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INSTRUCTION BOOK

SORTING MACHINE

ORION

Models:

3D

4D

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1. STARTING OPERATIONS

1.1 INSTALLATION

Check that the installation place is bright enough.

Check the grounding of the feeding plug.

Place the machine onto a table to be at least 70 cm. high.
(For the models : **3D 4D**)

Leave at least 20 cm. of free space on the backside of the machine.

Any dangerous liquid or solvent never has to get in contact with the machine.

Before using the machine it is necessary connecting the feeding cable supplied.



1.2 SWITCH ON THE MACHINE

Connect the feeding cable into its proper place as shown by the ARROW



Switch on the machine by pressing the key as shown by the ARROW



1.3 SUGGESTIONS

Use nylon transparent bags fixing them to the outlet spouts with the pincers supplied or use the plastic box supplied.

For the models **3D 4D**

1.4 ACCESSORIES

The machine is supplied with :

N° 9 PLASTIC BOX (for mod. **3D 4D**)

N° 1 POWER SUPPLY

N° 1 FEEDING CABLE

OPTIONALS :

KIT OF TUBES FOR THE PACKAGING OF COINS WITH THE MINITUBES SYSTEM

PRINTER FOR REPORT

CABLE RS232



2.HOW TO USE THE SORTING MACHINE ORION SERIES

2.1 FUNCTIONS

CONGRATULATIONS FOR CHOOSING ORION - SELEX S.R.L.

The machine “ORION” is a new Counting- Value- Sorting coin machine with a digital technology.

ORION allows to face all the problems related to coin treatment.

It can store in its memory up to 8 types of coins.

With the ORION machine you can count and value coins, sorting and pack them into bags or in minitubes ; further you can have partial printed report, for user and general.

This machine grants the best reliability.

The machine checks coins by 3 revolutionary sensors which detect their physical dimensional features (diameter and thickness) and their metal composition (ALLOY) (for model 3d).

4d version, an additional sensor analyzes the coins for the magnetic properties.

You can operate in a multi-function way knowing always at the real time both value in EURO and in other currencies.

To operate in an easier way the software has an innovative “**Help**” function.

If the User needs information about the machine functioning by pressing the key



He can get on his display a ready-on-line operating manual



To quit the “help” function just press the key

2.2 SORTING A GROUP OF COINS

This function allows the User to know, counting in a single passage, the number of coins, value in currency, value in Euro and to physically sorting coins into **8** holes (for models **3D 4D**).

2.3 SINGLE COIN REJECT (RJCT)

This function allows the user to sort a group of coins and also **checking their authenticity**.

All coins **SUSPECTED TO BE FALSE** are automatically driver into the holes placed at the right side of the machine.

For this feature **ORION Sorting machine is also a FALSE HUNTER machine**.

2.4 BATCHING FUNCTION (BATCH)

This function allows the User to set, for each sorting channel, a fixed number of coins so to be packed or driven into the drawers.

The machine automatically stops when the pre-fixed number if coins has been reached which allows the User to replace the sack or drawer and the writing **“Bth”** appears onto the display.

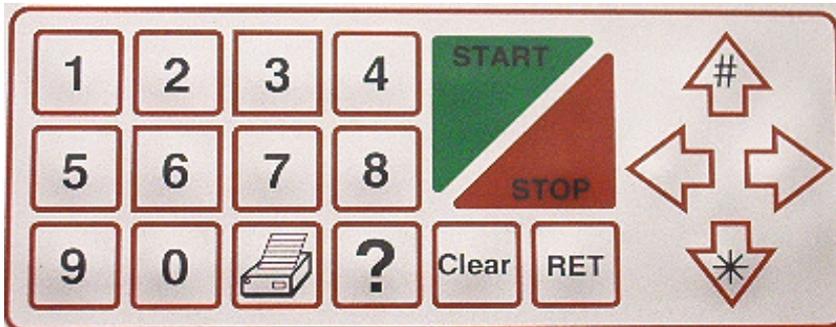
The sorting machine ORION has a sack **Overflow** device . In case there are too many coins inside the sack or into the drawer the display will show the following information :

2.00		0.50		1.00		0.20		0.05		0.10	
Bth +1		0		0		0		0		0	
START 1-Main	Total --Tot EU									0.00	
0-Menu	2-Btch	5-Re	6 -User	#-OV							0.00

TAKE OUT AND OU AGAIN THE EXCEEDING COINS INTO THE HOLDING HOPPER INDICATED BY THE DISPLAY.

3. ADVANCED SETTINGS

3.1 MAIN MENU



The above keyboard can choose the operating mode.

1- PARTIAL TOTAL	5- DATE	v1.01
2- MAIN TOTAL	6- TRIAL CONTING	
3- PARAMETERS CHANGE	dd-mm-yyyy	
4- CASH RESTORATION		

3.2 PARTIAL TOTAL

By pressing the KEY  you enter the PARTIAL TOTAL.

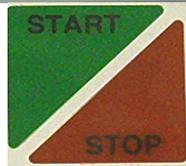
ORION machine can value, counting and sorting all the programmed coins, in a mixed way and if connected to a printer it can also print a report (optional).

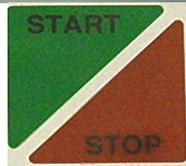
The display will show the following details :

2.00	0.50	1.00	0.20	0.05	0.10	
0	0	0	0	0	0	
START 1-Main Total -- Tot EU						0.00
0-Menu 2-Btch 5-Re 6-User #OV						0.00

PUT ALL MIXED COINS INTO THE FEEDING HOPPER.

SEE PICTURE



Pressing the keys  the counting process can be started or stopped.

The machine Mod. **ORION** is fitted with an electronic stop device which allows to stop the counting process after about 5 seconds from the last counted coin.

At the end of the counting process the display will show the counted quantities for each single coin and their amount expressed in value..



By this key  the User shifts to next page where other kinds of coins are visualized.

1.00		0.50		0.05		0.10		0.02		0.01		RJCT
0		0		0		0		0		0		
START 1-Main Total --- Tot EU											0.00	
0-Menu 2-Btch 5-Re 6 -User #-OV											0.00	

The User can proceed with the printing of the counting report in case the machine is connected to the proper printer. (optional).



Pressing the key  the printer will issue the report of the PARTIAL TOTAL.

In case “USER” is allowed :

(see paragraph 3.5 PARAMETERS CHANGE) the display will show the following message :

User [1 – 100] : _
 USERS Total : 0.00 EURO
 Press key 0 to finish

By pressing the keyboard, you can choose to memorize one of the effected counting process out of **100 total Users** the machine has.
 The choice made i.e.: by User n° 1.

Pressing key  it is possible to cancel the choice.

Pressing the key  the display will enter the **memorization** of **Total user**.

User : 1
 Value Counted [EURO] : 0.00
 User Total [EURO] : 0.00
 User's Code 0000.0000

When the cursor is set on “**User's Code**” it is possible inserting by the keyboard a **code made up by 4+4 numbers**.

Insert the desired code or press twice the key .

Once the **Printing** operation has been concluded the display will show again the detail of the effected counting.

To **reset** the counting process press the key , the display will show the following message :

Reset Partial Total

Reset Partial Total Confirmed ?

START – Reset

STOP- NO Reset

Pressing the key **STOP** the counting of the **Partial Total** is not reset and the display shows again the counted quantities.

Pressing the key **START** the counting of the **Partial Total** is reset. The display will show the following message:

Total Partial Reset Ended

Press a Key to continue

Pressing any key you enter a new counting process.

The machine **ORION** has a MEMORY which allows to sum up all the effected counting processes. Such a MEMORY is named **GENERAL TOTAL**.

In the MENU **PARTIAL TOTAL** it is possible entering directly the visualization of

the **GENERAL TOTAL** by the key ; without the access to the Main menu. See chapter 3.3 MAIN TOTAL.

By the key  it is possible setting the **BATCHING** function for each single sorting channel.

This function is anyway possible only if the reset of the General Total and of the Batching have been previously effected.

The display will show the following information:

```
1*  ___ 500  4> ___ 500  7> ___ 500
2> ___ 500  5> ___ 500  8> ___ 500
3> ___ 500  6> ___ 500
<- -> 0 -Me  START-Change * 2 -BATCH On/Off
```

Acting on these keys  you choose the counting LINE you want to modify.

By the key **START** you enter the modification process and the following message will appear :

```
Line Actual Batch 1 : 500
Currency :      2.00 EURO
Line New Batch   1 : _
```

Insert a new **Batching value** .

The max.value is 10000. Confirm with .

Pressing  the Batching function is possible :
Display will show:

```
1 - *Batch Control Enabled
2 -  Batch Control Disabled

Press Key 0 to finish
```

The symbol * means the real status of the function.

If you want to work without batching function press

2

To return to the previous Menu press

0

By the BATCHING Menu :

with the key **0** you return to PARTIAL TOTAL.

3.3 MAIN TOTAL

Pressing **2** you enter MAIN TOTAL

1> _____ 0	4> _____ 0	7> _____ 0	Main	
2> _____ 0	5> _____ 0	8> _____ 0	Total	
3> _____ 0	6> _____ 0		OV	0.00
0 = Esc	4 -Uncl.Bth	5 = Reset	Tot EU	0.00



By the key  the printer will issue the report of the GENERAL TOTAL.

4

By the key **4** you can visualize the Remaining Total (**UNCOMPLETED BATCH**).

The “Remaining Total” is run by the machine only if the Batching function is on.

By the “Remaining Total” you can know by Moon display the quantity of coins into the sacks not completed yet.

The display will show the following information:

1> _ _ _ _ 0	4> _ _ _ _ 0	7> _ _ _ _ 0
2> _ _ _ _ 0	5> _ _ _ _ 0	8> _ _ _ _ 0
3> _ _ _ _ 0	6> _ _ _ _ 0	UNC. BATCH
0=Esc	UNC. BATCH	EU 0.00



Pressing  you will get the report of the Remaining Total.

To go back to GENERAL TOTAL MENU press .

The **General Total** is **Reset** by key .

The display will show:

Reset Main Total

Reset Main Total Confirmed ?

START – Reset STOP – NO Reset

The display will show :

Batch Reset ?

START – Reset STOP – NO Reset

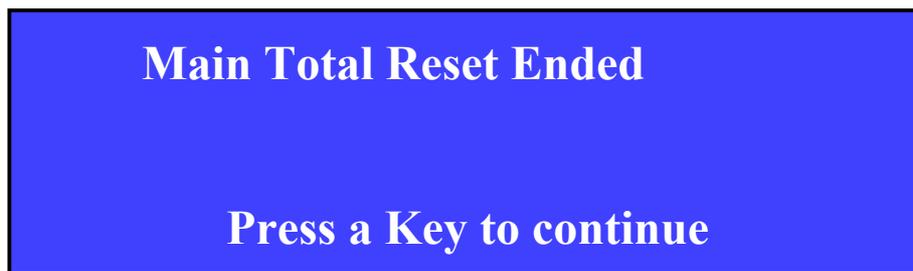
If you want **NOT to Reset the Batching** press the key **STOP**

In this case the machine will continue filling sacks keeping in memory the already processed quantities expressed by the “Remaining Total” (UNCOMPLETED BATCH).

If you want to Reset the **Batching** press **START**.

In this case the machine will fill up sacks starting from the values set in the Batching function.

The display will show :

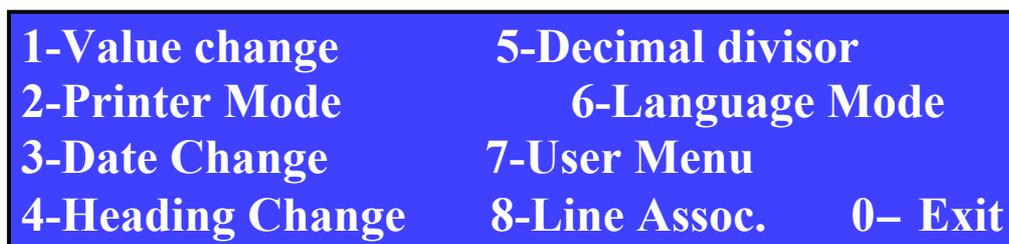


Pressing any key you come back to the General Total MENU.

3.4 PARAMETERS CHANGE

In the Main Menu, pressing  you enter the function **Parameters changing**.

The display will show :



This Menu allows the User to personalize the machine ORION.

1-VALUE CHANGE

Pressing  you enter the function **Value Change**. The User may vary the Value of the memorized counting lines. This function makes the machine “universal” and allows a rapid adaptation in case of introduction of new coins.

For a more detailed description see the technical Manual.

2-PRINTER MODE

Pressing the key  you enter the **Printer Mode** . It is possible adjusting the settings of the type of printer and the communication speed (**Baud Rate**).
The display will show :

1 – Baud Rate
2 – Printer Type
0 – Previous Menü

Pressing  you enter the modification of the communication speed.
The best communication speed is 9600.

Pressing  you enter the modification of the Printer type.
The display will show :

1 * Epson **4 – APS BPM224**
2 – Citizen
3 – Pc
Press Key 0 to finish

The best printer is EPSON type.

Pressing  the Serial Communication Protocol RS232 is activated.
(See enclosed for HOST communication)

Pressing  you return to previous Menu.

3-DATE CHANGE

From the Menu it is possible changing DATE and TIME.

Pressing key  is possible to change date. Il formato della data deve essere **dd-mm-yyyy**. It is not allowed 's inclusion of more than **31** days, more than **12** months, the ' year must be greater than or equal to **2002**.

To confirm the changing or to exit press the key



4-HEADING CHANGE

Pressing the key , is possible to modify the heading of the prints.

Previous Heading:
New Heading:
ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789' -.
< - - - - > START = Setting RET = Ok

With the keys  is possible choose the letter that you want fix in the

heading ; with the key **START** you fix the letters , with  you confirm and back to the previous menu.

5-DECIMAL DIVISOR

With key , is possible to choose the decimal divisor you want (comma or point).

6-LANGUAGE MODE

With  you can choose the language that you need:

The languages are:

- Italian
- French
- Spanish
- English
- German

7-USER MENU



By the menu, pressing the key  is open the user menu.
The display will show:

1 – Users Empower
2 – Users Schedule
3 – Print All Users
0 – Esc



By the key  you enter in Users' Total Running both for the printing processes
And for the display.



By the key  (if the Users have been previously enabled to) it is possible
Consulting a sum-up-menu which will show the currency value of the incomes of the
100 Users available.

The display will show the following information:

User [1 – 100] : _

Press key 0 to finish

By keyboard you can choose one of the 100 USER' TOTALS, i.e. user n° 1



and confirm by key .

The display will show the following information:

User [1 – 100] : _ **EURO**

0 – Menu - Print - 5-Res USER Tot.



By pressing the key  you can back to the previous menu.

By pressing the key  you can print the ticket of **User**.

By pressing the key  you can **RESET** the total **USER**.

In the Previous Menu

by the key  you can print a **USER' TOTAL** report.

8-LINE ASSOCIATION

From the menu, pressing  leads to **Line management**.
The display will show the following information:

1-Association Line
2-Line To Reject

0-Esc

To access the **Association line Menu** refer to section

3.4 CHANGING PARAMETERS **FOR EXPERT PERSONNEL ONLY**

Pressing the key , you enter the function **Line To Reject**. This feature allows the operator to choose one of 12 lines (8 in selection, 4 association) counting money and send a channel in the Reject.

The display will show the following information:

Select Line To Send In rejection
Actual Line In Rejection: No Line
New Line In Rejection: _ [0-12]
0=No Line In Rejection

To exit or confirm the selected line to send the Reject press  2 times.

0-PREVIOUS MENU

By pressing the key  you come back to the menu **PARAMETER CHANGE**.

By the menù PARAMETER CHANGE pressing the key  you come back to The previous menu.

3.5 CASH RESTORATION

From the MAIN MENU press Key  to activate the function **CASH RESTORATION**.

The display will show the following information:

Counting Restoration
Deposit all the Bags in the Machine
Clean the Coins Rail
START Restoration - STOP End Restoration

This function permits the operator to restore the latest counting if , for reason not depending from machine's normal working (i.e. sudden lack of power), this one has been registered uncorrectly .

3.6 DATE

Allows you to set the date directly from the Main Menu without going to Change Parameters

3.7 TRIAL COUNTING

From the main menu by pressing the key  to access the function **TRIAL COUNTING**.

This function behaves identically to the PARTIAL TOTAL function with the only difference that all statements made are not saved in permanent memory of the machine is turned off for this reason the same will be deleted.

You use this function when the operator wishes to recount a lot of money already counted.

In effect the test count is also a function called VERIFICATION.

3.4 PARAMETERS CHANGE

FOR EXPERT PERSONNEL ONLY

From MAIN MENU, it possible to enter the function **Parameters Change** by pressing key .
The display will show the following message:

1- Value Change	5- Decimal divisor
2- Printer Mode	6- Language Mode
3- Date Change	7- User Menu
4- Mod. Intestazione	8- Line Assoc. 0- Exit

Press key  to enter the Line Association Menu.

This function allows the operator to use other 4 lines for coin programming and to combine them with 1 or more counting lines.

This option must be used only, if the person knows the “self-learning system” of the machine very well and if there are denomination having the same value but a different alloy.

The display will show the following message:

1- Line 9 Association line 0
2- Line 10 Association line 0
3- Line 11 Association line 0
4- Line 12 Association line 0

Press a key to continue ; the display will show the following message:

Associate Line
Line to Associate [9..12]:
0-Esc

Choose the memorizing line to be combined from 9 up to and confirm by pressing key .
The display will show the following message:

Associate Line
Line to Associate [9..12]: 9 Ass: 0
Line join to [0.....8]
0-Esc

Choose the counting line to be combined with the auxiliary memorizing line chosen previously.
The counting Line goes from the number **1** up to number **8**.

By pressing number **0**, the memorizing line previously chosen will not combined with any counting line.

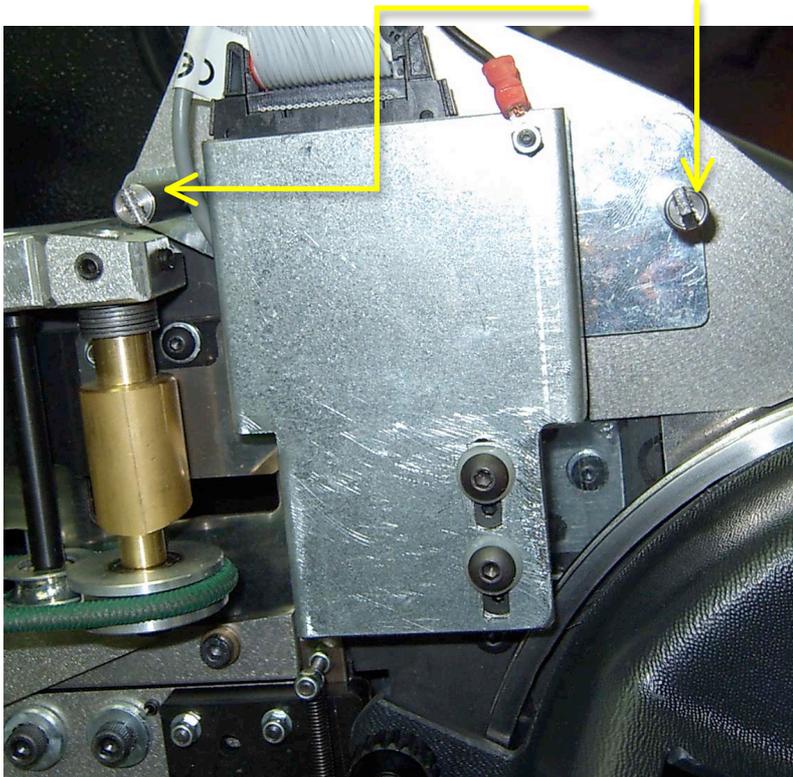
Read the MANUAL SET-UP for a correct use of this function.

4. PROBLEMS SOLUTIONS.

4.1 SENSORS CLEANING

OPEN THE UPPER COVER

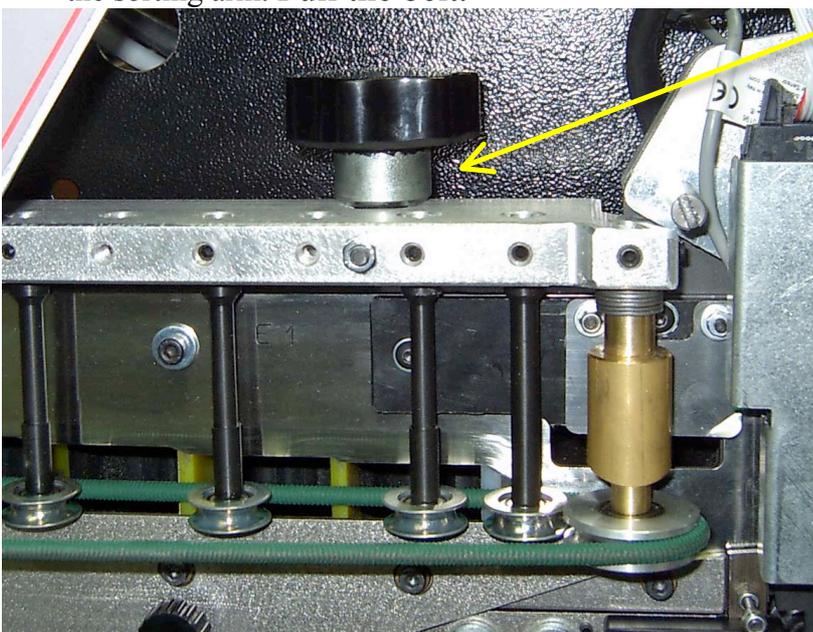
Unscrew the fixing pin using a coin and let the sensor rotates up to 180 degrees



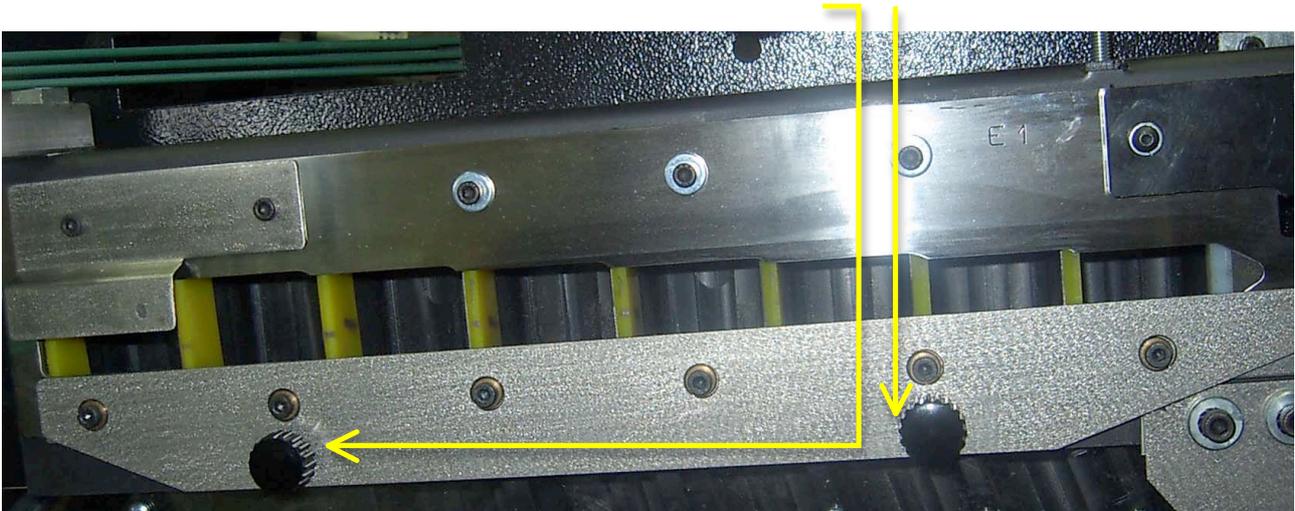
Thoroughly clean the platen glass with a cloth soaked in alcohol

4.2 COIN DRIVE - RAIL CLEANING & BELT CHANGE

Turn 180° the fixing handle of the coin-drive slide marked with YELLOW color and open the sorting arm. Pull the belt.



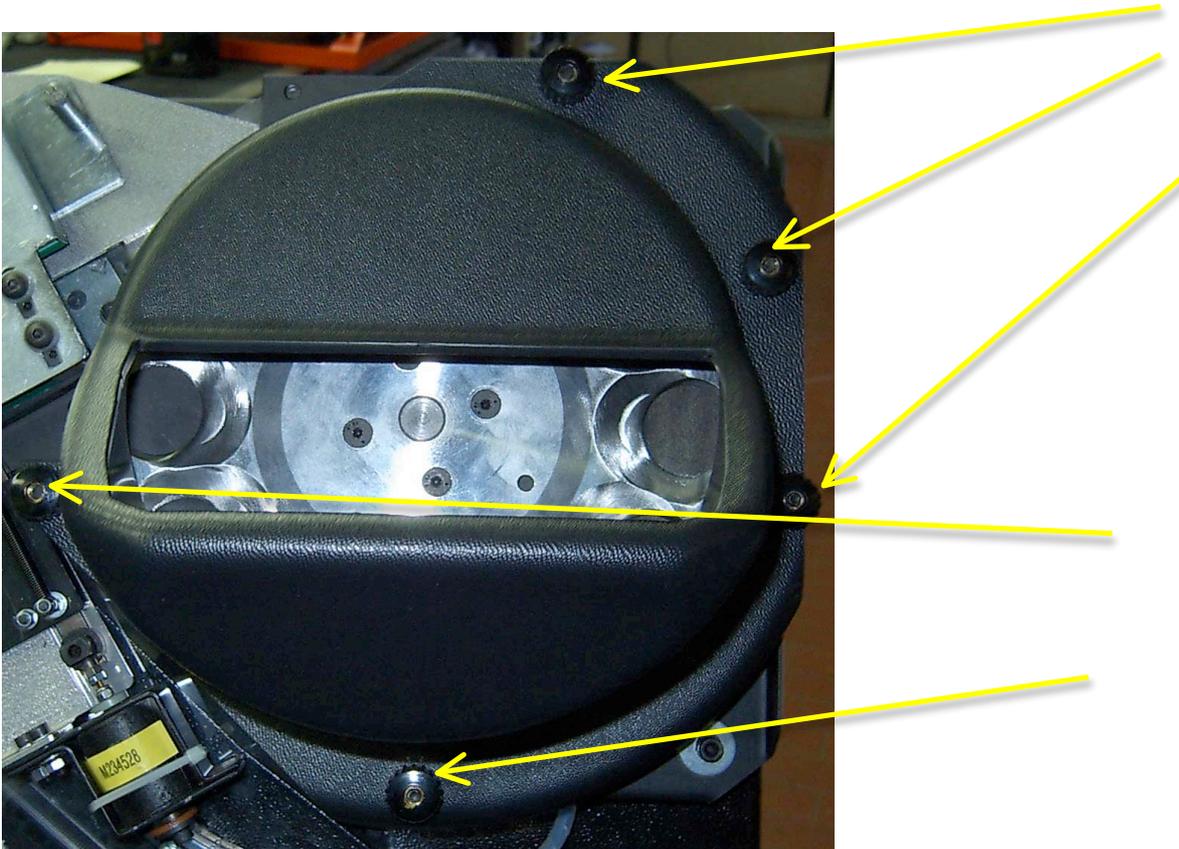
Unscrew the two knobs marked by yellow arrows and remove the COIN RAIL protection.



IN CASE OF JAMMING THE COINS, FREE AND CLEAN WITH A CLOTH SOAKED in alcohol the RAIL CHANNEL SELECTION.

4.3 FEEDING DISK CLEANING

Unscrew the knobs marked by the yellow arrow and remove the coins Hopper.



4.4 "ERROR" MESSAGES

SYSTEM ERROR
N: 1
Communication with CCD failed
Press a key to continue

Check the communication connector of the sensor and its cable.
Shut down and restart the machine if the problem persists, contact TECHNICAL SERVICE.

UNEXPECTED EVENT
N: 6
Stopped Coins
Press a key to continue

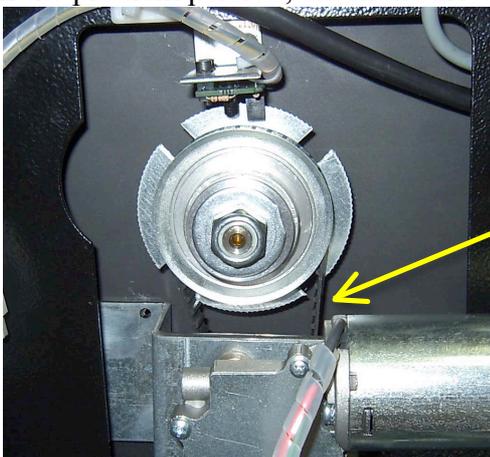
Remove the coins jammings under the sensor, if necessary, unscrew the sensor as described in section 4.1 and press any key to exit from 'error.

SYSTEM ERROR
N: 7
CCD Led Management Error
Press a key to continue

Remove the sensor as indicated in Section 4.1. Clean the light emission Glass.
Press any key to exit from 'error.
If the problem persists, replace the board card of the LED light emitting or contact TECHNICAL SERVICE.

UNEXPECTED EVENT
N: 3
Motor Error
Press a key to continue

Remove the coins Hopper as described in chapter 4.3
Verify that the hard power is not blocked by foreign objects.
Press any key to exit from 'error.
If the problem persists, check the drive belt indicated by the YELLOW arrow.



5 TECHNICAL FEATURES

5.1 DIMENSIONS

WIDTH	<i>mm.695</i>
HEIGHT	<i>mm.485</i>
DEPTH	<i>mm.320</i>
WEIGHT	<i>kg. 35</i>

5.2 VOLTAGE

VOLT	<i>220 50hz / 110 60hz</i>
WATT	<i>15 in Stand-by 150 in Working mode</i>

5.3 PERFORMANCES

COUNTING SPEED	<i>700/800 coins/min.</i>
HOPPER CAPACITY	<i>approx. 1000 / 1500 coins</i>

6 WARRANTY INFORMATION AND REGULATIONS

6.1 SYMBOLS

It is advisable to open the main cover only after turning off the machine.
The operator can carry out all cleaning operations in complete safety.

All the carter removed are indicated by the color YELLOW 

All screws and carter, which are indicated by the color RED 
not be removed except by authorized personnel from the company
after the fall of the WARRANTY.

6.2 WARRANTY CERTIFICATION

The sorting ORION has been designed using the standards and regulations
more stringent construction.

ATTACHED CERTIFICATION CE

