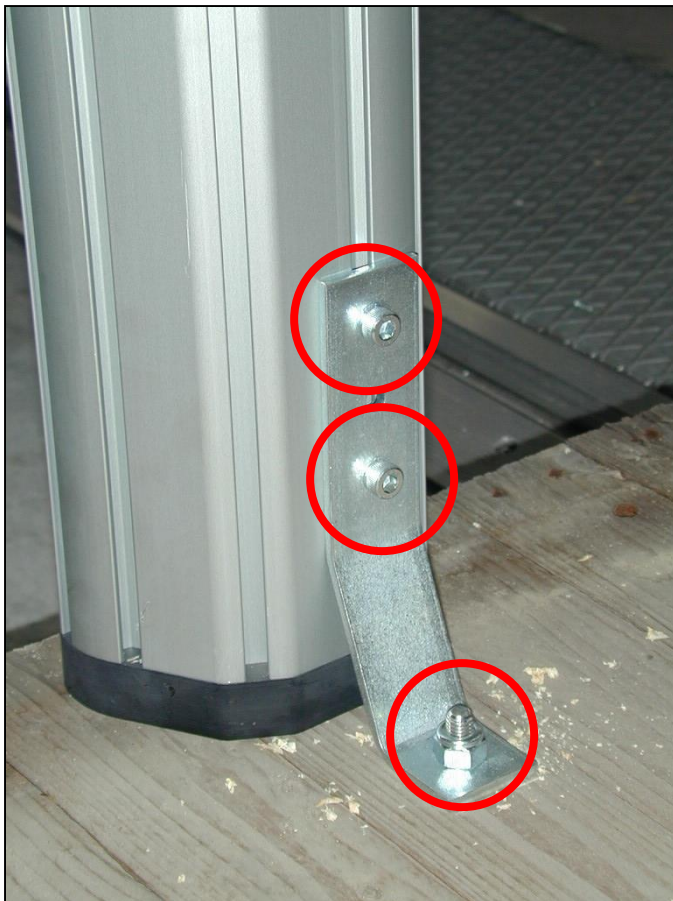


# D200: Installation and maintenance



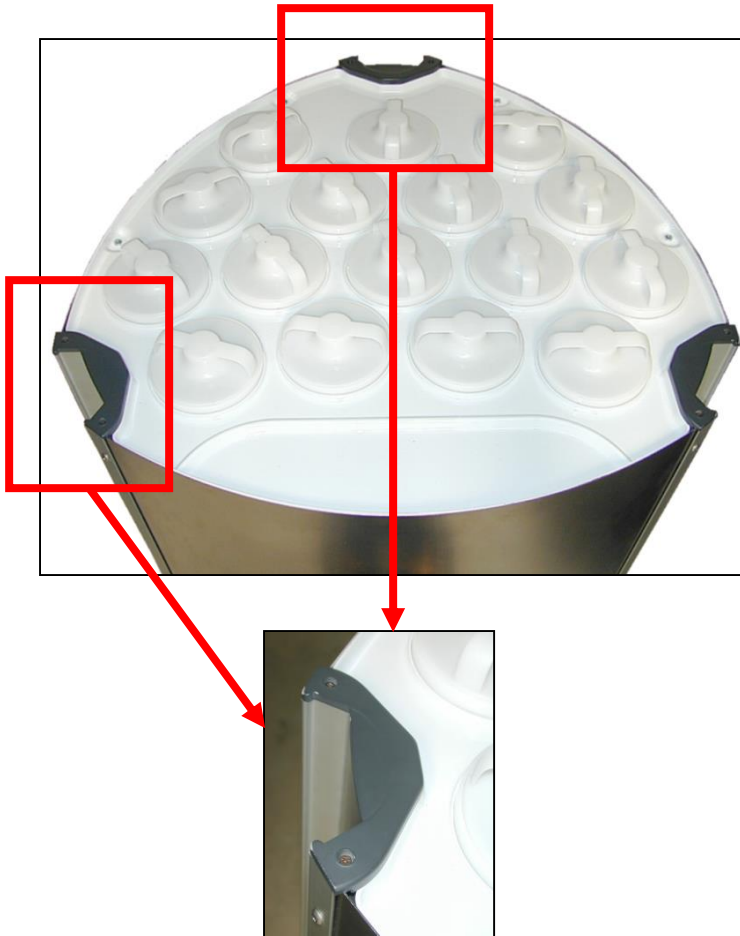
- [Installation](#)
- [Calibration](#)
- [Use](#)
- [Troubleshooting](#)
- [SAPS replacement](#)
- [CBMASTER replacement](#)
- [Fuses replacement](#)
- [Power supply unit replacement](#)
- [Sensor replacement](#)
- [Check-valve replacement](#)
- [Pipe replacement](#)
- [CBMONO replacement](#)

# D200 Package



- Unscrew the system that fasten the machine to the pallet and remove it.
- With one person at each corner, lift the machine up and remove the pallet.

# Connecting the computer



- To connect the computer to the machine, it is first necessary to remove the left side panel.
- Unscrew the screws to remove the upper covers of the aluminum profiles on the left and back side.

# Connecting the computer



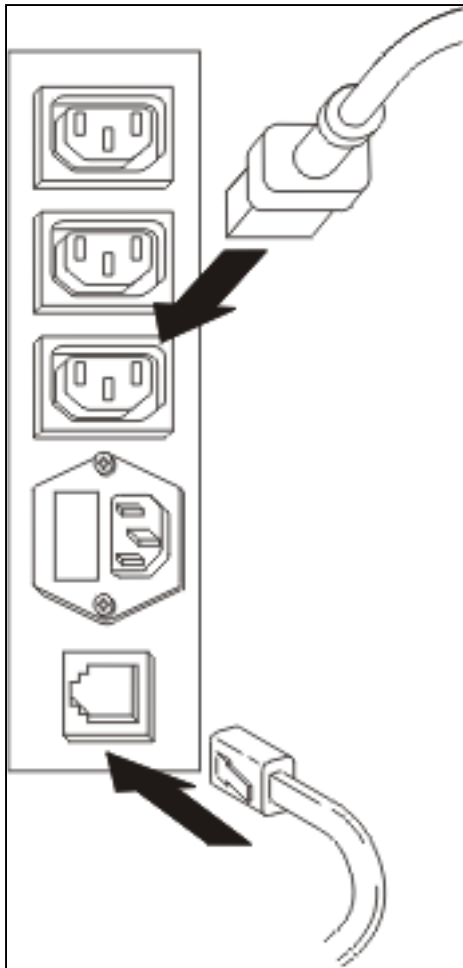
- Unscrew the screws that fix the left side panel to the aluminum profiles.
- Wear cut-proof gloves in order to protect your hands and slide up the panel.

# Connecting the computer



- Position the computer and connect the computer and monitor power supply cords to the auxiliary sockets by passing them through the opening (1) at the base of the frame.

# Connecting the computer



- Connect the 9-pin connector of the cable to the serial port of the computer (preferably COM1).
- Pass the cable through the opening at the base of the frame and insert the connector in the plug.

# Powering up of the machine



- Insert the power supply cable socket into the main machine plug, let the cable pass through the opening at the base of the frame.

# Powering up of the computer



- Set the machine main switch to the ON position.
- The machine, computer, monitor and all instruments powered through the auxiliary sockets will turn on.



# Machine configuration

ColorTECH [ ver. x.x] (C) COROB S.p.a.  
Interactive COROB machines configurator

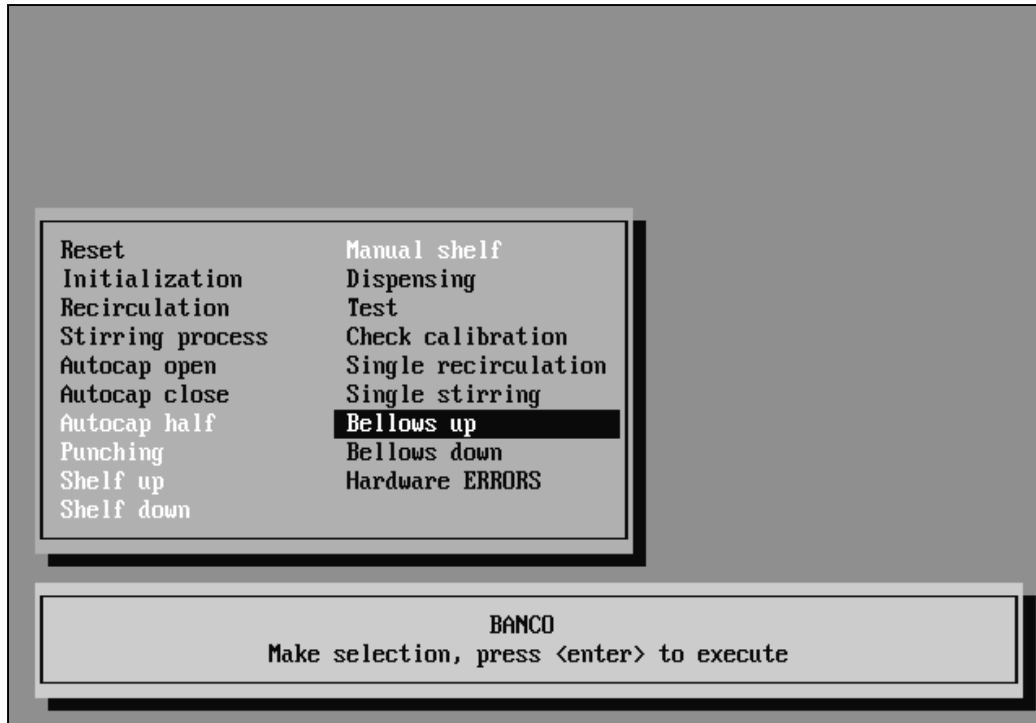
DISPENSER	New dispenser de	
TANK	1/12	
CNT_ID		
MAX_Q	0	
CUR_Q	0.00	
RES_Q	0	
COMMENT		

CODE	NAME
B	B - BRILLANT YELLOW
C	C - ORANGE
E	E - FAST RED
H	H - OXIDE RED
L	L - OXIDE BROWN
M	M - PHTHALO GREEN
N	N - PHTHALO BLUE
O	O - VIOLET

Press PgUp/PgDn to change record  
F1 (^K) for HELP; space = more options

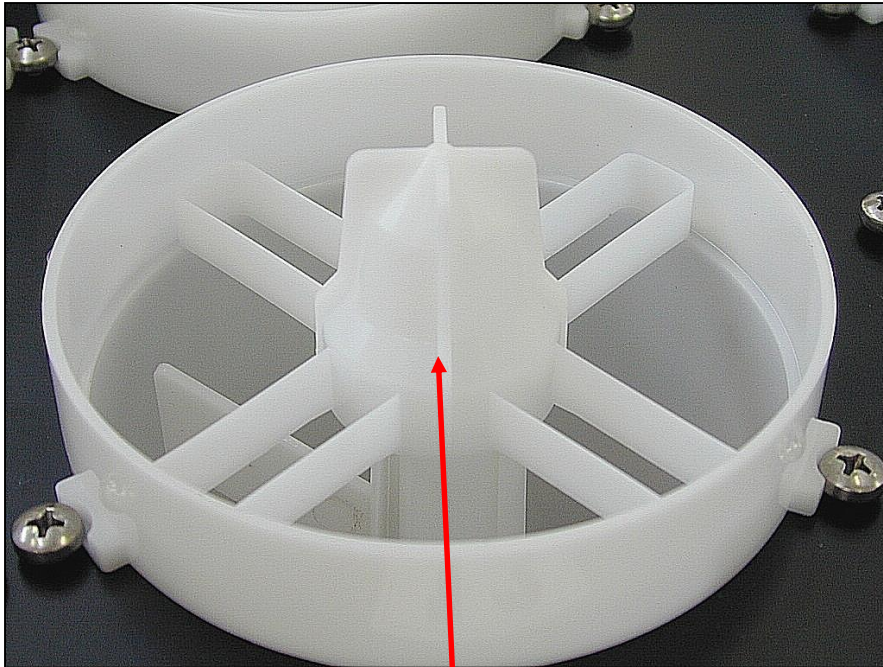
- Install ColorTECH and the application program.
- Use ColorTECH to configure the machine and proceed with the association between colorants and canisters.

# Filling the canisters



- Turn ON the machine and start ColorTech program.
- Place a can on the shelf and send a ***Bellows up*** command to compress all of the bellows.

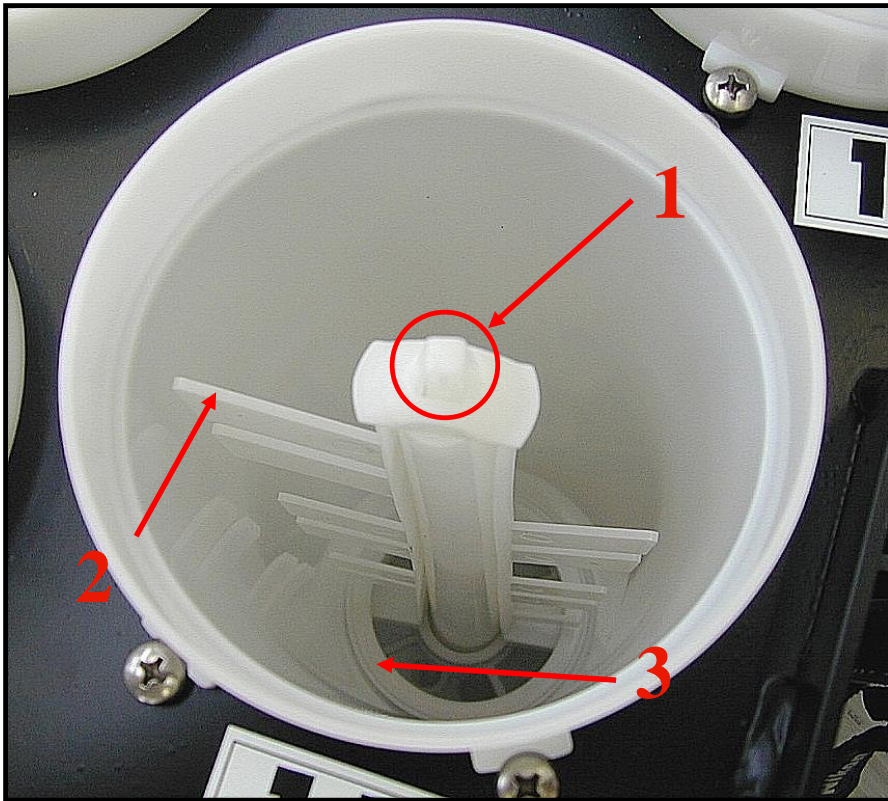
# Filling the canisters



1

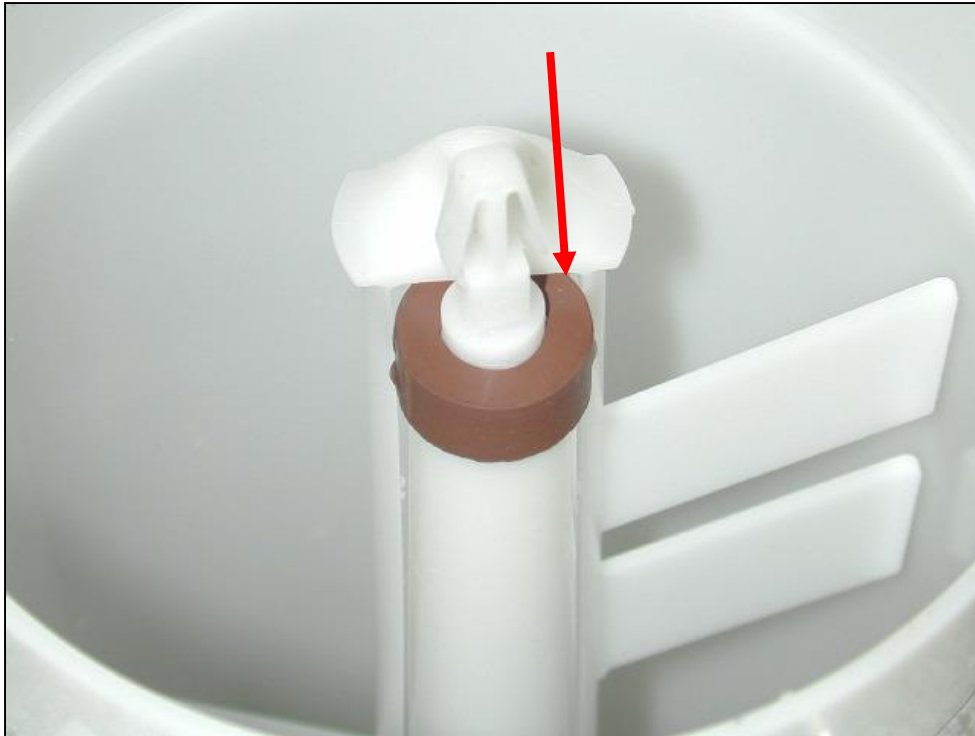
- To avoid emulsifying air, never use automatic shaker to shake the colorant.
- Remove the bottle draining system (1).

# Filling the canisters



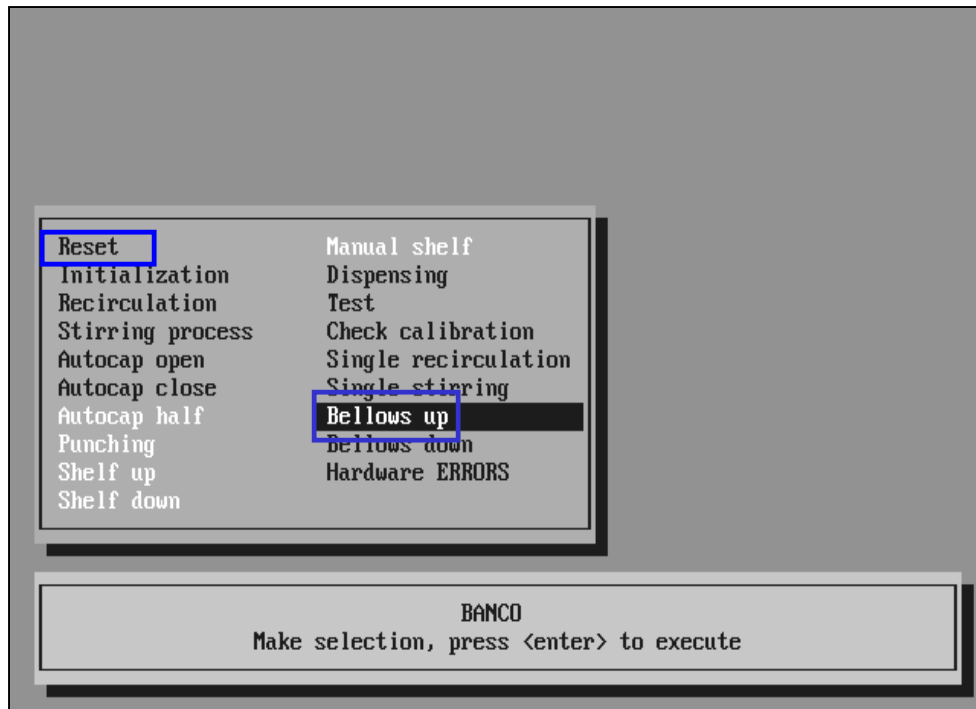
- Press the wings of the clip (1) and pull the stirrer (2) upward, to remove the filter (3).
- Fill the bottom of the canister with colorant, reassemble the filter and refit the bottle draining structure.

# Filling the canisters



- Pay attention that the anti-overflowing gasket fits properly on the stirring rod.

# Filling the canisters



- Finish filling the canister by pouring at least 1 liter of colorant. Fill all canister in the same way then send a **Reset** command.
- Repeat **Bellows up** and **Reset** at least 3 times.
- Dispense at least 200 ml from each of the canister.

# Colorant levels configuration

```
ColorTECH [ ver. x.x] (C) COROB S.p.a.
Interactive COROB machines configurator

DISPENSER | New dispenser default
TANK      | 1/12
CNT_ID    |
MAX_Q    | 0
CUR_Q    | 0.00
RES_Q    | 0
COMMENT   |

Press PgUp/PgDn to change record
F1 (^K) for HELP; space = more options
```

- Check that colorant level are set correctly:
  - Max. level: 2500
  - Res. level: 500
  - Cur. level: the actual level in each tank (this value is important for the correct work of the application programs).

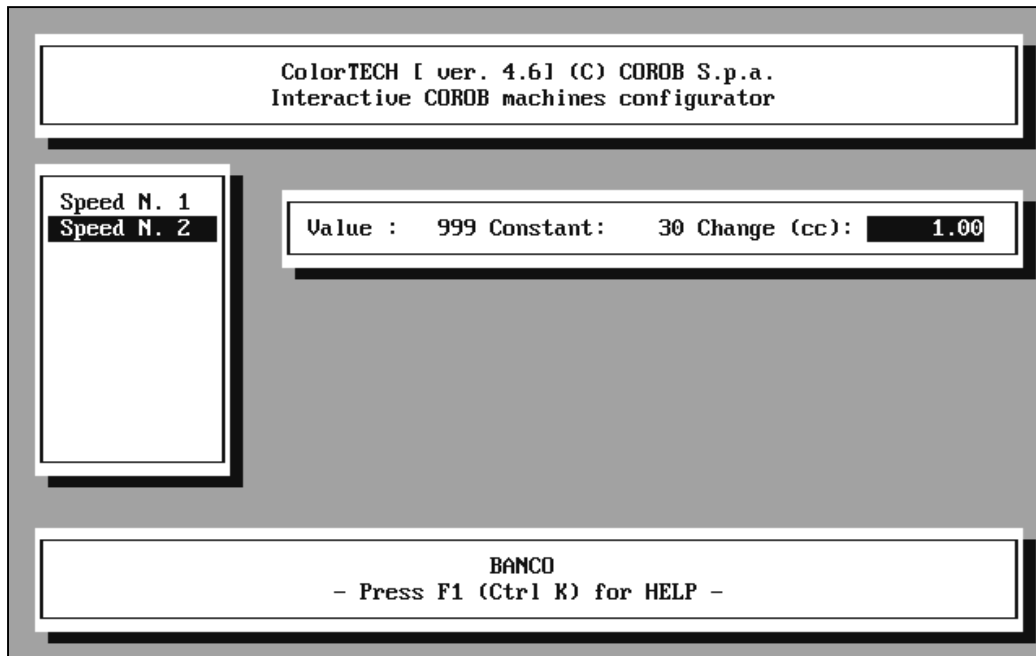
# Moistening the cap sponge



- Remove the sponge holding lid and moisten the sponge that is inside.
- Fit back the lid and bring back the sliding cap in its closed position.

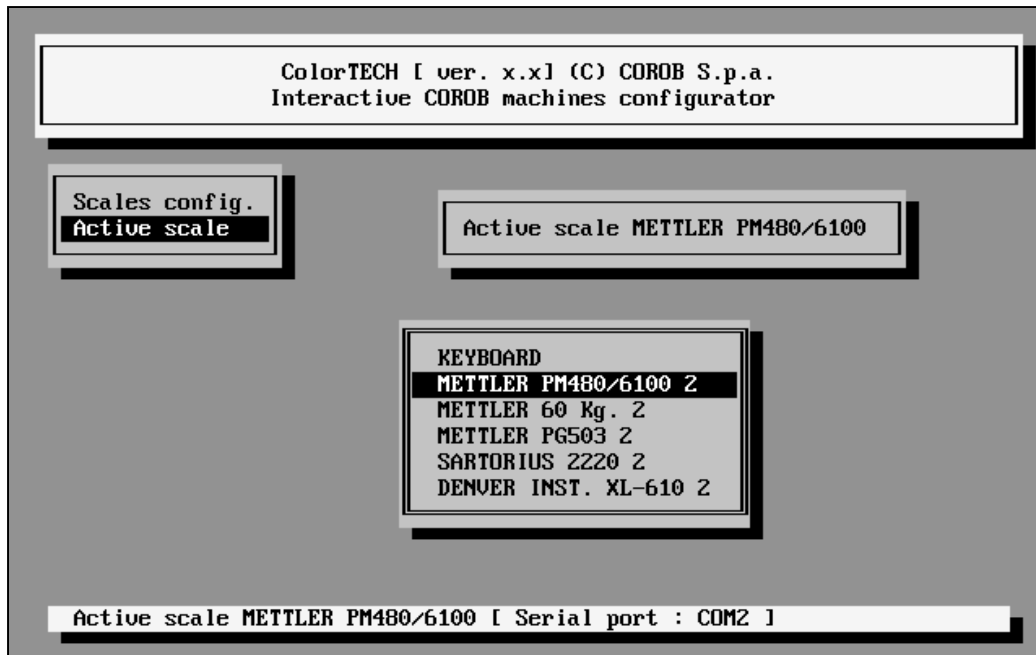


# Calibration



- Check the settings of speeds in **Setup Dispenser Speeds**.
  - Speed N.1: Value **150** Constant 6 Change (cc) **0.00**
  - Speed N.2: Value **999** Constant 30; Change (cc) **1.00**

# Calibration



- In **Scales Config** select **Active Scale**.
- Select the scale you wish to activate and confirm. If the scale you are using is not in the list select **Keyboard** to enter manually the weight.

# Calibration

Calibrating colorant : CLS11	Tank: 1	- Speed: 999
Specific weight :	Last calibration:	
cc_min: 1.0	Mpx :	- Offset :

<u>Steps</u>	<u>Weights</u>	<u>Volumes</u>
--------------	----------------	----------------

Press <ENTER> to start calibration

- In the canister list, move to the canister that you want to calibrate, press the spacebar and select **Automatic calibration**.
- Use PgUp and PgDown keys to select speed 2 (value = 999).

# Calibration

Calibrating colorant : CLS11	Tank: 1	- Speed: 999
Specific weight : 1780	Last calibration:	
cc_min: 1.0 -cc_max: 10.0	Mpx :	- Offset :

<u>Steps</u>	<u>Weights</u>	<u>Volumes</u>
40000		
8500		
8000		
3000		
1000		

How many tests for speed 999 ? (0 = abort)	2
--	---

- Set the steps to calibrate as follows: 40000, 8500, 8000, 3000, 1000.
- Set the number of tests to be carried out to 2.
- The calibration will go on automatically.

# Calibration

Calibrating colorant : CLS11	Tank: 1	- Speed: 150
Specific weight : 1780	Last calibration:	
cc_min: 0.0 -cc_max: 1.0	Mpx :	- Offset :

Steps	Weights	Volumes
1000		
600		
400		
250		

How many tests for speed 150 ? (0 = abort)

- Select speed 1 (value = 150) and set the steps to calibrate as follows: 1000, 600, 400 and, as the smallest value, the offset of speed 2 + 100 .
- Set the number of tests to be carried out to 4.

# Check calibration

Dispensing unit: 0.081 cc

cc. . . :	0.000
Units . . :	0.000
Weight . . :	0.000

Dispensed cc.    %Err

Std wg:

Cus wg:

Speed: 1 ( 150) 10xRPM

Change-volume: 0.0 cc

1 - B - BRILLANT YELLOW	1322 [ 1320]
2 - C - ORANGE	1392 [ 1393]
3 - E - FAST RED	1404 [ 1405]
4 - H - OXIDE RED	2098 [ 2096]
5 - L - OXIDE BROWN	1859 [ 1861]
6 - M - PHTHALO GREEN	1492 [ 1494]
7 - N - PHTHALO BLUE	1399 [ 1400]
8 - O - VIOLET	1404 [ 1400]
9 - R - LAMP BLACK	1392 [ 1390]
10 - S - TITAN WHITE	1982 [ 1982]
11 - T - OXIDE YELLOW	1845 [ 1850]

Manual Calibration Test (need a scale)  
- Press F1 (Ctrl K) for HELP -

- Using **Check calibration** you can check the accuracy of the machine.
- Select the circuit and enter the amount to be dispensed.
- Place the cursor bar on **Weight** and confirm.

# Check calibration

Dispensing unit: 0.081 cc

cc. . . :	5.000
Units . :	61.448
Weight . :	6.605

Dispensed cc.	%Err
Std wg:	4.996 -0.08
Cus wg:	5.004 +0.08

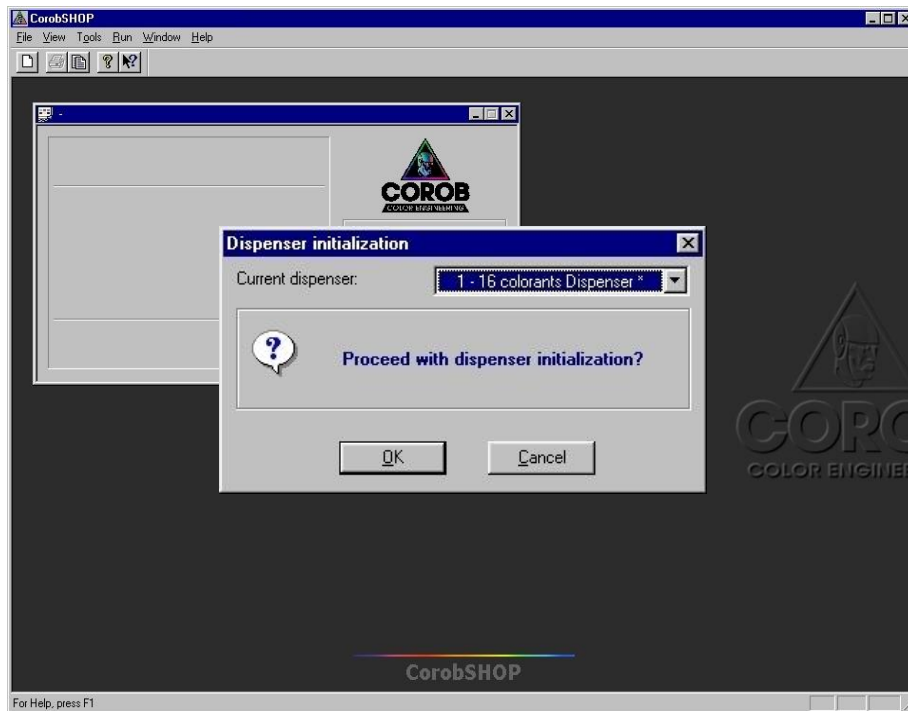
Speed:	1 ( 150) 10xRPM
Change-volume:	0.0 cc

1 - B - BRILLANT YELLOW	1322 [ 1320]
2 - C - ORANGE	1392 [ 1393]
3 - E - FAST RED	1404 [ 1405]
4 - H - OXIDE RED	2098 [ 2096]
5 - L - OXIDE BROWN	1859 [ 1861]
6 - M - PHTHALO GREEN	1492 [ 1494]
7 - N - PHTHALO BLUE	1399 [ 1400]
8 - O - VIOLET	1404 [ 1400]
9 - R - LAMP BLACK	1392 [ 1390]
10 - S - TITAN WHITE	1982 [ 1982]
11 - T - OXIDE YELLOW	1845 [ 1850]

Manual Calibration Test (need a scale)  
- Press F1 (Ctrl K) for HELP -

- The weight read will appear in the calibration test table and the **error percentage** between the amount required and that actually dispensed will be calculated.

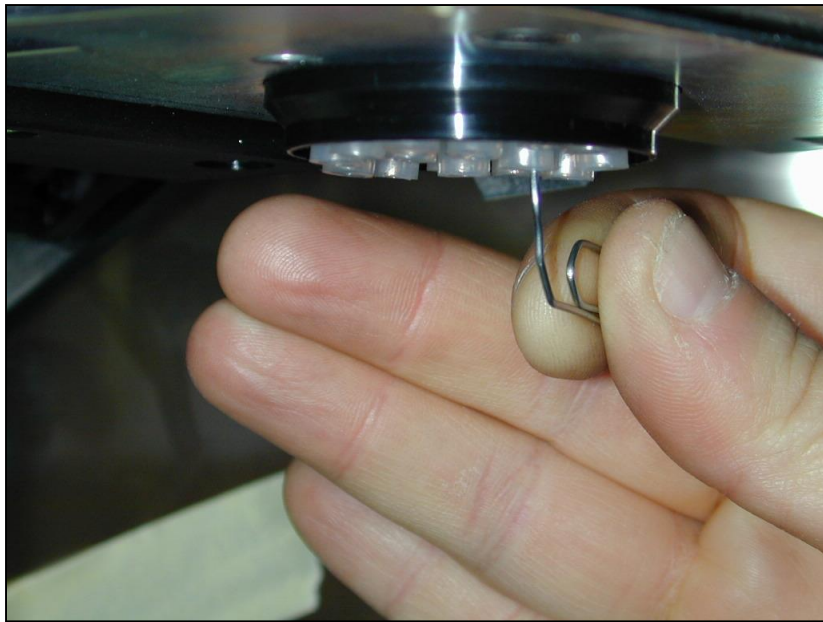
# D200 use



- Start CorobSHOP.
- The program asks to perform initialization and after this a Purge.
- During Purge check if the nozzle is clean and the colorant comes out regularly.



# D200 use



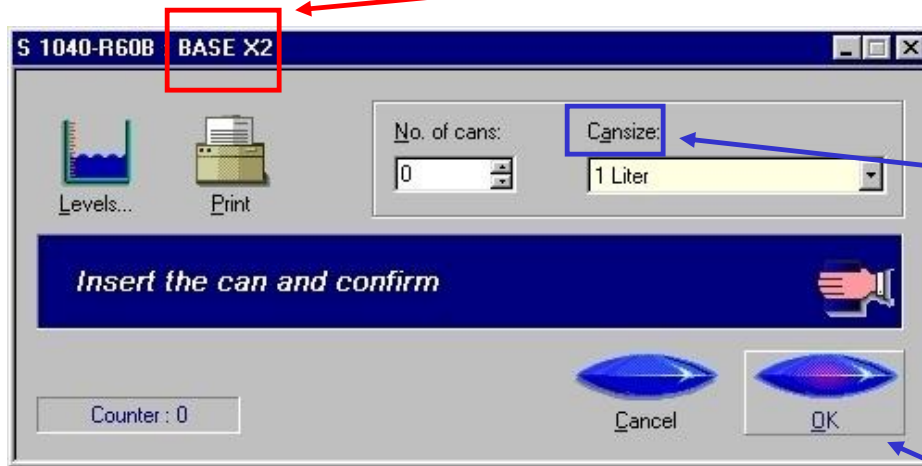
- If the nozzle is encrusted with colorant and the flow is not regular, remove any dried colorant with a tool like those in the pictures.

# D200 use

- Now the machine is ready for working:
  - Press **Search** to display the formula tree.
  - Select the formula to be dispensed.
  - Press the **Tint** button to open the dispensing window.

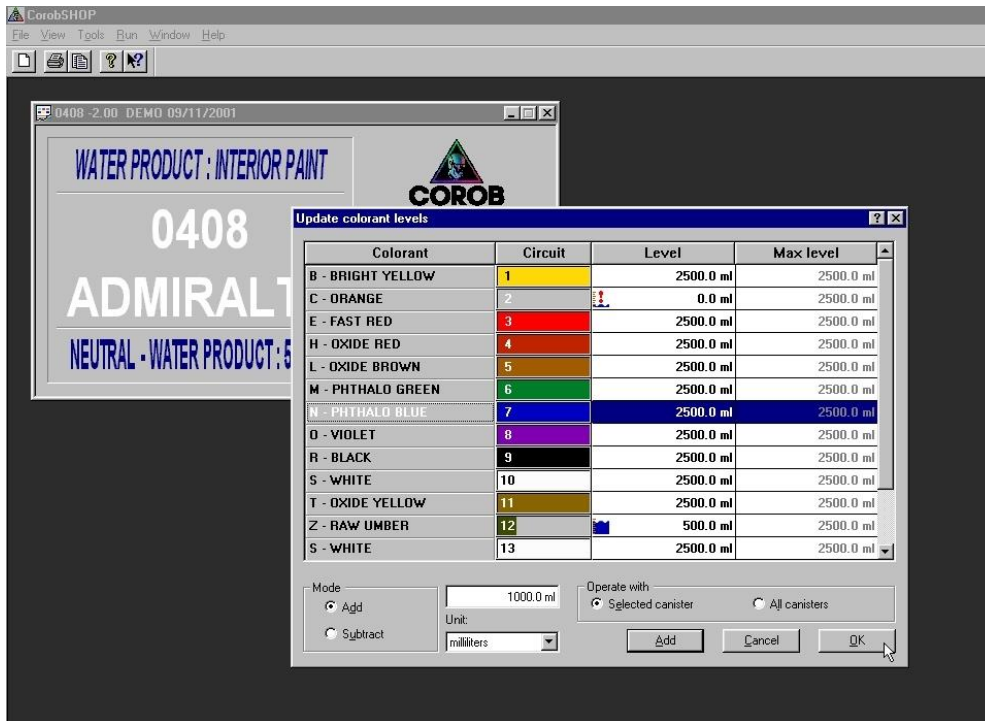


# D200 use



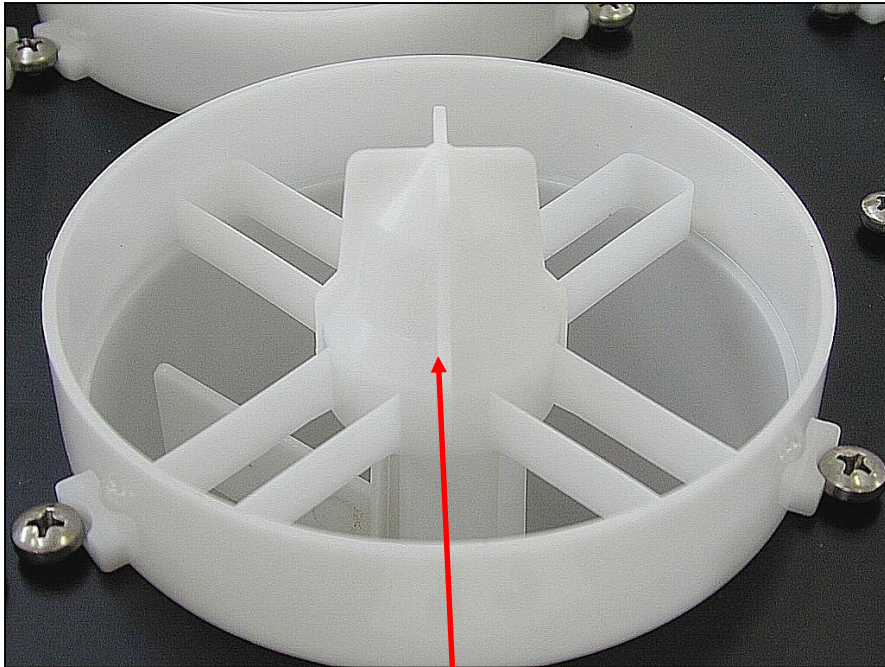
- The title bar shows the **code of the base** to be used.
- Select the **Can size** in the window.
- Place the can on the shelf and click **OK** to confirm dispensing.

# D200 use



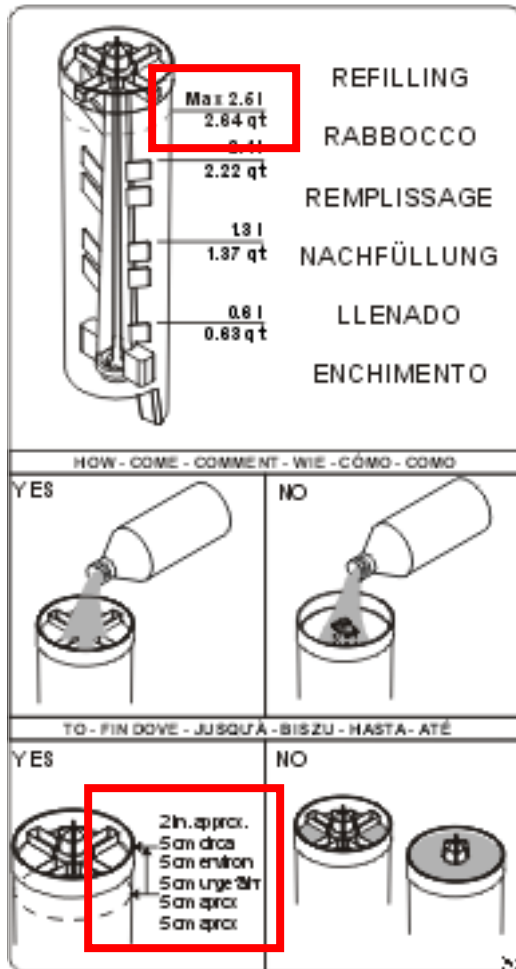
- CorobSHOP will warn you when one of the colorants reaches the Pre-warning level.
- Dispense the formula, then refill the canister and update the colorant level.

# Refilling the canisters



- Before adding colorant be sure that the bottle draining system is present and correctly positioned to avoid colorant spills from the shaft of the stirrer.

# Refilling the canisters



- Pour the colorant directly on the bottle draining system.
- The colorant level **MUST NOT** exceed the maximum level at no less than 5 cm from the upper edge of the canister.

# Daily maintenance

- Check the condition of the nozzle center. Remove any dried colorant with a sharp tool.
- Check the sponge condition: moisten it or clean it, if necessary.
- Check that actual levels are equal to those in CorobSHOP.

# D200 error codes

<b>CODE</b>	<b>MEANING</b>	<b>CIRCUIT INDICATION</b>	<b>NOTES</b>
<b>0x7B00</b>	<b>Error in carriage position (optic switch not detected during the reset)</b>	<b>from 0x7B01 to 0x7BFF</b>	
<b>0x7C00</b>	<b>Motor jammed (optic switch always darkened)</b>	<b>from 0x7C01 to 0x7CFF</b>	
<b>0x7D00</b>	<b>Wrong stroke (optic switch obscured too early, during the suction stage)</b>	<b>from 0x7D01 to 0x7DFF</b>	
<b>0x7007</b>	<b>line RS485 jammed</b>		<b>ONLY FOR SIMULTANEOUS MACHINE</b>
<b>0x7E00</b>	<b>Command timeout error (the module is not answering)</b>	<b>from 0x7E01 to 0x7EFF</b>	<b>ONLY FOR SIMULTANEOUS MACHINE</b>
<b>0x7F00</b>	<b>Module status error</b>	<b>from 0x7F01 to 0x7FFF</b>	<b>ONLY FOR SIMULTANEOUS MACHINE</b>



# Troubleshooting

7B00 Replace the SAPS.

7C00 Replace the SAPS.

7D00 1) Check the nozzle. If it is not clean, clean it and try again to dispense.  
2) Reduce speed 2 to “500”.

# Troubleshooting

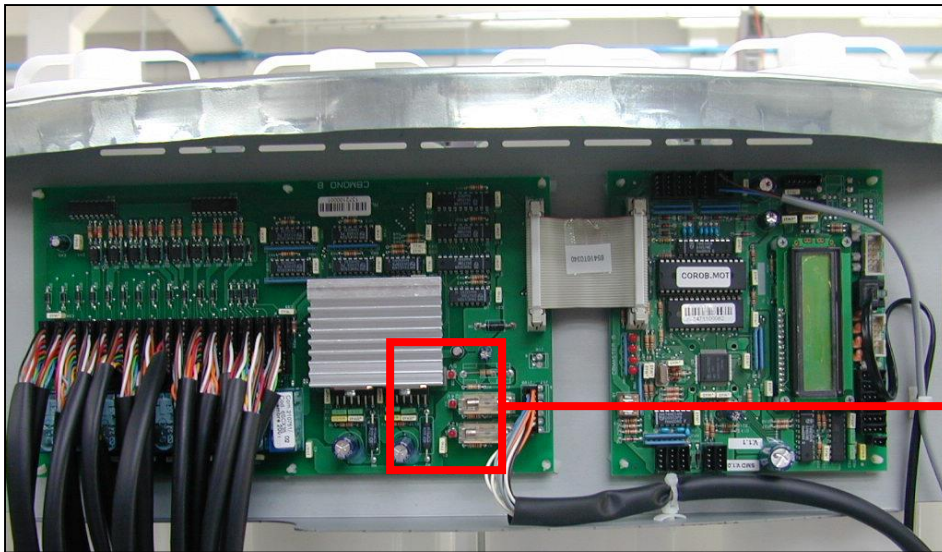
## Error in communication with dispenser:

- 1) Check that the serial cable between machine and PC is connected.
- 2) Check that the serial port works properly and that the serial port configuration in ColorTECH is correct.
- 3) Change CBMASTER board.

# Troubleshooting

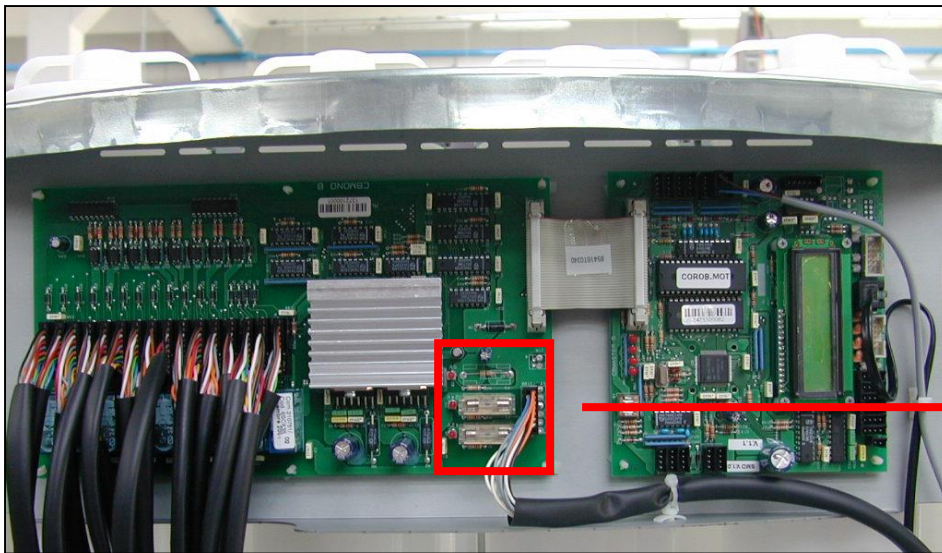
## Power supply check:

- 1) Check on CBMONO board that leds D1 (42 volt led), D2 (24 volt led) and D3 (5 volt led) are ON.

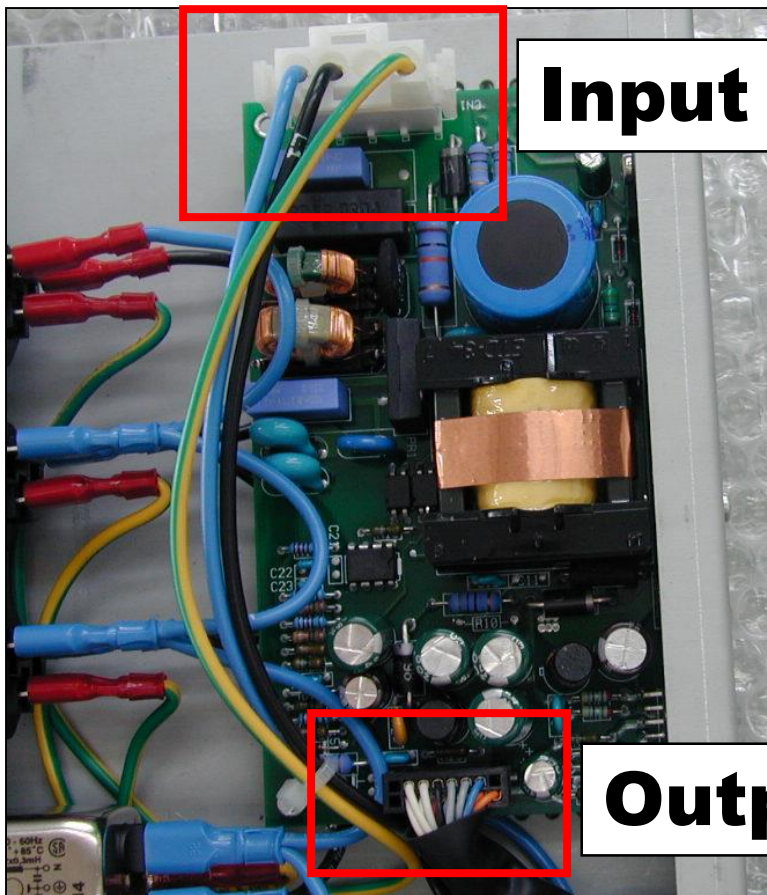


# Troubleshooting

2) Check on CBMONO board that fuses F1 and F2 are not burnt.



# Troubleshooting



3) Open the power supply box.

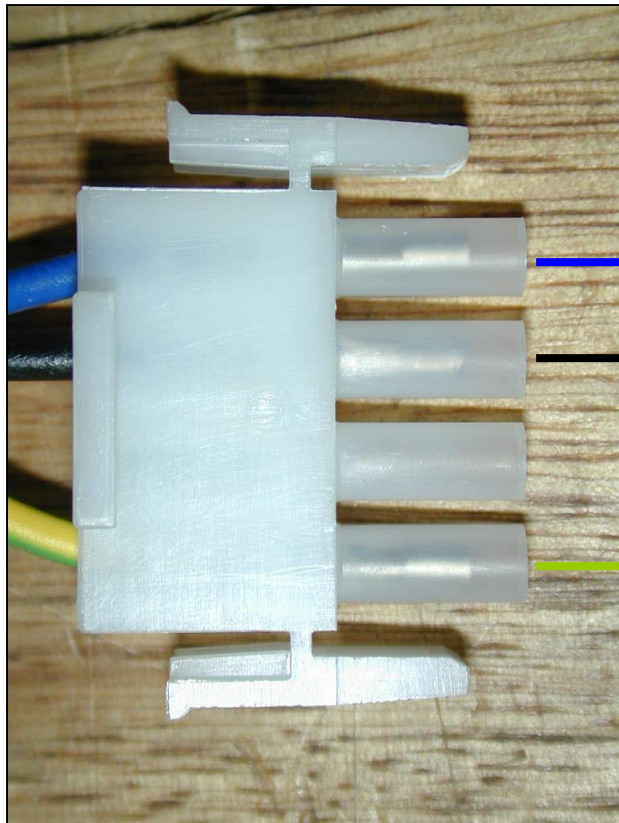
4) Check the input and output voltage on the power supply board.

Disconnect the two cables

Turn on the power supply

Pay attention to high voltage.

# Troubleshooting



**Neutral**

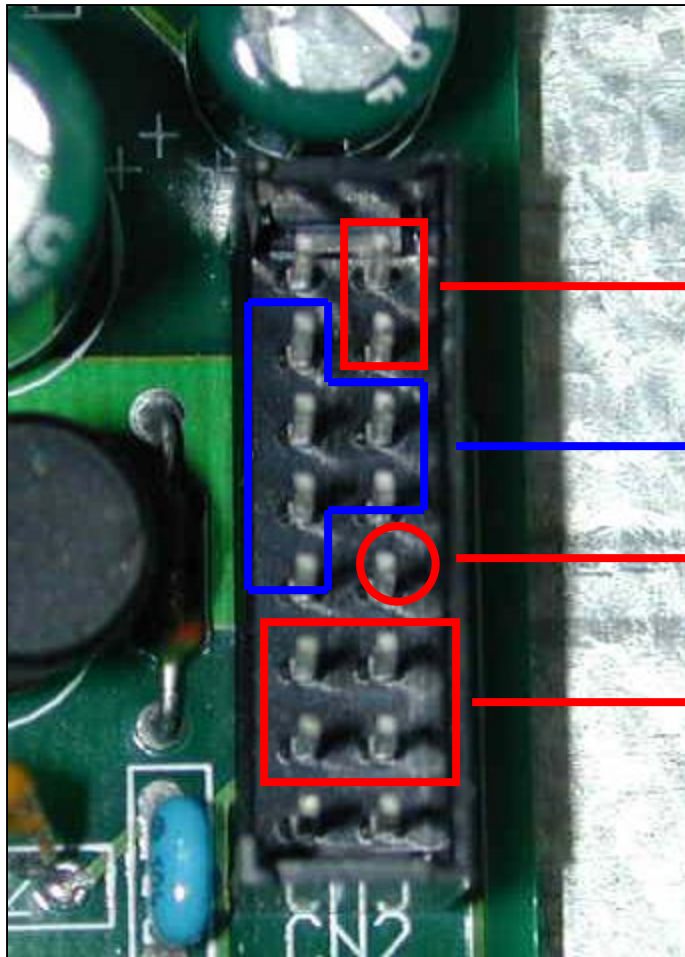
**Phase**

**Earth**

Check the input:

Check the input voltages as described in the picture.

# Troubleshooting



**5 volt**

**GND**

**24 volt**

**42 volt**

Check the output:

Reconnect the  
input cable

Check the output  
voltage as  
described in the  
picture.

# Troubleshooting

If input voltages are present and output voltages are not present:  
change power supply unit.

If output voltages are present and leds are not on:  
change CBMONO board.



# Troubleshooting

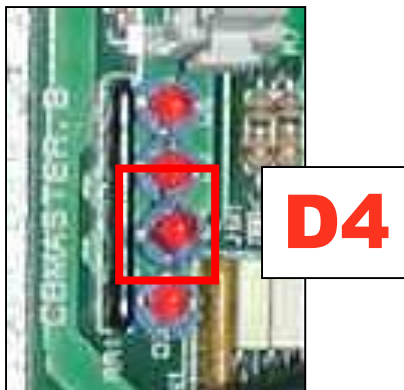
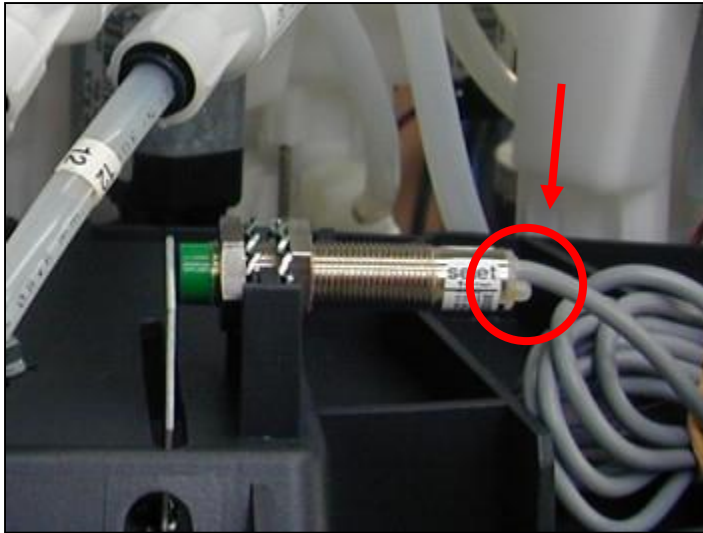
## Colorant dripping:

- 1) Open the front panel and change the check-valve.

## Can missing or too small:

- 1) Put a can under the nozzle.
- 2) Check that the sensor works properly.

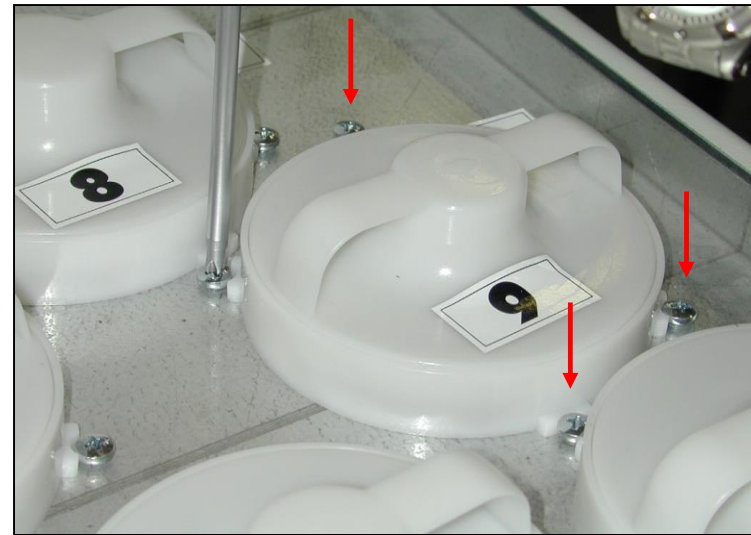
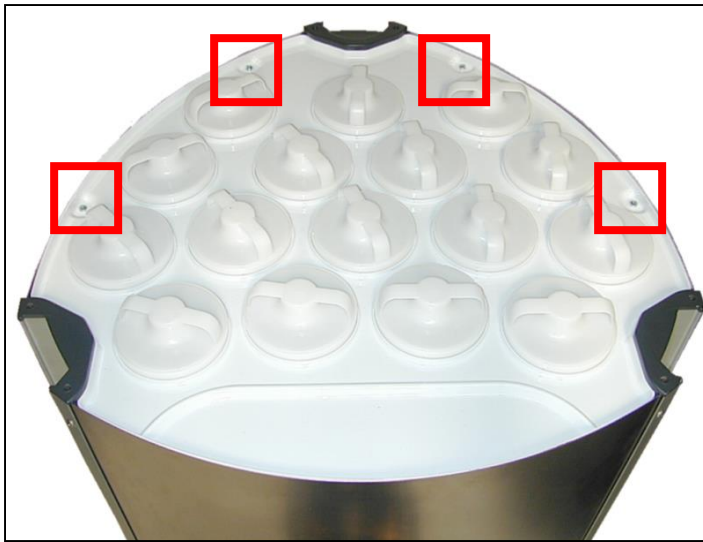
# Troubleshooting



## Sensor check:

- 1) Open the front panel and look that the sensor light works properly.
- 2) Check the cable looking at led D4 on the CBMASTER board.
- 3) Replace the sensor.

# SAPS replacement



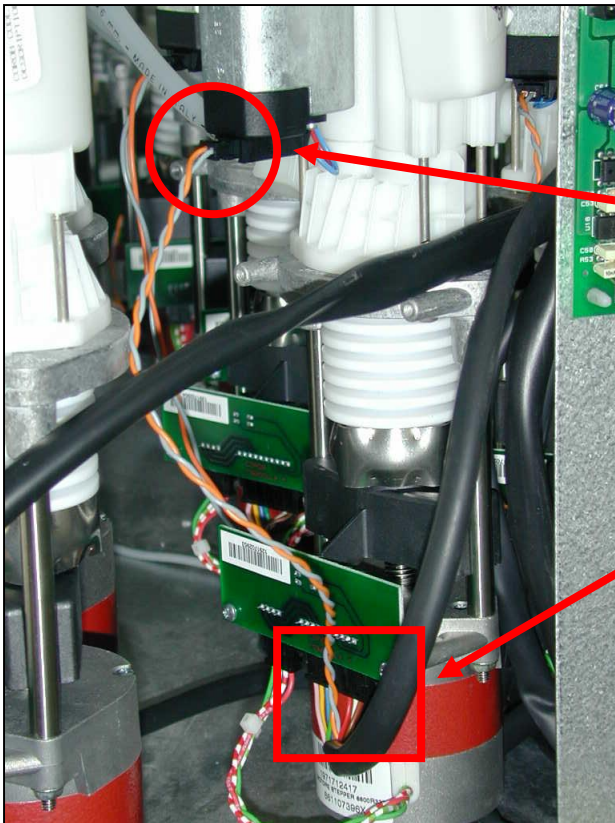
- Remove the protection cover by unscrewing it.
- Unscrew the screws that fix the circuit to the upper plate of the machine.

# SAPS replacement



- To reach the SAPS that you want to change unscrew the screws that fix the panel and remove it.

# SAPS replacement



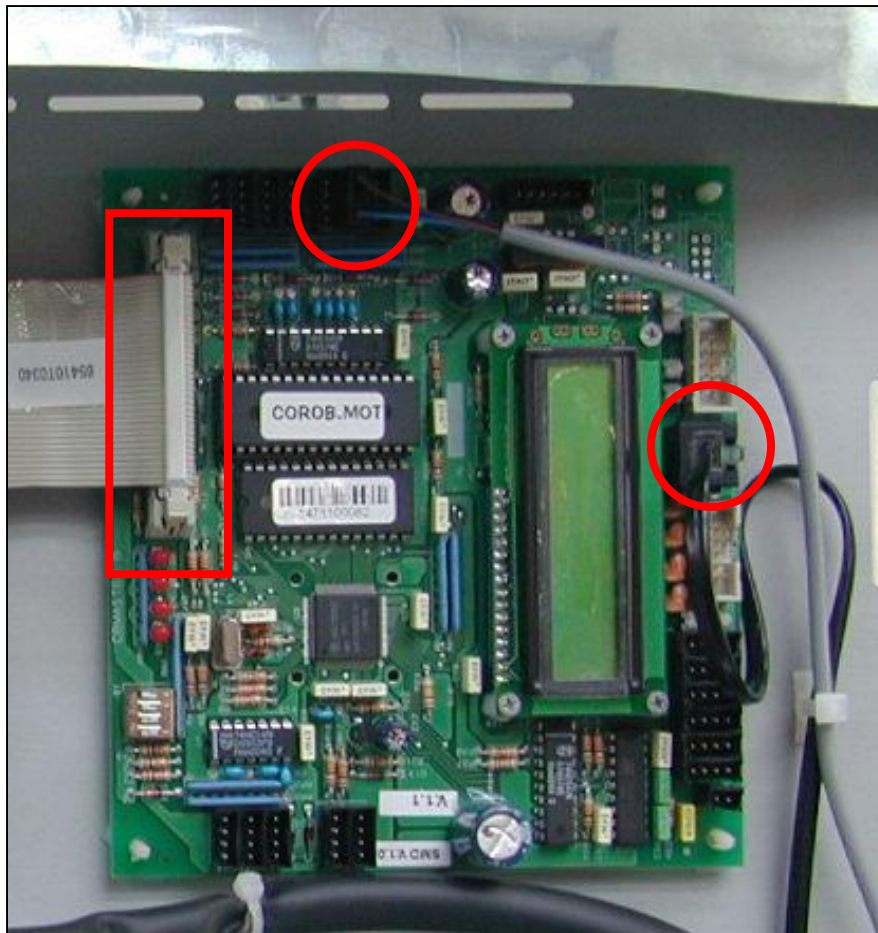
- Disconnect:
  - the stirring motor cable;
  - the power supply cable.

# SAPS replacement



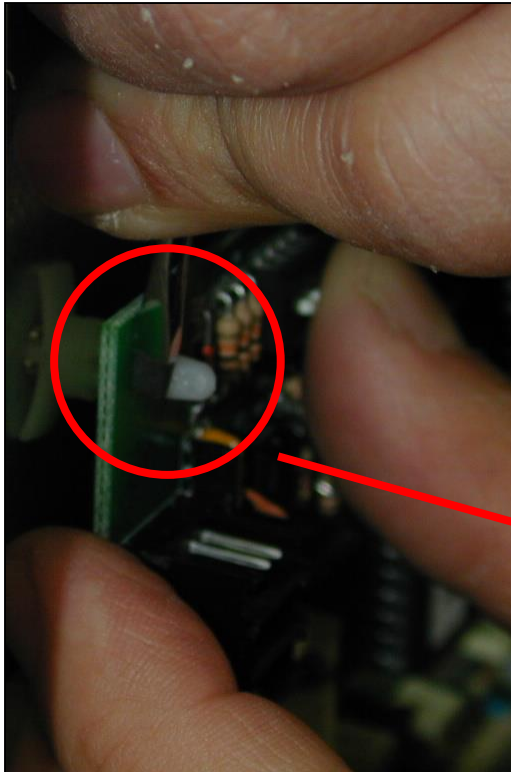
- Use a spanner to unscrew the connector, put some paper around the SAPS and disconnect the pipe.

# CBMASTER replacement

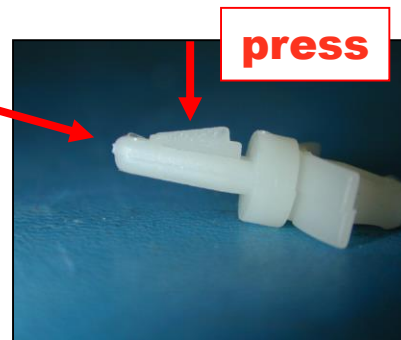


- Disconnect the sensor cable, the serial cable and the flat cable.

# CBMASTER replacement



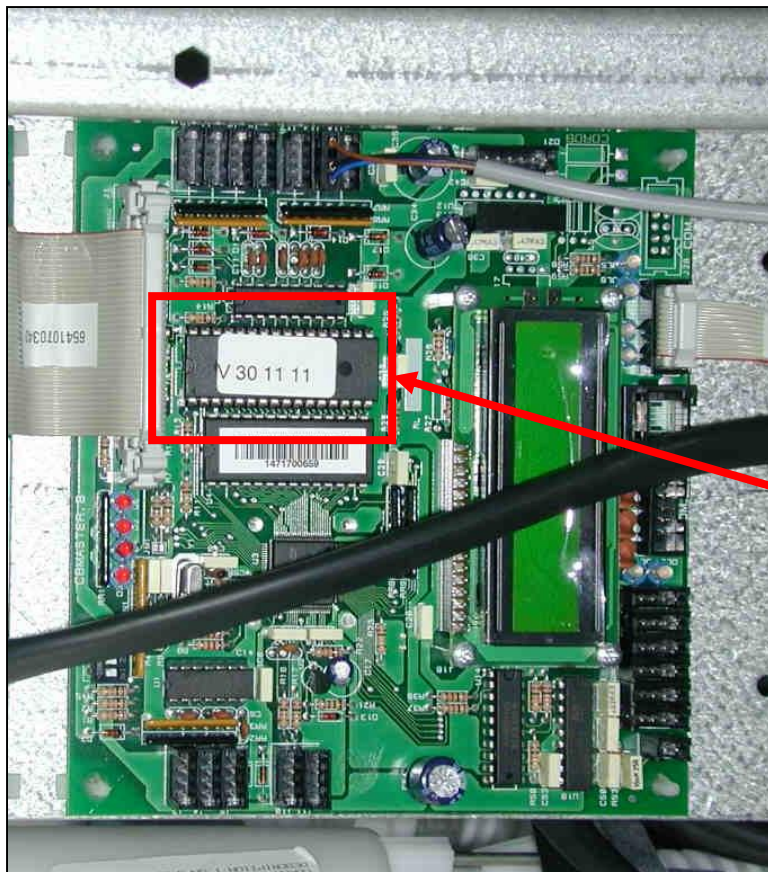
- Using a screwdriver or a pair of pincers to press, disconnect the 4 pins that fix the board.



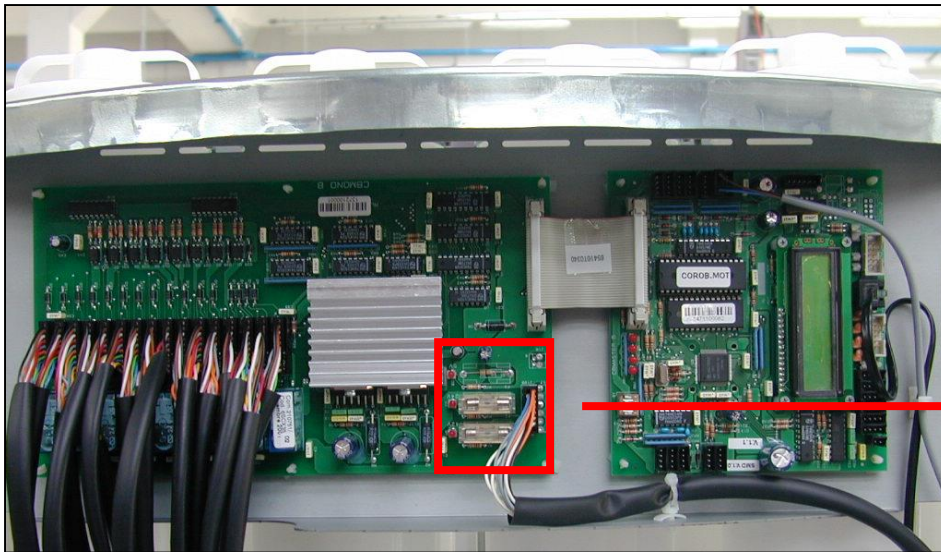


# CBMASTER replacement

- Change the EPROM on the new CBMASTER with that on the old one.

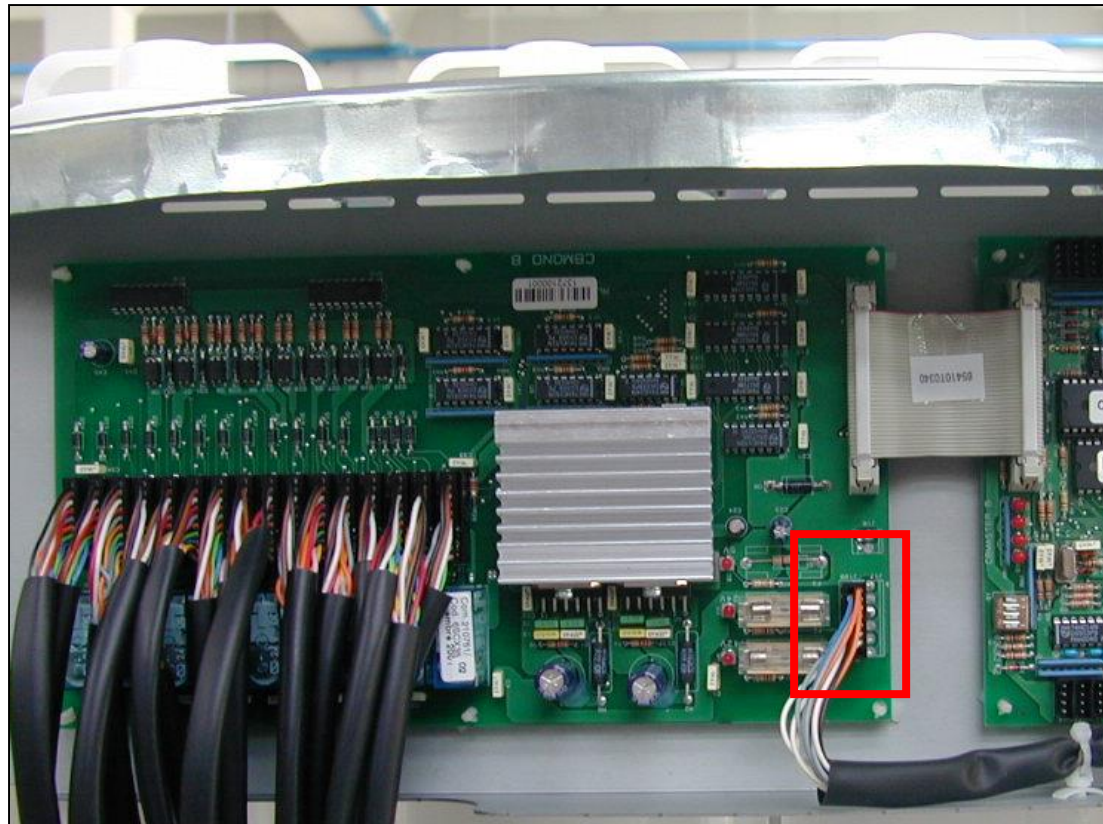


# Fuses replacement



- 24 volts and 42 volts fuses are located on CBMONO board.

# Power supply unit replacement



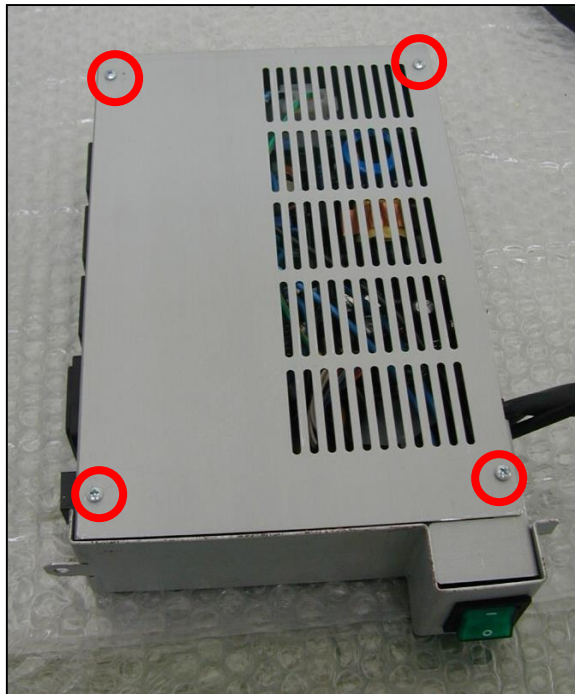
- Disconnect the cable on the CBMONO board and free it from the machine frame.

# Power supply unit replacement



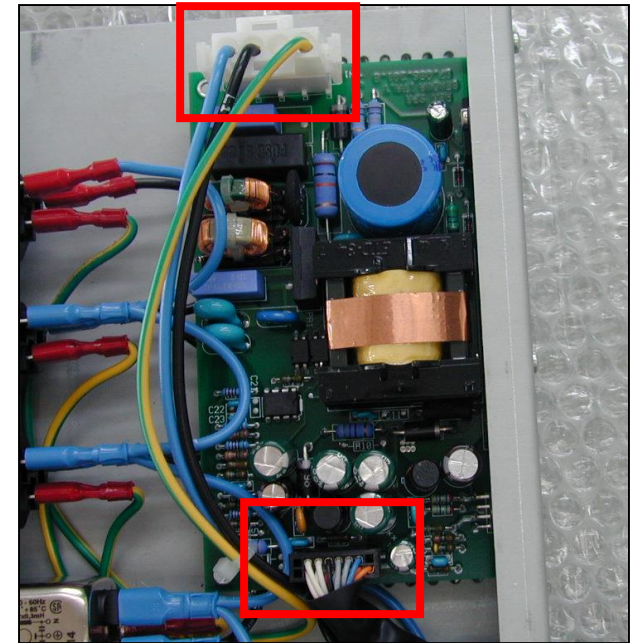
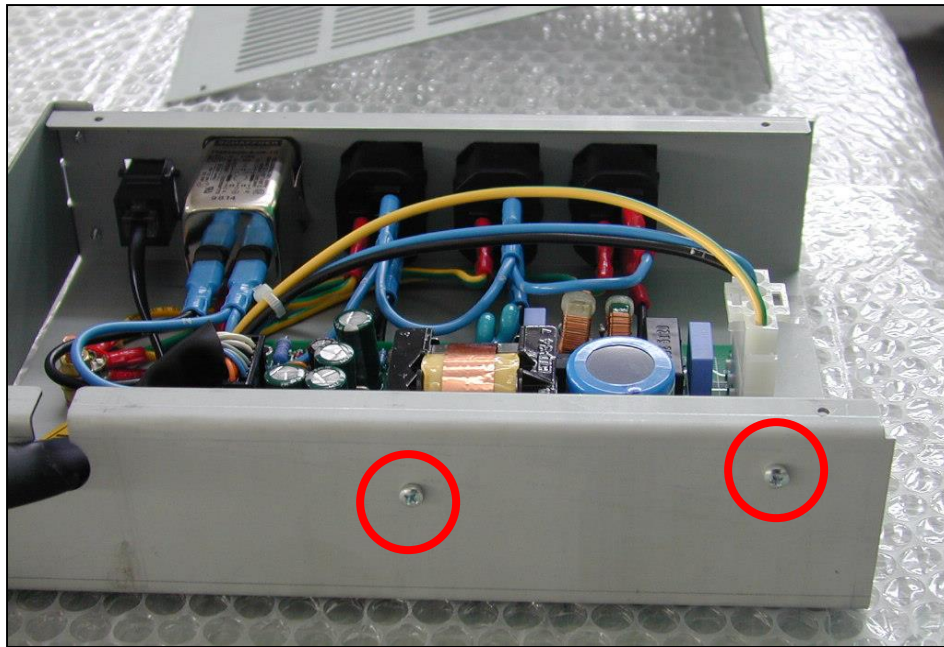
- Unscrew the power supply unit box from the frame and remove it.

# Power supply unit replacement



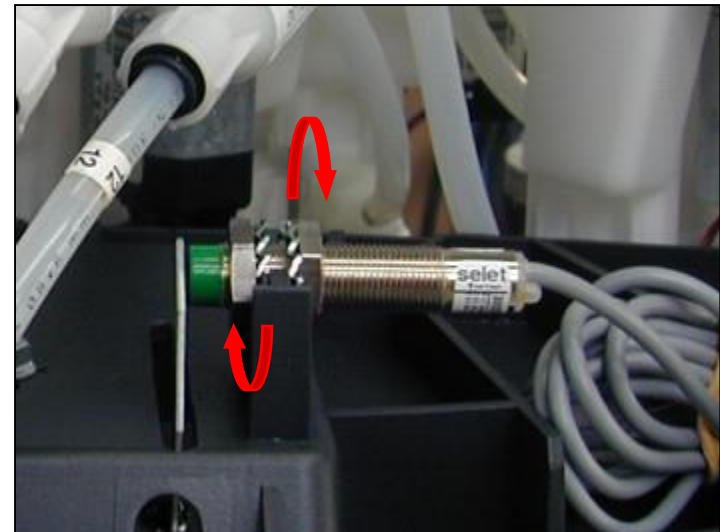
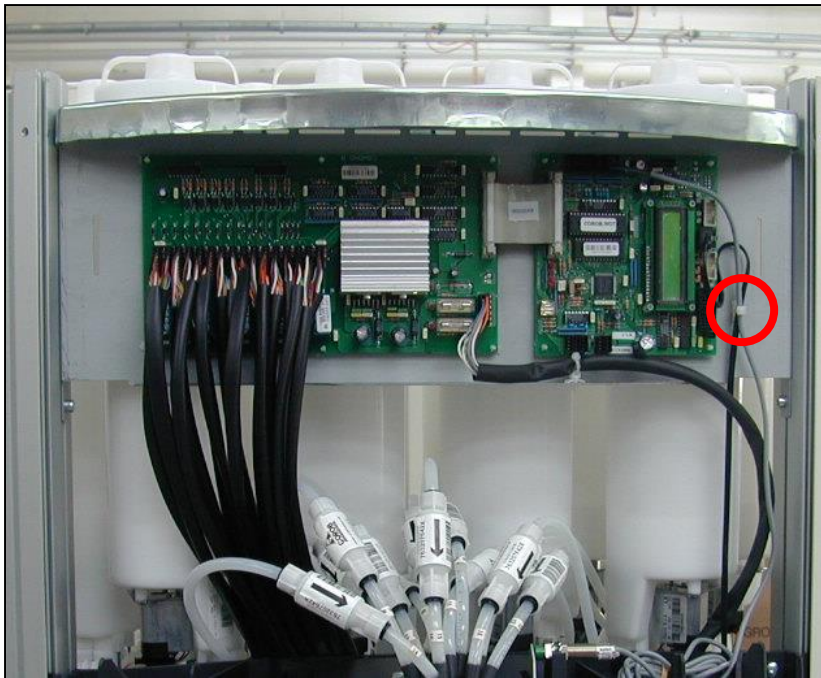
- Unscrew the 4 screws that fix the cover and remove it.

# Power supply unit replacement



- Unscrew the screw that fix the power supply unit and disconnect the two cables.

# Sensor replacement



- Cut all the clips that fix the sensor cable and, using 2 spanners, unscrew the sensor.

# Check-valve replacement



- Unscrew the screws that fix the front panel of the machine and remove it by sliding it upwards. Pay attention: two screws are under the machine nozzle.
- While doing this operation, wear cut-proof gloves in order to protect your hands.



# Check-valve replacement



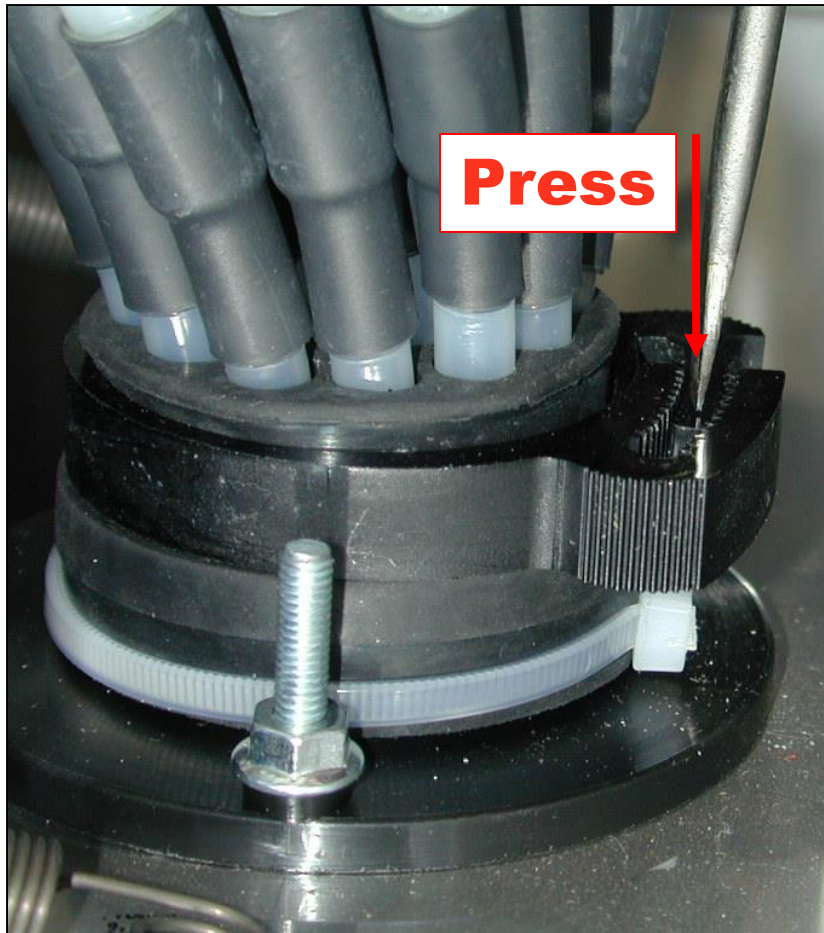
- Wrap a sheet of paper around the valve that has to be changed and put an empty can under the nozzle.

# Check-valve replacement



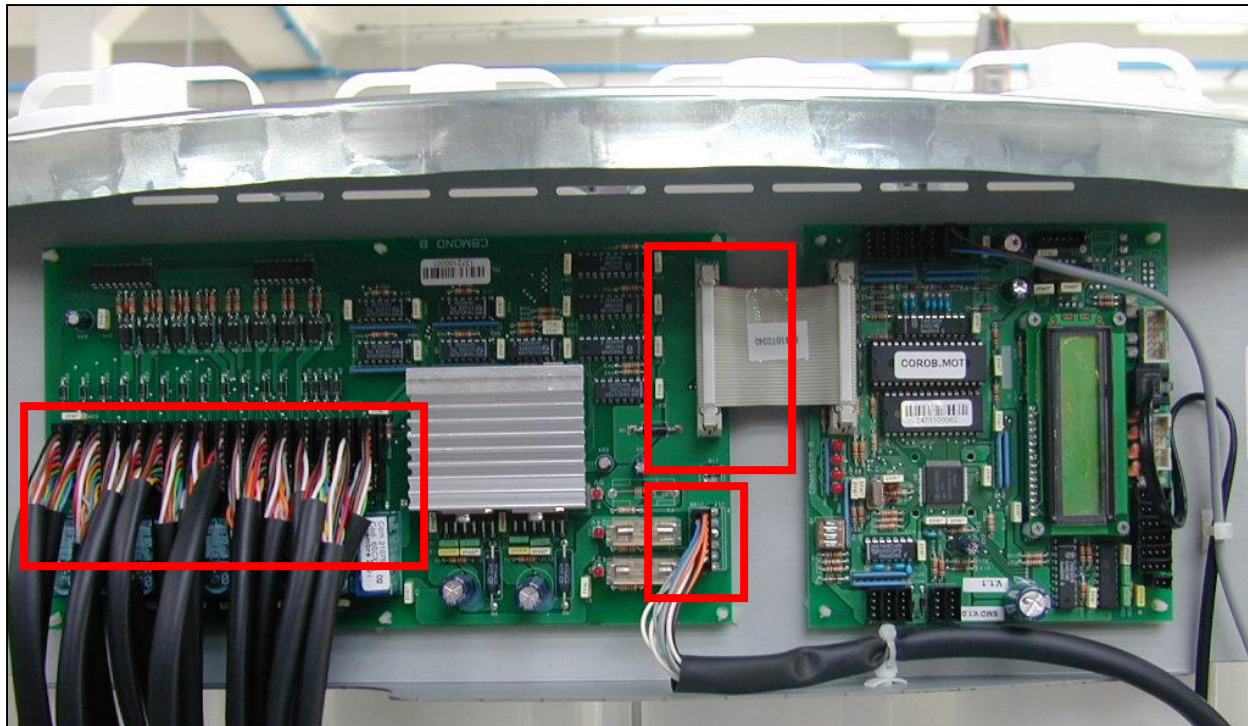
- Pressing with a spanner disconnect the two quick couplings and change the check-valve with a new one.

# Pipe replacement



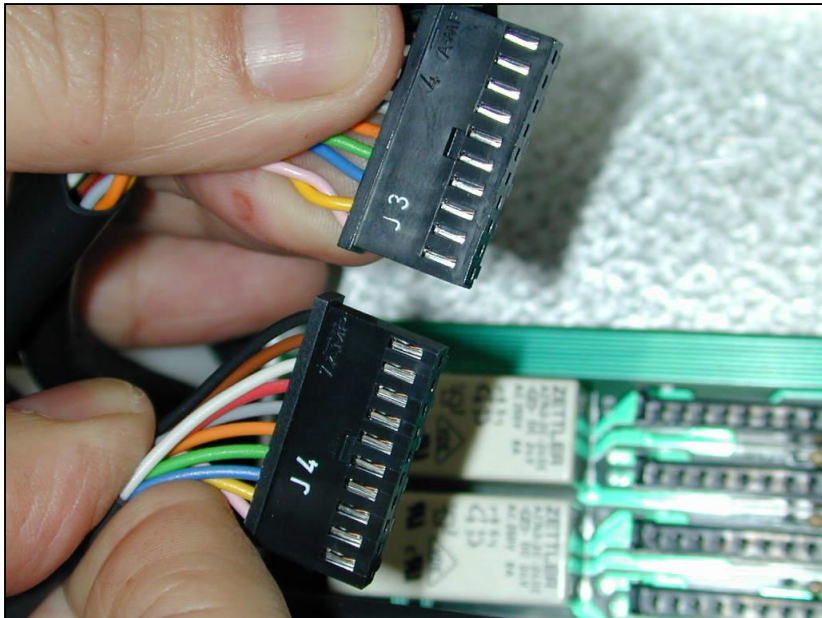
- Pressing with a screwdriver open the tie and remove it.
- Replace the pipe, reposition the tie and close it.

# CBMONO replacement



- Disconnect the SAPS cables, the power supply cable and the flat cable.

# CBMONO replacement



- While reconnecting the SAPS cables pay attention to the order. On the connectors you can find the number of the SAPS, connect them in sequence. From J1 on the left up to J16 on the right.