

COMPACTA

AUTOMATIC DISPENSER

User's Manual

Printed in Italy

Edition 1st February 2005

Addresses:

DROMONT S.p.A. Headquarters

*Via Borzone,42
12060 Grinzane Cavour (CN) – Italy
Tel. (+39) 0173 230 411
Fax. (+39) 0173 230 421
e_mail: dromont@dromont.it
Web Site: www.dromont.it*

DROMONT Asia / Pacific - Branch

*C/o Rhine Ruhr Process Equipment
A304, 3rd Floor West Wing, Wisma Tractor
No. 7, Jalag SS16/1
Subang Jaya, 47500 Pataling Jaya
Selangor Darul Ehsan, Malaysia
Tel. (+60) 3-7319341
Fax. (+60) 3-7319343
e_mail: nikitar@pd.jaring
Web Site: www.dromont.it*

© COPYRIGHT 2002, Dromont ® S.p.A. All rights reserved

No part of this manual may be reproduced in any form, or by any means, electronic or mechanical, including photocopying and recording, without prior written permission of Dromont® S.p.A. Information in this manual is subject to change without notice and does not represent a commitment on the part of Dromont® S.p.A.

Unless otherwise indicated, all reference companies, names, data and addresses used in the screens and/or examples are purely coincidental and serve only to clarify the use of the Dromont product.

Dromont® S.p.A. shall not be liable for technical or editorial errors or omissions made herein; nor for incidental or consequential damages resulting from the performance or use in this material.

If you require additional copies of this manual or further technical information about it, please write to:

Trade marks Misura Prima is a trademark of Dromont S.p.A.

Windows, Windows 95, 98, ME, NT, 2000 and XP are trademarks of Microsoft Corporation.

All other trademarks are the property of their respective owners.

Contents

1. INTRODUCTION	4
1.1 HOW TO READ THIS MANUAL	5
2. GENERAL INFORMATION	6
2.1 SAFETY WARNINGS	6
2.2 LABELS ON THE MACHINE	8
2.3 FIRE EXTINGUISHER.	8
3. UNPACKING THE MACHINE	9
3.1 MOVING AND HANDLING THE PACKED MACHINE	9
3.2 UNPACKING	9
4. FEATURES	10
4.1 GENERAL DESCRIPTION	10
4.2 TECHNICAL SPECIFICATIONS	11
4.3 MACHINE'S PERFORMANCE AND CHARACTERISTICS	12
4.4 FEATURES AND OPTIONS COMPACTA	12
4.4.1 CANISTERS	12
4.4.2 AUTOMATIC HUMIDIFIER (AUTOCAP)	13
4.4.3 ELECTRONIC BOARDS	14
4.4.4 ELEVATOR	15
4.5 OPTIONS	15
4.5.1 PRINTER	15
4.5.2 MODEM	16
4.5.3 CAN SIZES	16
5. INSTALLING THE MACHINE	17
5.1 GENERAL WARNINGS	17
5.2 SAFETY DEVICES ON THE MACHINE	17
5.3 CONDITIONS FOR PROPER INSTALLATION	18
5.4 ACCESSORIES	18
5.5 CONNECTING THE COMPUTER.	21
5.6 INSTALLING THE DROMONT SOFTWARE	21
5.7 SETTING THE SCALE	22
5.8 FILLING THE CANISTERS	22

5.9 CONTROL PANEL	23
5.10 PURGE AND RECIRCULATION	25
5.10.1 PURGE	25
5.10.2 RECIRCULATION	25
5.10.3 CALIBRATION	25
5.11 DOSING	26
5.12 SHUT DOWN	26
5.13 STANDBY	26
5.14 GENERAL ADVICE	27
6. ORDINARY MAINTENANCE	28
<hr/>	
6.1 GENERAL WARNINGS	28
6.2 MAINTENANCE TABLE	28
6.3 CLEANING	28
6.3.1 CANISTER FILTERS	28
6.3.2 DISPENSING NOZZLES	29
6.4 MOISTENING THE HUMIDIFIER CAP SPONGE	29
6.5 AUTOCAP PROTECTION	30
6.6 LUBRICATION	31
6.6.1 WORM SCREW AND HEAD SHAFT	31
6.7 CHANGING A PISTON	32
6.8 EXCHANGING ELECTRO VALVES:	33
7. NOTES	34
<hr/>	

1. INTRODUCTION

Purpose and use of this manual

This manual, inserted in the product packing, contains instructions on the installation, use, and routine maintenance of the following equipment:

Compacta Automatic Dispenser

This manual provides instructions on the routine maintenance needed to uphold the dispenser performance over time.

It's aimed at the machine operators and installers, who need the necessary training and professional skill to use similar automatic machines.

It also contains all information available at the time of publication regarding the machine and the accessories; since some of the latter are optional, they may not be installed on your machine. It thus also includes any variations or changes that involve different operating procedures for either the installation technician or the operator.



**READ THIS MANUAL CAREFULLY
BEFORE INSTALLING AND USING THE
MACHINE**

It's organised into chapters, each of which refers to a specific topic..

The present manual has to be considered an integral part of the machine, and must be stored until the machine is fully dismantled.





We recommend that you store it close to the machine so that it is easily accessible, in a place protected from heat and damp.

Use the manual in such a way as to avoid damaging its contents; do not remove, tear or rewrite any portion of its contents.

Should it be lost or partially ruined, so that its contents can no longer be read in full, we recommend that you request a new manual from the manufacturer.

Give this manual to any other user or subsequent owner of the machine.

1.1 How to read this manual

 WARNING	<p>WORDS IN BOLD TYPE PRECEDED BY  MARK REFER TO WARNINGS FOR POSSIBLE DANGER FOR THE OPERATOR.</p>
 REMARKS	<p>WORDS IN BOLD TYPE PRECEDED BY  MARK REFER TO REMARKS ABOUT IMPORTANT OPERATIONS FOR THE PROPER FUNCTIONING OF THE MACHINE.</p>

2. GENERAL INFORMATION

2.1 Safety warnings

The Dromont dispensers have been designed and manufactured in observance of essential safety requirements; the CE marking certifies its compliance.

All measures and precautions were taken during its design, manufacture, testing and installation to ensure the highest possible level of safety considering rational use of the machine.

The warnings listed below are to be considered general in nature; specific safety instructions related to the type of intervention to be carried out and the type of accessories installed on the machine are given in detail in the specific paragraphs.

READ THE SAFETY WARNINGS CAREFULLY BEFORE USING THE MACHINE
















WARNING



WARNING

WARNINGS

-  Do not operate near the plant without suitable personal protections such as:
 - glasses
 - protective suit (against chemical agents)
 - safety shoes
-  Do not operate the machine with permanent and/or movable protections disabled
-  When the Compacta is connected to the main power it will perform the automatic timed controlled process of re-circulation and stirring at pre-set intervals. This involves sudden activation of the pump motor during the re-circulation process and the sudden activation of the stirring motors during the stirring process
-  The customer must make sure that environmental conditions and power supply conditions where the machine operates are always in compliance with the instructions of this manual.
-  Do not disable safety precautions installed on the machine
-  Do not modify for any reason any part of the machine (joints, holes, finishing, ...) to adapt additional devices. (We advise to ask for modifications directly to DROMONT S.p.A.)
-  Clean machine coverings panels and commands carefully, with dry and soft cloths, or lightly soaked in a non-flammable detergent.

-  Only the authorized personnel who have read and understood every parts of the manual can use the Compacta.
-  Only trained personnel must do the repair and maintenance operations
-  The Compacta has to be linked only at voltage reported in Chapter 5.5.
-  During maintenance or repair operations the machine must be switched off with the power disconnected.
-  The machine makes the re-circulation at intervals specified by the operator. During the stirring the motor is activated and the stirrer turns.
-  The machine must be positioned on a flat area and fixed to the floor.

**DROMONT DECLINES ALL RESPONSIBILITY FOR ANY
MALFUNCTIONALITY OR INJURY TO PERSONS OR
DAMAGE CAUSED BY ABOVE-MENTIONED
OPERATIONS**

2.2 Labels on the machine



picture 2-1 Position of labels

FIELD	DESCRIPTION
Type	Type of machine
Frequency Hz	Frequency (Hz)
Date	Date of manufacturing
Serial number	Serial number
Auxiliary Volt	Feeding auxiliary Volt
Phases	Number of phases
Feeding Volt	Feeding machine volt
Installed power kW Ampere	Installed power (kW) and electric current (Ampere)

picture 2-2 Explanation of the technical data

2.3 Fire extinguisher.

If the machine catches fire, you must use dry powder or carbon dioxide fire extinguishers. Never use water. Carefully use the instructions indicated by the manufacturer and listed on the extinguisher.

3. UNPACKING THE MACHINE

3.1 Moving and handling the packed machine

The machine has been carefully wrapped with bubble plastic and cellophane plastic and tightened to a wooden pallet, which is specially adapted for unpacking the machine more quickly.

You'll find the dimensions of the packed machine in picture 3-1:

	Compacta 16	Compacta 24	Compacta 32
Width (mm/Inch)	720/28.35	850/33.5	850/33.5
Depth (mm/Inch)	705/27.75	1500/59.1	1500/59.1
Height (mm/Inch)	1370/53.93	1550/61	1550/61
Weight (kg)	330	370	380

picture 3-1

3.2 Unpacking

The following is the procedure for unpacking the Compacta:

- a) Cut the plastic folio and bubble plastic.
- b) Screw all four stabilisers clockwise until they reach the floor.
- c) Screw them another 1 cm until the machine comes loose from the pallet.
- d) Remove the pallet under the machine.
- e) Screw the stabilisers anti-clockwise until the wheels touch the floor.
- f) Place the machine in its final location.
- g) Screw the stabilisers clockwise until the wheels come off the ground.



REMARKS

USE A RATCHET OR AN ELECTRIC DEVICE FOR THE ABOVE WRITTEN PROCEDURE

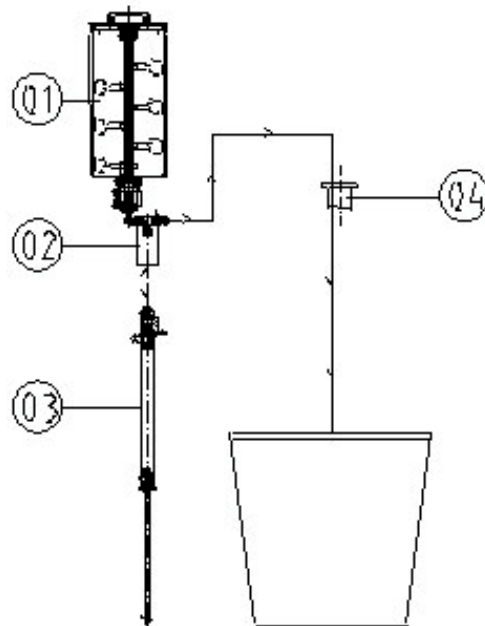
4. FEATURES

4.1 General description

The Compacta is an automatic dispenser with innovative architecture, it operates up to 32 internal circuits and supports both simultaneous volumetric and gravimetric dispensing and combined operational modes.

The Compacta uses the piston pump technology combining high accuracy with low wear.

picture 4-1 shows the working principle of the machine.



picture 4-1 working principle and fluid flow

The principle is basically as a bicycle pump: the pump (03) goes down which creates a depression in the piston volume. Due to this depression the colorant will pass from the canister through the filter and the three-way valve (02) to the piston. When the piston goes up it will push the fluid back to the canister (in recirculation) or it will go to the dosing head (04) passing through the three-way valve.

4.2 Technical specifications

	Compacta 16	Compacta 24	Compacta 32
Electrical specification			
Power supply*	See wiring diagrams	See wiring diagrams	See wiring diagrams
Frequency	50/60Hz	50/60Hz	50/60Hz
Maximum power absorbed	See wiring diagrams	See wiring diagrams	See wiring diagrams
Environment working conditions			
Temperature (°C)	10-35	10-35	10-35
	10-35: range for a right working of electronic cards and devices installed on the machine If the temperature changes the viscosity of the component to dose on the machine, it's necessary modify the work temperature to assure and guarantee a product viscosity lower than 2000 cPs		
Component viscosity (cPs)	0-2000 cPs – The machine works properly in this products viscosity range		
Relative humidity (%)	5-75	5-75	5-75
Overall dimensions			
Width (mm/inch)	720/28.3	800/31.5	800/31.5
Depth (mm/inch)	595/23.4	1400/55.1	1400/55.1
Height (mm/inc)	1260/49.6	1370/53.9	1370/53.9
Weight***			
Total machine (kg)	300	330	340
Noise Level			
Noise Level	<65 dB(A)	<65 dB(A)	<65 dB(A)
Vibrations			
The machine does not transmit vibrations to the floor that may compromise the stability and precision of any nearby equipment			
*** Figures are purely indicative, and depend on the exact configuration of the machine.			

picture 4-2

4.3 Machine's performance and characteristics

Dispensing system	Volumetric-simultaneously/gravimetrically/combo
Dispensing centre	external
Diameter dispensing head (mm)	35
Number of circuits	16
Canister capacity (L)	3-5
Type of canisters	Plastic canisters (POM)
Type of electro valves	Three way solenoid valves
Type of pumps	Piston pump
Flow-rate* (L/min)	0,5
Minimum dispensed quantity**	1/384 fl oz (0.077cc)
Automatic humidifier cap	standard
Manual lifting device	standard

*Flow-rate depending on colorant-characteristics; **Minimum dispensed quantity depending of colorant characteristics

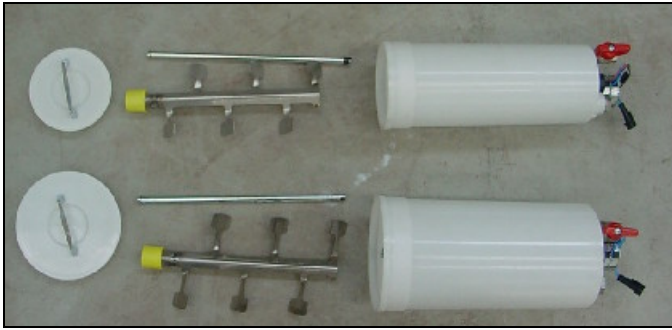
picture 4-3

4.4 Features and options Compacta

4.4.1 Canisters

The Compacta has a fixed combination of canister sizes of 3 and 5 liters.

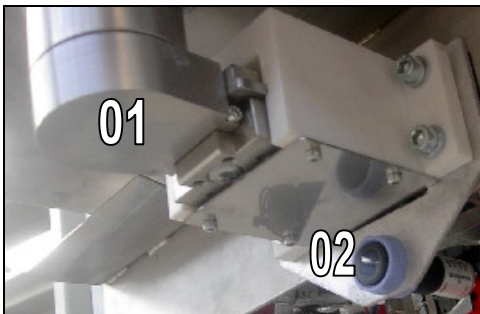
The canisters can be chosen in plastic (POM) or stainless steel (depending on the type of colorant) and are compatible with every type of colorant. Each canister has a stirrer that stirs at 20Rpm during the re-circulation or a dosing cycle. As you can see in **picture 4-4** the stirrer has been developed to guarantee the best mixing avoiding settling or the drying of the colorant. The stirring motor is independent and very easy exchangeable.



picture 4-4 3/5 Ltr canisters Compacta

4.4.2 Automatic humidifier (autocap)

The autocap (1) is connected to a sensor and opens or closes when the sensor (2) detects a can. The sensor is positioned in a way that even the smallest can will be detected. In picture 4-5 you can see the autocap.



picture 4-5 Autocap and photocell

4.4.3 Electronic boards

The Compacta is equipped with three exchangeable electronic boards (see picture 4-6). Each of which has their specific function declared in the accompanying table. The boards are accessible by opening the backdoor. The boards can be taken out by unscrewing them from the metal plate.

Three transformers supply the necessary voltage to the electronic boards and machine (picture 4-7)



WARNING

**ONLY QUALIFIED TECNICIANS MAY WORK ON
THE ELECTRONICS/ ELECTRICS.**



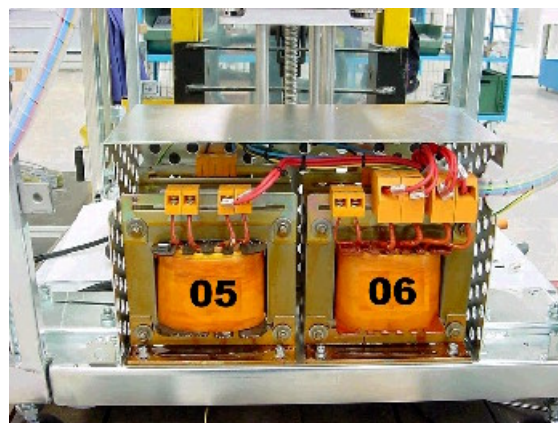
WARNING

**PLEASE MAKE SURE YOU TAKE THE RIGHT
SAFETY MEASUREMENTS BEFORE WORKING
ON/ INSIDE THE MACHINE.**

**PLEASE TAKE NOTICE OF THE SAFETY
STICKERS ON THE BACK OF THE MACHINE.**



picture 4-6 Electronic boards



picture 4-7 Transformers

The following is a description of the functions of each electronic board.

N°	Description
01	Driver for the stepping motor
02	Electronic board for powering the machine
03	Mother board with core module
04	Transformer for logic
05	Transformer for the stepping motors
06	Transformer for services

picture 4-8

4.4.4 Elevator

On the Compacta dispenser two different types of elevator can be installed: manual or automatic version.

Manual elevator

The Compacta is equipped with a manual shelf. Highering or lowering the shelf can be done tearing the handle that you'll find on the bottomside of the shelf. After the shelf is positioned in its position the handle is relieved and the shelf will be blocked in its position.

Automatic elevator

The elevator has a motor integrated which highers/lowers the cans until they are detected by the "photocell". Operating the elevator is very easy and effortless: just pushing the vertical arrows on the display moves the elevator up and down.

The elevator stops automatically when the photocell detects a can.

4.5 Options

4.5.1 Printer

There is the possibility to connect a printer to the Prima software. Follow the instructions for installation that comes with the printer and read the software manuals.

4.5.2 Modem

Dromont offers to each client a unique tele-assistance service, which goes through a modem and a special software package. This modem gives the Dromont service engineer access to the computer linked to the customer's machine. Problem solving in this way is easy and costs very little time.

4.5.3 Can sizes

Dimension	minimun	maximun
Height (mm)	100	450
Diameter (mm)	80	340
Volume (l)	0,5	41

picture 4-11



REMARKS

**THE COMPACTA IS DESIGNED AND DEVELOPED FOR DISPENSING
SIMULTANEOUSLY VOLUMETRICALLY OR GRAVIMETRICALLY INTO
CANS OF THE SIZE STATED IN CHAPTER 4.5
CAN-SIZES BIGGER OR SMALLER THAN STATED IN CHAPTER 4.5 CAN
CAUSE DAMAGE OR POLLUTION ON THE MACHINE**

5. INSTALLING THE MACHINE

5.1 General warnings

Only qualified or appropriately trained personnel are authorised to install the machine.



WARNING

BEFORE INSTALLING THE MACHINE, READ THE INSTRUCTIONS IN THIS CHAPTER CAREFULLY TO ENSURE THE SAFETY OF THE PERSONNEL INVOLVED AND AVOID DAMAGING THE MACHINE.

5.2 Safety devices on the machine

The Compacta is equipped with an emergency button on the front panel (see picture 5-1)

The emergency button is visibly positioned on the front of the machine. This button can be activated manually by pressing it in case of an emergency. As soon as the button is activated the machine will cancel all its operations and will stay in the position where it is. To disable the emergency turn the red bottom clockwise until it unlocks.



picture 5-1 Emergency button



WARNING

IN CASE OF A FAILURE OR BREAKDOWN OF ANY OF THE SAFETY DEVICES, IT IS NOT ALLOWED TO USE ANY COMPONENTS OTHER THAN PROVIDED BY THE MANUFACTURER. CONTACT ONLY THE DROMONT TECHNICAL SERVICE.

5.3 Conditions for proper installation

Installing the Dromont dispensers involves:

- a) Installing any accessory.
- b) Connecting the computer to the machine and installing the application software.
- c) Filling the canisters and do the purging/recirculation.
- d) Moistening the sponge of the humidifier cap.

5.4 Accessories

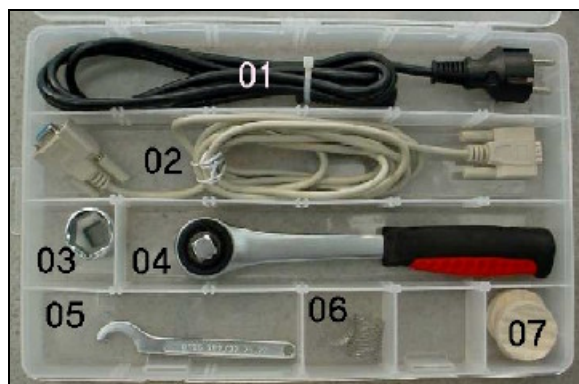
Depending on the options the customer selected with his machine the following parts that come with it:

X = standard **O** = optional

Accessories	Standard/Option
Power cable	X
Serial cable	X
Computer	O
Scale	O
Printer	O
Modem	O

picture 5-2 Power cable and general installation

Open the back door using a large screwdriver and take out the transparent box with spare-parts (see picture 5-3)



picture 5-3 Box with tools and spare parts

In this box you will find the following parts (see picture 2-1):

Part	Quantity	N°
Power cable for the PC	1	01
Serial cable for the PC	1	02
Socket spanner for stabilisers	1	03
Ratchet spanner for stabilisers	1	04
Tool for exchanging pistons	1	05
Filters	3	06
Sponges	3	07
Autocap protection	2	/

picture 5-4



picture 5-5 Power cable

Plug the power cable in the machine and in the powernet (see PIC.5.5).



WARNING

IT IS NOT POSSIBLE TO ADAPT THE MACHINE TO A VOLTAGE DIFFERENT FROM THE ONE PRINTED ON THE LABEL. ENGAGING THE WRONG VALUE CAN CAUSE A BLOW –UP OF THE TRANSFORMER.

Place the computer on a spot nearby the dispenser.

Plug the 9 pin connector of the PC's serial port RS 232 (see picture 5-6) into the dispenser's serial plug. You'll find the plug on the backside of the machine.



picture 5-6 Insert power(01) and serial cable (02)

5.5 Connecting the computer.

If the customer as an option chooses the computer, the accompanying software (e.g. application software, modem, printer etc) has already been installed. If this is not the case the installation instructions that came with the computer have to be followed.

When the customer uses his own computer, it has to have the following features:

- a) 1 serial port RS 232 for connecting the dispenser
- b) 1 serial port RS 232 for connecting the scale
- c) 1 serial port RS 232 for connecting the modem
- d) 1 parallel port to connect the printer

5.6 Installing the Dromont Software

With every machine comes a (auto) installation CD that contains a software package.

On every CD the following programs are recorded:

- a) **D_POS** for the formula manager (option)
- b) **D_DSP** for the dispenser manager
- c) **D_SET** for the setting parameter
- d) **D_TST** for the I/O test
- e) **D_DQC** for statistic control dosing (option)
- f) All the software manuals in electronic format
- g) User's Manual of the machine (CE Manual) in electronic format

For more information about software please refer to the Software Manuals.

5.7 Setting the scale

The installed scale must have the following set up:

Bits per second	9600
Data bits	8
Parity	none
Stop bits	1

5.8 Filling the canisters

Before switching the dispenser on you have to verify that all the valves on the underside of the canisters are open (see picture 5-7). They are open when they're vertically positioned.



WARNING

A VALVE THAT IS CLOSED CAN CAUSE A BLOW-UP OF THE TUBE WHEN THE MACHINE IS IN RECIRCULATION OR IN DOSING. THE TAPS ARE OPEN WHEN THEY ARE VERTICALLY POSITIONED (SEE PHOTO 5.10).

Do not clean the canisters and the pipelines as this operation has already been carried out in Dromont.



picture 5-7 Canister valves

For filling the canisters in the correct way always follow the rules stated below.

- Remove the lid of the canister that has to be filled.
- Pour the desired quantity of colorant into the canister paying attention not to spill it or create air bubbles. A piece of heavy paper that can be rolled into a cone is a good idea for filling. When you set the colors on the program that manages your machine, remember to set them in the same way you have introduced them in the canister.
- It is better to avoid pouring on the yellow stirring cap.
- Close the lid on the canister.
- Repeat the same operation with every canister on the machine.

**REMARKS**

**NEVER EXCEED THE MAXIMUM COLORANT LEVEL IN THE CANISTER.
THE MAXIMUM LEVEL IS 10MM BELOW THE YELLOW STIRRER CAP.**

5.9 Control panel

The display contains certain features that are explained in this chapter. Please carry out the following steps before operating the machine:

Check if all the cables (power-cable and serial cables) are properly connected (see chapter 5.4)

Switch on the main switch (see **picture 5-8**) and verify if the led inside the switch is turned on.



picture 5-8 Main switch

After carrying out the before mentioned operations you are finally ready to work with the machine.

As you can see on the display you have 2 vertical arrow, two horizontal arrows and 3 buttons named:

- ENTER
- MENU
- RESET

Pressing the MENU button you move into the functions described in the following table

Pressing < > button you move in the submenu.

Pressing ENTER button you confirm the selected function

Pressing RESET you exit to the MENU

PUSH	FUNCTION	CHOOSE BY PRESSING	EXPLANATION
2xMENU	M2> MIX	ENTER = ACTIVATE	Start recirculation cycle (see chapter 5.9.2)
3xMENU	M3> PURGE	ENTER = ACTIVATE	Start purge cycle (cleaning nozzles) (see chapter 5.9.1)
4xMENU	M4> MANUAL DISP (only for internal canisters)	VERTICAL ARROWS = INCREASE/DECREASE THE VALUE HORIZONTAL ARROW = SHIFT THE CURSOR	CODE = #01 = 0000,0 1/96 #01 = canister number. When there is no colorant or k1 or k2 or S.G. are missed, ?01 will appear on the display) 0000.0 = quantity in disp. Unit 1/96 = disp. Unit set in D_SET
5xMENU	M5> LANGUAGE	HORIZONTAL ARROWS	Choose between English and Italian

picture 5-9

5.10 Purge and recirculation

5.10.1 Purge

Whenever the machine is used after sitting idle for several hours, it is necessary to run the purge operation.

With this operation you allow the machine to dose a minimum quantity of every colour (1-7cc). The machine will go through a valve check by activating one by one all the valves. After checking the valves the machine will dose of every circuit a minimum quantity set by the operator (see software manuals).

To run this operation please read chapter 5.8.

5.10.2 Recirculation

Another important operation is the "recirculation". With the recirculation you avoid drying out and settling of the colorants. All circuits within the machine will recirculate simultaneously. First all the canisters are stirred for 20 seconds, after that the machine will do 3 entire mixing cycles (full piston stroke).

To run this operation manually please read chapter 5.8.

As you can see in the software manual you can run the same operations using the software.

The recirculation time is set at 30min (default). The operator can choose between an interval of 10...240 min (see the D_DSP SERVICE MANUAL).

5.10.3 Calibration

See D_DSP Service Manual.

5.11 Dosing

If all the before mentioned points have been carried out, you are finally ready to dose your pigment.

Pay attention a pail is placed under the dosing nozzles.

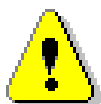
If the pail is not under the machine when you press the dosing button, you can stop the dosing cycle by pressing the EMERGENCY STOP button. This button is used to stop the machine (See chapter 5.2).



REMARKS

WHEN THE STEPPING MOTOR IS ACTIVATED, THERE WILL BE NO COMMUNICATION BETWEEN THE MACHINE AND THE SENSORS. IT IS THEREFORE IMPORTANT THAT THE CAN IS NOT REMOVED DURING DOSING.

5.12 Shut down



WARNING

IT IS EXTREMELY IMPORTANT THAT DURING THE NIGHT, DURING YOUR HOLIDAYS OR EVEN FOR ONLY 2 OR 3 HOURS, THE MACHINE REMAINS CONNECTED TO THE POWER SUPPLY

If this rule is not observed, the Prima Compacta can not guarantee high quality, the machine will not go in recirculation and as a result of this the colorant can begin to dry out and/or settle.

5.13 Standby

To put the machine in stand by:

- You can switch off your computer.
- Make sure the autocap is closed.
- Verify if the red button near the plug of the machine is on.
- Verify that the emergency button deactivated.

5.14 General Advice

About changing color...

In every canister you put a type of pigment. We strongly advise you against changing colors in a canister without special care being taken to clean the canister and pipes, you run a very high risk of cross contamination.

About the cleaning of the machine...

Dromont S.p.A. has already taken care of the internal cleaning.

The external cleaning has to be done with dry and soft cloths, or lightly soaked in a non-flammable liquid and in any case with non-aggressive solvents.

About the cleaning of dosing nozzle...

See Chapter6

6. ORDINARY MAINTENANCE

6.1 General warnings

Make sure that the machine is shut off and the power cable is disconnected from the power source.

Be careful not to come in contact with the colorants. Read carefully the safety data sheet given by the paint manufacturer for the use of protection aids. Make sure you understand the safety stickers on the back of the machine.

6.2 Maintenance table

1*	2*	3*	
		X	Canister filters (see chapter 6.3)
	X		Moisten the humidifier cap sponge (see chapter 6.4)
X			Cleaning the dispensing nozzles (see chapter 6.3)
		X	Lubricate the spindle (see chapter 6.5)
		X	Lubricate wormscrew, headshaft and the bearings (see chapter 6.5)

1* every day

2* Every week

3* Every 3 months/depending on colorant characteristics

picture 6-1

6.3 Cleaning

6.3.1 Canister filters

Take out the canister filters for cleaning once every 3 months. First close the tap (see picture 6-2 N°1) and unscrew the filter housing (N° 02). Take out the filter and clean it with some water (in case you use water based paints) or some solvent. If the filter is very dirty use a new one. After exchanging close the filter housing tightly.



picture 6-2 Canister filters

6.3.2 Dispensing nozzles

In case the dosing nozzles dry out, use a piece of cloth wrapped around a little nail or something similar (with a maximum diameter of 3mm) and clean them one by one. Never use the cloth to wipe the entire block because this causes a pollution of the nozzles and the accuracy of the color will be affected.

6.4 Moistening the humidifier cap sponge

Depending on the type of colorant (e.g. water- universal or solvent based the sponge has to be humidified with respectably alcohol or solvent.

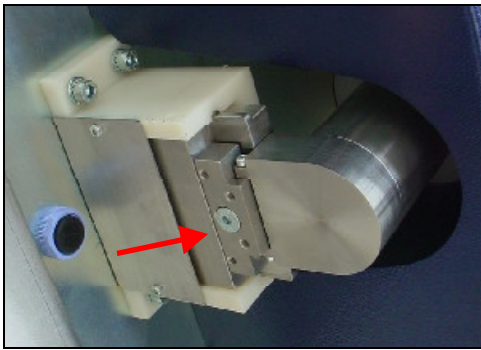
For the Compacta the exchange of the sponge is very simple.

The replacement or cleaning of the sponge is possible by unscrewing anti clockwise the main bold of the cap (see picture 6-3) by using an Allan-wrench.



WARNING

**MAKE SURE THE EMERGENCY BUTTON IS PRESSED BEFORE
DOING THE ABOVE WRITTEN PROCEDURE**



picture 6-3 Main bolt for autocap

6.5 Autocap protection

The protection for the autocap is developed to protect the operator for being trapped with their hand between the autocap and the dosing head.

The protection is made of a P.V.C. film with 4 holes for assembling. Push the 2 holes over the bolts on one side of the autocap (fig. 6.3a).

Then bend the film around the dosing head (fig 6.3b) and attach the other side on the remaining two bolts (see **picture 6-4**

picture 6-6)



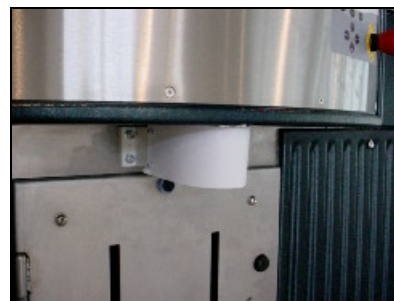
picture 6-4



picture 6-5



picture 6-6

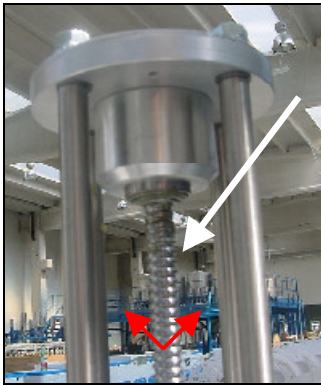


picture 6-7

6.6 Lubrication

6.6.1 Worm screw and head shaft

Once every month clean the head shafts (red arrows) and the worm screw (white arrow) using a clean rag and lubricate it with some grease. Do not exaggerate with the grease.



picture 6-8 Spindle

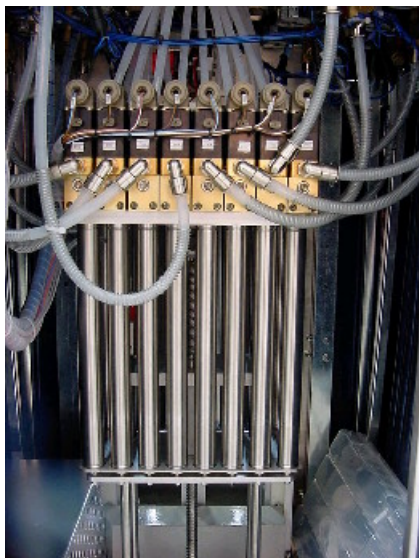
6.7 Changing a piston

Tools:

- a) Set of Allan wrenches
- b) Two new o-rings (only in case the old ones are worn)
- c) Wrench N°8 (metric size)

Procedure:

- a) Unscrew the bolt on the bottomside of the piston (see picture 6-9 a).
- b) Close the valve on the bottom of the canister.
- c) Disconnect the tube from the canister.
- d) Start a recirculation cycle and stop at half of its stroke.
- e) Unscrew the bolt that connects the piston to the flange.
- f) Activate the end position sensor and restart a recirculation cycle.
- g) Press the emergency button when the defect piston can be taken out.
- h) Unscrew the two screws on the brass block (see picture 6-9 b).
- i) Take a cup and pull out the cylinder. Use the cup to prevent leaking.
- j) Pull out the cylinder.
- k) Replace the cylinder and follow the procedure in reverse.



a)



b)

picture 6-9 exchanging piston

6.8 Exchanging electro valves:

- a) Disconnect the tube from the canister and start a recirculation cycle.
- b) Press the emergency button on the piston lowest position.
- c) Disconnect the power and take out the power cable from the net.
- d) Disconnect the three-way valve unscrewing the two screws indicated by the arrow.
- e) Take out the valve and disconnect the two tubes by pressing the outside ring and tearing the tube.
- f) Exchange the valve and assemble the unit using the procedure in reverse..



REMARKS

**NUMBER THE PIPES IN ORDER TO REMEMBER THE CORRECT ASSEMBLING.
A WRONG ASSEMBLING CAN CAUSE A BLOW-UP OF THE PIPES.**



picture 6-10 Exchanging the electro valve

