

SERVICE MANUAL

Flatwork ironers
50 type

04106003

NOTICE TO SERVICE PERSONNEL

INSTALLATION

Improper installation of Wascomat laundry and wet cleaning equipment can result in personal injury and severe damage to the machine.

REFER INSTALLATION TO QUALIFIED PERSONNEL!

RISK OF ELECTRIC SHOCK

The equipment utilizes high Voltages. Disconnect electric power before servicing.

The use of proper service tools and techniques, and the use of proper repair procedures, is essential to the safety of service personnel and equipment users.

REFER SERVICING TO QUALIFIED SERVICE PERSONNEL!

RISK OF PERSONAL INJURY

This equipment contains moving parts, and some components that may have sharp edges. Improper or careless service procedures may result in serious injury to service personnel.

REFER SERVICING TO QUALIFIED SERVICE PERSONNEL!

ABOUT THIS MANUAL

This manual is intended to provide service guidance to qualified service personnel.

Wascomat and its authorized dealers make no determination regarding the qualification of individuals requesting this service manual. The service provider assumes all risks inherent to the servicing of this equipment and any risks that arise as result of the lack of knowledge or ability of any person servicing this equipment.

REFER SERVICING TO QUALIFIED SERVICE PERSONNEL!

NOTE:

Improper installation or servicing of Wascomat equipment will void the manufacturer's warranty!

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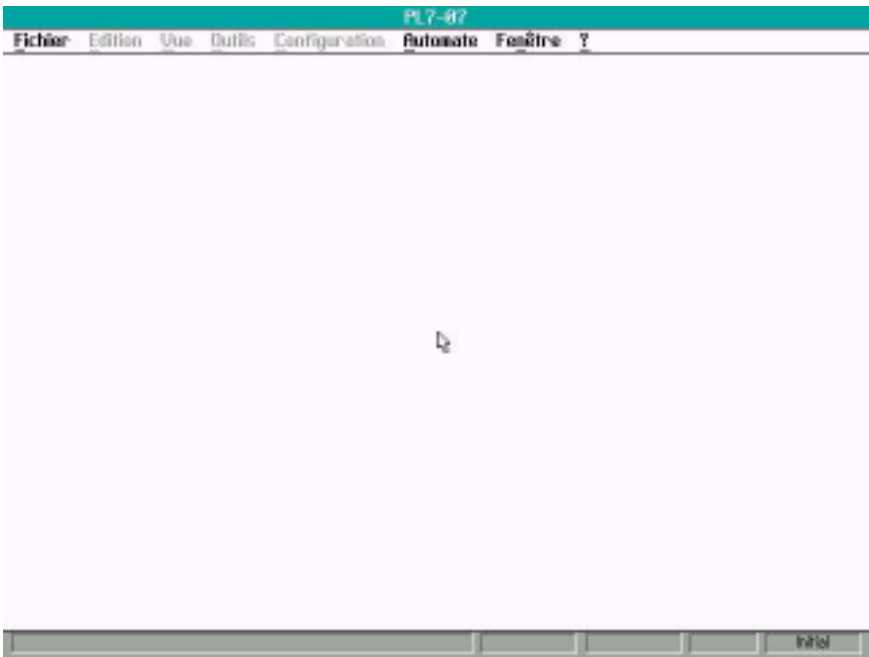
TEMPERATURE ON REGULATOR

Process to set the maxi temperature on regulator 1/5

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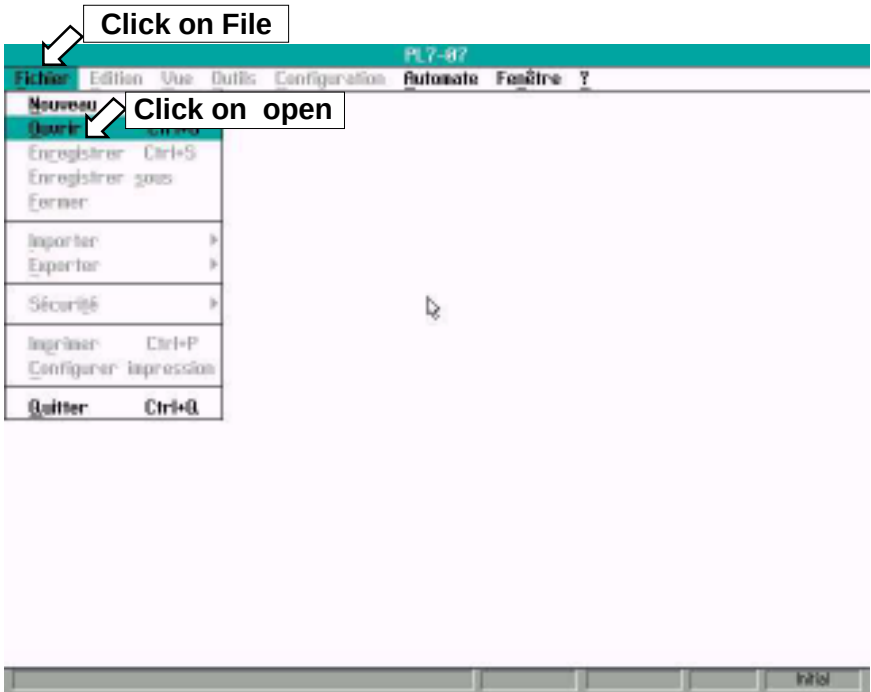
Using the software Telemecanique PL707 on a PC

On the office, click twice on the icon PL707.
The presentation page appears on screen.



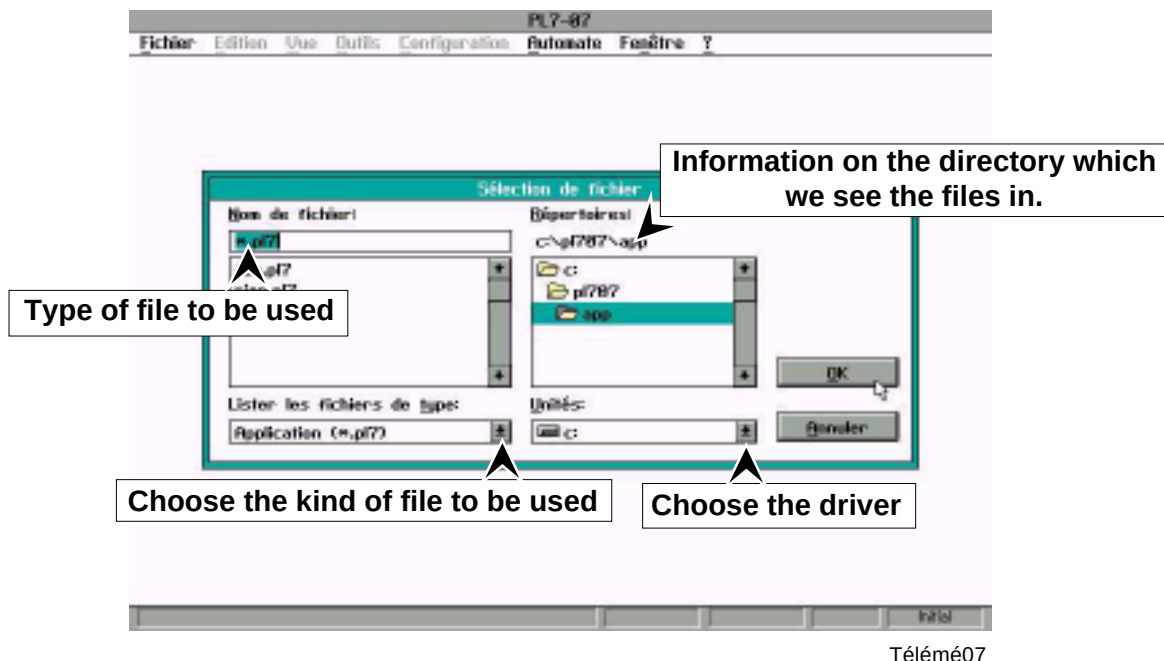
Télemé05

Opening a file

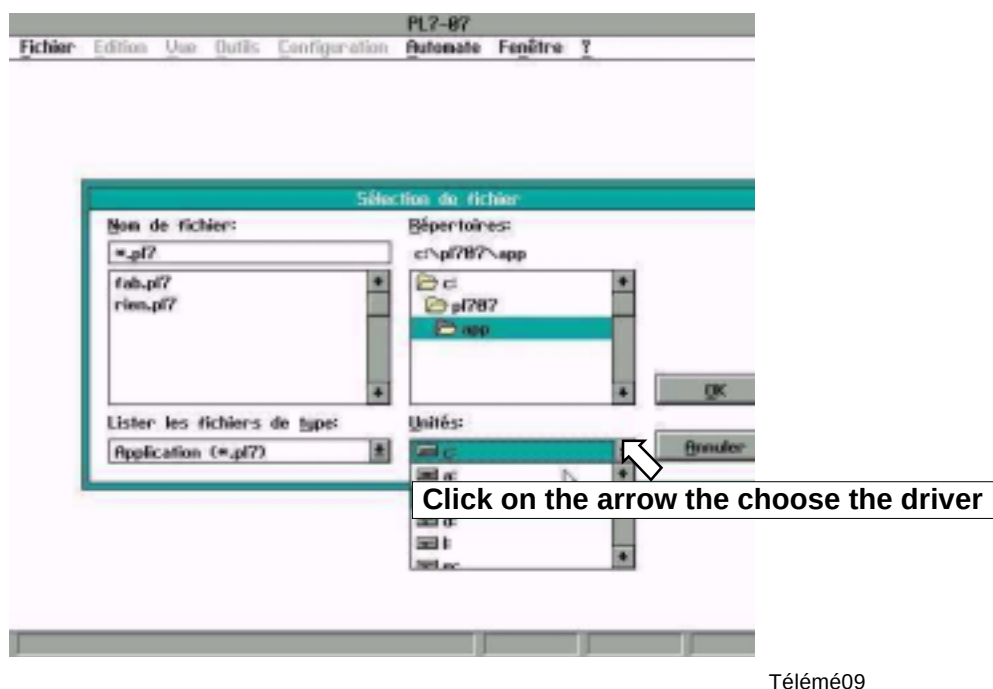


Télemé06

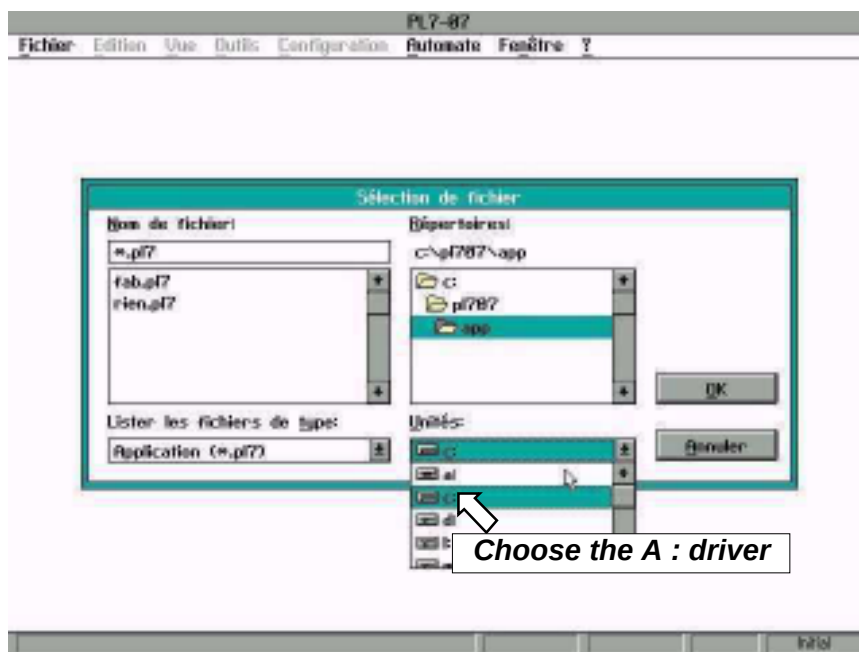
The following screen appears.



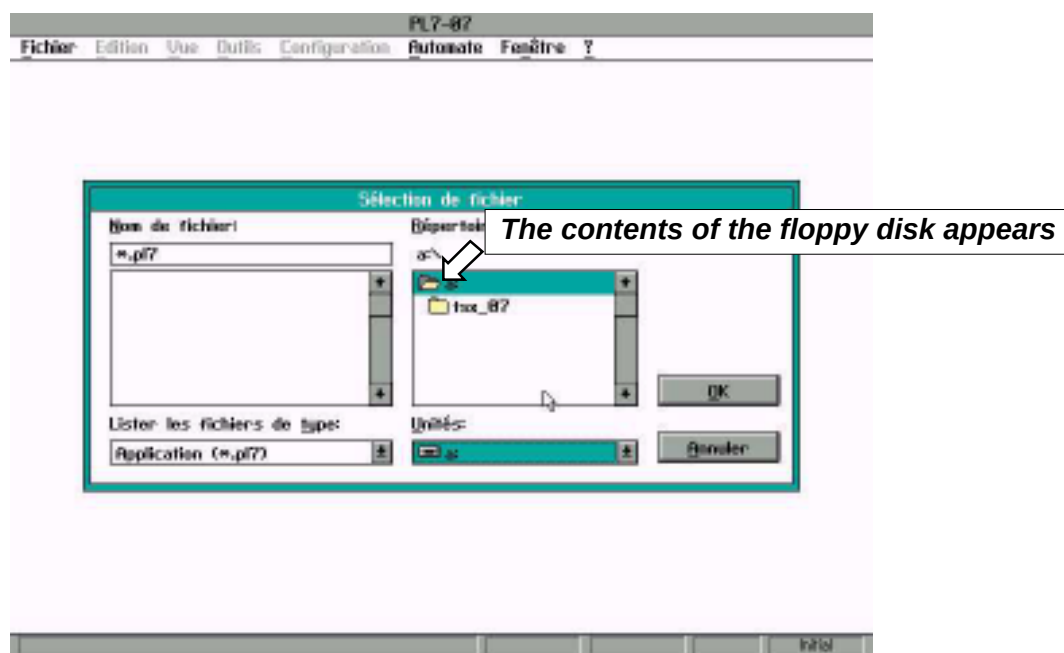
Example : how to take a file from a floppy disk



Example : using a file on a floppy disk.

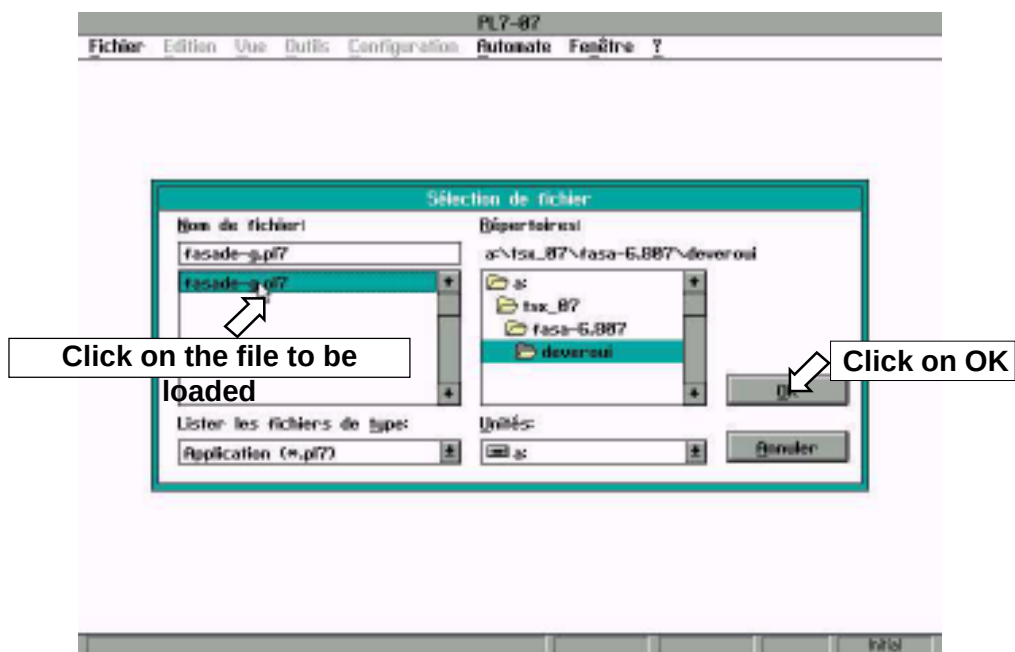


TéléMé09



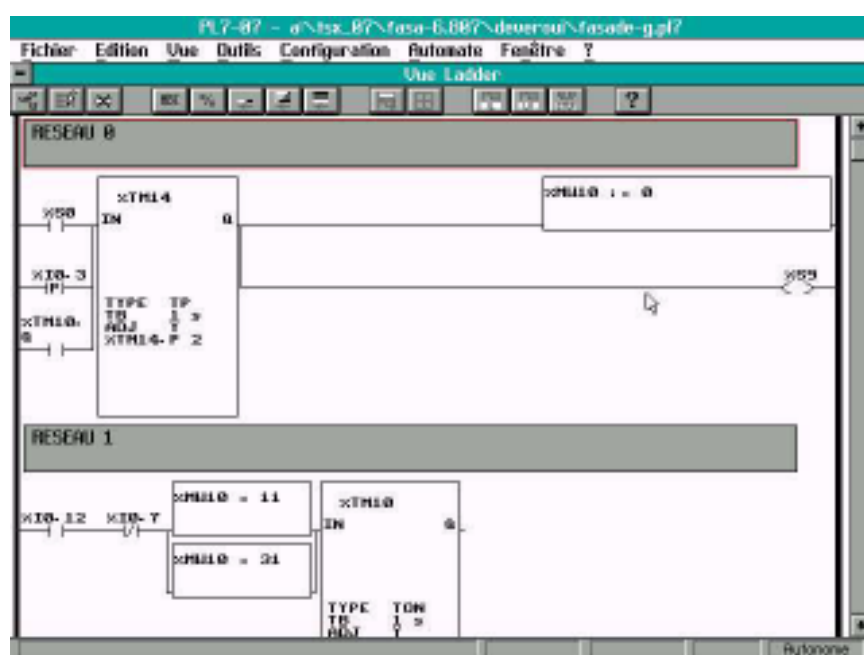
TéléMé10

Open the directory where the wished file is.



Téléme11

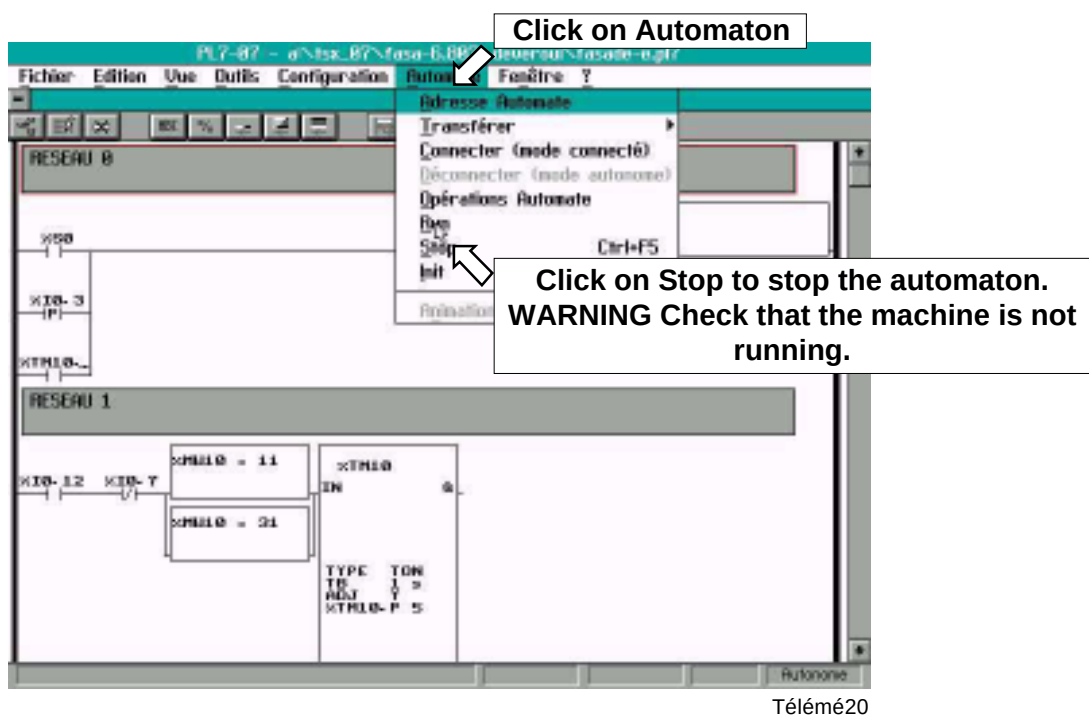
The program is displayed on screen



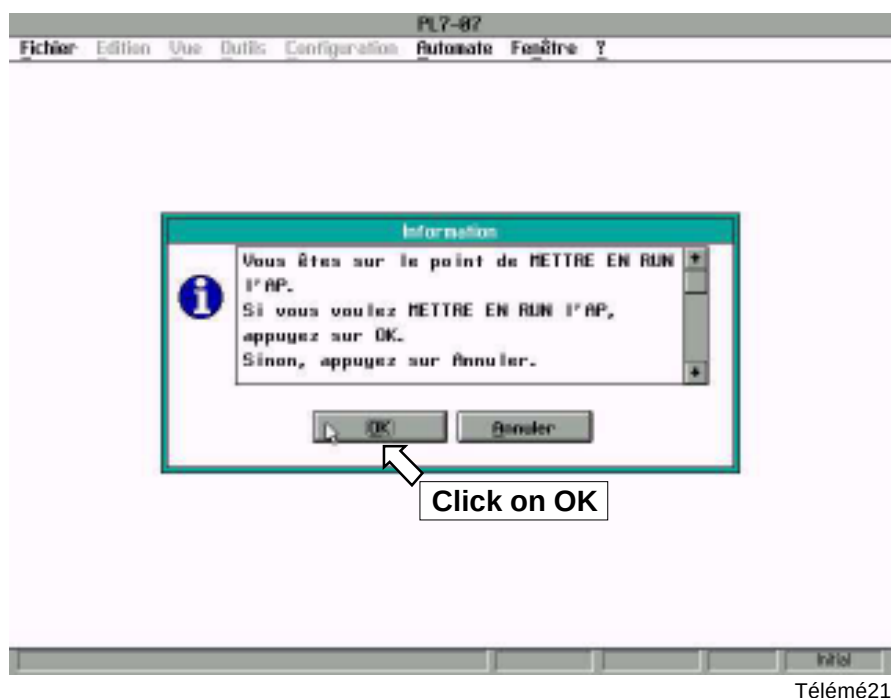
Téléme12

Stopping the automaton

Connect the automaton on the PC (round connector in the automaton, flat connector in the PC)



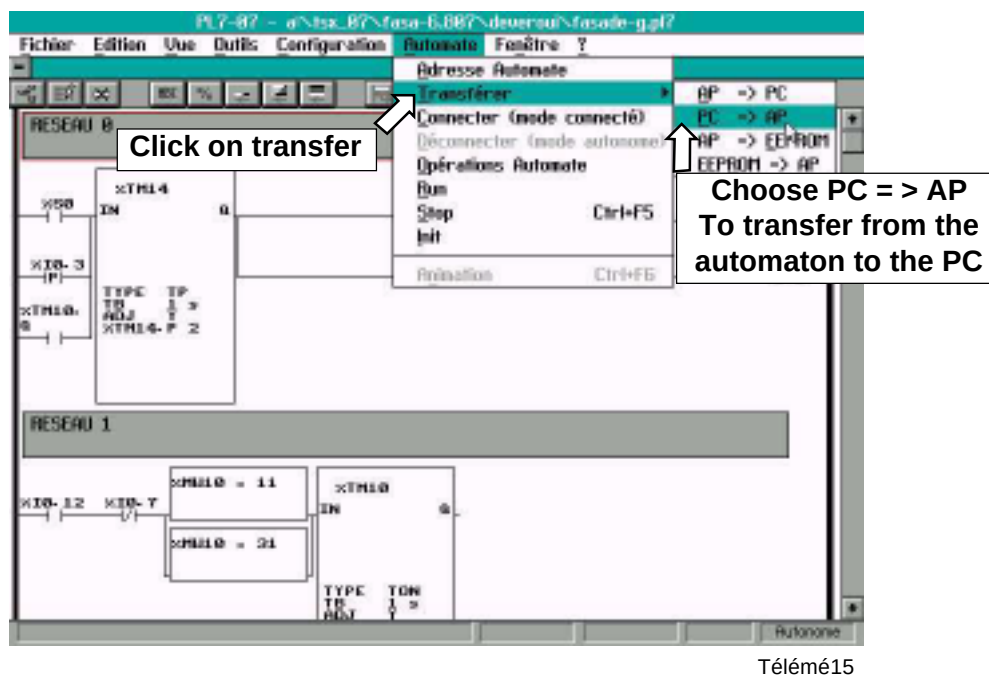
The following window appears



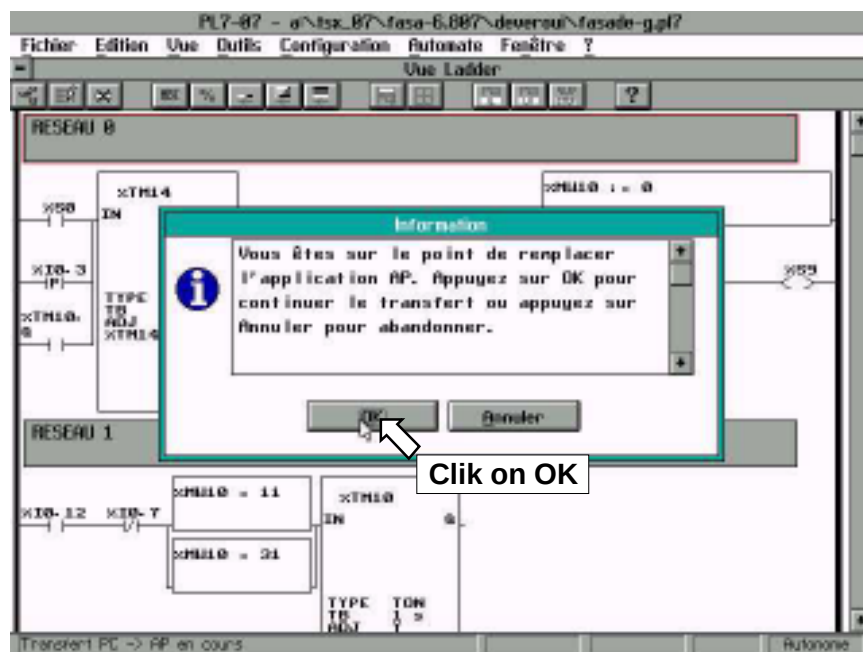
The automaton stops and the « Run » diode of the automaton is flashing.

Transfer of the file on the automaton

1. Transfers to the RAM

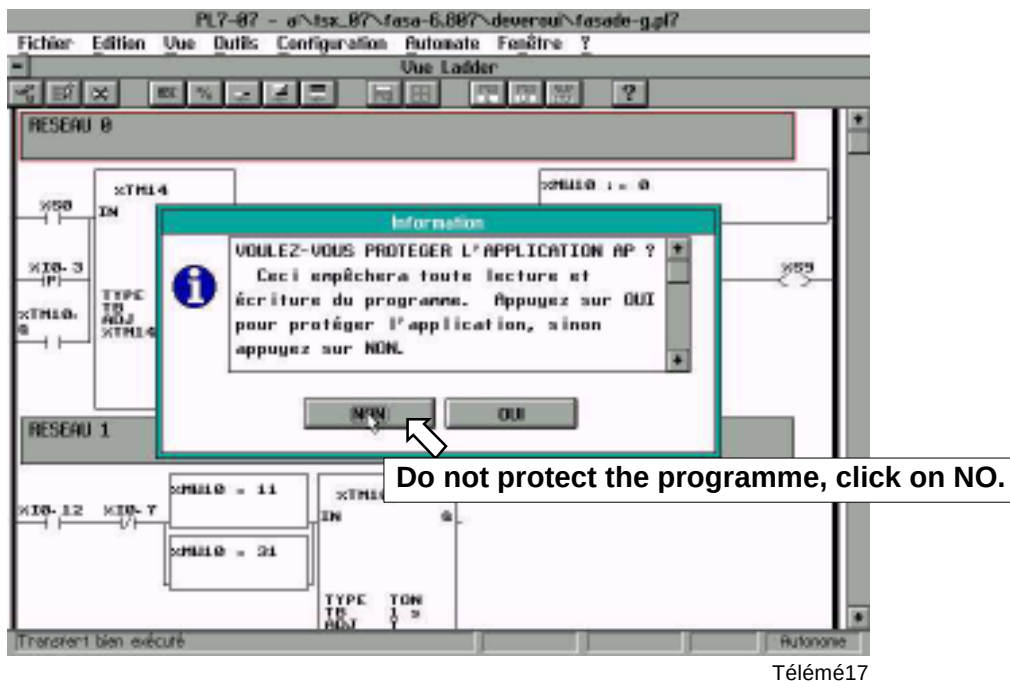


Téléme15



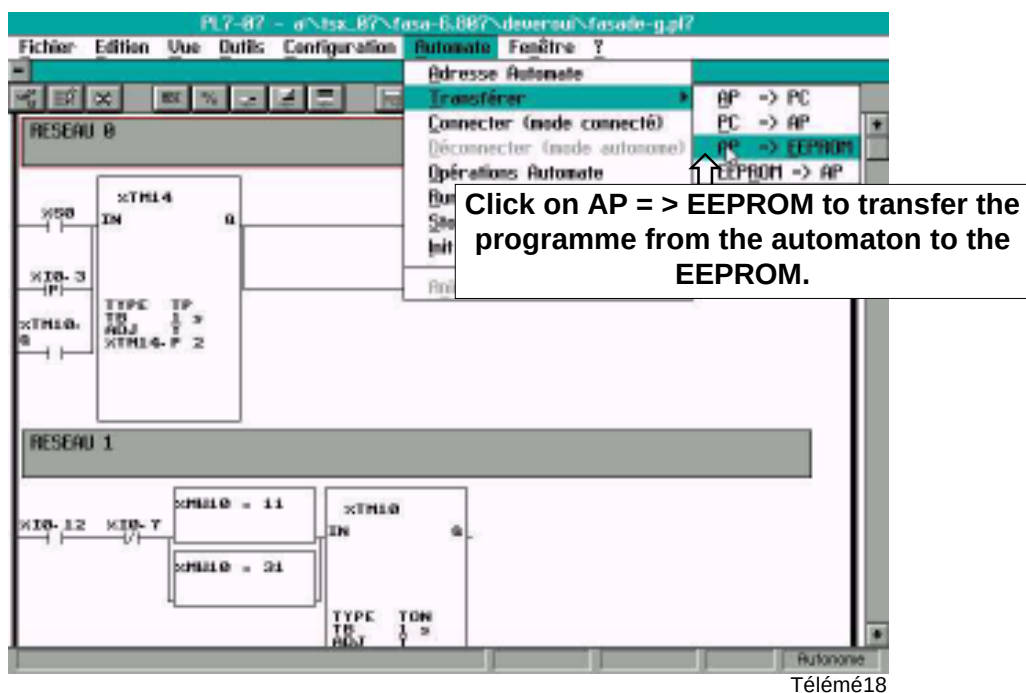
Téléme16

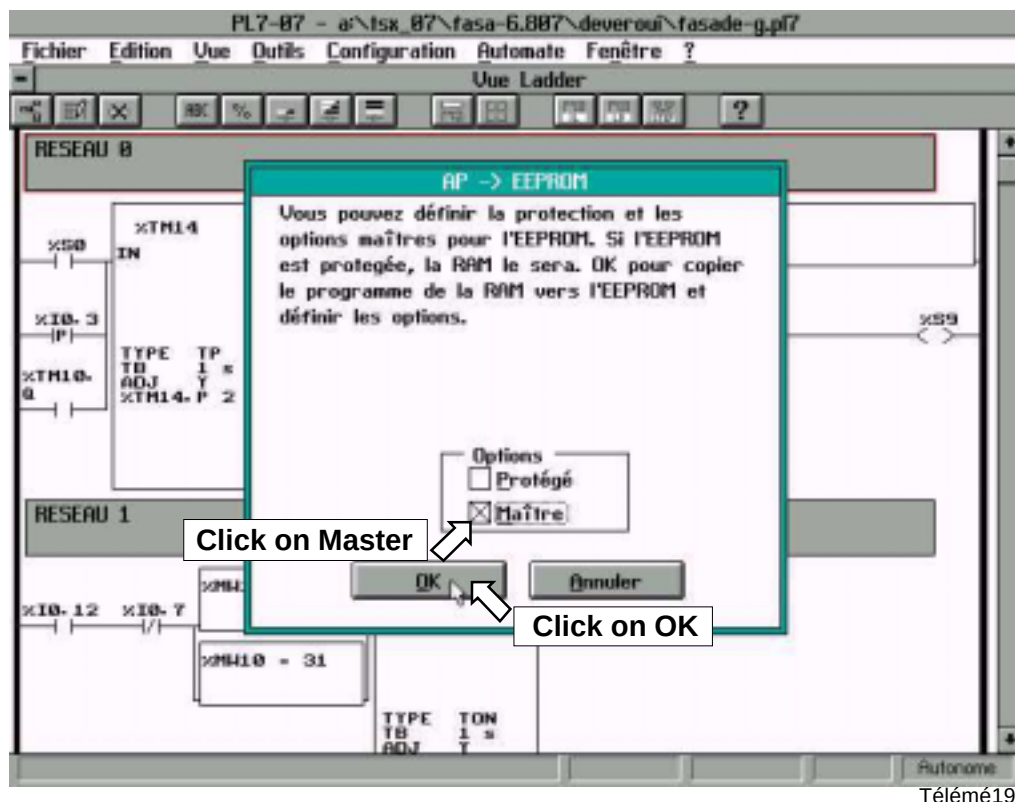
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The programme is saved on the automaton RAM.

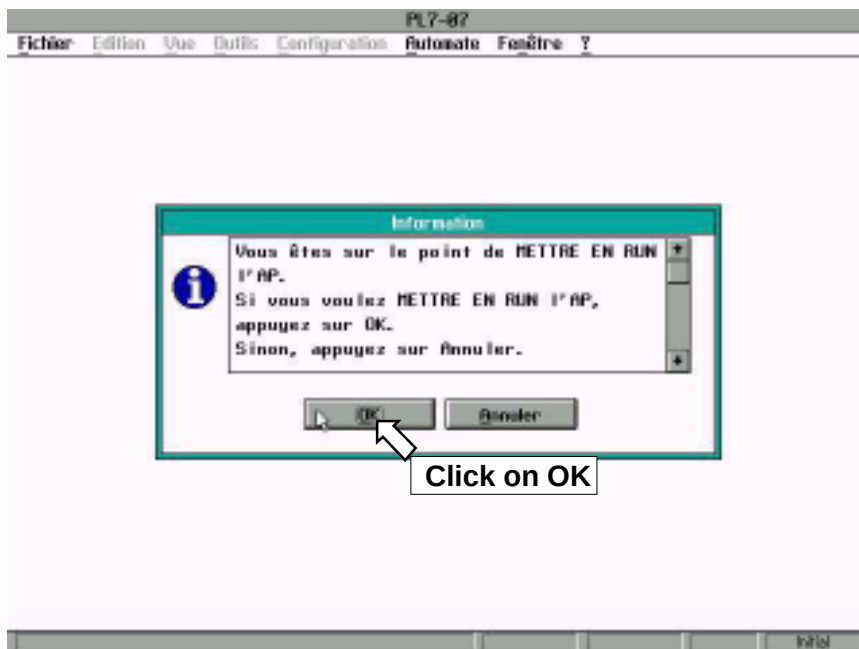
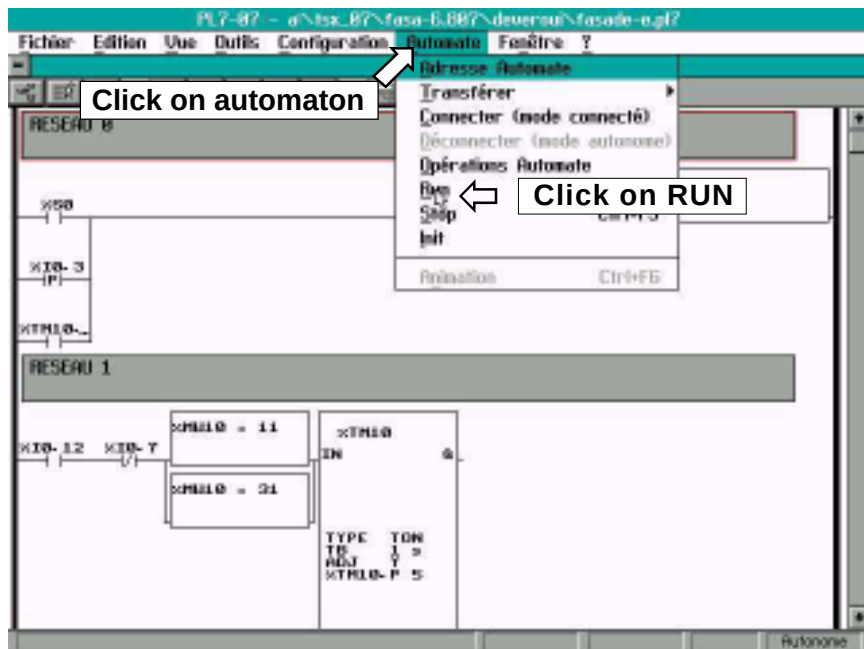
2. transfers to the ROM





The programme is saved on the EEPROM of the automaton.

Switching the automaton on.



The automaton starts to run and the diode RUN on the automaton keeps on lightening but it does not flash. The loading process is over.

PROCESS FOR IM 50 LF TSX 07 AUTOMATE PROGRAMMING

1°/ First of all save the customer's program in your hard disk :

- Select "**PLC**" and "**transfert**", choose AP ⇒ **PC** and wait few seconds.
- select "**files**" and select "**register in**" then type the name of the program that you wish and select "**OK**".

THE FOLLOWING PROCESS MUST BE DONE ONLY ONCE WHEN YOU USE THIS PROGRAM THE FIRST TIME.

- Select "**view**", select "**edit data**", "**ENTER**".
- Select "**tools**" and "**insert**", type **%MW0** and click on "**OK**".
- To save click on "**tools**" and on "**save data page**" then give a name ex.: IM50xx.dat, click on **OK**.

2°/ To measure the sheets with the PC :

- Select "**view**" select "**edit data**" enter
- Select "**tools**", select "**open data page**" and choose the file SR50xx.dat
- Select "**PLC**", select "**connected mode**" select "**PLC**", again then select "**animation**".

3°/ Feed sheets and check the measures on the screen, then select the measures of the sheets which are not folded well. See the chart of the parameters to know which one you have to modify.

4°/ Modifying of the parameters kW.....

- Select "**PLC**", select "**stop mode**" and confirm by "**OK**".
- Select "**configuration**", select "**constante**" and type number of the **kW** that you wish modify "**ENTER**", then click once on decimal, and choose hexadecimal, "**ENTER**", and modify the value, confirm by "**OK**".
- Select "**PLC**", select "**run mode**", confirm by "**OK**".

5°/ When all modifications wished are done, transfer to the "**EEPROM**" :

- Select "**PLC**", choose "**stop**" and confirm by "**OK**".
- Select "**PLC**", choose "**disconnect**".
- Select "**PLC**", choose "**transfer**", and "**AP**" ⇒ "**EEPROM**", click on "**Master**" and confirm by "**OK**".
- Select "**PLC**", choose "**run**", and confirm by "**OK**". Don't forget to do it.

6°/ Save the final program in the hard disk :

- Select file, select "**register in**", and type a name for the program, confirm by "**OK**".

HEXADECIMAL / DECIMAL conversion table

Ten Unit ⇔ ↓	1	2	3	4	5	6	7	8	9
0	0A	14	1E	28	32	3C	46	50	5A
1	0B	15	1F	29	33	3D	47	51	5B
2	0C	16	20	2A	34	3E	48	52	5C
3	0D	17	21	2B	35	3F	49	53	5D
4	0E	18	22	2C	36	40	4A	54	5E
5	0F	19	23	2D	37	41	4B	55	5F
6	10	1A	24	2E	38	42	4C	56	60
7	11	1B	25	2F	39	43	4D	57	61
8	12	1C	26	30	3A	44	4E	58	62
9	13	1D	27	31	3B	45	4F	59	63

FOLDING PARAMETERS ADJUSTMENT

4 folds	Adjusting constants			
	% MW11 (+ % MW4 -> C4,P)	% MW12 (+ % MW5 -> C5,P)	% MW13 (+ % MW6 -> C6,P)	% MW14 (+ % MW7 -> C7,P)
Position of the folding arm	1 st fold	2 nd & 3 rd fold	4 & 5 th fold	6 th fold
900 < long. <= 950	ph KW0 15 <u>ØF</u>	pb KW0 <u>32</u> 50		
950 < long. <= 1000	ph KW1 20 <u>14</u>	pb KW1 <u>32</u> 50		
1000 < long. <= 1050	ph KW2 20 <u>14</u>	pb KW2 <u>37</u> 55		
1050 < long. <= 1100	ph KW3 20 <u>14</u>	pb KW3 <u>3C</u> 60		
1100 < long. <= 1150	ph KW4 20 <u>14</u>	pb KW4 <u>41</u> 65		
1150 < long. <= 1200	ph KW5 25 <u>19</u>	pb KW5 <u>41</u> 65		
1200 < long. <= 1250	ph KW6 25 <u>19</u>	pb KW6 <u>46</u> 70		
1250 < long. <= 1300	ph KW7 30 <u>1E</u>	pb KW7 <u>46</u> 70		
1300 < long. <= 1350	ph KW8 30 <u>1E</u>	pb KW8 <u>4B</u> 75		
1350 < long. <= 1400	ph KW9 32 <u>20</u>	pb KW9 <u>4E</u> 78		
1400 < long. <= 1450	ph KW10 32 <u>20</u>	pb KW10 <u>50</u> 80		
1450 < long. <= 1500	ph KW11 35 <u>23</u>	pb KW11 <u>50</u> 80		
1500 < long. <= 1550	ph KW12 35 <u>23</u>	pb KW12 <u>55</u> 85		
Position of the folding arm	AV -> AR	AR -> AV	AV	

6 folds	Adjusting constants				
	% MW11 (+ % MW4 -> C4,P)	% MW12 (+ % MW5 -> C5,P)	% MW13 (+ % MW6 -> C6,P)	% MW14 (+ % MW7 -> C7,P)	% MW15 (+ % MW8 -> C8,P)
Position of the folding arm	1 st fold	2 nd & 3 rd fold	4 & 5 th fold	6 th fold	
1550 < long. < = 1600	ph KW60 30 1E	ph KW13 35 23	pb KW13 41 65		
1600 < long. < = 1650	ph KW60 30 1E	ph KW14 40 28	pb KW14 41 65		
1650 < long. < = 1700	ph KW60 30 1E	ph KW15 45 2D	pb KW15 41 65		
1700 < long. < = 1750	ph KW60 30 1E	ph KW16 50 32	pb KW16 41 65		
1750 < long. < = 1800	ph KW60 30 1E	ph KW17 50 32	pb KW17 44 68		
1800 < long. < = 1850	ph KW60 30 1E	ph KW18 55 37	pb KW18 44 68		
1850 < long. < = 1900	ph KW60 30 1E	ph KW19 60 3C	pb KW19 44 68		
1900 < long. < = 1950	ph KW60 30 1E	ph KW23 65	ph KW23 44 68		
1950 < long. < = 2000	ph KW60 30 1E	ph KW24 69 45	ph KW24 45 69		
2000 < long. < = 2050	ph KW60 30 1E	ph KW25 70 46	ph KW25 46 70		
2050 < long. < = 2100	ph KW60 30 1E	ph KW26 70 46	ph KW26 4B 75		
2100 < long. < = 2150	ph KW60 30 1E	ph KW27 75 4B	ph KW27 4B 75		
2150 < long. < = 2200	ph KW60 30 1E	ph KW28 75 4B	ph KW28 50 80		
2200 < long. < = 2250	ph KW60 30 1E	ph KW29 80 50	ph KW29 50 80		
2250 < long. < = 2300	ph KW60 30 1E	ph KW30 83 53	ph KW30 53 83		
2300 < long. < = 2350	ph KW60 30 1E	ph KW31 85 55	ph KW31 55 85		
2350 < long. < = 2400	ph KW60 30 1E	ph KW32 87 57	ph KW32 57 87		
Position of the folding arm	AV -> AR	AR -> AV	AV -> AR	AV	

8 folds	Adjusting constants				
	% MW11 (+ % MW4 -> C4,P)	% MW12 (+ % MW5 -> C5,P)	% MW13 (+ % MW6 -> C6,P)	% MW14 (+ % MW7 -> C7,P)	% MW15 (+ % MW8 -> C8,P)
Position of the folding arm	1 st fold	2 nd & 3 rd fold	4 & 5 th fold	6 th fold	
2400 < long. <= 2450	ph KW60 30 1E	ph KW33 46 70	pb KW33 45 2D	ph KW34 46 70	
2450 < long. <= 2500	ph KW60 30 1E	pb KW34 46 70	ph KW35 50 32	pb KW35 46 70	
2500 < long. <= 2550	ph KW60 30 1E	ph KW36 46 70	pb KW36 55 37	pb KW37 46 70	
2550 < long. <= 2600	ph KW60 30 1E	pb KW60 50 80	ph KW38 35 23	pb KW38 50 80	
2600 < long. <= 2650	ph KW60 30 1E	pb KW60 50 80	ph KW39 40 28	pb KW39 50 80	
2650 < long. <= 2700	ph KW60 30 1E	pb KW60 50 80	ph KW40 45 2D	pb KW40 50 80	
2700 < long. <= 2750	ph KW60 30 1E	pb KW60 50 80	pb KW41 50 32	pb KW41 50 80	
2750 < long. <= 2800	ph KW60 30 1E	pb KW60 50 80	ph KW42 55 37	pb KW42 50 80	
2800 < long. <= 2850	ph KW60 30 1E	pb KW60 50 80	ph KW43 60 3C	pb KW43 50 80	
2850 < long. <= 2900	ph KW60 30 1E	pb KW60 50 80	ph KW44 65 41	pb KW44 50 80	
2900 < long. <= 2950	ph KW60 30 1E	pb KW60 50 80	ph KW45 70 46	pb KW45 50 80	
2950 < long. <= 3000	ph KW60 30 1E	pb KW60 50 80	ph KW46 72 48	pb KW46 53 83	
3000 < long. <= 3050	ph KW60 30 1E	pb KW60 50 80	ph KW47 77 4D	pb KW47 53 83	
3050 < long. <= 3100	ph KW60 30 1E	pb KW60 50 80	ph KW48 80 50	pb KW48 55 85	
3100 < long. <= 3150	ph KW60 30 1E	pb KW60 50 80	ph KW49 82 52	pb KW49 55 85	
3150 < long. <= 3200	ph KW60 30 1E	pb KW60 50 80	ph KW50 85 55	pb KW50 57 87	
Position of the folding arm	AV -> AR	AR -> AV	AV -> AR	AR -> AV	

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Folding

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10 folds	Adjusting constants					
	% MW11 (+ % MW4 -> C4,P)	% MW12 (+ % MW5 -> C5,P)	% MW13 (+ % MW6 -> C6,P)	% MW14 (+ % MW7 -> C7,P)	% MW15 (+ % MW8 -> C8,P)	
Position of the folding arm	1 st fold "advance"	2 nd & 3 rd fold "advance"	4 & 5 th fold	6 th fold		
3200 < long. <= 3250	ph KW60 30 <u>1E</u>	pb KW60 50 <u>80</u>	ph KW51 60 <u>3C</u>	pb KW51 2D <u>45</u>	ph KW52 80 <u>50</u>	
3250 < long. <= 3300	ph KW60 30 <u>1E</u>	pb KW60 50 <u>80</u>	pb KW52 65 <u>41</u>	ph KW53 2D <u>45</u>	pb KW53 80 <u>50</u>	
3300 < long. <= 3350	ph KW60 30 <u>1E</u>	pb KW60 50 <u>80</u>	ph KW54 70 <u>46</u>	pb KW54 2D <u>45</u>	ph KW55 80 <u>50</u>	
3350 < long. <= 3400	ph KW60 30 <u>1E</u>	pb KW60 50 <u>80</u>	pb KW55 75 <u>4B</u>	pb KW56 2D <u>45</u>	pb KW56 80 <u>50</u>	
3400 < long. <= 3450	ph KW60 30 <u>1E</u>	pb KW60 50 <u>80</u>	ph KW57 75 <u>4B</u>	pb KW57 32 <u>50</u>	ph KW58 80 <u>50</u>	
3450 < long. <= 3500	ph KW60 30 <u>1E</u>	pb KW60 50 <u>80</u>	pb KW58 80 <u>50</u>	pb KW59 32 <u>50</u>	pb KW59 80 <u>50</u>	
Position of the folding arm	AV -> AR	AR -> AV	AV -> AR	AR -> AV	AV -> AR	

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TROUBLE SHOOTING



50 type FLATWORK IRONERS

THE FOLDING DOES NOT WORK



■ Check the feeding photocell :10.1 on PLC

■ Check the folding photocell :10.7 on PLC

■ Check if the eject roll is in upper position

TS002



■ Check the rotation sensor : IO.5 on PLC

■ Check the clutch : O0.0

TS003

THE EJECTING ROLL DOES NOT GO DOWN TO EJECT A SHEET



■ Check the
folding
photocell :I0.7

THE FOLDING SYSTEM DOES NOT WORK PROPERLY



- Feed the sheet before the feeding photocell

- Do a reset (switch without folding for 5 s. and switch with folding).

- Check the rotation sensor (10.5)

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THE LINEN BECOME YELLOW

- Check the temperature on different part of the cylinder.
- Check if the linen is well rinsed with phenolphthalein, the quantity of detergent must be :
 - 15 g/kg for prewash
 - 15 g/kg for wash.

OVER HEATING ON THE CYLINDER



*setting of the
temperature
regulator*

- Check if all length of the cylinder is used

TS006



- Check if the supports sensor are well stucked against the cylinder.

TS007

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THE GAS BURNER DOES NOT START PROPERLY

- Check if the fresh air inlet of the laundry, is not on front of the gas inlet of the ironer.
- Check the type of the gas and the pressure :
 - see the chart in the notice.
- Check the ignitor and the electrode.

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THE HEATING DOES NOT WORK



- Check the depressure switch, only for gas heating

- Check the safety thermostat

- Check the temperature regulator

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THE IRONER STOP SUDDENLY

- Check all safety (see the electric diagram).
 - motor over heating.
 - hand safety on the feeding table.
 - inverter switch fault.

Installing process :

PROCESS TO LOAD PARAMETERS IN CONVERTERS

MITSUBISHI CONVERTER

Motion motor

Référence FREQUROL FR - S520S - 0,4 kW

- Turn the power off.
- Disconnect the bridge between STF and PC on the Mitsubishi.
- Turn the power on.
- Push on PU/EXT on the Mitsubishi, the led is on.
- Push on "Mode" and turn the button - or + to choose the parameter that you wish modify.
- Push on SET to see the value and turn the button to modify the value.
- Push on SET to confirm the new value.
- The parameters C are after the parameter P99.
- After the modification turn the power off and connect the bridge between STF and PC.
- When the motor is running you can see the frequency on the Mitsubishi, if you push on SET you can see the motor intensity.

Settings to be modified in comparison with factory settings :

- Pr 0 = 6
- Pr 1 = 50 (SR) ; 35 (SRP)
- Pr 7 = 1
- Pr 8 = 1
- Pr 9 = 2.4
- Pr 30 = 1
- Pr 38 = 24 (5.5 m) ;
35 (8 m) ; 50 (12 m)
- Pr 72 = 15
- C2 = 8
- Pr 79 = 2

Mitsubishi converter



D0838

TELEMECANIQUE CONVERTER

Motion motor

Référence ALTIVAR 08 ATV- 08U09M2 - 0,37 kW

- Turn the power off.
- Disconnect the bridge between Li1 and 15V of the converter.
- Turn the power on.
- On the display must be RDY.
- With the $\downarrow$ button choose the parameter that you wish to modify.
- Push on MODE to see the value.
- Push on $\downarrow$ or $\uparrow$ to change the value.
- Push on MODE to confirm the new value.
- After the modification turn the power off and connect the bridge between LI1 and + 15 V.

Settings to be modified in comparison with factory settings :

- ACC = 1
- DEC = 1
- LSP = 8
- HSP = 24
- ith = 2.4
- L2A = YES
- CrI = 30
- SPL = 0
- Atr = USF

Telemecanique converter



D0840

PROCESS TO SET THE MAXI TEMPERATURE ON REGULATOR

Gas heating

- Push simultaneously on ▲ and ▼ until "PA" is displayed.
- Push simultaneously on "SET" and on ▼ until -19 °C is reached. The password is displayed.
- Push simultaneously on ▲ and ▼ until "70" is displayed.
Push on ▲ to see "rA2".
- Push simultaneously on "SET" and ▲ to adjust at 170 °C.
- Wait for 30s or push simultaneously on ▲ and ▼ and push on "SET" to exit.

Control panel



