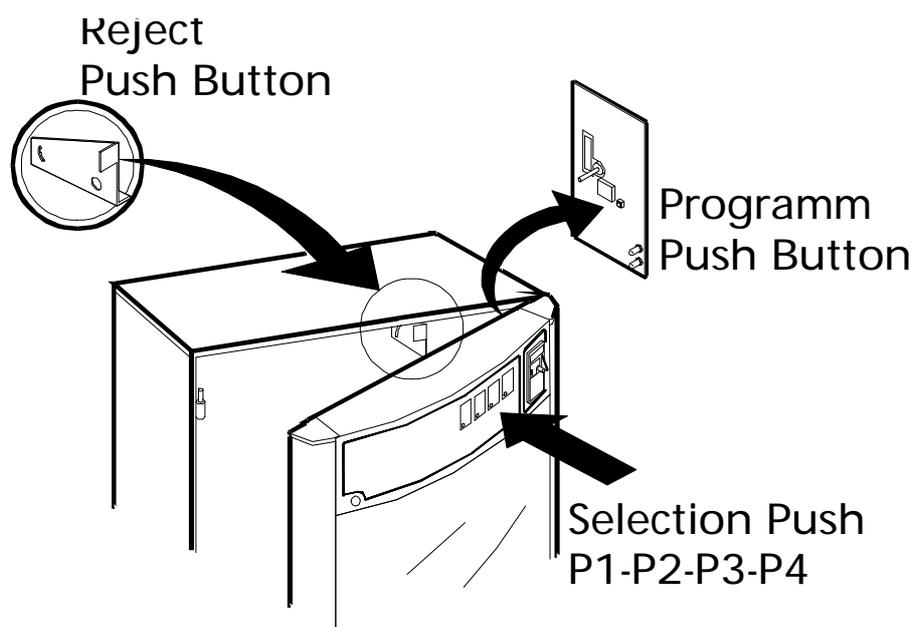
*Is the same but in inverse process.*

# Programming Manual

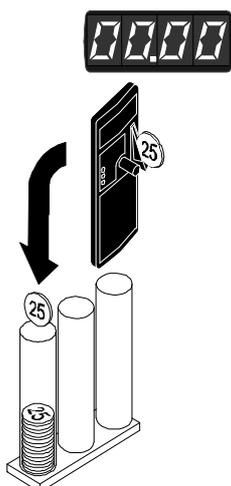
**Elite** SERIE

## PROGRAMMING PUSH

*The **programming push** are the elements that allow us check and insert the information when a programming operation is done. Example: change the price of products.*



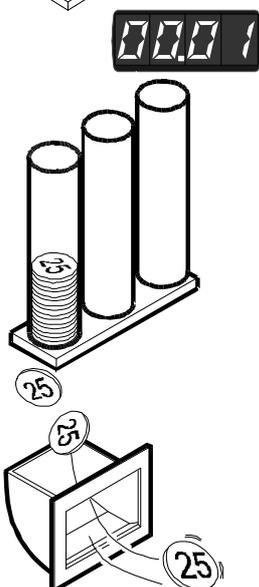
- **Programming Push Button.** This push is in the display board, inside the door. This push has two functions:
  - 1 Enter and exit of programming mode.
  - 2 Change of programming option.
- **Reject Push Button.** Is below the coin insert canal. Its function is change the value of programming options.
- **Selection Push Button.** Its function is the same that reject push button, cahnge the value of aprogramming options.



• **Reloading return tubes.**

(OPTION IS ONLY ACTIVATED WHEN THERE IS A CHANGE GIVER IN THE MACHINE AND IT IS OPERATING)

By entering this option all types of coins which do not go to the return tubes are inhibited. You only have to introduce coins to reload the tubes. The tubes reload until they fill up, at which time the coin is inhibited and its value flashes on the display. While the flashing continues any coin introduced will be inhibited. This process continues until all the tubes are full or the PROGRAMMING key is pressed to go to the next option. The total sum of money in the tubes appears at all times. If you wish to know the number of each type of coin in the tubes, just press the first channels (p1-p4), depending on the number of tubes in the cash box. The total sum of money introduced can be seen by pressing the next push-button on the last tube (p4 or p5).



• **Unloading return tubes and hoppers.**

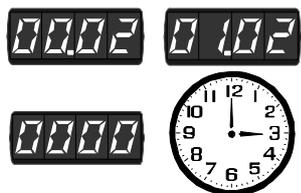
(OPTION IS ONLY ACTIVATED WHEN THERE IS A CHANGE GIVER IN THE MACHINE AND IT IS OPERATING)

To unload the coins in the return tubes, just press the channels (3 or 4 depending on the change giver coin mechanism) located top right in the machine. Each one represents a tube with a type of coin.

When you press one of these the number of coins in that tube appears on the display, in addition to the number of tubes separated by a full stop (E.g. **100.1 100 coins in tube 1**). To unload coins, just press on this channel again. The change giver coin mechanism expels five coins each time. The display always shows the number of coins remaining in the tube. The process can be repeated until there is no coin left in the channel.

If you press 'PROGRAMMING' you move to the next programming option. If you press another channel (containing a tube) the process is repeated. Once all the coins are unloaded from the tubes you can only exit by pressing the PROGRAMMING key.

If the machine has hoppers and these are activated, you can also unload these with the channels next to the last tube (p4 and p5 or p5 and p6). In each case the hopper will unload five coins and the display will indicate the total number of coins unloaded.



• **Deactivate visualisation of clock. (00.02)**

• **Activate visualisation of clock. (01.02)**

In option **00.02** the clock is not visualised. Instead, the figure 0000 appears in the display (while the machine is operating normally). To activate the visualisation of the clock, just press 'REJECT' and the machine will change to option **01.02**. Within this option, in addition to allowing the visualisation of the time in normal operation, we can see the hours and minutes on the clock. To do this just press channel 1 (located top right in the machine). The hours and minutes appear on the display with the minutes flashing. Channel 1 is used to change the time 1, the minutes increasing as you press. If you press REJECT the hours flash, you can increase in steps with channel 1 and decrease with channel 2.

If you press REJECT again the current year flashes, and this can be changed through channel 1 and 2.

Pressing REJECT once again, the current day and month appear. The day flashes (change it with channel), pressing REJECT yet again will make the month flash and this can be changed with channel 1 and 2. To exit this option, press PROGRAMMING.

If you press REJECT instead of PROGRAMMING you start with hours and minutes again.

• **Programming of prices.**



**(OPTION IS ONLY ACTIVATED WHEN THERE IS A CHANGE GIVER IN THE MACHINE AND IT IS OPERATING)**

To program prices of products in each channel, enter programming option **00.03**. When you press a channel the product price appears on the display. If you do not wish to change it, just press any other channel so that the price of the pressed channel appears, or alternatively press the PROGRAMMING button. This takes you to the next option within the programming mode. If the price of a channel flashes this means that it is de-programmed and that the machine cannot sell it. To correct this de-programmed state just program the price of that channel.

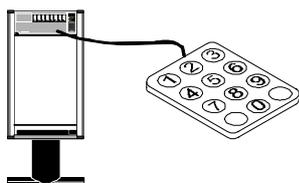
To change a price just press the appropriate channel a second time. The price of that product goes to the value determined by the user via the REJECT key (default value: 30 B.M.U.) and each time you press it the figure rises until it reaches the required price. If another channel or the PROGRAMMING button is pressed before changing the price the price of the channel which was being changed will be the last figure to appear on the display.

If you want to determine the basic figure (from which price increases in a channel will be made) just press the REJECT push-button at any time. The current value appears. Next time you press it resets to zero and each time it is pressed afterwards it increases until the required price is reached.



**• Programming prices from the keyboard.**

**(OPTION IS ONLY ACTIVATED WHEN THERE IS A CHANGE GIVER IN THE MACHINE AND IT IS OPERATING)**



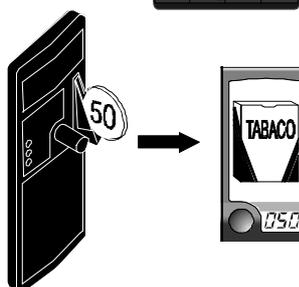
To program the prices of the products in each channel, enter programming option **01.03**. By pressing a channel the price of the product appears on the display. If you do not wish to change the price, just press any other channel so that the price of the pressed channel appears, or press the PROGRAMMING button. This will take you to the next option in the programming mode.

To change a price just press a number of up to 8 digits on the small keyboard. Erase the last key pressed with the letter 'C'. Once the new price is entered it is stored, so you can change channel or exit the option with the PROGRAMMING push-button. If the number entered is not a multiple of the scale factor of the change giver coin mechanism it is cancelled and the previous value remains. If values are entered with decimals, zeros at the end should also be entered.



**• Programming of prices with money.**

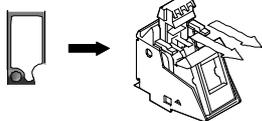
**(OPTION IS ONLY ACTIVATED WHEN THERE IS A CHANGE GIVER IN THE MACHINE AND IT IS OPERATING)**



To program the prices of the products in each channel in this option, just enter the price of a product (it is best to start with the lowest price). The display will show the value entered at all times and the machine will return the inserted coin. Any price shown on the display can be stored in any of the channels simply by pressing the corresponding push-buttons.

To exit, just press the PROGRAMMING push-button.

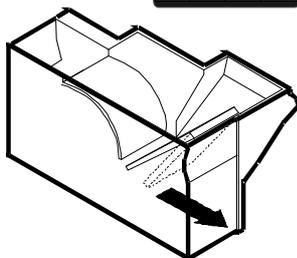
0004



• **Manual handling of motors.**

To handle the motors in each channel manually, enter programming option **00.04**. By pressing a channel the associated motors will move in sequence. Each time a motor is moved the display will show the push-button number which is being moved and the number of the motor (e.g. **07.07 push-button 7, motor 7**). This will flash slowly if the motor that is being moved is a slow one (if it flashes stronger the motor is faster). If a slow motor has been replaced with a fast one (or vice versa) this will be detected and the system will adapt to operate with one or the other. This can be seen through the flashing, when the motor moves a second or third time to check that the adjustment has been made correctly. Once you stop moving a motor or fan, if this motor has extracted a product incorrectly during a cycle the display will show this, indicating the number of wrong cycles and the number of the motor (no flashing). (E.g. **03.07 wrong cycles 3, motor 7**). If this defective motor has been replaced by another you can erase the number of errors by pushing the REJECT push-button when the cycle is finished; The word Erase flashes on the display, and if it is moved again you will see that its number of wrong cycles is now 0. To exit this option and move on to the next one, press the PROGRAMMING button.

0104



• **Manual handling of the hoppers and the escrow.**

*(OPTION WILL ONLY BE ACTIVATED WHEN THE HOPPER OR THE ESCROW ARE ACTIVATED)*

To handle the hoppers and the escrow 'V' manually, enter programming option **X1.04**. 'X' is a value that indicates what is being moved at each moment according to the following table:

- 01.04 Move hopper 1 (press p1).
- 11.04 Move hopper 2 (press p2).
- 21.04 Move escrow flap 1 (press p3).
- 31.04 Move escrow flap 2 (press p4).

We recommend not moving the hoppers to unload coins as this negatively affects the accuracy of the sales data.

0005

• **Audit information of the machine.**

This is used to visualise or print a ticket with the sales data of the machine, broken down as follows: each product, change giver coin mechanism tubes, money box ...

The following visualisation options are available:

**00.05 Partial sales data on the number of products sold per channel:**

These are sales made since the last time the partial sales data was reset. Each time a channel is pressed, the number of products sold (corresponding to that channel) appears on the display.

If the number is higher than 9999 (4 digits of the display) the figure will appear in the display, advancing from right to left.

To pass to the next option, press the REJECT button.

0105

• **Partial sales data on product sales lost per channel:**

These are sales lost since the last time partial sales data was reset.

Each time a channel is pressed the sales lost appear on the display (sales not made) of the number of products corresponding to that channel.

If the number is higher than 9999 (the four digits on the display), the figure will appear on the display, advancing from right to left.

To pass to the next option, press the REJECT button.

0205

• **Total sales data on the number of products sold per channel:**

These are sales made since the machine was purchased. They cannot be reset to zero.

Each time a channel is pressed the number of products sold corresponding to that channel appears on the display.

If the number is higher than 9999 (the four digits on the display), the figure will appear on the display, advancing from right to left.

To pass to the next option, press the REJECT button.

03.05

• **Total sales data of sales lost (products per channel):**

These are sales lost since the machine was purchased. They cannot be reset to zero.

Each time a channel is pressed the lost sale appears on the display (sale not made) of the number of products corresponding to that channel.

If the number is higher than 9999 (the four digits on the display), the figure will appear on the display, advancing from right to left.

To pass to the next option, press the REJECT button.

04.05

• **Total and partial sales data on the number of products sold per machine:**

These are sales made since the machine was purchased and since the last time that partial sales data was reset.

If channel 1 is pressed total sales appear on the display. Pressing channel 3 shows partial sales (always the number of products).

If the number is higher than 9999 (the four digits on the display), the figure will appear on the display, advancing from right to left.

To pass to the next option, press the REJECT button.

05.05

• **Total and partial sales data on sales made by the machine:**

These are sales made since the machine was purchased and since the last time a reset was made of partial sales data.

If channel 1 is pressed total sales appear on the display. Partial sales appear if channel 2 is pressed (always in terms of value of the product).

If the number is higher than 9999 (the four digits on the display), the figure will appear on the display, advancing from right to left.

To pass to the next option, press the REJECT button.

06.05

• **Total and partial sales data of money stored in the cash box:**

This represents the value of sales which have gone to the cash box.

If channel 1 is pressed the total value registered since the machine was purchased appears on the display. If channel 2 is pressed the value corresponds to the period since the last time a reset of partial sales data was made. If the number is higher than 9999 (the four digits on the display), the figure will appear on the display, advancing from right to left.

To pass to the next option, press the REJECT button.

07.05

• **Sales data on money in the return tubes.**

On pressing REJECT the total sum of money in the return tubes appears on the display.

If the number is higher than 9999 (the four digits on the display), the figure will appear on the display, advancing from right to left.

To pass to the next option, press the REJECT button.

08.05

• **Reset of partial sales data on the machine.**

By pressing channel 1 a reset is made (set to zero) of the partial sales data of the machine. Once this is done the figure **08.05** flashes on the display.

To pass to the next option, press the REJECT button.

09.05

• **Printing of a sales data ticket.**

Once in this option (and with the printer connected) press channel 1. The display shows 'r232' flashing and starts to send characters to the printer. When this is finished it shows the value **09.05** again. You can print as many tickets as you like.

**Exit the sales data option by pressing the PROGRAMMING button, or start again by pressing REJECT.**



- Deactivate machine lighting. (00.06)
- Activate machine lighting. (01.06)

If you are in option **00.06** the fluorescent light in the front panel of the machine will always be switched off. To activate it, just press REJECT and the machine will change to option **01.06**. Within this option, by pressing channel 1 the time the machine has been switched on will appear on the display (in hours and minutes, the latter flashing). To change the value use the first and second push-button located in the top right corner of the machine (Channel 1). The value increases or decrease each time the button is pressed. If REJECT is pressed the hours flash and increase with Channel 1 and decrease with Channel 2.

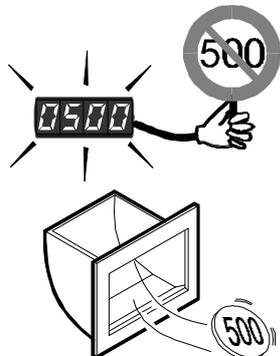
If you press REJECT again the time (in hours and minutes) the machine has been switched off appear (the minutes flash). Change the minutes through channel 1 and 2 and press REJECT again, the hour flashes and this can be changed with channel 1 and 2. If you want the machine to be switched on all the time, the timetable for switching on and off should coincide i.e. show the same time. To exit this option, press PROGRAMMING.

If REJECT is pressed instead of PROGRAMMING you start again with hours and minutes switched on.



- Inhibiting coins.

**(OPTION WILL ONLY BE ACTIVATED WHEN THE HOPPER OR THE ESCROW ARE ACTIVATED)**



When REJECT is pressed the first type of coin appears on the display. If it is inhibited it flashes. To change from one state to another, just press and let go the first channel of product located top right of the machine. To change the type de coin, press REJECT again. After visualize the last type of coin, the list starts again with the first. When there are two types of coin with the same value, the oldest is shown with its value and a full stop.

To exit press the PROGRAMMING button.



- Access code to programming levels.

To access other programming options (located at a higher level) enter programming option **00.10**. When you press any channel or REJECT push-button, the code 0000 appears in the display. The code is between 0 and 9999.



To enter an access code, use the first four push-buttons located in the top right corner of the machine. Each one of these represents a digit on the display. After each keystroke in each channel, the digit corresponding to that channel in a unit increases (when it reaches 9 it goes to 0, etc.). Once the code you want to enter appears on the display, press the REJECT button to validate it. If the code is incorrect the machine allows you to try again up to three times. After that it exits the programming mode. If the code is correct the machine enters the first programming option of the next level. The code is **1111**.



- Programming of the codes in each product.

To program the codes of the products in each channel, enter programming option **00.11**. By pressing a channel the code of the product will appear on the

display. This product code is a number between 0 and 9999. If you do not want to change it just press REJECT or the PROGRAMMING button. This second action will take you to the next option of those available in the programming mode.

To see a new code just press another channel.

If you want to modify a code, once it appears on the display you can change its value by using the first four push-buttons located in the top right corner of the machine. Each one of these represents a digit on the display. After each keystroke in each channel, the digit corresponding to that channel in a unit increases (when it reaches 9 it goes to 0, etc.). Once the code you want appears, press the REJECT button to change another code. If REJECT or PROGRAMMING is pressed before finishing the code change the value of the code in the channel being changed will be the last one that appears on the display.



**• Programming of the codes in each product using the keyboard.**

To program the codes of the products in each channel, enter programming option **01.11**. By pressing a channel the code of the product appears on the display. This product code is a number between 0 and 9999. If you do not want to change it just press PROGRAMMING or another channel.

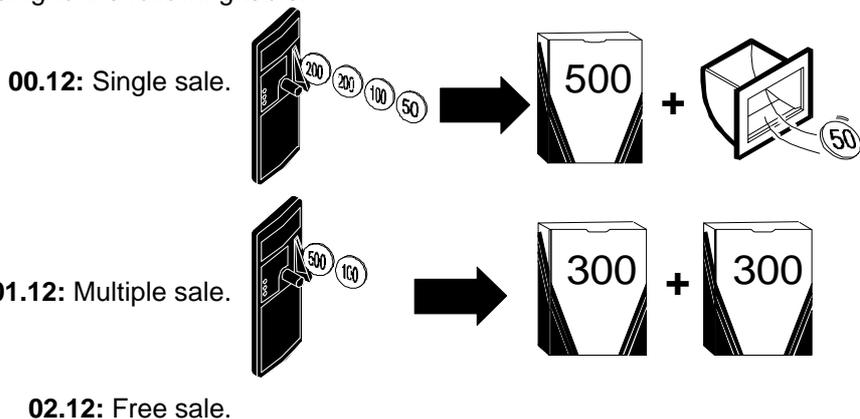
If you want to change a code, once it appears on the display you can change it by using the numerical keyboard. If the number entered is greater than four figures, the value is automatically cancelled and the display sets itself to **0000**. In this case you have to re-enter the required value. If you press a different channel or PROGRAMMING before finishing the code change, the value of the code in the channel that was being modified will be the last one that appears on the display. To exit press PROGRAMMING.



**• Programming of the type of sale to be made.**

When you enter this option the value **0X.12** will appear on the display. The value **X** represents the current option of type of sale.

Each time REJECT is pressed, the type of sale to be made is changed according to the following table:



To exit this option and pass to the next one after the value has been stored, press PROGRAMMING. The stored value is the last one visualised on the display.

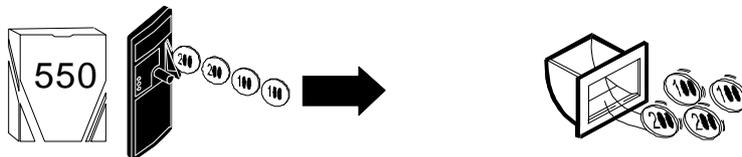
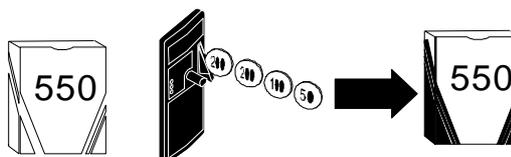


**• Programming for what the machine should do when change has run out.**

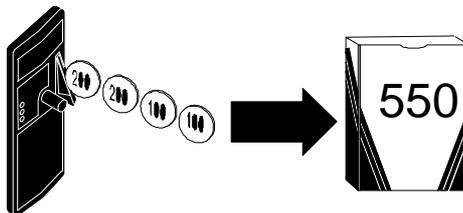
When you enter this option the value **0X.13** will appear on the display. **X** represents the current option.

Each time REJECT is pressed the working mode of the machine is changed when it has run out of change (according to the following table):

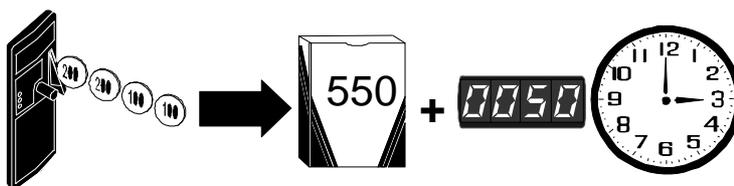
**00.13:** Only sale at exact price



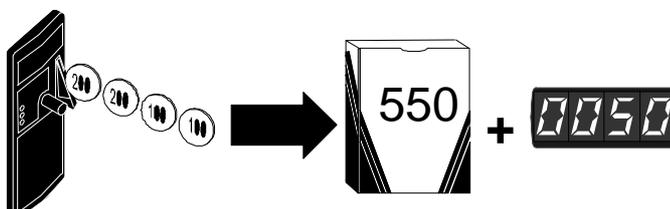
**01.13:** Change is not returned



**02.13:** Maintain change temporarily on the display



**03.13:** Maintain change permanently on the display



To exit this option and pass to the next one while storing the value, press PROGRAMMING. The stored value is the last one indicated on the display.

Remember that in 'multiple sales' there is no exact price, so in this option the machine automatically goes to 'Sale registering credit temporarily' at 02.13. If you change to single sale this option stays at the value left for multiple sale.



**• Programming of obliged sale.**

When you enter this option, the display shows the value **0X.14**. X represents the current option i.e. an obliged sale.

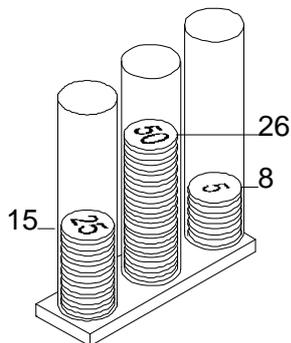
Each time REJECT is pressed the type is changed according to the following table:

- 00.14:** No obliged sale. Money can be recovered if there is change in the tubes.
- 01.14:** Obligated sale. Money cannot be recovered if a sale is not made.

To exit this option and pass to the next one, storing the value, press PROGRAMMING, The stored value is the last one indicated on the display.

00.15

• **Programming of minimum coin levels.**



Once inside option **00.15** (programming the minimum number of coins which the coin return, below which the machine indicates that it has no change) just press the channels (3 or 4 channels depending on the change giver coin mechanism) located top right in the machine. Each one represents a tube with a type of coin.

When you press one of them, the type of coin it contains appears on the display (value of that coin). If you press again the minimum number currently programmed appears. To change it just press that channel again, the minimum goes to 4 coins and this figure increases by one each time the channel is pressed until you reach the number of coins required (these values appear on the display and are between 4 and 15 coins).

If you press the PROGRAMMING key you pass to the next programming option. If you press another channel (containing a tube) the process is repeated. The last value indicated on the display remains as the minimum.

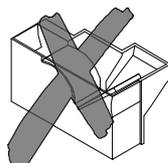
00.16

• **Escrow "V"**

When you enter this option, the display shows the value **0X.16**. X represents the current option.

Each time REJECT is pressed the option is changed according to the following table:

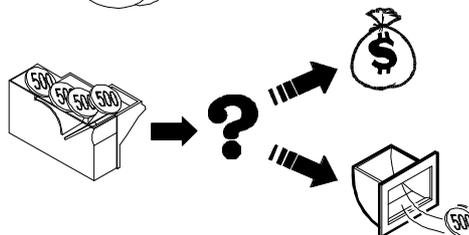
**00.16:** There is no Escrow .



**01.16:** There is an Escrow but it is not used.



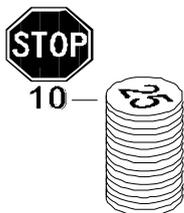
**02.16:** There is an Escrow and it is used.



To exit this option and pass to the next one while storing the value, press PROGRAMMING, The stored value is the last one indicated on the display.

00.17

• **Maximum credit/return value of coins.**



When you enter this option, the display shows the value **00.17**. If you press REJECT the maximum value of money that can be recovered or admitted as credit in each operation appears on the display. If you want to change this value, just press REJECT again to reset it to zero. In successive keystrokes the value increases until the required value is reached. To exit this option and pass to the next one while storing the value, press PROGRAMMING again.

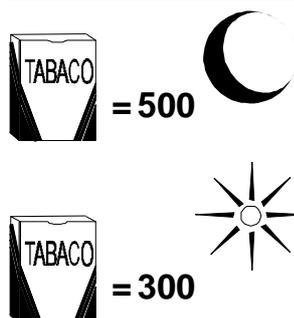
00.18 01.18

• **Deactivate discount/surcharge on sales. (00.18)**

• **Activate discount/surcharge on sales. (01.18)**

Programming of working hours and percentage of the discount/surcharge.

If you are in option **00.18** the machine will never apply discount/surcharge on its sales. To activate this just press REJECT and the machine will change to



option **01.18**. Within this option, when you press channel 1 the time (hours and minutes) when the application of the discount/surcharge on sales will appear (the minutes flash). To change the value, use the first push-button located in the top right-hand corner of the machine (Channel 1). When you press it its value increases. If you press REJECT the hours flash, and these can be increased by using channel 1.

If you press REJECT again, the when the discount/surcharge on sales ends is shown (the minutes flash). With channel 1 you can change the minutes, and by pressing REJECT again the hour flashes (change the hours with channel 1).

If you want the machine to always sell at a discount/surcharge, the starting and finish time should be the same. If you press REJECT again the discount/surcharge percentage to be applied appears on the display. When you press channel 1, this value increases one by one and with the channel you decrease. This percentage admits values of up to 255. Discount is considered up to 100, and above that figure it is considered a surcharge on sales.

To know the final price for the product the following formula is used:

$$\text{Final price} = \text{Initial price} * (\text{percentage} / 100)$$

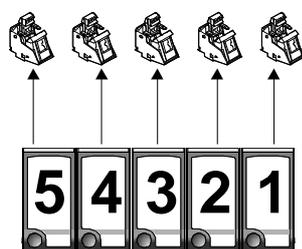
To exit this option, press PROGRAMMING.

If you press REJECT instead of PROGRAMMING you start again, with the time of application of the discount/surcharge on sales.

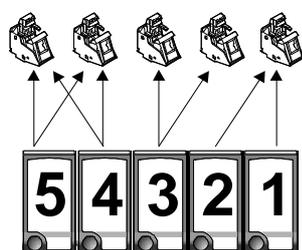


- Deactivate connection between channels and extractors. (00.19)
- Activate connection between channels and extractors. (01.19)

Programming of the connection between channels and extractors.



If you are in option **00.19** the machine will move (by default) the motors associated to each push-button (in normal operation mode) according to the type of machine (8, 12, 16 or 24 channels) i.e. following ex-works settings. To see these settings, enter option **00.04**. If, for any reason, you want to change these settings just press REJECT and the machine will change to option **01.19**. Within this option, when you press channel 1a vertical segment appears on the display to indicate that the machine is in 'reading' mode. To link channels just press the push-buttons corresponding to that channel, the product detectors of the motors you want to connect (the order does not matter, you can start with switches or push-buttons or mix them up) and validate them by pressing REJECT. From the version of memory 2,21, it will give a package of each channel that is united of alternative form. This process is repeated until there are none left to connect, because if any motor or push-button is overlooked they will not respond to any order to move. In normal operation, if a channel has not been assigned instead of visualising its price, the code **E-\_\_** appears on the display to indicate that it does not know which extractor to move. The following is important to bear in mind: the machine does not allow you to connect channels that have already been linked, nor does it let you link channels with different prices.



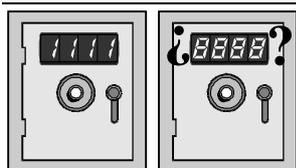
IMPORTANT: Press PROGRAMMING to exit this option.



- Change of access code to programming levels.

To change the access code to other programming options at a higher level, enter programming option **00.20**. This option only allows you to change the code entered in option **00.10**. When you press any channel or the REJECT push-button, code 0000 appears on the display. The code is a number between 0 and 9999.

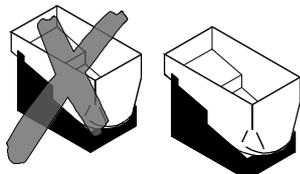
To enter an access code, use the first four push-buttons located in the top



right-hand corner of the machine. Each one represents a digit on the display. With each keystroke in each channel the digit corresponding to that channel in a unit increases, and when it reaches 9 it goes to 0, etc. Once you have seen the code you want to enter, press the REJECT button to validate it. The machine does not ask for verification of that code so it is best not to make a mistake when entering it. Once the code is entered the machine changes to the next programming option. If you press PROGRAMMING without validating it with REJECT the original code remains.



- Deactivate hopper 1. (00.21)
- Activate hopper 1. (10.21)

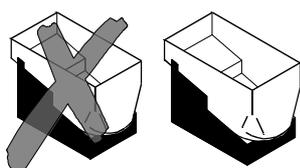


#### Programming of the coin value in hopper 1

If you are in option **00.21** the machine will not use hopper 1 for coin returns. When REJECT is pressed you pass to option **10.21**, which activates hopper 1. By pressing p1 you visualise the coin programmed at the time. If you want to change its value just press p1 repeatedly and the coins that can be assigned will appear on the display. The last value visualised will be the one assigned to the hopper.  
Press PROGRAMMING to exit this option.



- Deactivate hopper 2. (01.21)
- Activate hopper 2. (11.21)



#### Programming of the coin value in hopper 2

If you are in option **01.21** the machine will not use hopper 2 for coin returns. When REJECT is pressed you pass to option **11.21**, which activates hopper 2. By pressing p1 you visualise the coin programmed at the time. If you want to change its value just press p1 repeatedly and the coins that can be assigned will appear on the display. The last value visualised will be the one assigned to the hopper.  
Press PROGRAMMING to exit this option.



- Desactivate programming bill value (00.22).
- Activate programming bill value (10.22).

**(OPTION IS ONLY ACTIVATED WHEN THERE IS A BILL VALIDATOR IN THE MACHINE AND IT IS OPERATING)**

This option allow change the value of a the bills.

When the option is activated (11.22), push p1. On the display appears "bILL" to indicate that the machine is waiting a bill.

If you insert a bill appears the actual value. You can change with the first five push. To validate push REJECT and "bILL" appears again.

Press PROGRAMMING to exit this option.



- **Desactivate** programming coin value.
- **Activate** programming coin value.

**(THIS OPTION IS ONLY ACTIVATED WHEN THERE IS A VALIDATOR IN THE MACHINE AND IT IS OPERATING)**

Allows us to change the value of the coins accepted by the coin selector, modify the number of decimals, choose the language for display messages and determine the inhibition level of the validator.

If p1 (pushbutton 1) appears on the display "COIN" the machine is ready to receive coins. Insert one of the coins accepted by the validator (if it is not accepted, check the validator inhibition level, pressing the coin return pushbutton, it will change between "HIGH" and "LOW"), the value will appear on the display with the previously-assigned decimals.

If you wish to change the assigned value, press pushbuttons according to the following list:

- p1: changes the value of the 1st digit (e.g.: "0200", "0201", "0202"...)
  - p2: changes the value of the 2nd digit (e.g.: "0200", "0210", "0220"...)
    - p3: changes the value of the 3rd digit (e.g.: "0200", "0300", "0400"...)
      - p4: changes the value of the 4th digit (e.g.: "0200", "1200", "2200"...)

With the first validation all other values will be set to 0. Therefore the values of all the coins to be accepted by the validator have to be programmed.

If you want to change the number of decimals, press the appropriate pushbutton as per the following list:

- p5: no decimals (e.g.: "0200")
- p6: one decimal (e.g.: "020.0")
- p7: two decimals (e.g.: "02.00")
- p8: three decimals (e.g.: "2.000")

To change the language press p1 until the desired language appears on the display.



- **Turn off modem (00.28)**
- **Turn on modem. Programming telephone number (01.28)**

This option is used to turn the modem on and to enter the phone number it should call (maximum 15 digits). To turn it on coin return is pressed and the option switches to **01.28**.

Once turned on it can be entered through p1 to programme the telephone number. The phone number appears in 4-digit groups. each digit can have a blank value (no number), a hyphen "-" and values from 0 to 9.

The first four pushbuttons are used to increase the 4 digits seen on the display. The next three pushbuttons are used to select each of the 4-digit groups in the 15-digit phone number.:

	Group 1	Group 2	Group 3	Group 4
p8----->	-123	xxxx	xxxx	xxxx
p7----->	-xxx	4567	xxxx	xxxx
p6----->	-xxx	xxxx	8901	xxxx
p5----->				2345
	-ppp	pppp	pppp	pppp
	-321	4321	4321	4321

Once the phone number has been entered press coin return to validate it and the number will appear on the display.

To exit this option press the programming button.



- **Tone dialing mode for telephone number (02.28).**
- **Pulse dialing mode for telephone number (12.28)**

This option is used to tell the modem how to dial.  
Press coin return to switch between dialling modes.

To exit this option press the programming button.



- **Type of modem**

This option is used to select the type of modem that is going to use the machine. In order to change between one or another one, it is enough with pressing coin return.

If you want to leave this option to press programming button.



Option 03.28 Modem Tellink 1200/2400. Multitech D.

Option 13.28 Modem WAVECOM WM02 GSM 900/1800/1900/9600.

Option 23.28 Modem Tellink 14400. Multitech F.

Option 33.28 Analogical modem Smartlink 56k.

Option 43.28 Modem SIEMENS TC35 ó M20T.

Option 53.28 Phone GSM (Bosch GSM 908 or Bosch 909 GSM Dual).



- **Machine identification.**

To program the identification value of the machine enter programming option **00.29**. When you press any push-button (including those on the keyboard) the current value appears on the display. Enter a figure on the numerical keyboard (maximum 6 digits) and if you agree press PROGRAMMING to exit. This value should be the serial number of the machine. If you enter more than six figures, start again. Given that the display only visualise up to 4 digits any value above 9999 will be shown moving from right to left.



- **Machine identification through pushbuttons.**

To programme the identification value of the machine, enter programming option **01.29**. Pressing any button, including keyboard keys, will show the current value on the display. The number assigned to this machine is introduced using the first 6 pushbuttons on the top, right-hand corner of the machine. Each pushbutton represents a digit on the display. Each time a slide is pushed, the number corresponding to that slide is increased by one unit. When 9 is reached it goes to 0 and so on. Given that the display can only show 4 digits, values higher than 9999 can only be seen by moving from right to left.

Once you have finished, press the programming button to exit.

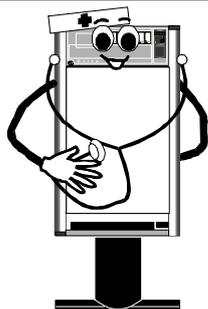


Entering this option implies setting the frequency of calls from the machine to the PC down to 0, so the only way to call is through programming options 00.02 or 01.02.



- **Programming of machine initiation.**

This option is limited to manufacturing personnel and should be used the first time the machine is put into operation. To activate it just press REJECT. Initially the machine will move all the motors it finds to locate them in their correct position. It will detect the type of machine (8, 12, 16 or 24 channels), the type of motor, will initialise all the variables required for it to work, and when it finish option **00.30** will flash on the display. If you enter this option and press channel 8 before pressing REJECT, the type of machine will be detected. If you press channel 7 the type of memory will be detected and option **00.30** will flash on the display. The flashing stops when the process of detection is finished. If channel 1 is pressed after REJECT has been pressed



the machine will perform a cycle of the extractors, moving each one 50 times. If you want to interrupt this cycle press REJECT until the machine finishes the turn is it making and detects this push-button. The display will show the value 51. When it finishes the cycle, by pressing each channel of the machine you will see the number of errors detected at the position and product switches of the channel in question, separated by a full stop (e.g 23.12 23 errors position switching and 12 errors in product switching). If the machine has been stopped before finishing the movement with the REJECT and then channel 1, will start the cycle again. To exit press PROGRAMMING. If you press REJECT again the machine will be initialised (reset).

## Advice Codes.

**Switch off and on the machine.**

**If the display flashes, press the programming push-button while the display flashes and test if the problem has disappeared.**

**If it doesn't work yet, the following list shows you the messages the machine can show in the display to help you to solve the problem.**

CODIGO	DESCRIPCION DE LA AVERIA
	<b>Indicates that some of the prices have been de-programmed.</b> Press PROGRAMMING so that the machine can try and correct the error. This assigns a default prices to the channels in the machine that are not being used (1000 B.M.U.). If the error persists it should be corrected in 'programming of prices'. To find out which channel is the one that is de-programmed just press each push-button within option 00.03 to know its price. If a channel is de-programmed its price flashes.
	<b>Indicates a de-programming of the codes assigned to each channel.</b> To get the machine to try and correct the error, press PROGRAMMING. This assigns the value '0' to the channels that are not being used in the machine. If the error persists it should be corrected in code programming mode.
	<b>Indicates a de-programming in the channel connections.</b> To get the machine to try and correct the error, press PROGRAMMING. This 'de-assigns' the motors of the de-programmed push-button i.e. that push-button will not move any extractor.
	<b>Indicates a de-programming of the type of machine (8, 12, 16 ,24 channels).</b> To get the machine to try and correct the error, press PROGRAMMING. This corrects the error and detects the type of machine again. If one of the key motors is out of position it will detect an 'erroneous' machine type.
	<b>Indicates a de-programming of the type of sale of the machine.</b> To get the machine to try and correct the error, press PROGRAMMING. This corrects the error, leaving it as it was the last time. If, for any reason, the machine cannot reconstruct the previous value it will leave it as a single sale.
	<b>Indicates a de-programming of the sales data of the machine.</b> To get the machine to try and correct the error, press PROGRAMMING. This resets the sales data value that does not coincide.
	<b>Indicates that extractor number XX is faulty.</b> To get the machine to try and correct the error, press PROGRAMMING. This eliminates the fault from this extractor provided it is not physically damaged.
	<b>Indicates that the REJECT push-button remains continuously pressed.</b> To correct the error open the machine and see what has not been pressed.
	<b>Indicates that the flap that drops the coins to cash box is not working.</b> This failure means that the change giver coin mechanism does not accept any coins. The machine will try to correct the error each time REJECT is pressed and there is not credit on the display. It will also attempt this each time the machine starts up, provided that option 16 is at value 01.16 or 02.16.
	<b>Indicates that the falp that drops the coins to return cap is not working.</b> This failure means that the change giver coin mechanism does not accept any coins. The machine will try to correct the error each time REJECT is pressed and there is not credit on the display. It will also attempt this each time the machine starts up, provided that option 16 is at value 02.16.