

LABEXIA LXP RANGE
USER MANUAL

Labexia 1400 LXP



MEMBER OF THE GETINGE GROUP

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PRECAUTIONS TO BE TAKEN BEFORE USE

- Users must be trained before using the washer-dryer.
- The staff that use or repair this washer-dryer must have followed a complete training referring its use and maintenance. This training must include the selection and understanding of the washing cycle, the loading and unloading of the baskets and the handling of the washing products.
- The staff in contact with the detergent products and its emanations, which could be used in this washer-dryer, must have knowledge of the safety data sheet of the used products as well as the detailed instructions about the dangers and the detection of toxic product leaks.
- The training of the users and technicians must be done regularly and always before the first use of the washer-dryer. A written register of these trainings must be kept in order to prove the presence and the understanding of the interested parties.

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CHAPTER 1 INTRODUCTION

You have in your possession a LANCER washer-dryer.

Its good working and your entire satisfaction depend on the attention you pay when reading this guide.

You will find here some advices about the use, the loading and the maintenance. Follow them, as they have been written in your interest.

Before using your washer-dryer, learn to know it and use it rightly, so as to it can develop its tasks many years.

This manual has been conceived with the purpose of introducing to you the LABEXIA LXP washer range. You will also find the description of the different chapters included in this utilisation manual.

1.LABEXIA LXP WASHERS-DRYERS

2.USER'S MANUAL

1. LABEXIA LXP WASHERS-DRYERS

1400 LXP washers-dryers belongs to the LABEXIA LXP range of washers-driers for the cleaning and drying of labware in the chemistry, microbiology, quality control and analytical laboratories.

Fully programmable, easy to use, 1400 LXP features technological innovations as the injector drying system, using hot HEPA filtered air, or the automatic electric door locking (option) for the users comfort and safety.

Some of the main features of 1400 LXP washers-dryers:

- Multiple loading configurations thanks to four independent washing levels, the upper levels can be positioned in three different positions.
- Microprocessor control, with 4 pre-set programs plus 36 other open programs featuring programmable parameters
- Powerful hydraulic system, guaranteeing the best results of washing with direct injection on each level and each lower and upper washing arm
- Easy loading and unloading thanks to the ergonomic loading level, the extractable runners for the baskets and the automatic electric door lock (option)
- Internal and external labware drying system by means of hot, HEPA filtered air.

This washer has been developed and manufactured following the standards (CE or UL).

For the washers in conformity with the CE standards, a "CE conformity declaration" is delivered with the machines.

2. USER'S MANUAL

The present manual is destined to facilitate the operations of use, handle, maintenance and repair.

This only concerns the operations to be done by a level 1 code owner.

Before using your washer-dryer and in order to obtain the best service read carefully the following advices and recommendations. Follow them, as they have been written in your interest.

Respecting the precautionary measures of use, the washer-dryer must only be used for the washing operations described in the manual.

This manual is divided in 7 chapters, completed by an appendix.

You have just ended the reading of **chapter 1**.

Chapter 2 will familiarise yourself with your washer-dryer in order to use it as correct as possible.

Chapter 3 describes step by step the washing process, of launching a cycle at the end of this one.

Chapter 4 is reserved to you and allows you to read the sequences of a cycle of washing, to prime the dosing pumps after a change of tank or to personalize the headings and feet of the printed tickets.

Chapter 5 introduces the different traceability systems available in the LABEXIA LXP range washers-dryers.

Chapter 6 describes the operations of internal and external maintenance of your washer-dryer in order to keep it in good state as long possible.

Chapter 7 is a description of the different working incidents that you could find when using your washer-dryer.

All over this manual, we have incorporated brief comments and icons to help you locate the important information.

When you see this icon, it means:



: ATTENTION !! PAY SPECIAL ATTENTION !!

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CHAPTER 2 BEFORE YOU START

After having installed rightly your washer-dryer, following the installation manual, you can begin to familiarise with this one.

You will find in this chapter all the information of indispensable knowledge to assure the good working and avoid material and corporal damage.

1.PRESENTATION OF THE CONTROL PANEL

2.SAFETY ADVICES

3.OPENING OF THE DOOR

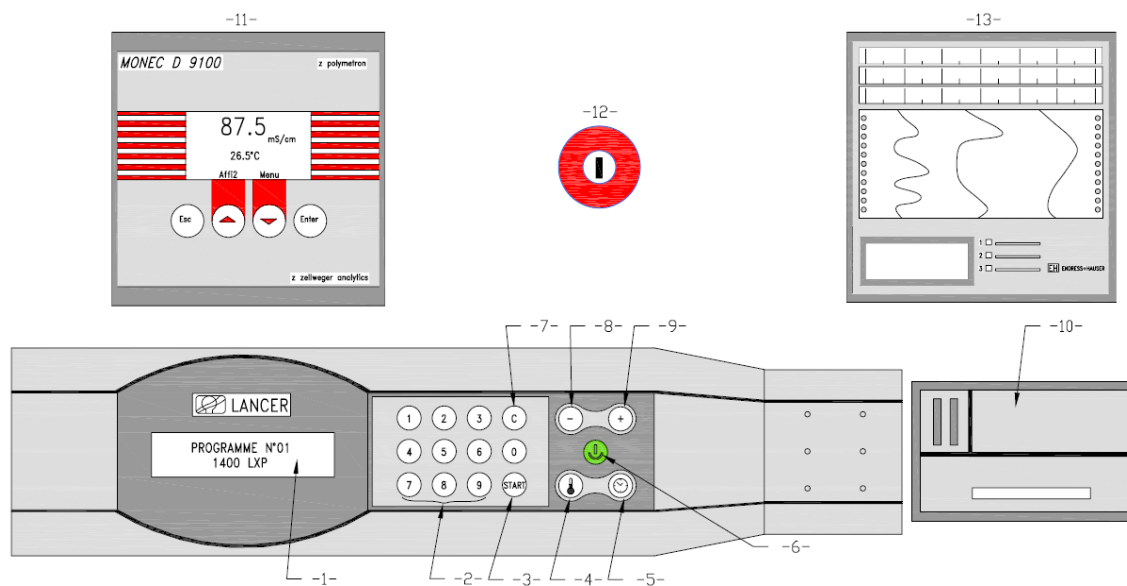
4.WASHING PRODUCTS

5.BUILT-IN PRINTER (OPTION)

6.EXTERNAL PRINTER (OPTION)

7.USING OF THE ACCESSORIES

1. PRESENTATION OF THE CONTROL PANEL



- | | |
|---------------------|--|
| -1- DISPLAY | -8- FUNCTION "-" KEY |
| -2- NUMERIC KEYPAD | -9- FUNCTION "+" KEY & DOOR OPENING KEY (option) |
| -3- KEY "START" | -10- PRINTER (option) |
| -4- TEMPERATURE KEY | -11- CONDUCTIVITY METER (option) |
| -5- TIME KEY | -12- EMERGENCY STOP (option) |
| -6- POWER UP KEY | -13- RECORDER (option) |
| -7- KEY "C" | |

2. SAFETY ADVICES

This apparatus, dedicated to an industrial use, has been developed to wash and dry glassware, labware in the chemistry, microbiology, quality control and analytical laboratories ...



THIS WASHER MUST BE USED UNDER THE NORMAL CONDITIONS OF OPERATION IN CONFORMITY WITH THE INSTRUCTIONS MANUAL OF THE MANUFACTURER
WE DECLINE ANY RESPONSIBILITY AND GUARANTEE IN THE EVENT OF NON-RESPECT OF THESE RECOMMENDATIONS WHICH CAN INVOLVE BODY OR MATERIAL DAMAGES

- use only products of washing and cleaning certified for employment with washers of laboratory glassware.
- if before washing, you treat your material of laboratory using solvents and in general, all produced flammable or with strong detonating capacity, do not introduce immediately it into the chamber of the apparatus.
- In the same way, it is strongly recommended not to use solvents or aerosols near the apparatus.
- If incidents occur and you cannot solve them using solutions that we recommend you, do not hesitate to contact Lancer's technical assistance service.

2.1 PRECAUTIONS FOR USE



BURN RISK IF THE DOOR IS OPENED OVER 60°C.
AT THE END OF THE CYCLE, LET COOL THE SUPPORTS, BASKETS, ACCESORIES AND WASHED OBJECTS BEFORE HANDLING THEM.



TEMP. > 60°C

(D) NICHT WÄHREND
DEM SPÜLGANG ÖFFNEN
(F) NE PAS OUVRIR EN
FONCTIONNEMENT
(GB) DO NOT OPEN WHEN FUNCTIONING
(NL) NIET OPENEN TIJDENS PROCES

BURN RISK if the door is opened over 60°C.
A preventive message appears in the screen at the end of the cycle.

W A R N I N G !
H O T B A S I N

Possibility of a cold ventilation at the end of the program.



SAFETY GLASSES OBLIGATORY



SAFETY GLOVES OBLIGATORY

Risk for operator depends on the products (detergents and acids) used inside the machine and on the nature of deposit on washing items.

Wearing safety glasses and gloves must not be sufficient in some cases.

Operator has to read safety data sheets of used products (delivered with the washer-dryer) so as to prevent risk before opening the door.

2.2 USE



IT IS STRICTLY PROHIBITED TO USE THE WASHER IN AN EXPLOSIVE ENVIRONMENT OR TO USE SOLVENTS, HYDROCARBONS, NITRIC ACID, ALCOHOL, ALCOHOL DERIVATIVES, OR OTHER FLAMMABLE PRODUCTS IN THE MACHINE.



DO NOT FORCE DOOR LOCKING DEVICE DURING A WASHING CYCLE

This machine uses detergent (caustic) and acid additives with elevated temperatures in the chamber during the different phases of the wash cycle. Opening the door during the wash cycle can cause **EXPOSURE TO HIGH TEMPERATURES AND HAZARDOUS CHEMICALS AND VAPORS.**

WASH CYCLE INTERRUPTED BY OPENED DOOR

If the wash chamber door is opened during the wash, the wash cycle is stopped and is considered unsuccessful. The machine will return to its initial state. The wash cycle should be restarted using the steps contained in this manual

WASH CYCLE INTERRUPTED BY ALARM CONDITION

If the machine goes into an alarm condition, the wash cycle is stopped and is considered unsuccessful. The machine will return to its initial state. Resolve the problem then restart the cycle

2.3 MAXIMUM CHARGE

Respect the maximum charge allowed for the loading at the door and upper level.

Do not climb or sit on the doors.

When several baskets are used simultaneously, maximum one basket can be in position out of chamber in the same time.

Maximum charge allowed on the different levels is:

	WASHER
	1400 LXP
DOOR LEVEL	65 Kg
UPPER LEVEL	26 Kg

3. OPENING OF THE DOOR



DO NOT CLIMB OR SIT ON THE DOOR.
MAXIMUM WEIGHT ALLOWED ON THE DOOR IS 65 KG.

3.1 STANDARD WASHER-DRYER

If the wash chamber door is opened during the wash, the wash cycle is stopped and is considered unsuccessful. The machine will return to its initial state.

Switch the washer-dryer ON by pushing the key .


Turn the handle towards the right and take the door down, up to horizontal position.

When washer-dryer is loaded and door closed, washing cycle can begin.

3.2 WASHER-DRYER EQUIPPED WITH A DOOR LOCKING DEVICE (OPTION)

The washers-dryer is equipped with a door locking device which prevents its opening during the washing cycle.

Switch the washer-dryer ON by pushing the key .

Push the key  then turn the handle towards the right and take the door down, up to horizontal position.

When washer-dryer is loaded and door closed, washing cycle can begin.



DO NOT FORCE TO OPEN THE DOOR DURING A WASHING
CYCLE, DOOR SAFETY LOCKING DEVICE CAN BE DAMAGED.

4. WASHING PRODUCTS



PROGRAMS PREESTABLISHED WITH THIS WASHER-DRYER HAVE BEEN VALIDATED WITH THE LANCER BRAND WASHING PRODUCTS.



THE INFORMATION CONCERNING THE SAFETY DATA OF THE LANCER WASHING PRODUCTS HAS BEEN DELIVERED WITH THE MACHINE.

4.1 PRODUCT TANK AREA



The washer-dryer is equipped with a product tank casing (capacity 2 x 10L tanks) located on front of washer.

4.2 WASHING PRODUCTS CATEGORIES

NON-FOAMING DETERGENT

Using the correct non-foaming detergent is required for proper cleaning in this machine. The non-foaming detergent must be matched to remove the contamination source in order to ensure satisfactory washing.

IT IS STRICTLY PROHIBITED TO USE SOLVENTS AS DETERGENT.

PLEASE REFER TO SUPPLIERS MATERIAL SAFETY DATA SHEET FOR SPECIFIC SAFETY AND FORMULATION INFORMATION REGARDING THE DETERGENT USED IN THIS EQUIPMENT.

THE PROGRAMMED CYCLES ON THIS WASHER HAVE BEEN VALIDATED WITH LANCER CHEMICALS.

NEUTRALIZING ACID

Using the correct non-foaming neutralizing acid is required for proper cleaning in this machine. The non-foaming neutralizing acid must be matched to remove the detergent source in order to ensure satisfactory washing.

THE USE OF NITRIC ACID IS PROHIBITED. ONLY DILUTE PHOSPHORIC, ACETIC AND CITRIC ACIDS CAN BE USED.

PLEASE REFER TO SUPPLIERS MATERIAL SAFETY DATA SHEET FOR SPECIFIC SAFETY AND FORMULATION INFORMATION REGARDING THE ACID USED IN THIS EQUIPMENT.

THE PROGRAMMED CYCLES ON THIS WASHER HAVE BEEN VALIDATED WITH LANCER CHEMICALS.

4.3 INSTRUCTIONS TO RESPECT IN CASE OF HANDLING THE WASHING PRODUCTS



ANYBODY CALLED TO HANDLE THE WASHING PRODUCTS MUST BE INFORMED OF THE IMPLICATED RISKS TO THESE PRODUCTS.

4.4 INSTRUCTIONS TO RESPECT IN CASE OF CHANGING THE PRODUCT FORMULA

Before changing to a different type or brand of cleaning chemical (acid or detergent) it is necessary to rinse the plumbing circuitry of the machine. Install the new chemical(s) per the installation instructions and then prime the detergent and acid pumps. Then a wash cycle can be programmed and run which uses several rinses with water only. This will prevent any cross contamination of chemicals.

After the new cleaning chemical have been installed, it will be necessary to adjust the chemical dosing times in all applicable steps of the wash cycle in order to match the formulation of the new cleaning chemicals.

Please contact LANCER for advice or assistance.

4.5 CHANGE OF THE TANKS

Before launching the cycle, check product tank levels and change those with low levels so as to avoid bad washing because of a lack of additive.

WHEN TO CHANGE THE CHEMICAL CONTAINERS

This message is displayed when the chemical bottles are almost empty.

- AT BEGINNING OF CYCLE

When starting the cycle, in case of lack of product, a message of sound and visual alarm appears.

Example:



W A R N I N G
L A C K O F C H E M I C .

It is necessary to fill or change the detergent or acid containers to continue the cycle.

- DURING THE CYCLE (VALIDATION MONITOR OPTION)

During the cycle, in case of lack of product, a message of sound and visual alarm appears.

Example:



E X T . I N T E R R U P .
W A S H


This mistake is also mentioned in the ticket.

Example:

PB IN THE DETERGENT INTAKE

INCIDENT N°10

HOW TO CHANGE THE CHEMICAL CONTAINERS ?

Press  button to switch the washer OFF.

Use the necessary protection for the chemical to be changed (gloves, mask, safety glasses...).

Locate the container(s) that need to be changed.

Unscrew the cap(s) from the empty chemical bottle(s) and take out the chemical suction tube(s).

Unscrew the cap(s) from the full chemical bottle(s) and insert the chemical suction tube(s). Tighten the cap(s) to secure the chemical suction tube in place.

Press  button to switch the washer ON.

Dispose of used chemical bottles or caps according to local and company regulations. Please consult the Material Safety Data Sheet for specific information regarding the chemicals used in the washer.

5. BUILT-IN PRINTER (OPTION)

5.1 PRINTER VERIFICATION

Before launching a cycle or printing again the ticket, check the quantity of paper in the roller of the printer

5.2 SELECTING SUITABLE PAPER ROLLS

Make sure you use quality paper. Extra dust and wear may result from non-approved products. This may affect warranty. The paper roll is normally supplied separately to avoid unrolling or damage in transit. Consult Lancer for suitable paper rolls.

5.3 REMOVING PAPER OR CLEARING A JAM

If some paper remains in the printer when a new roll is required or a paper jam has occurred, simply open the doors as described above. Double-clicking the paper feed button will print out any stored data, if the printer was in spooling mode.

5.4 PAPER FEED BUTTON

Pressing the paper feed button when the printer is idle advances paper at up to 50 mm per second, depending on the voltage supplied. However, the feed button has several additional functions:

- A single press and release of the button: in idle or spooling mode, advances paper (in steps of 1/16 mm);
- "Double-clicking*" the button:
 - * in idle mode, prints a demo/test message including the firmware version, encoded calibration data, and the full character set;
 - * in spooling mode, or having been out of paper, prints any stored data and enters idle mode.

** Double-clicking means pressing and releasing twice in quick succession. The double-click period is like that of a PC mouse.*

5.5 LED INDICATIONS

The LED on the printer door of the Ap1200 indicates the following printer conditions:

- Steady illumination means that all is normal.
- Flashing on and off indicates either:
 - * the printer is out of paper
 - * the doors are not closed
 - * or a combination of the two
- Very rapid flashing indicates the power supply voltage is too low.
- No light indicates that the unit has no power.
- The LED is extinguished while the Paper Feed button is being pressed.

5.6 OPENING THE DOORS

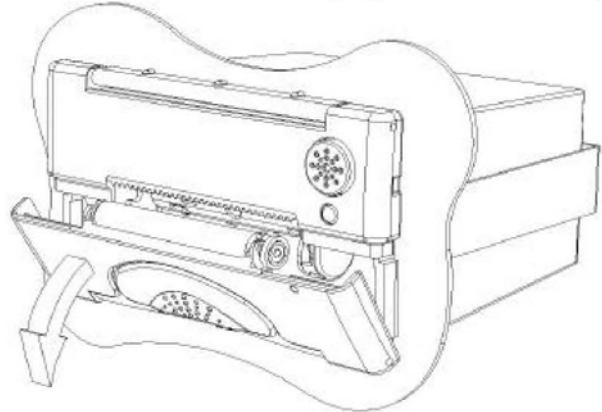


BEFORE HANDLING THE PRINTER, USERS MUST ENSURE THAT THEY ARE PROPERLY DISCHARGED TO EARTH

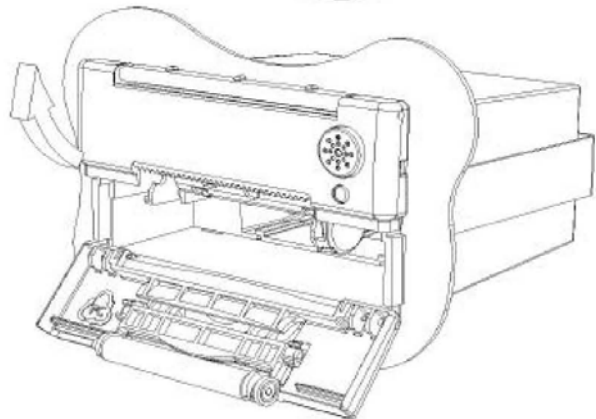
Step 1:
Use the index finger to pull
release lever open



Step 2:
Continue to swing open this door until it is
held in the fully opened position.



Step 3:
Swing open the door with the *printer
mechanism* attached (normally top door), until it
is in the fully open position.
Do not grip the tear bar or the print head whilst
opening.



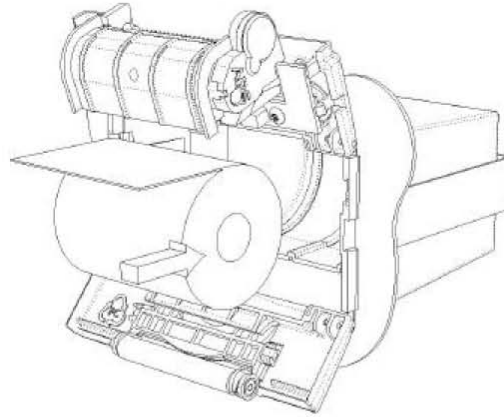
5.7 CHANGING THE PAPER

Step 1

To open the doors please follow the procedure as detailed in the section 'Opening The Doors', above.

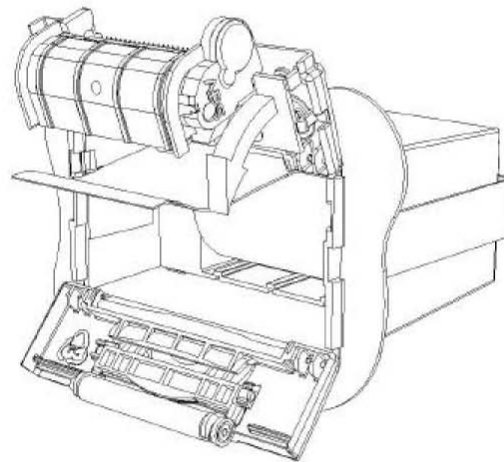
Step 2

Discard a few turns in case they have been damaged or have glue on.
Ensure the coated surface is orientated correctly to contact the print head.



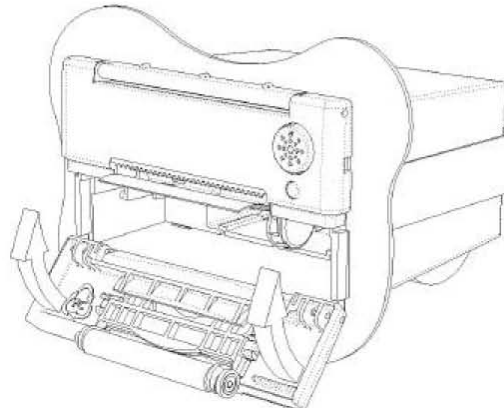
Step 3:

Close *printer door*, ensuring the paper is carefully aligned in the paper path.



Step 4:

Close *release lever door*.
Apply pressure to both sides of the door.
When the LED stops flashing the printer is ready to print.



5.8 PRINTER MAINTENANCE

After some use you may need to remove paper dust from and around the mechanism. Use a small vacuum cleaner to clear.

6. EXTERNAL PRINTER (OPTION)

6.1 CHECKING THE PRINTER

Before launching any cycle or reprinting the printout, check the quantity of paper of the printer roller.

6.2 CHOICE OF THE SUITABLE PAPER ROLLS

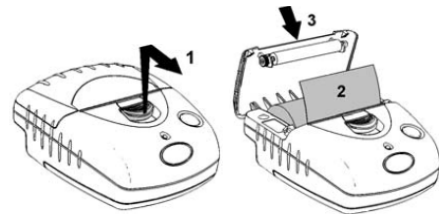
Please use quality paper. The use of non-approved products can cause dust and increased wear. This can affect the guarantee. The paper roll is normally delivered separately in order to prevent it from unrolling or becoming damaged during transport. Consult Lancer about suitable paper rolls.

6.3 REMOVING PAPER AND CLEARING PAPER JAMS

If there is some paper in the printer when a new roll is necessary or a paper jam has occurred, simply open the cover and press the paper advance button.

6.4 LOADING PAPER

1. Slide the cover opening button forward until it opens.
2. Unroll a small amount of paper and insert the paper roll in the printer.
3. Close the cover, the paper has been loaded.



Pressing on the paper advance button while the printer is on standby mode makes the paper advance. However, the advance button has several other functions:

- ⇒ Pressing the button once and releasing it:
 - In standby mode, makes the paper advance.
 - In sleep mode, makes the printer go into the standby mode.
- ⇒ In standby mode, a "double click" on the button, prints out a sample message.

6.5 OPERATING MODES

“Stand-by mode”: ready to receive data but there is no data waiting to be printed out in the buffer and the printer engine is not turning.

“Sleep mode”: actually disabled. If the paper advance button is pressed, the external charger connected or external data is received, the printer leaves sleep mode and enters stand-by mode. The LED is off in sleep mode.

There is no switch. Powering up is automatic or carried out by a command received from the washer-disinfector. To save energy, the printer enters sleep mode after a period of inactivity. The printer can be also programmed to always remain active or to enter sleep mode on command.

6.6 PRINTER MAINTENANCE

After a certain time of use, it may prove necessary to remove paper dust from inside and around the mechanism. Use a small vacuum for cleaning.

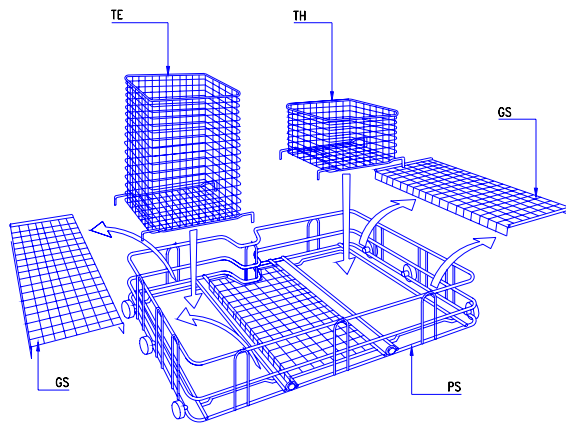
7. USING OF THE ACCESSORIES



IF THE LOADINGS TO BE HANDLED ARE SUPERIOR TO 25 KG THERE IS PLACE TO USE A HANDLING SYSTEM.

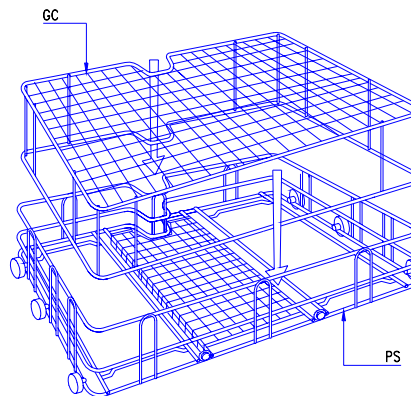
7.1 SOME EXAMPLES

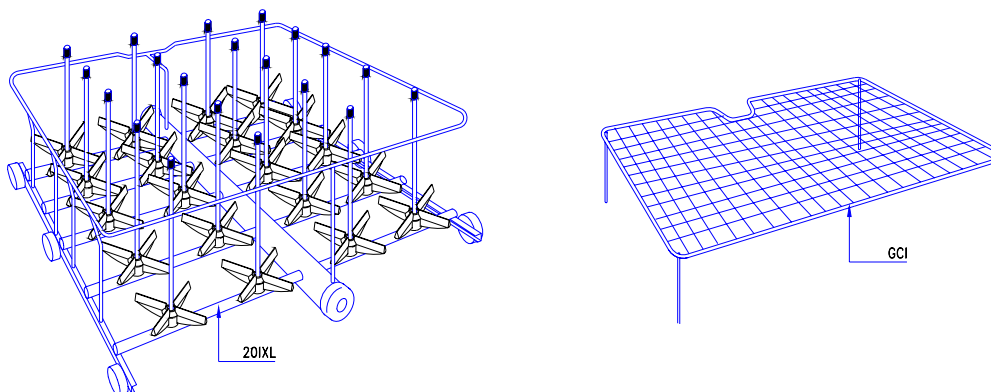
In order to wash items in "TE" or "TH" type baskets, place the baskets on the "PS" (basic rack) or "PSB" (basic rack with spray arm) after removing one or more "GS" (support grilles). Check that the basket is correctly fitted on the rods of the rack designed for that purpose. Reinstall the grilles for any washing operation that does not require the use of "TE" or "TH" type baskets.



Note : The "PS" should only be positioned at the bottom level of the washer chamber where washing action is provided by the lower spray arm. The "PSB" can be positioned on any level.

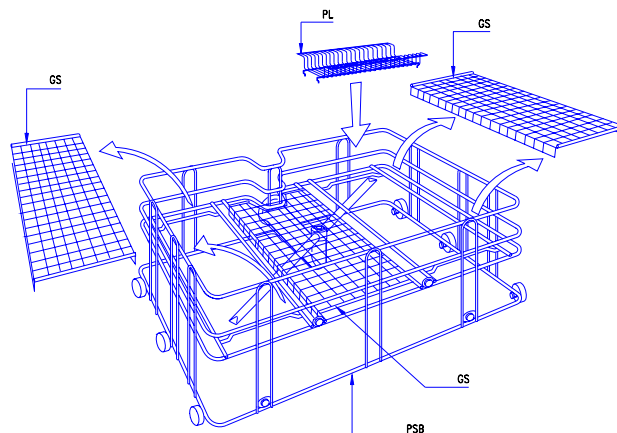
It is extremely important that the items to be washed are prevented from moving in order to obtain correct cleaning and to avoid breakage of fragile items. Items that can be easily moved or knocked over when loaded on the "PS" or "PSB" rack should be secured in place. The "GC" hold down screen should be used for "PS" or "PSB" racks. The "GCI" hold down screen should be used for injector racks.





In the case of washing items with small diameter openings such as volumetric flasks, it is very important that the flow rate of the injectors used must be lower than the flow capacity of the flasks to be washed in order to avoid a gradual filling of the flasks during the washing cycle. If the diameter of the opening is too small to allow the water to escape from around the injector the mechanical action of the injector can be absorbed by the water contained in the glassware giving poor cleaning results. It is imperative to use baskets with injectors of proper diameter and, above all, to secure lightweight items with a "GC" or "GCI" hold down screen.

In order to wash items on a "PL" type basket (for cleaning slides), place the baskets on the "PS" (basic rack) or "PSB" (basic rack with spray arm) after removing one or more "GS" (support grilles). Check that the basket is correctly fitted on the rods of the rack designed for that purpose. Reinstall the grilles for any washing operation that does not require the use of "PL" type baskets.



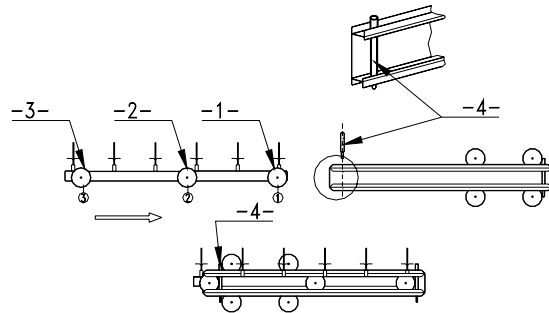
You should only use baskets that are suitable for the parts to be washed. When your washer is put into service, our technicians will give you useful advice on the best way to load the racks relative to the items to be washed.

Please feel free to contact LANCER for advice or assistance.

When several racks are used simultaneously on the different levels, only one rack should be pulled out of chamber on the door and the runners at a time.

7.2 FITTING THE BASKETS

- a) Pull the slide rails out of the chamber.
- b) Remove the front pins.
- c) Insert wheels 1 and 2 of the basket in the slide rails.
- d) Fit the pins back in place between wheels 2 and 3.



1-2-3 BASKET WHEELS
4 PIN



THE CHOICE OF THE BASKETS AND RACKS IS VERY IMPORTANT TO EFFICIENT CLEANING.
PLEASE FEEL FREE TO CONTACT LANCER FOR ADVICE OR ASSISTANCE.

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CHAPTER 3 USING YOUR WASHER-DRYER


This chapter has been written in order to let you use your washer-dryer.

You will find here the process of launching of the washing cycles appropriated to the materials to wash following the proposed programs, as well as the handling, which is necessary to make at the end of the cycle.

- 1.LAUNCHING OF A CYCLE
- 2.END OF THE CYCLE
- 3.INFORMATIONS OUT OF CYCLE
- 4.WASHING PROGRAMS

1. LAUNCHING OF A CYCLE

1.1 SWITCHING ON

Push the key .

The display indicates the number of the last executed program and the type of washer-dryer.

P	R	O	G	R	A	M	M	E	N	°	0	4
1	4	0	0	L	X	P						

1.2 CYCLE

The washer-disinfector is delivered with 4 pre-established programs at the factory (see page 40). Enter the number of the program to select the cycle, with the help of the keys of the numeric keypad.

PROGRAMME 01: VOLUMETRIC FLASKS

- Prewash with hot water with the detergent
- Wash with hot water with the detergent.
- Acid rinse with the neutralizant acid
- Rinse with purified water
- Final rinse at 50° with the purified water
- Drying at 60°C
- Cooling

PROGRAMME 02: BACTERIOLOGY, VIROLOGY

- Prewash with hot water with the detergent
- Wash with hot water with the detergent.
- Acid rinse with the neutralizant acid
- Final rinse at 80° with the purified water
- Drying at 60°C
- Cooling

PROGRAMME 03: CHEMISTRY, BIOLOGY

- Prewash with hot water with the detergent
- Wash with hot water with the detergent.
- Acid rinse with the neutralizant acid
- Rinse with purified water
- Final rinse at 80° with the purified water
- Drying at 60°C
- Cooling

PROGRAMME 04: GELOSE

- Prewash with hot water with the detergent
- Wash with hot water with the detergent.
- Acid rinse with the neutralizant acid
- Rinse with purified water
- Final rinse at 80° with the purified water
- Drying at 90°C
- Cooling

NOTE: other programs can be pre-established depending on their necessities (maximum 36).



BEFORE START, VERIFY THAT THE TAPS OF ENTRANCE OF WATER ARE OPEN.

1.3 USING OF THE KEYPAD

- Numeric keypad (0, 1, 2, 3, ..., 9) and keys \oplus and \ominus allow settings of times, temperatures, quantities and programs,
- Keys \odot , \oplus and \ominus allow selection of setting (ex: water 1 / water 2 / ...),
- Key START allows validation of the datas.

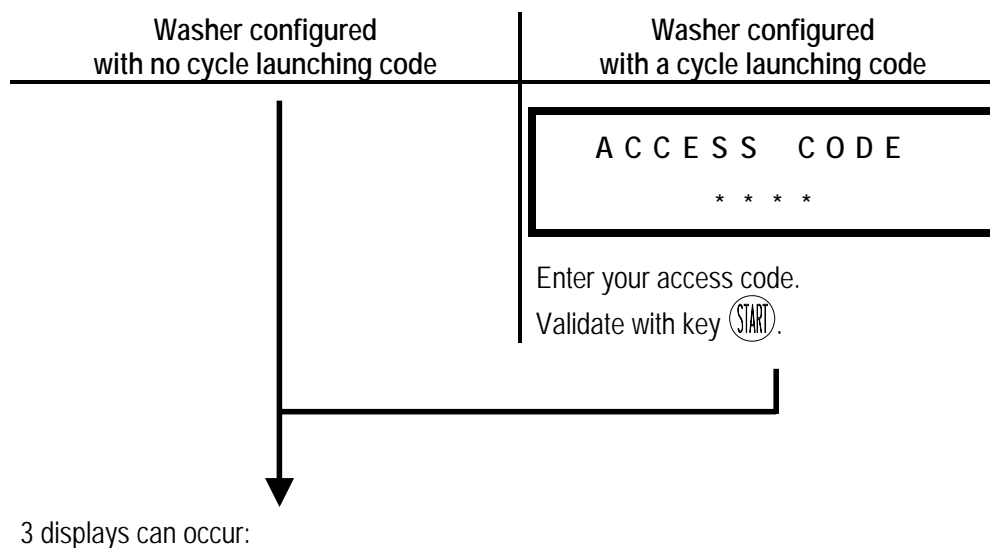
Tips:

- Key \odot makes it possible to retrogress during the settings,
- All the flashing parameters are adjustable with keys \oplus and \ominus .

1.4 LAUNCHING OF A CYCLE

Choose an appropriate cycle for the items to be washed.

Press the START push-button. There are 2 possibilities.



1) The display indicates:

- the selected cycle number,
- the temperature in the chamber,
- the current function, "RESINS RINSE" (*Only on washers with regeneration*). or "PREWASH 1"

2	6	P	R	E	W	A	S	H	1					
T	E	M	P	E	R	A	T	U	R	E	2	4	°	C

The cycle will be carried out without requiring any further action.

2) The display indicates:

W	A	R	N	I	N	G	!		
L	A	C	K	O	F	S	A	L	T

If there is a lack of product, salt (*for washer with regeneration*) or washing products (*for washer with level floats*), the message is displayed at the start of the cycle when you press the **START** key.

It is essential to fill the salt pot located inside of the washer, (*see page 56*) and or to fill the tanks of products.

3) The display indicates:

W	A	R	N	I	N	G	!	
F	U	L	L	B	A	S	I	N

In the case the chamber contains water at the beginning of the cycle, either following the interruption of the previous cycle or due to an abnormal addition of water from outside).

The washer is emptied and the cycle then proceeds normally.

1.5 DEVELOPMENT OF THE OPERATIONS

During the cycle, the display shows in permanence:













- the number of the program in course,
- the water or the air temperature in the chamber,
- the name of the function in course.










1.6 INFORMATION DURING THE CYCLE

Vocabulary:

A washing cycle consists of several sequences (Prewash, Wash, Rinse, Drying...).

Each sequence is divided in phases (Filling, Priming, Re-circulating, Additive intake, Emptying ...).

KEYS	USING OF THE KEYPAD
	Fast advance (if Validation Monitor option, Fast Advance is automatically set on OFF)
 (1 st pressing)	Display « Phase in progress »
 (2 nd pressing)	Display « Waiting phase »
 (3 rd pressing)	Display « Program name N°Xx »
 (4 th pressing)	Display « Remaining rinse number » (only for Running water rinses 1 and 2)
 (5 th pressing)	Display « Number of rinse already done » (only for Running water rinses 1 and 2)
 (1 st pressing)	Display « Lower basin temperature »
 (2 nd pressing)	Display « Upper basin temperature » (if Validation Monitor option)
 (3 rd pressing)	Display « right chimney temperature & left chimney temperature » (not applicable on LABEXIA LXP range)
 (4 th pressing)	Display « Programmed temperature »
 (5 th pressing)	Display « Lower basin temperature L24 & Lower basin temperature MONVAL » (if Validation Monitor option)
 (6 th pressing)	Display « Upper basin temperature L24 & Upper basin temperature MONVAL » (if Validation Monitor option)

 (1 st pressing)	Display « Remaining phase duration »
 (2 nd pressing)	Display « Phase duration already done »
 (3 rd pressing)	Display « Programmed phase duration »
 (4 th pressing)	Display « Sequence duration in progress »
 (5 th pressing)	Display « Maximum remaining duration »
 (6 th pressing)	Display « Maximum duration already done »
 (7 th pressing)	Display « Date » (if Printer or Validation Monitor option)
 (8 th pressing)	Display « Hour » (if Printer or Validation Monitor option)
①	Display « Output status - relays 1 to 8 » (if test mode activated)
②	Display « Output status - relays 9 to 16 » (if test mode activated)
③	Display « Output status – relays 17 to 24 » (if test mode activated)
⑧	Display « Input status 1 to 8 » (if test mode activated)
⑨	Display « Alarm status 1 to 8 » (if test mode activated)
Ⓒ and 	Re-Initialization of the machine

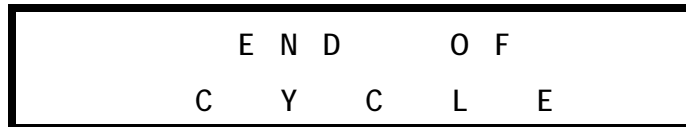
2. END OF THE CYCLE

2.1 OPENING OF THE DOOR



BURN RISK IF THE DOOR IS OPENED OVER 60°C.
AT THE END OF THE CYCLE, LET COOL THE SUPPORTS,
BASKETS, ACCESORIES AND WASHED OBJECTS BEFORE
HANDLING THEM.

The display indicates "END OF CYCLE".



If the chamber temperature is higher than 60°C, a prevention message appears.



If printer option, remove and control the ticket delivered by the printer.

STANDARD WASHER DRYER (NO DOOR LOCKING DEVICE)

Turn the handle towards the right and take the door down, up to horizontal position.

When washer-dryer is unloaded and door closed, a new washing cycle can begin.

WASHER DRYER EQUIPPED WITH A DOOR LOCKING DEVICE (OPTION)


Push the key , turn the handle towards the right and take the door down, up to horizontal position.

When washer-dryer is unloaded and door closed, a new washing cycle can begin.

2.2 REPRINTING OF THE TICKET (IF PRINTER OPTION)


It is possible to print the ticket again in the following cases:

- lack of paper (end of roller)
- bad impression.

Push simultaneously the keys  and .

Wait for the complete impression of the ticket before launching a new washing cycle.

2.3 SWITCHING OFF

Push the key .

Close the taps of arrival of water.

Clean the filters of the bottom of the chamber (see page 62).

COMMENT


In case of an interruption of the electrical feeding, the program is returned to the initial point. It is convenient then to proceed again to the operations of BEGINNING OF A CYCLE (see page 26). It is convenient to execute again the complete washing cycle.

3. INFORMATIONS OUT OF CYCLE

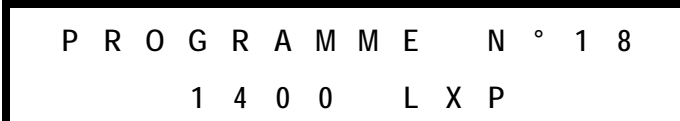
3.1 STAND BY INFORMATIONS

KEYS	USING OF THE KEYPAD
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩	Selection of the washing cycle program
⊕	Increment of the program N°
⊖	Decrement of the program N°
🌡️ (1 st pressing)	Display « Lower basin temperature & Upper basin temperature » (Upper basin temperature not applicable on LABEXIA LXP range)
🌡️ (2 nd pressing)	Display « right chimney temperature & left chimney temperature » (not applicable on LABEXIA LXP range)
🌡️ (3 rd pressing)	Display « Lower basin temperature L24 & Lower basin temperature MONVAL » (if Validation Monitor option)
🌡️ (4 th pressing)	Display « Upper basin temperature L24 & Upper basin temperature MONVAL » (if Validation Monitor option)
🌡️ (5 th pressing)	Return to initial display
🕒 (1 st pressing)	Display « Machine Cycle Number »
🕒 (2 nd pressing)	Display « N°xx Program Cycle Time »
🕒 (3 rd pressing)	Display « Machine Time »
🕒 (4 th pressing)	Display « N°xx Program Name »
🕒 (5 th pressing)	Display « Date » (if Printer or Validation Monitor option)
🕒 (6 th pressing)	Display « Hour » (if Printer or Validation Monitor option)
🕒 (7 th pressing)	Return to initial display
🌡️ and ⑩	Printing again of the ticket
Ⓒ and ⑩	Maintenance time set to zero
Ⓒ and ⊖	Re-Initialization of the machine

3.2 READING OF THE NAMES OF THE PROGRAMS

Switch the washer-dryer ON by pushing the key .

The display shows then the number of the last executed program.
Select the wanted program (example: program N°18).





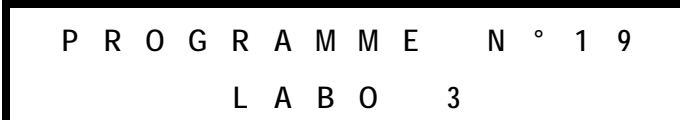
P R O G R A M M E N ° 1 8
1 4 0 0 L X P

The name of the program appears by an action on the key .




P R O G R A M M E N ° 1 8
G L A S S W A R E

A simultaneous action on the keys  and  enables to watch the names of the following programs.



P R O G R A M M E N ° 1 9
L A B O 3

When you stop pushing on the key , the last marked program is selected.

4. WASHING PROGRAMS

4.1 DESIGNATION OF WATER FILLING ACCORDING TO CONFIGURATIONS

FUNCTIONS	POSSIBILITY	STANDARD CONFIGURATION
PREWASH 1	1, 2, 3, 4, 5	3
PREWASHE 2	1, 2, 3, 4, 5	3
PREWASH 3	1, 2, 3, 4, 5	3
WASH	1, 2, 3, 4, 5	3
RUNNING WATER RINSE 1	1, 2, 3, 4, 5	1
ACID RINSE	1, 2, 3, 4, 5	1
RUNNING WATER RINSE 2	1, 2, 3, 4, 5	1
COLD DEMI. 1	1, 2, 3, 4, 5	4
COLD DEMI 2	1, 2, 3, 4, 5	4
COLD DEMI 3	1, 2, 3, 4, 5	4
COLD DEMI 4	1, 2, 3, 4, 5	4
HOT DEMI.	1, 2, 3, 4, 5	4

FUNCTIONS	POSSIBILITY	CONFIGURATION WITHOUT SOFTENER
PREWASH 1	1, 2, 3, 4, 5	3
PREWASHE 2	1, 2, 3, 4, 5	3
PREWASH 3	1, 2, 3, 4, 5	3
WASH	1, 2, 3, 4, 5	3
RUNNING WATER RINSE 1	1, 2, 3, 4, 5	2
ACID RINSE	1, 2, 3, 4, 5	2
RUNNING WATER RINSE 2	1, 2, 3, 4, 5	2
COLD DEMI. 1	1, 2, 3, 4, 5	4
COLD DEMI 2	1, 2, 3, 4, 5	4
COLD DEMI 3	1, 2, 3, 4, 5	4
COLD DEMI 4	1, 2, 3, 4, 5	4
HOT DEMI.	1, 2, 3, 4, 5	4

FUNCTIONS	POSSIBILITY	CONFIGURATION SOFTENER BUT WITHOUT PURIFIED WATER
PREWASH 1	1, 2, 3, 4, 5	3
PREWASHE 2	1, 2, 3, 4, 5	3
PREWASH 3	1, 2, 3, 4, 5	3
WASH	1, 2, 3, 4, 5	3
RUNNING WATER RINSE 1	1, 2, 3, 4, 5	1
ACID RINSE	1, 2, 3, 4, 5	1
RUNNING WATER RINSE 2	1, 2, 3, 4, 5	1
COLD DEMI. 1	1, 2, 3, 4, 5	2
COLD DEMI 2	1, 2, 3, 4, 5	2
COLD DEMI 3	1, 2, 3, 4, 5	2
COLD DEMI 4	1, 2, 3, 4, 5	2
HOT DEMI.	1, 2, 3, 4, 5	3

4.2 TABLE OF FACTORY-PROGRAMMED CYCLES STANDARD – 1400 LXP

Estimated consumption of water per operation (depending on the used baskets): 20 litres.

Flow-rate of the acid and detergent pumps (depending on the used products): 280 ml/mn.

FUNCTIONS	POSSIBILITY	Volumetric flasks	Bacteriology Virology	Chemistry Biology	Gelose
		CYCLE 01	CYCLE 02	CYCLE 03	CYCLE 04
PREWASH 1 DURATION	0 to 30 mn	1	2	2	2
FILLING	1 / 2 / 3 / 4 / 5	3	3	3	3
PREWASH 1 TEMPERATURE	0 to 95 °C	0	0	0	90
PREWASH 1 DETERGENT	0 to 360 s	11	11	11	43
Option PREWASH 1 DETERGENT 2	0 to 360 s	0	0	0	0
Option NEUTRALISATION	0 to 360 s	6	6	6	22
PREWASH 2 DURATION	0 to 30 mn	0	0	0	1
FILLING	1 / 2 / 3 / 4 / 5	/	/	/	3
PREWASH 2 TEMPERATURE	0 to 95 °C	/	/	/	0
PREWASH 2 DETERGENT	0 to 360 s	/	/	/	0
Option PREWASH 2 DETERGENT 2	0 to 360 s	/	/	/	0
Option NEUTRALISATION	0 to 360 s	/	/	/	0
PREWASH 3 DURATION	0 to 30 mn	0	0	0	0
FILLING	1 / 2 / 3 / 4 / 5	/	/	/	/
PREWASH 3 TEMPERATURE	0 to 95 °C	/	/	/	/
PREWASH 3 DETERGENT	0 to 360 s	/	/	/	/
Option PREWASH 3 DETERGENT 2	0 to 360 s	/	/	/	/
Option NEUTRALISATION	0 to 360 s	/	/	/	/
WASH DURATION	0 to 30 mn	4	4	2	2
FILLING	1 / 2 / 3 / 4 / 5	3	3	3	3
WASH TEMPERATURE	0 to 95 °C	50	85	70	90
WASH DETERGENT	0 to 360 s	43	43	43	54
Option WASH DETERGENT 2	0 to 360 s	0	0	0	0
Option NEUTRALISATION	0 to 360 s	22	22	22	27
RUNNING WATER RINSE 1	0 to 9	1	1	2	2
FILLING	1 / 2 / 3 / 4 / 5	1	1	1	1
ACID RINSE DURATION	0 to 30 mn	2	2	2	2
FILLING	1 / 2 / 3 / 4 / 5	1	1	1	1
ACID RINSE TEMPERATURE	0 to 95 °C	0	0	0	0
ACID RINSE	0 to 360 s	43	43	43	43
Option NEUTRALISATION	0 to 360 s	1min26	1min26	1min26	1min26
RUNNING WATER RINSE 2	0 to 9	1	2	1	1
FILLING	1 / 2 / 3 / 4 / 5	1	1	1	1
RINSE 1 DURATION	0 to 30 mn	1	0	1	1
FILLING	1 / 2 / 3 / 4 / 5	4	/	4	4
RINSE 2 DURATION	0 to 30 mn	0	0	1	0
FILLING	1 / 2 / 3 / 4 / 5	/	/	4	/
RINSE 3 DURATION	0 to 30 mn	0	0	0	0
FILLING	1 / 2 / 3 / 4 / 5	/	/	/	/
RINSE 4 DURATION	0 to 30 mn	0	0	0	0
FILLING	1 / 2 / 3 / 4 / 5	/	/	/	/
HOT RINSE DURATION	0 to 30 mn	1	1	1	1
FILLING	1 / 2 / 3 / 4 / 5	4	4	4	4
HOT RINSE TEMPERATURE	0 to 95 °C	50	80	80	80
DRYING	0 to 90 mn	10	25	25	25
DRYING TEMPERATURE	0 to 110°C	60	60	60	90
COOLING	0 to 30 mn	5	5	5	5

4.3 TABLE OF FACTORY-PROGRAMMED CYCLES SOFTENER OPTION – 1400 LX

Estimated consumption of water per operation (depending on the used baskets): 20 litres.

Flow-rate of the acid and detergent pumps (depending on the used products): 280 ml/mn.

FUNCTIONS	POSSIBILITY	Volumetric flasks	Bacteriology Virology	Chemistry Biology	Gelose
		CYCLE 01	CYCLE 02	CYCLE 03	CYCLE 04
PREWASH 1 DURATION	0 to 30 mn	1	2	2	2
FILLING	1 / 2 / 3 / 4 / 5	3	3	3	3
PREWASH 1 TEMPERATURE	0 to 95 °C	0	0	0	90
PREWASH 1 DETERGENT	0 to 360 s	11	11	11	43
Option PREWASH 1 DETERGENT 2	0 to 360 s	0	0	0	0
Option NEUTRALISATION	0 to 360 s	6	6	6	22
PREWASH 2 DURATION	0 to 30 mn	0	0	0	1
FILLING	1 / 2 / 3 / 4 / 5	/	/	/	3
PREWASH 2 TEMPERATURE	0 to 95 °C	/	/	/	0
PREWASH 2 DETERGENT	0 to 360 s	/	/	/	0
Option PREWASH 2 DETERGENT 2	0 to 360 s	/	/	/	0
Option NEUTRALISATION	0 to 360 s	/	/	/	0
PREWASH 3 DURATION	0 to 30 mn	0	0	0	0
FILLING	1 / 2 / 3 / 4 / 5	/	/	/	/
PREWASH 3 TEMPERATURE	0 to 95 °C	/	/	/	/
PREWASH 3 DETERGENT	0 to 360 s	/	/	/	/
Option PREWASH 3 DETERGENT 2	0 to 360 s	/	/	/	/
Option NEUTRALISATION	0 to 360 s	/	/	/	/
WASH DURATION	0 to 30 mn	4	4	2	2
FILLING	1 / 2 / 3 / 4 / 5	3	3	3	3
WASH TEMPERATURE	0 to 95 °C	50	85	70	90
WASH DETERGENT	0 to 360 s	43	43	43	54
Option WASH DETERGENT 2	0 to 360 s	0	0	0	0
Option NEUTRALISATION	0 to 360 s	22	22	22	27
RUNNING WATER RINSE 1	0 to 9	1	1	2	2
FILLING	1 / 2 / 3 / 4 / 5	2	2	2	2
ACID RINSE DURATION	0 to 30 mn	2	2	2	2
FILLING	1 / 2 / 3 / 4 / 5	2	2	2	2
ACID RINSE TEMPERATURE	0 to 95 °C	0	0	0	0
ACID RINSE	0 to 360 s	43	43	43	43
Option NEUTRALISATION	0 to 360 s	1min26	1min26	1min26	1min26
RUNNING WATER RINSE 2	0 to 9	1	2	1	1
FILLING	1 / 2 / 3 / 4 / 5	2	2	2	2
RINSE 1 DURATION	0 to 30 mn	1	0	1	1
FILLING	1 / 2 / 3 / 4 / 5	4	/	4	4
RINSE 2 DURATION	0 to 30 mn	0	0	1	0
FILLING	1 / 2 / 3 / 4 / 5	/	/	4	/
RINSE 3 DURATION	0 to 30 mn	0	0	0	0
FILLING	1 / 2 / 3 / 4 / 5	/	/	/	/
RINSE 4 DURATION	0 to 30 mn	0	0	0	0
FILLING	1 / 2 / 3 / 4 / 5	/	/	/	/
HOT RINSE DURATION	0 to 30 mn	1	1	1	1
FILLING	1 / 2 / 3 / 4 / 5	4	4	4	4
HOT RINSE TEMPERATURE	0 to 95 °C	50	80	80	80
DRYING	0 to 90 mn	10	25	25	25
DRYING TEMPERATURE	0 to 110°C	60	60	60	90
COOLING	0 to 30 mn	5	5	5	5

4.4 TABLE OF FACTORY-PROGRAMMED CYCLES SOFTENER OPTION (NO PURIFIED WATER AVAILABLE) – 1400 LX

Estimated consumption of water per operation (depending on the used baskets): 20 litres.

Flow-rate of the acid and detergent pumps (depending on the used products): 280 ml/mn.

FUNCTIONS	POSSIBILITY	Volumetric	Bacteriology	Chemistry	Gelose
		flasks CYCLE 01	Virology CYCLE 02	Biology CYCLE 03	CYCLE 04
PREWASH 1 DURATION	0 to 30 mn	1	2	2	2
FILLING	1 / 2 / 3 / 4 / 5	3	3	3	3
PREWASH 1 TEMPERATURE	0 to 95 °C	0	0	0	90
PREWASH 1 DETERGENT	0 to 360 s	11	11	11	43
Option PREWASH 1 DETERGENT 2	0 to 360 s	0	0	0	0
Option NEUTRALISATION	0 to 360 s	6	6	6	22
PREWASH 2 DURATION	0 to 30 mn	0	0	0	1
FILLING	1 / 2 / 3 / 4 / 5	/	/	/	3
PREWASH 2 TEMPERATURE	0 to 95 °C	/	/	/	0
PREWASH 2 DETERGENT	0 to 360 s	/	/	/	0
Option PREWASH 2 DETERGENT 2	0 to 360 s	/	/	/	0
Option NEUTRALISATION	0 to 360 s	/	/	/	0
PREWASH 3 DURATION	0 to 30 mn	0	0	0	0
FILLING	1 / 2 / 3 / 4 / 5	/	/	/	/
PREWASH 3 TEMPERATURE	0 to 95 °C	/	/	/	/
PREWASH 3 DETERGENT	0 to 360 s	/	/	/	/
Option PREWASH 3 DETERGENT 2	0 to 360 s	/	/	/	/
Option NEUTRALISATION	0 to 360 s	/	/	/	/
WASH DURATION	0 to 30 mn	4	4	2	2
FILLING	1 / 2 / 3 / 4 / 5	3	3	3	3
WASH TEMPERATURE	0 to 95 °C	50	85	70	90
WASH DETERGENT	0 to 360 s	43	43	43	54
Option WASH DETERGENT 2	0 to 360 s	0	0	0	0
Option NEUTRALISATION	0 to 360 s	22	22	22	27
RUNNING WATER RINSE 1	0 to 9	1	1	2	2
FILLING	1 / 2 / 3 / 4 / 5	1	1	1	1
ACID RINSE DURATION	0 to 30 mn	2	2	2	2
FILLING	1 / 2 / 3 / 4 / 5	1	1	1	1
ACID RINSE TEMPERATURE	0 to 95 °C	0	0	0	0
ACID RINSE	0 to 360 s	43	43	43	43
Option NEUTRALISATION	0 to 360 s	1min26	1min26	1min26	1min26
RUNNING WATER RINSE 2	0 to 9	1	2	1	1
FILLING	1 / 2 / 3 / 4 / 5	1	1	1	1
RINSE 1 DURATION	0 to 30 mn	1	0	1	1
FILLING	1 / 2 / 3 / 4 / 5	2	/	2	2
RINSE 2 DURATION	0 to 30 mn	0	0	1	0
FILLING	1 / 2 / 3 / 4 / 5	/	/	2	/
RINSE 3 DURATION	0 to 30 mn	0	0	0	0
FILLING	1 / 2 / 3 / 4 / 5	/	/	/	/
RINSE 4 DURATION	0 to 30 mn	0	0	0	0
FILLING	1 / 2 / 3 / 4 / 5	/	/	/	/
HOT RINSE DURATION	0 to 30 mn	1	1	1	1
FILLING	1 / 2 / 3 / 4 / 5	3	3	3	3
HOT RINSE TEMPERATURE	0 to 95 °C	50	80	80	80
DRYING	0 to 90 mn	10	25	25	25
DRYING TEMPERATURE	0 to 110°C	60	60	60	90
COOLING	0 to 30 mn	5	5	5	5

4.5 USER CYCLE PROGRAMMING TABLE – 1400 LXP

Estimated consumption of water per operation (depending on the used baskets): 20 litres.
Flow-rate of the acid and detergent pumps (depending on the used products): 280 ml/mn.

FUNCTIONS	POSSIBILITY				
		CYCLE N°	CYCLE N°	CYCLE N°	CYCLE N°
PREWASH 1 DURATION	0 to 30 mn				
FILLING	1 / 2 / 3 / 4 / 5				
PREWASH 1 TEMPERATURE	0 to 95 °C				
PREWASH 1 DETERGENT	0 to 360 s				
Option PREWASH 1 DETERGENT 2	0 to 360 s				
Option NEUTRALISATION	0 to 360 s				
PREWASH 2 DURATION	0 to 30 mn				
FILLING	1 / 2 / 3 / 4 / 5				
PREWASH 2 TEMPERATURE	0 to 95 °C				
PREWASH 2 DETERGENT	0 to 360 s				
Option PREWASH 2 DETERGENT 2	0 to 360 s				
Option NEUTRALISATION	0 to 360 s				
PREWASH 3 DURATION	0 to 30 mn				
FILLING	1 / 2 / 3 / 4 / 5				
PREWASH 3 TEMPERATURE	0 to 95 °C				
PREWASH 3 DETERGENT	0 to 360 s				
Option PREWASH 3 DETERGENT 2	0 to 360 s				
Option NEUTRALISATION	0 to 360 s				
WASH DURATION	0 to 30 mn				
FILLING	1 / 2 / 3 / 4 / 5				
WASH TEMPERATURE	0 to 95 °C				
WASH DETERGENT	0 to 360 s				
Option WASH DETERGENT 2	0 to 360 s				
Option NEUTRALISATION	0 to 360 s				
RUNNING WATER RINSE 1	0 to 9				
FILLING	1 / 2 / 3 / 4 / 5				
ACID RINSE DURATION	0 to 30 mn				
FILLING	1 / 2 / 3 / 4 / 5				
ACID RINSE TEMPERATURE	0 to 95 °C				
ACID RINSE	0 to 360 s				
Option NEUTRALISATION	0 to 360 s				
RUNNING WATER RINSE 2	0 to 9				
FILLING	1 / 2 / 3 / 4 / 5				
RINSE 1 DURATION	0 to 30 mn				
FILLING	1 / 2 / 3 / 4 / 5				
RINSE 2 DURATION	0 to 30 mn				
FILLING	1 / 2 / 3 / 4 / 5				
RINSE 3 DURATION	0 to 30 mn				
FILLING	1 / 2 / 3 / 4 / 5				
RINSE 4 DURATION	0 to 30 mn				
FILLING	1 / 2 / 3 / 4 / 5				
HOT RINSE DURATION	0 to 30 mn				
FILLING	1 / 2 / 3 / 4 / 5				
HOT RINSE TEMPERATURE	0 to 95 °C				
DRYING	0 to 90 mn				
DRYING TEMPERATURE	0 to 110°C				
COOLING	0 to 30 mn				

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Flow-rate of the acid and detergent pumps (depending on the used products): 280 ml/mn.

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Option PREWASH 1 DETERGENT 2	0 to 360 s				
Option NEUTRALISATION	0 to 360 s				
PREWASH 2 DURATION	0 to 30 mn				
FILLING	1 / 2 / 3 / 4 / 5				
PREWASH 2 TEMPERATURE	0 to 95 °C				
PREWASH 2 DETERGENT	0 to 360 s				
Option PREWASH 2 DETERGENT 2	0 to 360 s				
Option NEUTRALISATION	0 to 360 s				
PREWASH 3 DURATION	0 to 30 mn				
FILLING	1 / 2 / 3 / 4 / 5				
PREWASH 3 TEMPERATURE	0 to 95 °C				
PREWASH 3 DETERGENT	0 to 360 s				
Option PREWASH 3 DETERGENT 2	0 to 360 s				
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FILLING	1 / 2 / 3 / 4 / 5				
RINSE 1 DURATION	0 to 30 mn				
FILLING	1 / 2 / 3 / 4 / 5				
RINSE 2 DURATION	0 to 30 mn				
FILLING	1 / 2 / 3 / 4 / 5				
RINSE 3 DURATION	0 to 30 mn				
FILLING	1 / 2 / 3 / 4 / 5				
RINSE 4 DURATION	0 to 30 mn				
FILLING	1 / 2 / 3 / 4 / 5				
HOT RINSE DURATION	0 to 30 mn				
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Option NEUTRALISATION	0 to 360 s				
PREWASH 2 DURATION	0 to 30 mn				
FILLING	1 / 2 / 3 / 4 / 5				
PREWASH 2 TEMPERATURE	0 to 95 °C				
PREWASH 2 DETERGENT	0 to 360 s				
Option PREWASH 2 DETERGENT 2	0 to 360 s				
Option NEUTRALISATION	0 to 360 s				
PREWASH 3 DURATION	0 to 30 mn				
FILLING	1 / 2 / 3 / 4 / 5				
PREWASH 3 TEMPERATURE	0 to 95 °C				
PREWASH 3 DETERGENT	0 to 360 s				
Option PREWASH 3 DETERGENT 2	0 to 360 s				
Option NEUTRALISATION	0 to 360 s				
WASH DURATION	0 to 30 mn				
FILLING	1 / 2 / 3 / 4 / 5				
WASH TEMPERATURE	0 to 95 °C				
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ACID RINSE	0 to 360 s				
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RUNNING WATER RINSE 2	0 to 9				
FILLING	1 / 2 / 3 / 4 / 5				
RINSE 1 DURATION	0 to 30 mn				
FILLING	1 / 2 / 3 / 4 / 5				
RINSE 2 DURATION	0 to 30 mn				
FILLING	1 / 2 / 3 / 4 / 5				
RINSE 3 DURATION	0 to 30 mn				
FILLING	1 / 2 / 3 / 4 / 5				
RINSE 4 DURATION	0 to 30 mn				
FILLING	1 / 2 / 3 / 4 / 5				
HOT RINSE DURATION	0 to 30 mn				
FILLING	1 / 2 / 3 / 4 / 5				
HOT RINSE TEMPERATURE	0 to 95 °C				
DRYING	0 to 90 mn				
DRYING TEMPERATURE	0 to 110°C				
COOLING	0 to 30 mn				

4.6 RATE OF CHANGE OF THE CYCLE PARAMETERS

During the standard cycle the rate is the importance of all variation of temperature, or of pressure or the concentration of the chemicals products used by the procedure must be comprised between the limits which will not damage the articles to be treated by the washer-dryer.

The temperature

- measured from 0 to 150°C
- precision $\pm 1^\circ\text{C}$ between 0 and 100°C
- minimal resolution of 1°C
- measuring frequency: 5s

The pressure

- the maximum pressure is lower than 80% of the scale of the sensors
- precision of $\pm 5\text{kPa}$
- resolution of 1kPa
- precision to the pressure of working $\pm 5\text{kPa}$

Timing

- precision of $\pm 2.5\%$ for $T < 5\text{mn}$
- precision of $\pm 1\%$ for $T > 5\text{mn}$

4.7 WATER AND PRODUCT CONSUMPTION DEPENDING ON THE WASHING CYCLES

These consumptions are given at indicative tittle and can change depending on the cycle parameters and the washing products used.

1400 LXP

	Cycle N°01 Volumetric flasks	Cycle N°02 Bacteriology Virology	Cycle N°03 Chemistry Biology	Cycle N°04 Gelose
Hot water	40 l	40 l	40 l	60 l
Cold water	60 l	80 l	80 l	80 l
Demineralized water	40 l	20 l	60 l	40 l
Total waters	140 l	140 l	180 l	180 l
Neutralizant (NLL)	200 ml	200 ml	200 ml	200 ml
Detergent (LLL)	250 ml	250 ml	250 ml	450 ml

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CHAPTER 4 USER'S MENU

In this chapter you will find all information to use your washer-dryer as well as possible

It is possible to execute all the detailed operations both by the owner of a technician code and the owner of a supervisor code.


- 1.ACCES TO USER'S MENU
- 2.READING SEQUENCE OF A WASHING CYCLE
- 3.DOSING PUMP PRIMING
- 4.TICKET PARAMETER SETTING
- 5.END OF SETTING

1. ACCES TO USER'S MENU

Switch the washer-dryer ON by pushing the key .

The display then shows the number of the last executed program.

P R O G R A M N ° 0 0
1 4 0 0 L X P

Select program 00.
Validate with the  key.




A C C E S S C O D E
* * * *

Enter your user's code

If a wrong code is entered, the display recovers its initial state.

If the code is correct, the display shows:

M E N U O P E R A T O R
P R O G R A M . R E A D


Select, using keys  or , the desired functions.
Validate with the  key.

2. READING SEQUENCE OF A WASHING CYCLE

It enables to display each sequence of a washing cycle.

```


M E N U   O P E R A T O R
P R O G R A M .   R E A D
  
```

Validate with the  key.

```


P R O G R A M   N °
N ° 0 4
  
```

Choose the program to be checked.

Validate with the  key.

```

0 4   P R E W A S H       1
R E - C I R C U .   0 2 M 0 0 S
  
```

The sequencing of all the functions in the cycle can be displayed by repeatedly pressing on the  key.

```

E N D   O F   M E N U
  
```

The display returns to the user's menu.

3. DOSING PUMP PRIMING

Enables dosing pump priming when changing additive tanks.

Switch the washer-dryer OFF.

Use the necessary protections when handling the products (gloves, masks, glasses...).

Open the tank casing door and locate the tank to be changed.

Verify the level of the other product tanks to avoid a new alarm « LACK OF PRODUCT » in the next beginning of cycle.


Unscrew the stoppers and take off the product suction pipes, place them in a container.

Change the tank(s) and replace the suction pipe(s).

Switch the washer-dryer ON to prime dosing pumps.

```

M E N U   O P E R A T O R
P U M P   P R I M I N G
  
```

Validate with the  key.

```

          A C I D
P U M P      →      O F F
  
```

Press on  or  key to select dosing pump to be primed

Choose, with button , status "ON" or "OFF" of the dosing pump.

```

          F I L L I N G
I N   P R O G R E S S
  
```

Chamber is filled with water to dilute the product.

```

A C I D           =           5 9 s
P U M P         - >           O N
  
```

Status is "ON" during 1mn to prime dosing pump.

```
  E M P T Y I N G
  I N   P R O G R E S S
```

Basin emptying.

To go out the adjustment mode, validate with key C .

```
  E N D   S E T T I N G   ?
P U M P           - >   O F F
```

Validate with the START key.

```
  E N D   O F   M E N U
```


The display returns to the user's menu.

4. TICKET PARAMETER SETTING

Enables to customize 2 heading lines and 3 foot lines on the ticket (if printer option).

```

M E N U   O P E R A T O R
P R I N T E R   S E T T I N G S
  
```

Validate with the  key.

```

H E A D   1 :   E N T E T E   D
U   T I C K E T   L I G N E   1
  
```

First character is flashing on top of display.

Characters are selected with the  and  keys or numeric keypad.


Tip:

Several characters can be displayed by a long pressing on keys of the numeric keypad.

Example with key  :


```


{ 3 D E F d e f }
3
  
```

Go through the characters by successive pressings on key .

Each character must be validated with the key .

When the ticket line is customized, complete the line of characters with successive pressings on key .

Press on key  to go to next heading line then to foot lines.

Validate with the  key.

```

E N D   O F   M E N U
  
```

The display returns to the user's menu.

5. END OF SETTING

Select *END OF SETTING ?* using keys \oplus or \ominus to leave user's menu.

```
E N D   S E T T I N G S
```

Validate with the START key.

```
P R O G R A M   N ° 0 0  
1 4 0 0   L X P
```

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CHAPTER 5 TRACEABILITY

These last years, TRACEABILITY has become in the hospital milieu in a crucial issue. The matter is to control permanently the correct development of the washing cycle and to obtain its validation.

TRACEABILITY enables the supervision of the correct performance of parameters such as washing, chamber filling, detergent taking, effective temperature, duration of the phases.

During the development of the program all the data must be registered, archived in paper support and, optionally, on data support.

You will find in this chapter the different systems of traceability proposed by our company.

1.INTERNAL PRINTER OR EXTERNAL PRINTER (OPTION)

2.VALIDATION MONITOR, PRINTER AND OUTPUT RS232 (OPTION)

1. INTERNAL PRINTER OR EXTERNAL PRINTER (OPTION)

ITS ROLE:

The LANCER PRINTER gives permanently the development of the washing.

Also, it permits the stock of the information.

ITS RESULTS:

At the end of the program, the results are registered and archived, whether on a paper support by the mean of an horodated ticket, or on a magnetic support via an RS 232 connection.



INTERNAL PRINTER

(built-in printer in front of the washer)



EXTERNAL PRINTER

(desktop printer)

2. VALIDATION MONITOR, PRINTER AND OUTPUT RS232 (OPTION)

The LABEXIA LXP washers-dryers are controlled by a programmable microprocessor. In order to obtain an independent verification of the washing-disinfecting process, a VALIDATION MONITOR can be provided. The VALIDATION MONITOR is a microprocessor independent from the controller and equipped with its own sensors and clock.

ITS ROLE:

The LANCER VALIDATION MONITOR is a system of validation of the washing parameters. It checks permanently the right development of the washing cycle and allows its validation, as well as the stock of the information.

ITS RESULTS:

At the end of the program, the results are registered and archived, whether on a paper support by the mean of an horodated ticket, or on a magnetic support via a RS 232 connection (provided).

IMPRESSION OF A REPORT

The date, the hour, the number of phases of the program as well as their denomination are printed in the ticket, these durations can vary from one cycle to the other.

The temperature is printed at constant intervals, which can be previously chosen. The value of the temperature is given by the LANCER VALIDATION MONITOR, and can be compared to the programmed one, which is printed as well.

At the end of the cycle, the hour of ending of the cycle and its complete duration are indicated at the bottom of the ticket. This ticket is called "complete ticket"; it is generally used during the installation phase of the washer, in order to determine the best washing and disinfecting procedure and to periodically validate the washer.

A smaller ticket, "simplified ticket", is enough for the ordinary washings. It simply indicates the date and the hour of start and end of the cycle, the number of programs and their durations.

If an incident occurs during the washing, a complete ticket will be automatically printed, showing all the phases executed before the failure.



THE DISPLAYED TEMPERATURE IS THE TEMPERATURE AT THE BOTTOM OF THE CHAMBER (PRE-SET REGULATED TEMPERATURE).

THE TEMPERATURE PRINTED ON THE TICKET CORRESPONDS TO THE REAL TEMPERATURE IN THE CHAMBER.

A DIFERENTIAL OF TEMPERATURE CAN EXIST.

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CHAPTER 6 MAINTENANCE OF THE WASHER-DRYER

This chapter describes the maintenance operations to assure the good working of your washer-dryer.

- 1.CHAMBER FILTERS
- 2.REGENERATING OF SOFTENER (OPTION)
- 3.STRAINER FILTERS
- 4.DRYING AIR FILTERS
- 5.EXTERNAL MAINTENANCE OF THE WASHER-DRYER
- 6.SHUT DOWN AT END OF DAY
- 7.PREVENTIVE MAINTENANCE
- 8.PREVENTATIVE MAINTENANCE SCHEDULE

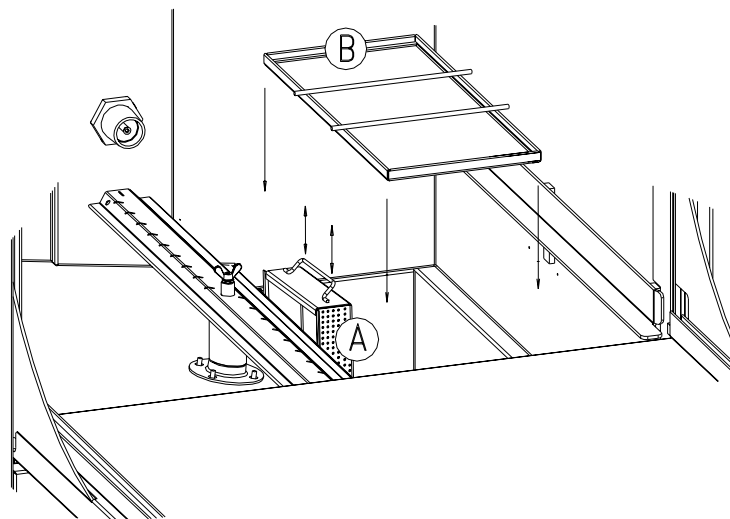


NEVER USE OR PLACE IN THE WASHER REMMANTS OF PRODUCTS SUCHS AS ACETONE, SOLVANTS, OLI, SULFO-CROMIC, PETROL DERIVEDS, ACIDS (SULFURIC, NITRIC, CLORHIDRIC, EVEN AT LOW CONCENTRATIONS), ETC.



DURING THE CLEANING OPERATIONS INSIDE THE CHAMBER, IT IS CONVENIENT TO BE PROVIDED WITH GLOVES AND TO PAY ATTENTION TO THE EVENTUAL EDGE TOOLS (NEEDLES, INSTRUMENTS...) WHICH COULD BE PLACED INSIDE THE FILTERS OF THE BOTTOM OF THE CHAMBER.

1. CHAMBER FILTERS



Clean the filters after each cycle.

Place them correctly.

Order of fitting: A -> B

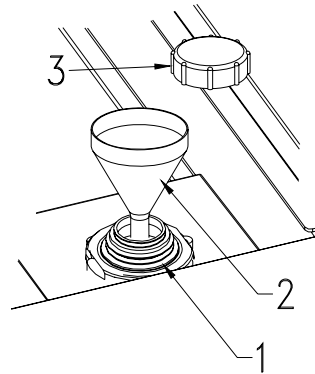
2. REGENERATING OF SOFTENER (OPTION)

Only for washers with regeneration (option).

This function is automatic (masked time).

When the display unit indicates "SALT RECHARGE", it is essential to fill the salt pot located at the bottom of the chamber, inside the washer. Use special softening, regenerating salt.

- 1 Salt pot
- 2 Filling funnel
- 3 Salt pot cap



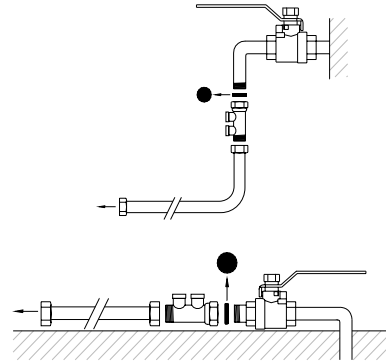
DO NOT FORGET TO CAP SALT POT AFTER FILLING WITH SALT

3. STRAINER FILTERS

Check the cleanness of the strainer filters and clean them if needed.

The contained remnants in the filters increase the filling times and could activate the alarm "LACK OF WATER".

The filters should be replaced each year.

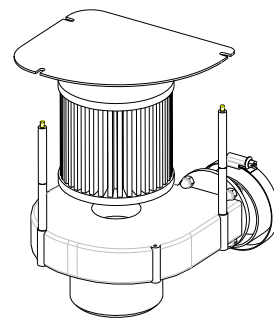


4. DRYING AIR FILTERS

The life duration of the drying air filters depends on the rate of use of the washer-dryer and the quality of the near air.

We recommend the preventive change of the drying air filters at least one time every year.

Check visually the state of the drying air filters every 6 months



5. EXTERNAL MAINTENANCE OF THE WASHER-DRYER

LANCER washers are entirely covered with panels (bodywork) in stainless steel AISI 304L.

5.1 CLEANING METHOD

The periodic maintenance cleaning must be done with a cleaning product.

Should the periodic maintenance have been largely forgotten, we recommend the use of a specific cleaning product.

The product must be applied with the help of a rag or a soft sponge, and always polishing the stainless steel in the sense of the brushing to avoid the risk of stripes.

For the drying, the best is using a rubber scraper similar to the one used to clean windows. This will avoid watering you can have with a rag cleaning.



**PRUDENCE:
TRY TO AVOID THE PROJECTIONS OF LIQUID OVER THE
WASHER-DRYER.**

5.2 CLEANING PRODUCTS

LANCER offers a maintenance product for stainless steel in the market under the name of LANCERSHINE.

A safe and efficient aerosol cleaning product for a use in the external side of the stainless machines and other equipments to be washed, assuring a very professional finishing.

Available in container of 450 ml. Ref: LANCERSHINE

DETERGENTS, SOAPS:

All the detergents, soaps or cleaning products found in shops can normally be used, but they **MUST NOT** contain chlorinated products. Domestic soaps for dishwashers or washing machines are particularly adapted to the periodical cleaning.

ABRASIVE DUSTS:

These products can stripe the stainless steel surfaces and modify then the aspect, at least locally. Even that, their use can be useful to eliminate by scraping the adherent spots.

ACID PRODUCTS:

The resource to these acid-cleaning products must only be used in specific cases.

Vinegar (acetic acid) can be used to remove stains left by minerals.

There are phosphoric acid-based or nitric acid-based products specially conceived for the cleaning of stainless steels. It is convenient to follow strictly the instructions given by their manufacturers.

The chloric disinfectants must only be used with caution: diluted solution in cold water, short contact time, abundant rinsing.



IN ALL THE CASES IT IS NECESSARY TO PROCEED AFTER THE CLEANING TO AN ABUNDANT AND CAREFUL RINSING (WITH A SOFT TEXTILE), IN ORDER TO ELIMINATE EVERY TRACE OF THE USED PRODUCT.

6. SHUT DOWN AT END OF DAY

- a) SHUT OFF THE WATER INLET COCKS so that the valves are not left pressurised. Do not forget to open them again before using the appliance again.
- b) SWITCH OFF THE APPLIANCE.

7. PREVENTIVE MAINTENANCE

LANCER'S TECHNICAL ASSISTANCE SERVICE recommends to carry out a preventive maintenance action every year in order to guarantee the validity of the washing cycles and to perennialize the operation of the washer-dryer.

The preventive maintenance reduced the risks of stoppings of the washer-dryer due to breakdowns and makes it possible to lengthen the lifespan of the equipment.

A meter of hours on the washer-dryer starts at the end of 800 operating hours, a message with the screen indicating to carry out maintenance.

These 800 hours are as an indication and it is advisable in the cases of not very frequent use of the washer-dryer to privilege the period of 1 year for the preventive maintenance.

Depending on the countries where the washer-dryer is used and the local norms, a higher frequency of preventive maintenance visits can be necessary.

8. PREVENTATIVE MAINTENANCE SCHEDULE

FUNCTION	Daily (1)	Biannual (2)	1 Year (2)	2 Years (2)	5 Years (2)
Clean filter system in chamber.	X	X	X	X	X
Check chemical containers for any leakage.	X	X	X	X	X
Ensure chemical hoses are not pinched.	X	X	X	X	X
Clean exterior panels.	X	X	X	X	X
Inspect water supply hoses for cracks, bulges, and leaks.		X	X	X	X
Ensure the water hose seals and filters are clean and have no cracks.		X	X	X	X
Check chemical supply hoses for cracks, bulges and leaks.		X	X	X	X
Inspect internal tubing on chemical pumps for wear.		X	X	X	X
Check chemical level sensors for correct operation.		X	X	X	X
Ensure all panels are properly secured.		X	X	X	X
Check all internal hoses for cracks, bulges and leaks.		X	X	X	X
Ensure all hose clamps are properly tightened.		X	X	X	X
Check all column seals for leaks and cracks.		X	X	X	X
Check spray arm support seals for leaks and cracks.		X	X	X	X
Check spray arms and bushings for wear.		X	X	X	X
Check door seal and gasket for leakage.		X	X	X	X
Inspect the door springs, door wheels and their sling, hooks, door switch for proper operation.		X	X	X	X
Check recycling and emptying pump seals for leakage and quiet operation.			X	X	X
Check for loose electrical connections at components and electronic cards.			X	X	X
Verify the correct operation of all relays and their associated components.			X	X	X
Change the heating relay			X	X	X
Change the Hepa filter of the dryer			X	X	X
Verify the correct operation of the fan of the dryer			X	X	X
Verify the correct operation of the non-return valve of the drying network			X	X	X

(1) Daily maintenance must be handled by users staff.

(2) Others maintenances (bi-annual, 1 year, 2 years & 5 years) must be carry out by the Lancer's technical assistance service.

CHAPTER 7 INCIDENTS / GUIDE OF QUICK REPAIRS

In this chapter you will find all the working incidents that you could find in your washer-dryer.

1. INCIDENTS

2. LACK OF PRODUCTS

3. FAULT ALARMS

1. INCIDENTS

1.1 THE DETERGENT OR NEUTRALIZING AGENT DOES NOT ENTER THE WASHER

- The tube is blocked.
- The tank is empty.
- The pump hose is pinched.

1.2 THE WASHER DOES NOT FUNCTION

- It is not connected to the power supply.
- There is mains power.
- The circuit breaker protecting the electrical control circuit has been tripped. CONSULT THE MAINTENANCE DEPARTMENT.

1.3 ABNORMAL NOISE

- One of the washing arms is touching one or more of the items to be washed.
- Check the loading of the washer.

These alarms stop the development of the cycle.

To go out of the mode alarm, two procedures can be used:

Washer configured "alarm mode & stop washing without code"

* press simultaneously the keys (C) and (−)

or * switch the washer OFF by turning the power-switch -11-

Washer configured "alarm mode & stop washing with code"

E	N	T	E	R	Y	O	U	R	C	O	D	E	?
					*	*	*	*					

Introduce the alarm code.

2. LACK OF PRODUCTS

In case of detection of lack of the washing products, a message appears at the beginning of the cycle, when the user enters his access code.

LACK OF DETERGENT

	A	L	A	R	M									
D	E	T	E	R	G	E	N	T	R	E	C	H	G	.

LACK OF ACID


	A	L	A	R	M				
A	C	I	D	R	E	C	H	G	.

It is indispensable to replace the tank.

Consider checking the level of other product tanks in order to avoid another alarm.

LACK OF LUBRICANT

W A R N I N G !
L U B R I C . R E C H G .

INCIDENT: the following message is displayed at the start of the cycle when you press the  key.

ACTION: It is indispensable to fill the lubricant tank.

LACK OF ADDITIVE PRODUCT (DETERGENT 2)

W A R N I N G !
D E T E R G . 2 R E C H G .

INCIDENT: the following message is displayed at the start of the cycle when you press the  key.

ACTION: It is indispensable to fill the detergent tank 2.

HOT CHAMBER

W A R N I N G !
H O T C H A M B E R

INCIDENT: the following message is displayed if the temperature inside the washing chamber is above the safety temperature set point for door opening.

ACTION: At the end of the cycle, let the washer chamber and contents cool before opening the chamber door.

FULL BASIN

W A R N I N G !
F U L L B A S I N :

INCIDENT: If the wash chamber contains water at the beginning of the cycle, either from the interruption of the previous cycle or due to an abnormal addition of water to the chamber.

ACTION: The washer is automatically emptied and the cycle then proceeds normally.

MAINTENANCE REMINDER

M a i n t e n a n c e
I n X X X H o u r s


INCIDENT: After turning on the machine, the reminder of the upcoming preventative maintenance is shown on the display.

ACTION: Press the  key to acknowledge the reminder. Schedule a preventative maintenance service call.

PREVENTATIVE MAINTENANCE REQUIRED

T i m e f o r P r e v e n -
T i v e M a i n t e n a n c e

INCIDENT: After starting the wash cycle, the preventative maintenance message is shown on the display.

ACTION: Press the  key to acknowledge the reminder. Preventative maintenance should be performed on the machine.

3. FAULT ALARMS

Additional information can be displayed on screen:

- T1: type 1 alarm -> instantaneous alarm
- T2: type 2 alarm -> drying alarm
- T3: type 3 alarm -> alarm with management of alarm

EXAMPLE:

```

T 1   E R R O R       N ° : 1 5
D R A I N I N G   F A U L T

```

FAULT N°01: « MAXI PROBE 1 »

```

E R R O R       N ° : 0 1
M A X .   P R O B E   N ° 1

```

INCIDENT: The probe used to check the temperature of the water in the chamber is disconnected or defective.

ACTION: Check the electric connection and the state of the probe.

*This message can also appear for **the probes 2, 3, and 4.***

FAULT N°05: « T° PROBE 1 HIGH »

```

E R R O R       N ° : 0 5
T °   P R O B E   1   H I G H

```

INCIDENT: During the re-circulation phase, the probe temperature is over the regulation temperature range.

This alarm can only appear if pre-set temperature is 70°C minimum.

ACTION: Check the electric connection and the state of the probe.

FAULT N°06: « T° PROBE 1 LOW »

E	R	R	O	R	N	°	:	0	6	
T	°	P	R	O	B	E	1	L	O	W

INCIDENT: During the re-circulation phase, the probe temperature is below the regulation temperature range.

This alarm can only appear if pre-set temperature is 70°C minimum.

ACTION: Check the electric connection and the state of the probe.

FAULT N°09: « T° BASIN TOO HOT »

E	R	R	O	R	N	°	:	0	9			
T	°	B	A	S	I	N	T	O	O	H	O	T

INCIDENT: During the drying phase, the temperature read by the probe is with the top of the regulation period.

ACTION: Check the electric connection and the state of the probe.

FAULT N°12 – « FILLING CHAMBER »

E	R	R	O	R	N	°	:	1	2				
F	I	L	L	I	N	G	C	H	A	M	B	E	R

INCIDENT: During the filling phase, the washer-dryer has not reached its level of water before the development of the normal filling time, defined in factory.

ACTION: Check the openings of the taps, the state of water arrival tubes and filters.

FAULT N°13 – « WATER HEATING »

E R R O R N ° : 1 3
W A T E R H E A T I N G

INCIDENT: During the heating phase, this message appears if the temperature increase is not enough rapid (8°C for 8 minutes heating).

ACTION: Check the electric connection, the steam valve (steam heating option), the pressure of the steam circuit (steam heating option) and the safety thermal cut-out close to heating elements.

FAULT N°14: « HEATING EXCESS »

E R R O R N ° : 1 4
H E A T I N G E X C E S S

INCIDENT: During the heating phase, this message appears if the basin temperature exceeds the programmed temperature by 20°C.

ACTION: Check that the incoming water temperature does not exceed the programmed setpoint temperature (to 20°C).

CONTACT A MAINTENANCE TECHNICIAN.

FAULT N°15 – « DRAINING FAULT »

E R R O R N ° : 1 5
D R A I N I N G F A U L T

INCIDENT: The washer has not been fully emptied at the end of the normal emptying time, defined in factory.

ACTION: Check that there is no restriction on the emptying line, that the emptying pump (or the valve) and its pipes are not blocked and that the chamber filters are not clogged.

FAULT N°16 – « CONDUCTIVITY PROBLEM »

E R R O R # : 1 6
C O N D U C T . P R O B L E M

For washers equipped with Conductivity meter Monitor Option

INCIDENT: During final rinse, water quality is not satisfactory. The water conductivity can be checked on the ticket printer.

ACTION: Check if program is well adapted to washed items, water quality, conductivity-meter setting or probe connecting.

FAULT N°19 – « REFILL FAULT »

E R R O R N ° : 1 9
R E F I L L F A U L T

INCIDENT: During the re-circulation phase, time to level water inside the basin exceeds 90 seconds.

ACTION: Check the filling pressurestat, the presence of a leak on the re-circulating pump, the draining pump or the connecting hoses of the hydraulic system.

FAULT N°20 – « PUMP PRIMING »

E R R O R # : 2 0
P U M P P R I M I N G

INCIDENT: During the filling phase, the machine has not achieved proper water level for pump priming.

ACTION: Check the water supply, hoses, filter screens, and valves.

FAULT N°24 – « POWER INTERRUPTION » IF CYCLE AUTORESTART NON SELECTED

```

  E R R O R      N ° : 2 4
P O W E R      I N T E R U P T .

```

INCIDENT: Previous cycle has been stopped by a power interruption

ACTION: Start again the washing cycle.

FAULT N°25 – « POWER INTERRUPTION » IF CYCLE AUTORESTART SELECTED

```

  E R R O R      N ° : 2 5
P O W E R      I N T E R U P T .

```


INCIDENT: Previous cycle has been stopped by a power interruption

ACTION: Start again the washing cycle or start the washing cycle at the beginning of the sequence in progress when power has been interrupted.

```

( C )          - > S T O P
( S T A R T ) - > C O N T I N U

```

Press on key 

```



EEPROM BURNING
IN PROGRESS


```

```

  E R R O R      N ° : 2 5
P O W E R      I N T E R U P T .

```

Press simultaneously on keys  and 
to reinitialised washer

Press on key 

```

XX CYCLE RESUME
LOWR BASIN : 20 ° C

```

Washing cycle start again

FAULT N° 30 – « OPENED DOOR »

E R R O R # : 3 0
O p e n e d d o o r

INCIDENT: During the cycle, if the door is not correctly closed.

ACTION: Check the position of the handle or the state of the door switches.

FAULT N°35 – « CYCLE POINTERS »

E R R O R N ° : 3 5
C Y C L E P O I N T E R S

INCIDENT: The cycle is stopped following an error of the software (bug).

ACTION: Start again the washing cycle



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LANCER INDUSTRIE
30 bd. de l'Industrie - Z.I. Pahin
31170 Tournefeuille - FRANCE
Tél. +33 (0)5 61 15 11 11
Fax : +33 (0)5 61 15 16 16
lancersite@lancer.fr - www.lancer.fr

LANCER USA INC.
3543 State Rd 419
Winter Springs, FL 32708 USA
Tél. +1 407 327 8488
Fax : +1 407 327 1229
sales@lancer.com - www.lancer.com

LANCER UK LTD.
1 Pembroke Avenue Waterbeach
Cambridge CB5 9QR - UK
Tél. +44 (0)1 223 861 665
Fax : +44 (0)1 223 861 990
sales@lancer.co.uk - www.lancer.co.uk