

INSTRUCTION MANUAL

iSPRAY 2



CE

S.E.F.A[®]

Z.I. PASTABRAC - B.P 44
11260 ESPERAZA
FRANCE

Tel :33 (0)4.68.74.05.89 - Fax :33.(0)4.68.74.24.08

E Mail : contact@sefa.fr

CONDITIONS OF GUARANTEE

- The guarantee period starts the day of putting the equipment into service at the user's place, materialized by the return of the guarantee bill for a duration of two years, 8h per day meaning about 3000 hours.
- The guarantee is strictly limited to our equipments, against the defects of matter and execution, with the buyer's responsibility to prove the known defects.
- Our responsibility is limited to the obligation to rectify or replace free of charge the parts acknowledged as faulty by ourselves, and there will no claim for any indemnity whatever the reason given.
- Parts replaced under the guarantee:
 - ↳ remain our property
 - ↳ are the subject of an invoicing of deposit
- A credit of cancellation is activated as soon as the faulty parts are returned.
The return will have to occur ONE MONTH MAXIMUM after the intervention

THE GUARANTEE DOES NOT COVER :

- The retail consumables such as:
 - Fuses, bulbs, joints, flexible devices, covers, nozzles, filters.....
 - The supplies, which are not our own manufacturing, undergo the guarantee of their manufacturer.

THE GUARANTEE DOES NOT APPLY :

- To replacements, nor repairs which would result from normal wear and tear of apparatus and machines, of deteriorations and accidents coming from negligence, defect of monitoring and maintenance, defective use or modifications without our written agreement.
- In case of vice coming from the material supplied by the buyer, or a design imposed by the latter.
- To repairs which would result from deteriorations or accidents occurred during transport.
- To operations of maintenance and adjustments inherent in the use of the machine, and indicated in the maintenance manual, such as:
 - adjustments of intermediaries
 - screwing of piping, etc...



For the pneumatic machines, any trace of detergent oil in the pneumatic circuit inhibits the conditions of guarantee previously mentioned.

**For any technical information or spare parts orders,
please give the reference number of the machine as well as its serial number**

INDEX

CONDITIONS OF GUARANTEE	1
INDEX.....	2
SPECIFICATIONS.....	3
INSTALLATION OF THE MACHINE.....	3
GENERAL POINTS	4
USAGE.....	5
1. SAFETY.....	5
a) <i>Internationals Symbols:</i>	5
b) <i>Some important points for the safety of the staff:</i>	5
c) <i>Safety device on the machine:</i>	6
2. CYCLE DESCRIPTION:	6
a) <i>Working cycle</i>	6
SETTINGS.....	7
MAINTENANCE	10
1. PARTS SUBJECTED TO WEAR AND TEAR	13
2. MAINTENANCE.....	13
QUICK REPAIR ADVISES.....	13
ELECTRIC DIAGRAM	14
FLUID CIRCUITS	15
NOTEMAKER	16

SPECIFICATIONS

	iSPRAY2
Weight in running order	95 kg
Height	600 mm
Depth	990 mm (1570 mm open)
With	645 mm
Plate dimension	400 x 500 mm
Power supply	230 V Single phase + Earth 50/60 Hz
Power	300 W
Amperage	1.3 A
Number of nozzles	2
Maximum speed	10s for full cycle
Speed adjustment	Proportional

Non contractual document: according to the technical progress, we reserve the right to modify the characteristics of our products.

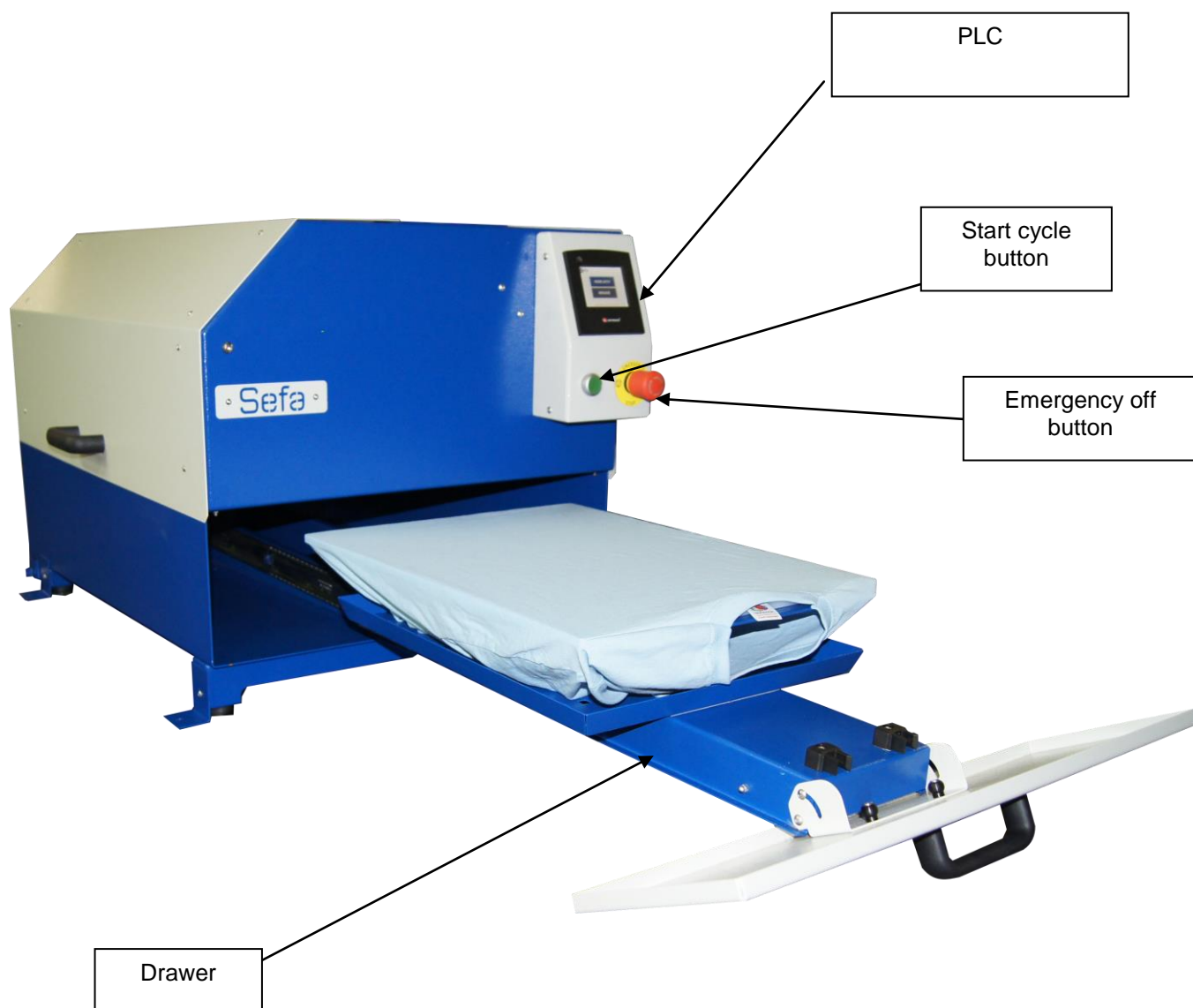
INSTALLATION OF THE MACHINE

USE BY QUALIFIED STAFF ONLY

- Unpack the machine from the box.
- Mount the brakes/wheels.
- After having properly positioned the equipment in its working place:
- Plug the machine electrically (220 Volt + Neutral + Earth / 50 or 60 Hertz)
- Immerse the draining tube (6mm diameter white tube) in an empty tank.
- Immerse the suction tube in a clean pre-treatment product tank.

GENERAL POINTS

This pre-treatment machine is standard to the labour laws to ensure the security of the user. Its design allows it to ensure an intensive production while keeping a total reliability.



This machine was designed for an operator working in front of the machine.

USAGE

- The iSPRAY2 was designed for the application of pre-treatment in medium mass production.
- This equipment was tested in our workshops to obtain a two-year guarantee against any manufacturing vice.
- The adjustments (electric and mechanical) executed by our technicians in the workshop as well as the securities introduced on the machine should not be modified in any case. Otherwise, the company SEFA will deny all responsibility on potential problems linked to the so-called machine.
- Before starting any pre-treatment operation, it is recommended to read carefully the safety instructions as well as the directions for use.

1. SAFETY

THIS EQUIPMENT IS DESIGNED FOR SINGLE USE ONLY

USE BY QUALIFIED STAFF ONLY

a) Internationals Symbols:



ON



OFF



DANGER, WARNING



ELECTROCUTION RISK

You will find most of these symbols on the SEFA machines.



b) Some important points for the safety of the staff:

- During handling action, ensure that the operator do not risk anything in terms of burn, electrocution or other.
- Carry out a daily inspection of the machine before starting the production.
- In the area close to the machine, make sure that nobody is around before you start.
- If the machine does not work properly, immediately cut the power supply and look for the cause.

c) **Safety device on the machine:**

**Protections and safety devices should not be modified.
They must be put together again in case of possible removal for maintenance.
They must be kept in place and in good condition during normal operation.**

- The emergency stop:
 - ↳ Located on the front of the machine: if the operator pushes it, it switches the machine off.
- Working order or safety device check:
 - ↳ Try the emergency stop periodically
- After an emergency stop:
 - ↳ In order to restart the operation, check that no other problem remains on the machine.
Unlock the emergency stop by turning the red button.
- Manual:
 - ↳ Technical documentation about the components used is provided to you on delivery of the machine. Please read it before any handling of the machine.

2. CYCLE DESCRIPTION:

a) **Working cycle**

- 1) Turn on the machine up by pushing the general switch
- 2) Choose the product to spray.
- 3) Adjust the spraying area.
- 4) Set the nozzle speed to increase or decrease the quantity of sprayed product.
- 5) Adjust the article on the plate.
- 6) Close the drawer.
- 7) Push the « Start Cycle button ».
- 8) The product is sprayed between the two indexes.
- 9) Open the drawer and remove the article.
- 10) Restart the operation from n° 7 if the settings don't change, otherwise restart from n°3.

SETTINGS

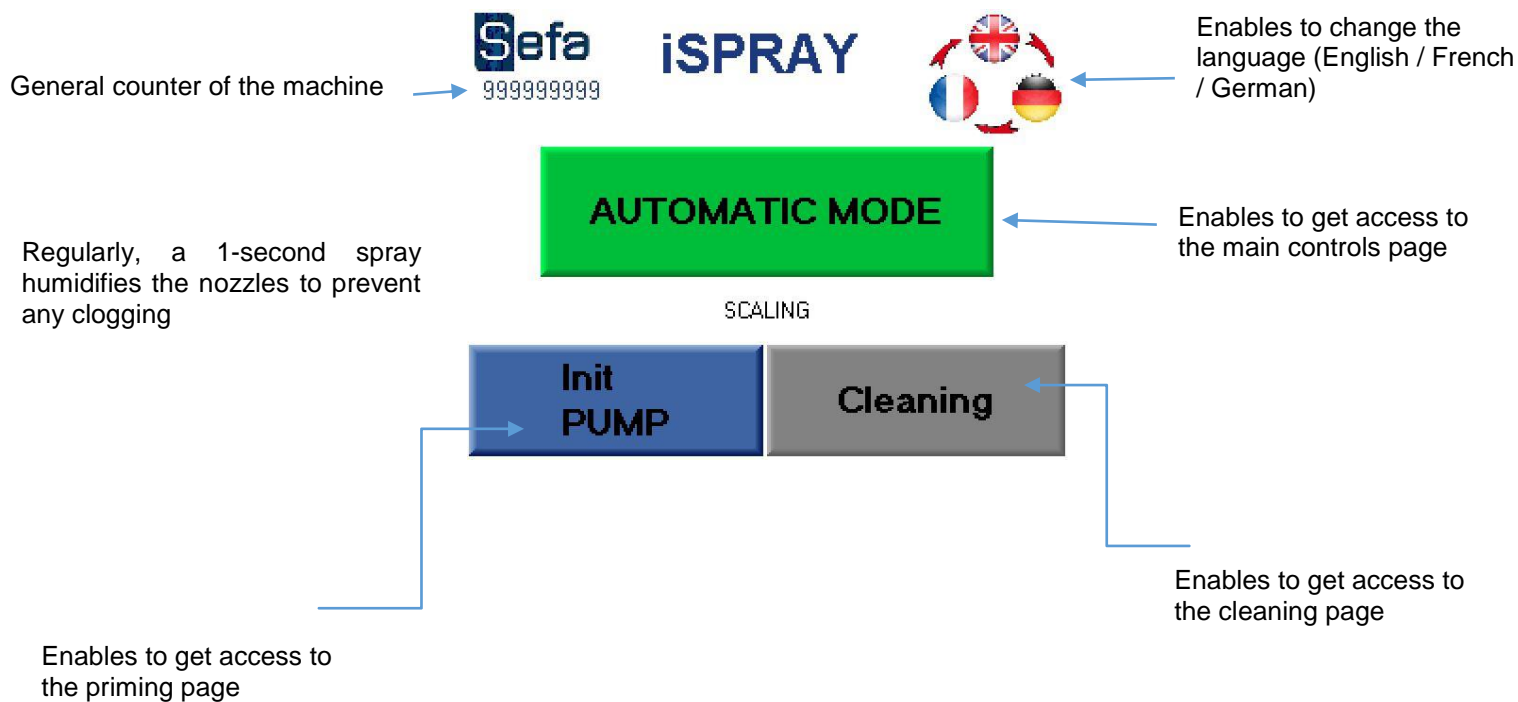
USE BY QUALIFIED STAFF ONLY

Initialisation phase:



When you turn the machine on, this screen is displayed while the trolley finds its origin point (0 mm).

Main menu :



Priming :



**INIT
PRETREATMENT**

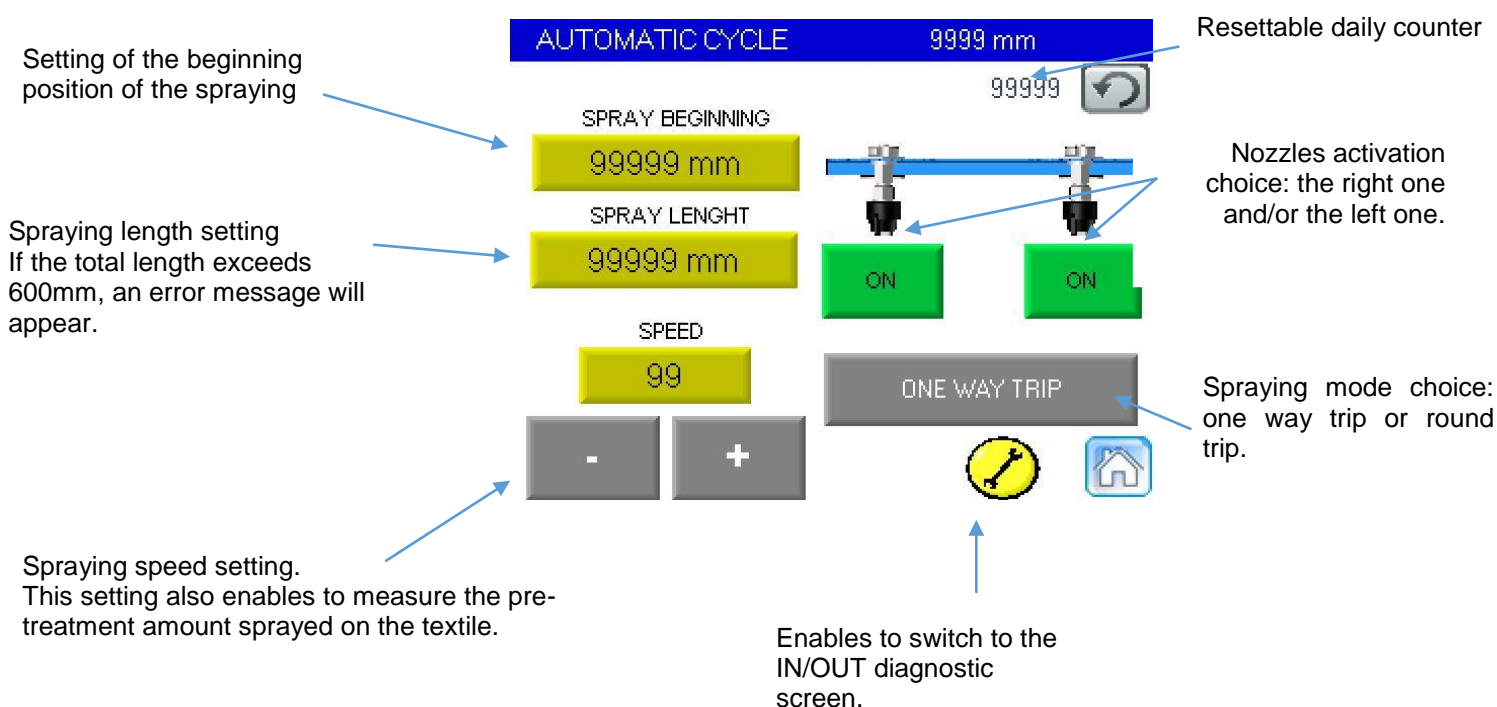
A continuous push on that button kicks the pump in and makes the diluted pre-treatment solution flow through both the nozzles and the watering hose if the tap is open.

**INIT
WATER**

A continuous push on that button kicks the pump in and makes the water flow through both the nozzles and the watering hose if the tap is open.



Automatic cycle:



IN/OUT diagnostic:

Diagnostics

9999 mm

- ☐ Start cycle button
- ☐ Start pump
- ☐ Electrodistributor product
- ☐ Electrodistributor left nozzle
- ☐ Electrodistributor right nozzle



On that screen, we display the sensors state (IN) and the actuators state (OUT).
That diagnostic screen will be useful for a remote repair for instance.

Cleaning Mode:



This machine has two cleaning modes:
-Nozzles cleaning (enables to water the whole pipes system as well as the pump and the nozzles).
-Machine cleaning (enables to water the whole machine with the provided hose).

Nozzles cleaning:

If you didn't clean the nozzles for more than 24 hours, a message will warn you and ask you to do the nozzles cleaning.



A push on the cleaning button will automatically launch a rinsing through the nozzles during the time set by the user. The activation of one or/and the other nozzle is up to the user.

Machine cleaning :



To launch a machine cleaning, you only have to open the tap shown on the first picture, to unroll the hose and to push « cleaning ». At the end of the cleaning, the user will have to close the tap.

Errors management:

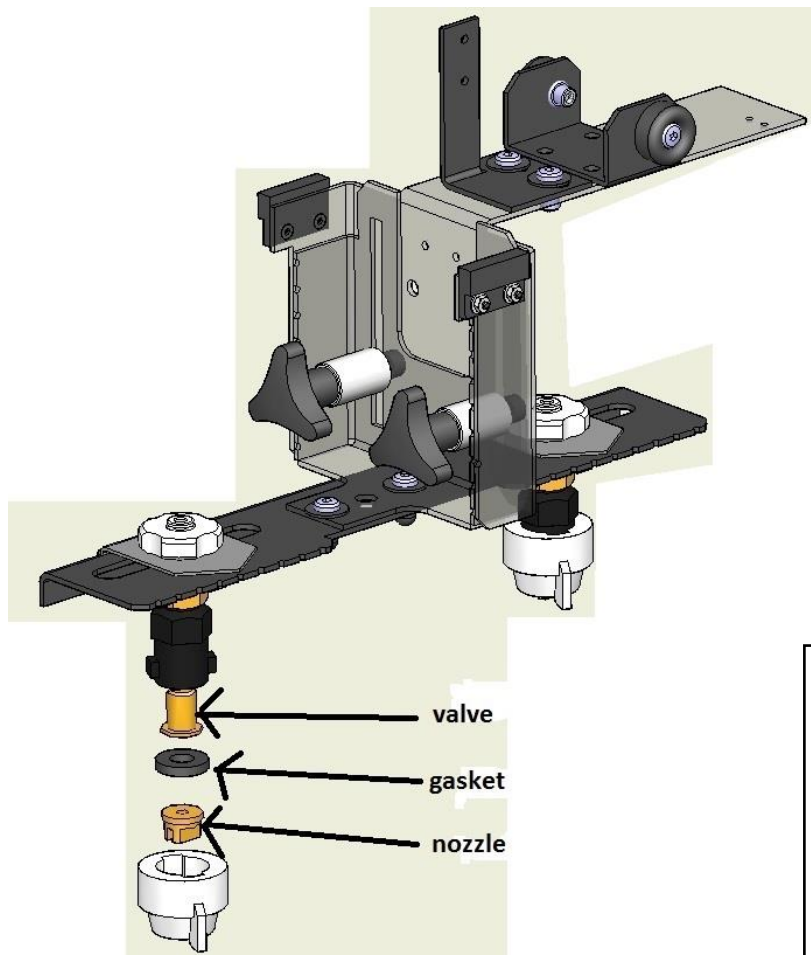
The moving management of the nozzles trolley is made via an electrical pin. If an electronic error occurs, you just have to cancel it by pushing the RESET button.

Alarm LECP6

RESET



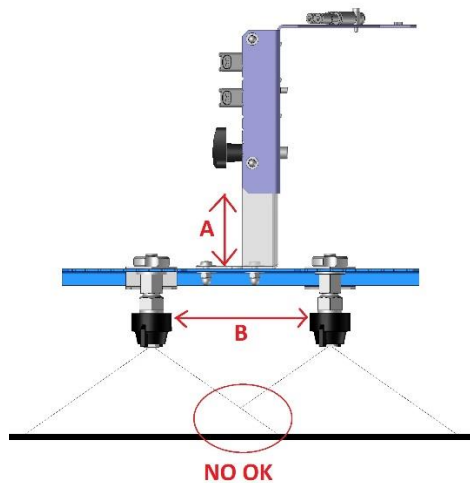
Cleaning and dismounting nozzles:



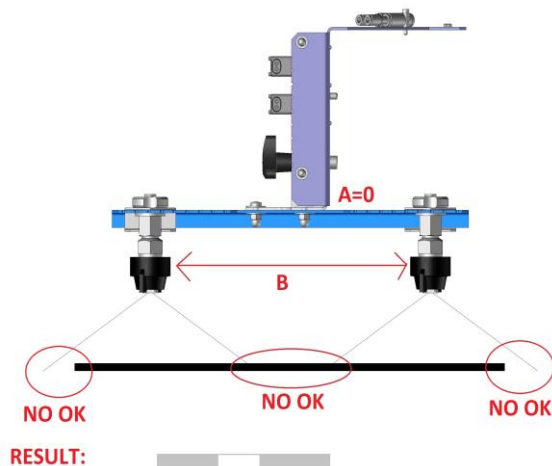
Every day, you need to put the 2 valves and the 2 nozzles into a ultrasonic cleaner machine to clean up those parts.

Spray settings:

NO OK:



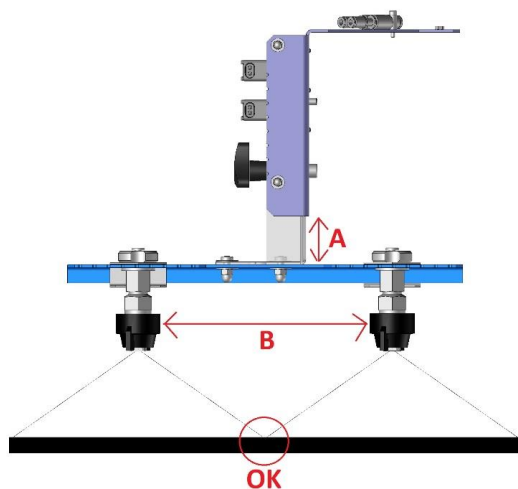
RESULT:



RESULT:



OK:



RESULT :



You need to find the correct setting regarding the distance A and B to have a uniform spray area without absence or overload of product.

MAINTENANCE

USE BY QUALIFIED STAFF ONLY

**ANY SERVICING INTERVENTION
MUST BE DONE WHEN THE MACHINE IS OFF AND LOCKED
(ELECTRIC AND PNEUMATIC ENERGIES UNPLUGGED)**

- It is recommended to have the following tools within reach:

- ✦ Cruciform and bit screwdrivers
- ✦ A set of end wrenches and box spanners
- ✦ Small adjustable pliers
- ✦ Circlip pliers
- ✦ Long and fine pliers with insulating handle
- ✦ A set of Allen keys
- ✦ A multimeter

1. PARTS SUBJECTED TO WEAR AND TEAR

- For any order:
 - Specify the reference, description and quantity wanted.
 - Name and serial number of the machine as well.

<u>Reference</u>	<u>Description</u>	<u>Quantity</u>
ALI-OM3	ALIMENTATION 24VDC 60W	1
ORI-TPU1100067	NOZZLE	2
JOI-BUSE	GASKET	2
CLA-4193A-40-50SS	VALVE	2

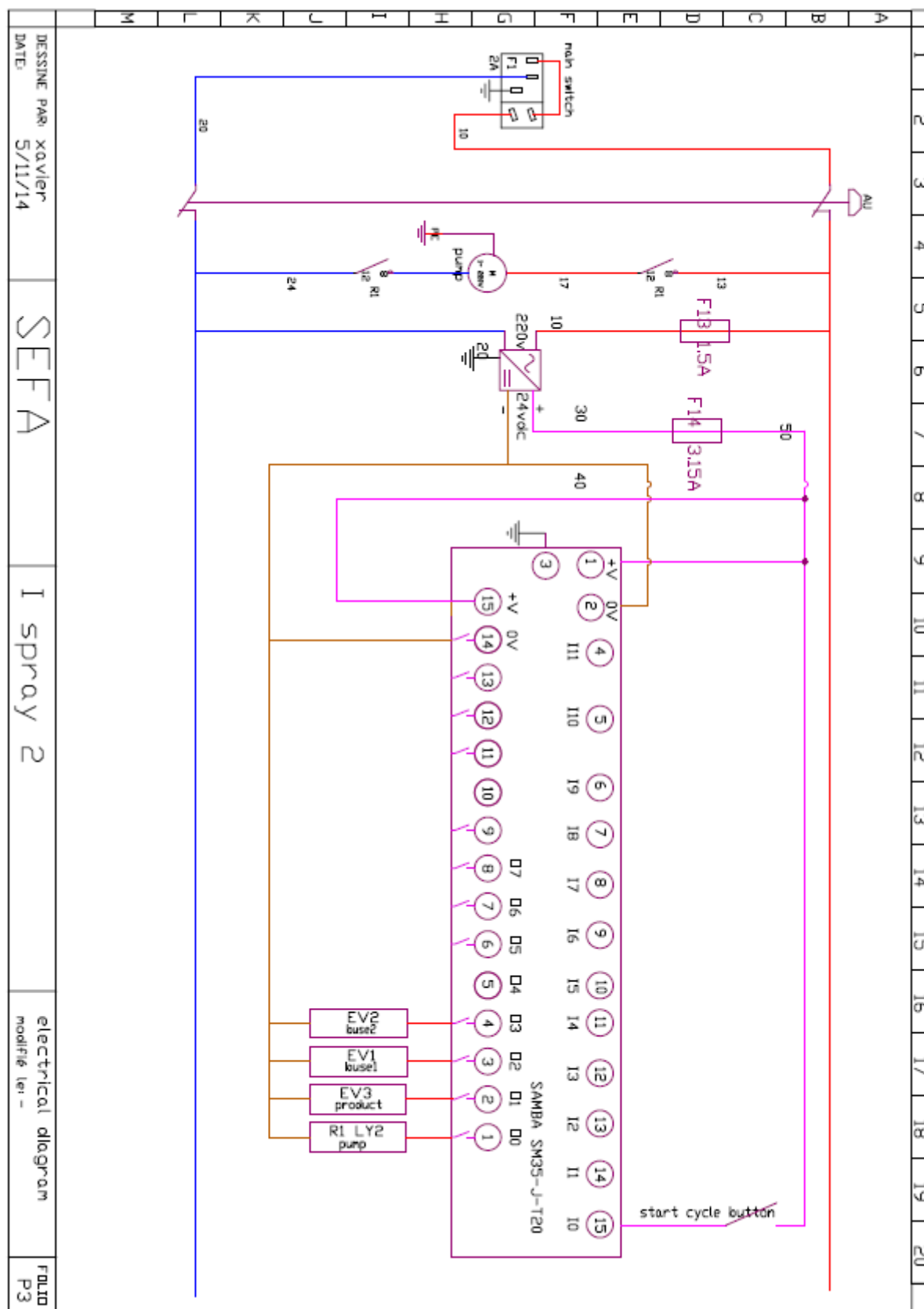
2. MAINTENANCE

- Launch a cleaning cycle with DEMINERALIZED WATER every day.
See CYCLE Page 6 § 2.b)
- Cleanup the nozzle on a daily basis at the end of the day with the ultrasound bath provided with the machine.

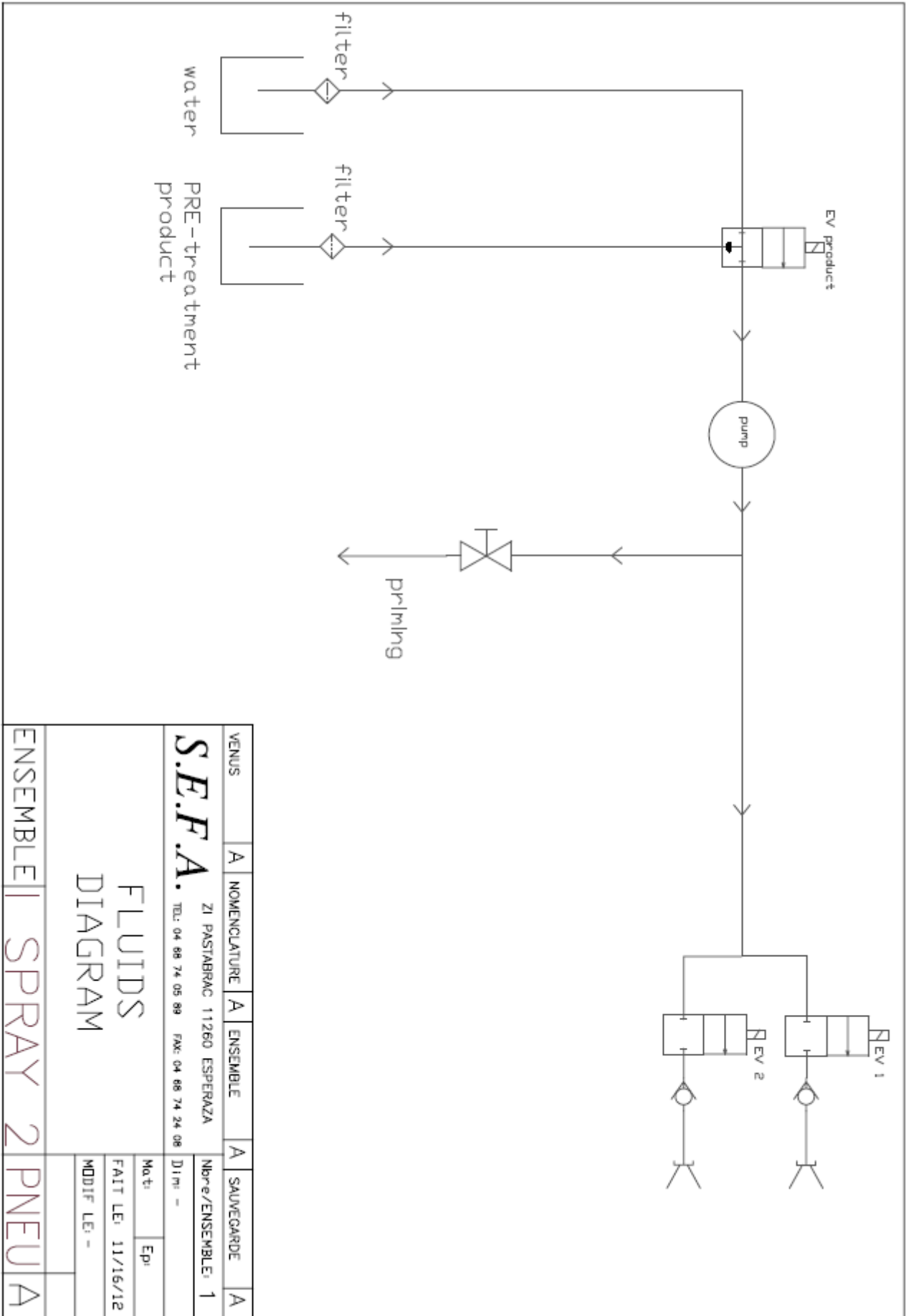
QUICK REPAIR ADVISES

<u>SYMPTOMS</u>	<u>POSSIBLE BREAKDOWNS</u>	<u>REPAIR</u>
The machine doesn't start.	<ul style="list-style-type: none"> ➤ Security Stop is engaged ➤ The plug is not in ➤ The switch is not connected ➤ The general fuse is out of order ➤ The electric box fuse is out of order. 	<ul style="list-style-type: none"> ➤ Turn the red part to unlock the security stop. ➤ Check your network and if the machine is linked to it. ➤ Put the general switch On/Off on 1. ➤ It is located in a casing next to the power cable plug. To access it, pull the power cable out, with the tip of a screwdriver lift the fuse casing. You will find in the square tube a replacement fuse to put instead of the one in the clip. ➤ It is located in the electrical box (2A). To access, remove the power cable and unscrew the 4 screws holding the silver plate of the electrical box.
The machine does not spray product	<ul style="list-style-type: none"> ➤ The machine is not primed 	<ul style="list-style-type: none"> ➤ Make the priming procedure

ELECTRIC DIAGRAM



FLUID CIRCUITS



NOTEMAKER
