



Service Manual

Washing machine

Frontloader

AWM 5120

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	Family	SC1

Technical data**Dimensions**

Height	85	cm
Width	59.5	cm
Depth	60	cm

Weight

Without packing	73	kg
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Main Connection

Voltage	230	V
Frequency	50	Hz
Power consumption	2.3	kW
Fuse rating	10	A

Drum

Volume	42	l
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Capacity of dry laundry

Cotton/coloured	4.5	kg
Cotton rapid	3	kg
Cotton short	4.5	kg
Easy care	2	kg
Easy care rapid	1.5	kg
Easy care short	2	kg
Delicate	1.5	kg
Wool	1	kg

Water Level

Level 1		
Switching point	60± 5	mmWc
Switching back point	35± 5	mmWc

Overflow	300 ± 20	mmWc
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Water level inside the drum

(Only switching level inside the drum)

Level 1	25 - 39	mm
Overflow	267 - 306	mm

Nominal currents

Contacts		
11 - 12	4 (4)	A
11 - 14	16 (4)	A
11 - 16	1 (1)	A

Contact system		
11 - 12 - 14	spring contact	
11 - 16	sliding contact	
Damping system	no	

Door lock

Lock time (20 °C)	3 - 6"	
Unlock time	60 - 90"	
Voltage	230	V
Nominal current:		
Contact 4 - 5	16 (4)	A

Heating element

Kind of heating	Tubular heating element with NTC - sensor	
Nominal Voltage	230	V
Nominal power	2050	W
resistance R 25	22 - 28	Ω
Resistance NTC :		
0°C	35.9	kΩ
30°C	9.7	kΩ
40°C	6.6	kΩ
50°C	4.6	kΩ
60°C	3.2	kΩ
70°C	2.3	kΩ
95°C	1.1	kΩ

Inlet valve:

Water temperature	60	°C
Rated flow <1 bar	8	l/min
Pressure range	0.5 - 10	bar
Nominal voltage	220 / 240	V
Frequency	50	Hz
Starting voltage:		
< 6 bar	160	V
6 - 10 bar	170	V
Nominal current	35	mA
Nominal power	6	VA
Nominal (20 °C)	3.4 - 4.5	kΩ

Drain pump (synchronous)

Nominal Voltage	230	V
Nominal current	0.3	A
Nominal power	34	W
Frequency	50	Hz
Resistor (coil)	155	Ω ± 7%
Motor protection	yes	
Capacity(1,25m height)	14± 2	l/min

Technical data

Program timer

Type	SC1
Timer basic	4619 712 52201
Timer programmed	4619 744 80321
Nominal voltage	230 V
Frequency	50 Hz
Detergent dispenser	3
Spin speed	1200 rpm

Connector

(OA4.1 - OA4.2	5. Option
OA4.3 - OA4.4	6. Option
OB4.1 - OB4.2	3. Option
OB4.3 - OB4.4	4. Option
OC4.1 - OC4.2	1. Option
OC4.3 - OC4.4	2. Option
SLT3.1 - SLT3.3	Temp.selector
SLS4.1 - SLS4.4	Spin speed selector
VCF3.1 - VCF3.3	Valve (cold water)
VHF3.1 - VHF3.3	Valve (hot water)
Pi5.1 =	negative supply
Pi5.2 =	data
Pi5.3 =	clock
Pi5.4 =	positive supply
PL3.1 - PL3.3	Pilot lamp

Connector

M7.1 - M7.7	Motor
DP2.1 - DP2.2	Pump
AQS2.1 - AQS2.2	Aquastopswitch
SET2.1 - SET2.2	NTC
DSS3.1 - DSS3.3	Door switch
PR2.1 - PR2.2	Pressostat
Single connector	
HE2.1 - HE2.2	Heating element
PS2.1 - PS2.2	Pressostat
SM3.2 - SM3.3	mains switch (3 fold connector)

Program 32 positions

	Cotton/ coloured	Easy care	Delicate	Wool	Silk
Pre wash	02 - 06	03 - 06	04 - 06	-	-
Main wash	07 - 21	12 - 21	14 - 21	17 - 21	18 - 21
Rinse	22 - 28	22 - 28	22 - 28	22 - 28	22 - 28
Spin	29 - 31	29 - 31	29 - 31	29 - 31	29 - 31
Stop	32	32	32	32	32

Ambient temperature	up to 70 °C
Storage temperature	up to 85 °C
Wash speed	54 rpm
Ramp speed	95 rpm
Spin speed	1200 rpm

Resistance (at the selector) :

1160 rpm	4.7	kΩ
960 rpm	3.6	kΩ
780 rpm	2.7	kΩ
580 rpm	1.8	kΩ
440 rpm	1.1	kΩ
95 rpm	0.68	kΩ
0	0	

Without resistor (on push button switch)

released	1160	rpm
pushed	580	rpm

Output

Motor	M7.6 - DSS 3.2 > 40 V
Aquastop	AQ2.2 - DSS 3.2 230 V
in pump step	AQ2.1 - DSS 3.2 230 V
NTC	not measurable
Pump	DP2.1 - DP2.2 230 V
Doorlock	DSS3.1 - DSS 3.3 230 V
Pressostat	E4 - E2 230V
- empty	PR2.1 - E2 230 V
- full	PR2.2 - E2 230 V
Valve (Rast 2,5)	V2.1 - V2.2 >170 V
Options	not measurable

Motor

Type	MCA 45/ 64 - 148 t.f. WHE 4
Belt ratio	i = 1: 13.1

Resistance contacts

6 - 7	68.7	Ω ± 7%
4 - 5	2.00	Ω ± 7%
2 - 3	2.07	Ω ± 7%
1 - 3	1.32	Ω ± 7%

Technical data

Radio interference supression

Type	ISKRA - KPB 7325	
Nominal voltage	230	V
Nominal capacity	250nFX1 + 2 x 22 nFY2± 20%	
Derivation current	≥ 4.15 mA(2x2.075mA) at 250V 50Hz	
Nominal resistance 1MΩ	0.6± 5%	W

Temperature selector

Positions	7	
Nominal voltage	5	V
Value of resistors ± 5%:		
1 -2 - 3	internal shunt	
4 - 6	internal shunt	
5 - 6	Position 1	<10 Ω
	Position 2	0.68 kΩ
	Position 3	1.10 kΩ
	Position 4	1.80 kΩ
	Position 5	2.70 kΩ
	Position 6	3.60 kΩ
	Position 7	4.70 kΩ

Push buttons

Switch mains ON/OFF	SM	
Switch rinse stop	SRS	OPT.1
Switch spin reduction	SSR	OPT.2

Spare part list

Model **AWM 5120**
Service No. **857051220000**
Version **857051220000**

Pos. No.	12NC Code	Description
001 0	4819 440 19716	Cabinet
002 0	4812 440 19343	Flap
011 0	4819 462 48472	Foot
021 0	4819 440 19715	Front
024 0	4819 440 19892	Panel, rear
024 1	4819 418 79837	Box hose
025 0	4812 440 19817	Traverse
030 0	4812 310 18619	Table top VBL 42 I
040 0	4812 417 18787	Hinge
050 0	4819 440 19714	Plinth
061 0	4812 466 88458	Counter weight upper
061 1	4812 466 88459	Counter weight front
061 2	4819 310 39227	Mounting kit Weight top
061 3	4819 310 39228	Mounting kit Weight bottom
081 0	4812 529 18038	Shock absorber until 1200
084 0	4812 466 58001	Silent bloc
086 2	4812 401 18412	Stopper
110 0	4812 498 18139	Handle,door white
130 0	4812 417 28047	Plate Door lock
130 1	4812 417 28048	Plate Doorlock Lower
131 0	4812 417 28046	Lock Door
131 1	4812 417 28045	Pin Door Lock
131 2	4812 492 58022	Spring Door Lock
135 1	4812 498 18137	Knob Door safety
135 2	4812 491 48004	Spring
135 3	4812 290 68153	Holder,adjust. Door Safety
140 0	4812 450 68219	Door glass
143 0	4812 440 19782	Glassdoor frame VBL WH
144 0	4812 440 19589	Frame,door glas DE-WT
191 0	4812 460 68527	Door bellow standard
191 0	4812 460 68532	Door bellow WH grease resistance
191 1	4812 492 18017	Strap
191 2	4819 530 58059	Ring
200 1	4812 418 18296	Tub 42 I
200 2	4819 418 18352	Tub
200 3	4812 520 18065	Hub cpl. 1200,48L
200 4	4812 290 88054	Clamp for tub WH
220 0	4819 418 18379	Drum
271 0	4812 358 18056	V-ribbed belt WH 1250 J5
272 0	4812 528 58027	Pulley DIAM.298
272 2	4812 532 18024	Washer
272 3	4812 505 18368	Nut M10
292 0	4812 530 58101	Gasket Tub
301 0	4812 453 19961	Control panel AWM 5120
303 0	4812 498 78102	Handle
331 0	4812 414 58104	Knob Timer
332 0	4812 513 18103	Button Options
333 0	4812 513 18104	Button on/off
335 0	4812 414 58107	Knob thermostat
339 0	4812 413 48305	Adapter f. button
341 0	4812 414 58132	Indication disc
351 0	4812 134 48243	Pilot lamp BK-SC1
400 0	4812 361 58094	Motor 1200-MCA52/WHEO
409 0	4812 362 48004	Brush,carbon motor CESET
421 0	4812 121 18142	Interf.filter 1,00 µ F

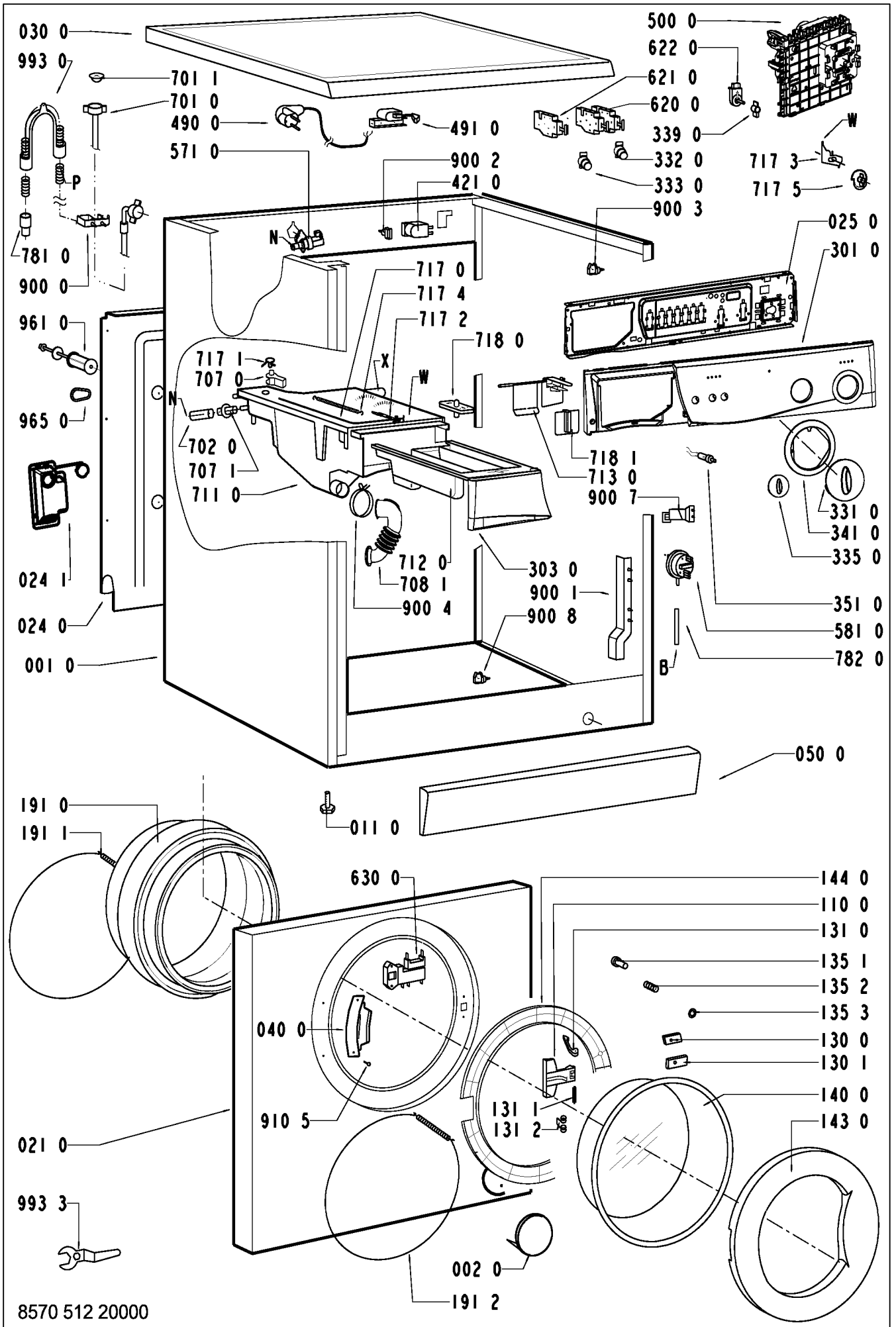
Pos. No.	12NC Code	Description
430 0	4812 310 18458	Pump SERVICE SET
451 0	4812 259 28758	Heating element
490 0	4819 321 18136	Cable,mains 2m SA
491 0	4812 321 28367	Strain relief
500 0	4812 282 18787	Timer SC1 (RH,SR)
571 0	4812 271 28375	Valve,magnet Single
581 0	4812 271 28448	Pressostat SC1 65/40
620 0	4819 410 28998	Switch options
621 0	4819 410 29004	Switch ON/OFF
622 0	4812 413 48279	Selector,switch Temp./Spin
630 0	4812 280 58026	Door lock 3 TABS
691 0	4812 282 18702	Sensor NTC (SC1)
701 0	4819 530 28848	Hose, inlet
701 1	4819 466 69704	Gasket and filter
702 0	4819 530 29019	Hose intern
707 0	4812 526 48031	Nozzle Distribution
707 1	4812 526 48028	Nozzle
708 1	4812 530 48143	Bend
711 0	4812 418 88025	Dispenser BK,WH-3CH
712 0	4812 418 68198	Drawer 3 C. VBL
713 0	4812 418 88019	Flap Detergent Container
717 0	4819 321 28092	Bowden cable
717 1	4812 321 38013	Lever , Nozzle
717 2	4812 321 38012	Holder,adjust.
717 3	4812 278 88007	Slide
717 4	4812 492 38359	Spring , Nozzle
717 5	4812 233 18004	Cam 3 C. incl. adapter WH
718 0	4812 526 48051	Siphon
718 1	4812 418 88018	Accessory
753 1	4819 418 68234	Chamber,air
754 0	4812 530 28826	Drainhose
754 1	4812 530 28832	Lock eco
754 2	4812 530 28829	Flange eco
760 0	4812 480 58085	Filter set pump
781 0	4819 530 28847	Hose,draining
782 0	4812 530 28827	Hose Pressostat
787 0	4812 530 28813	Hose
787 2	4819 401 18868	Clamp,hose
794 5	4812 530 58095	Gasket Air trap
900 0	4812 255 18204	Holder Hose outlet
900 1	4812 290 88049	Bracket
900 2	4812 290 88046	Cable clamp
900 3	4812 290 88048	Cable clamp
900 4	4819 401 18529	Clamp,hose
900 5	4812 401 18414	Clamp,hose
900 6	4812 401 18444	Support Heatingelement
900 7	4812 255 18205	Holder Pressostat
900 8	4819 401 18823	Clamp
910 0	4812 502 18383	Screw Torx T40 M 8X 25
910 5	4812 903 08014	Screw M5x12
930 0	4819 492 38139	Spring Suspension
941 0	4812 520 28004	Bearing,ball 6206
941 1	4812 520 28066	Bearing,ball 6204
941 5	4812 520 18067	Hub 1200,48L
953 0	4812 530 58099	Shaft seal 1200

Spare part list

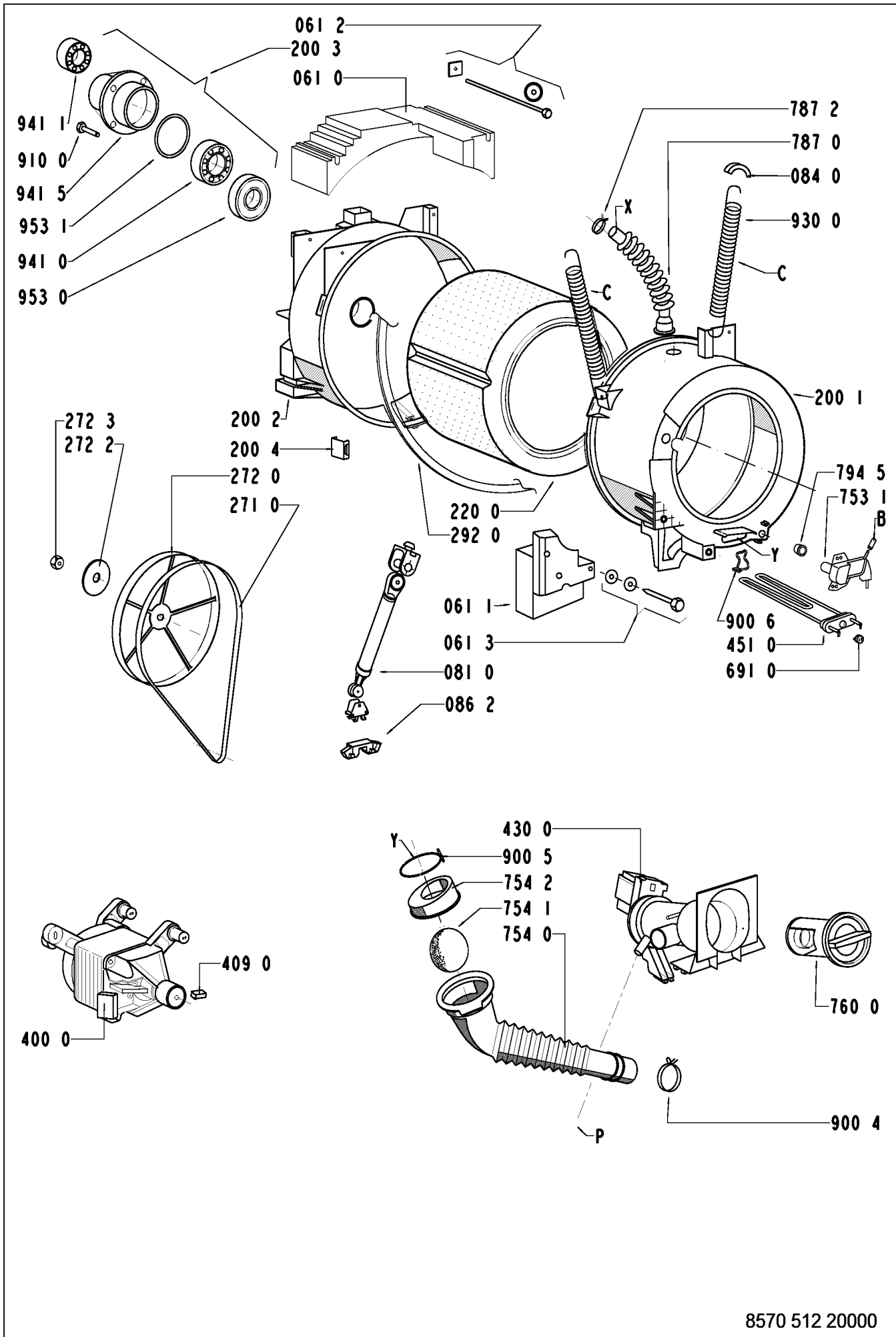
Model AWM 5120
Service No. 857051220000
Version 857051220000

Pos. No.	12NC Code	Description
953 1	4812 530 58096	O-Ring Bearing
961 0	4819 532 68829	Spacer
965 0	4812 466 68545	Cover BK/WH
993 0	4819 530 29028	Bow
993 3	4812 395 58004	Tool

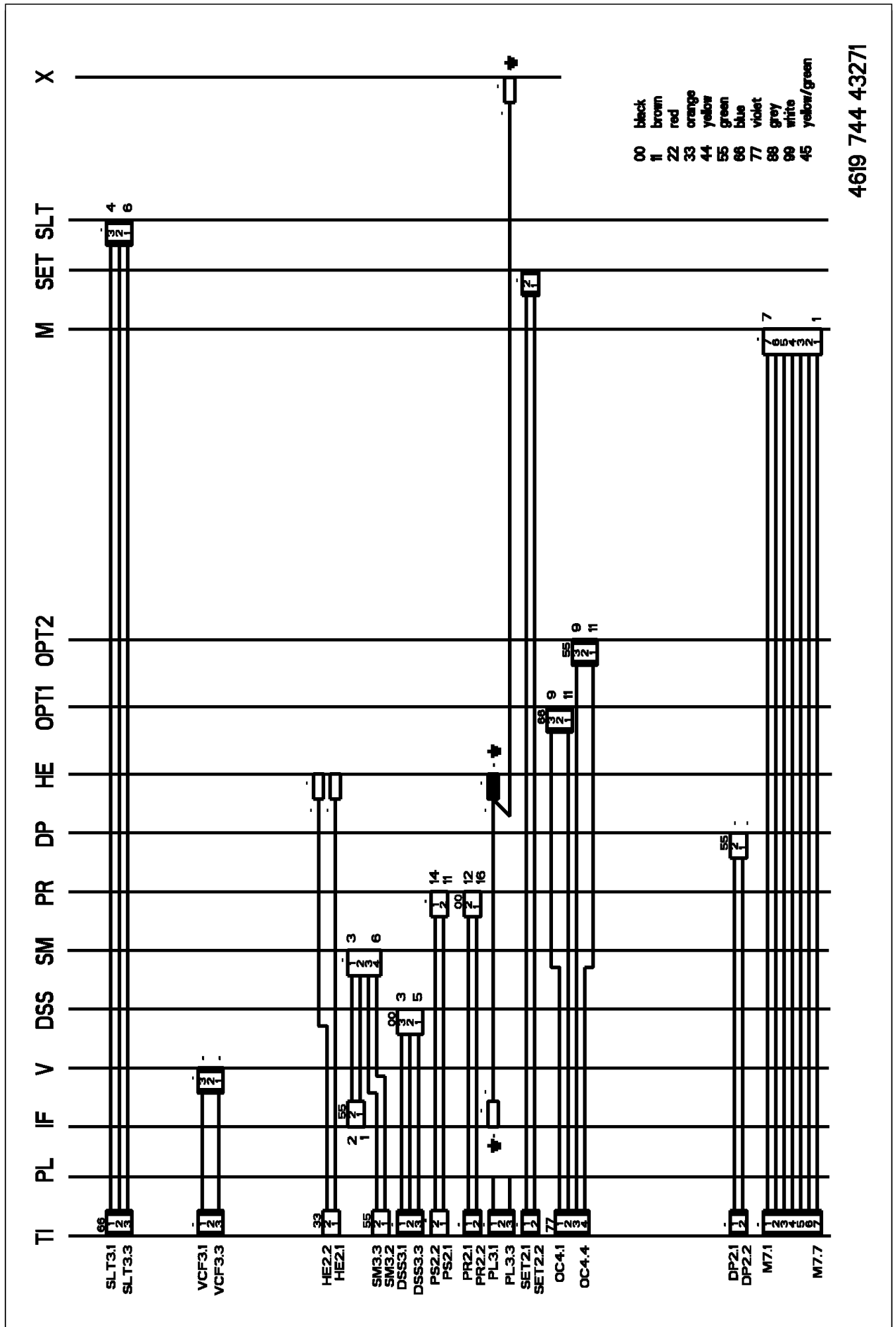
Exploded view



Exploded view

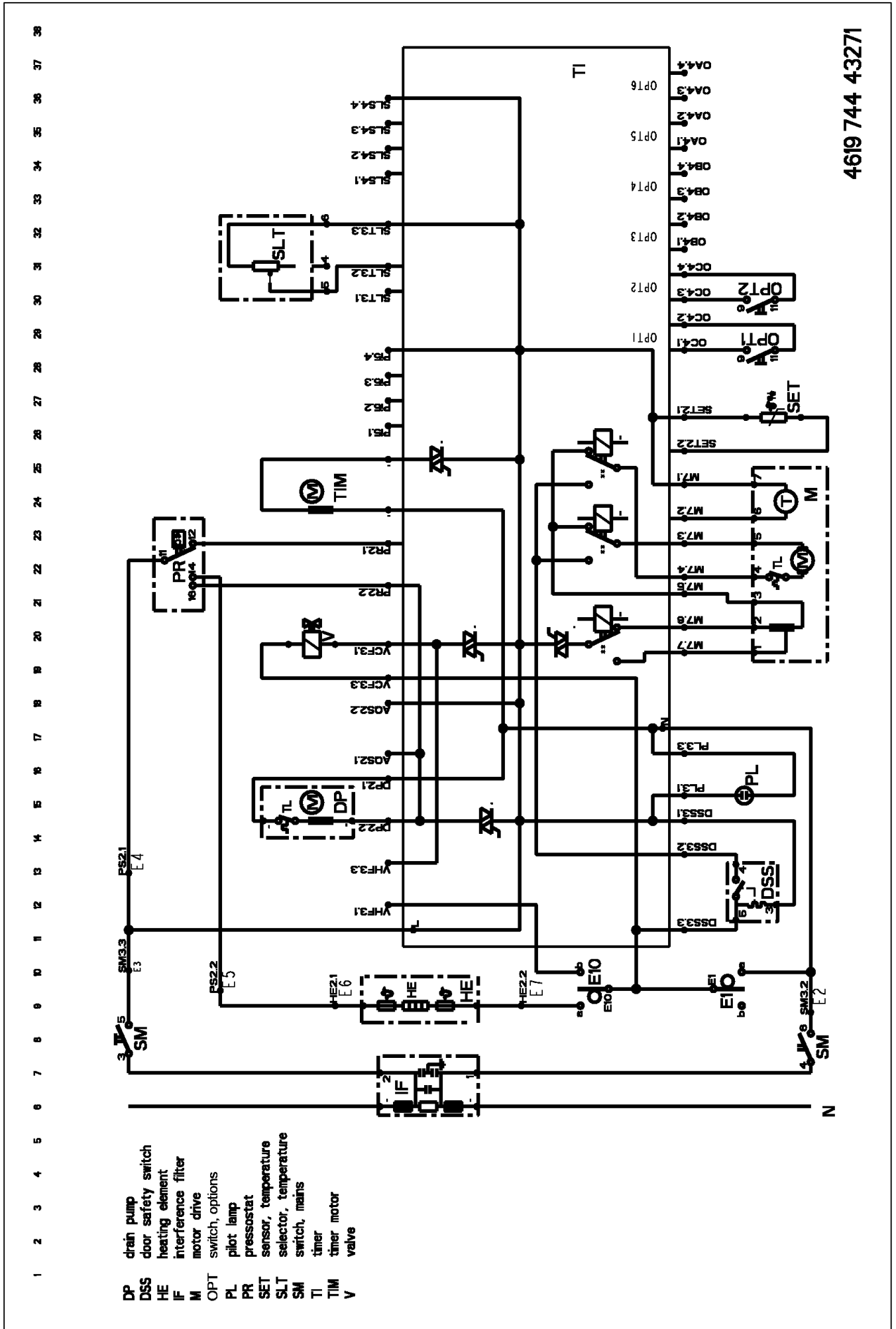


Wiring diagram



4619 744 43271

Circuit diagram



- 1 DP drain pump
- 2 DSS diode
- 3 HE heating element
- 4 IF interference filter
- 5 M motor drive
- 6 OPT switch, options
- 7 PL pilot lamp
- 8 PR pressostat
- 9 SET sensor, temperature
- 10 SLT selector, temperature
- 11 SM switch, mains
- 12 TIM timer
- 13 TIM timer motor
- 14 V valve

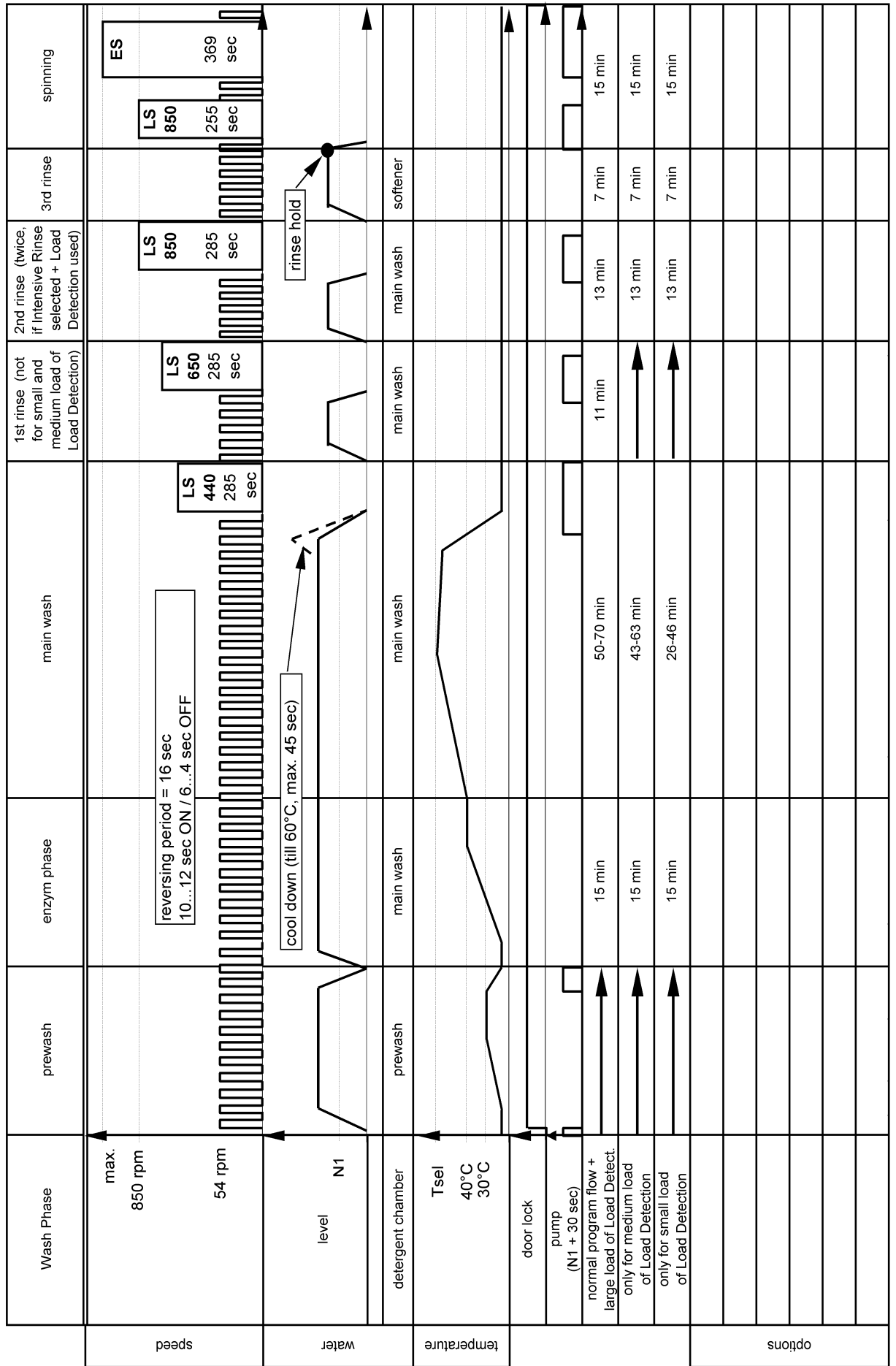
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Program chart

Delta SC1

Wash Cycle of COTTON

4619 744 61551

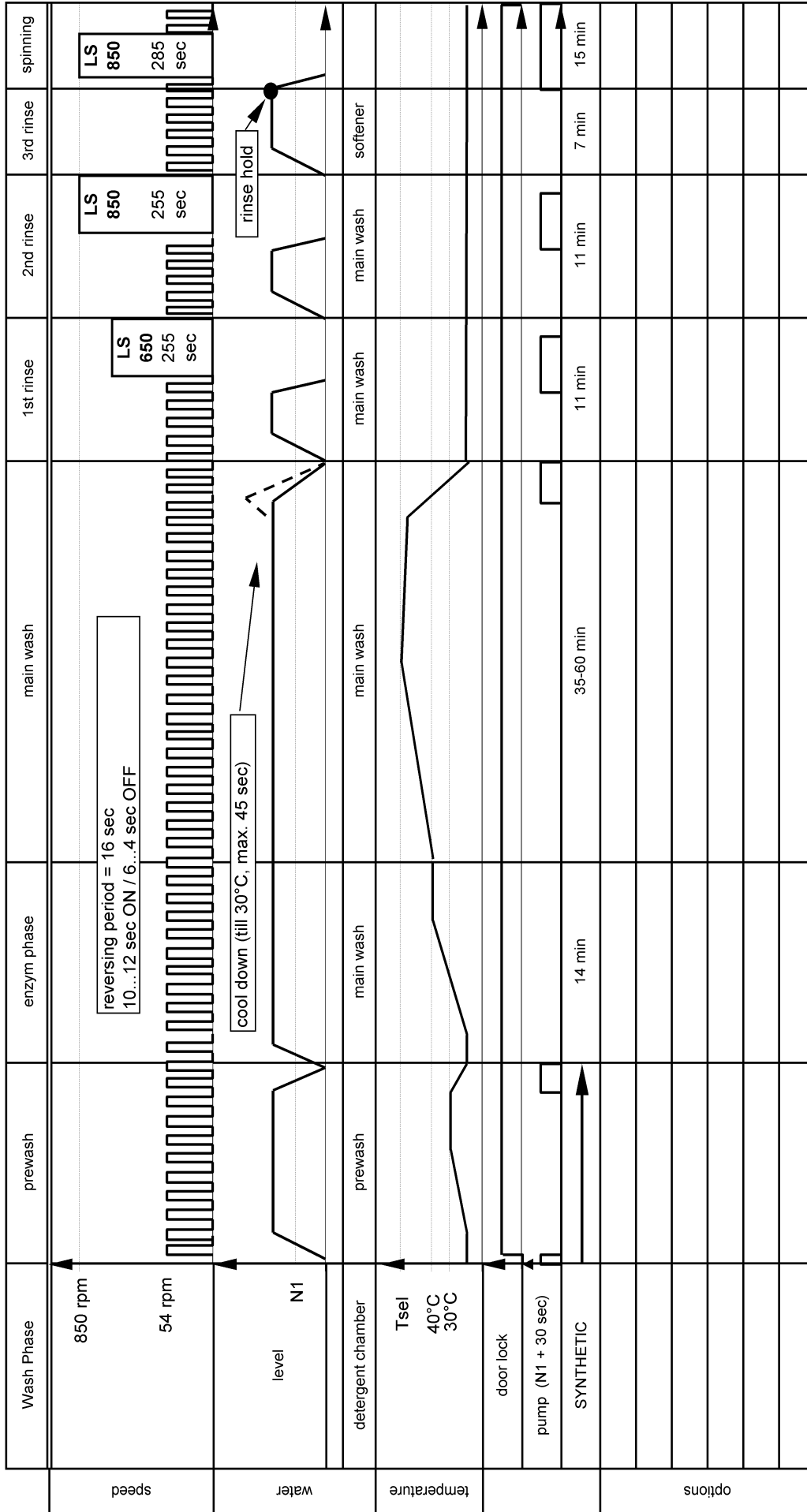


Program chart

4619 744 61551

Wash Cycle of SYNTHETIC

Delta SC1

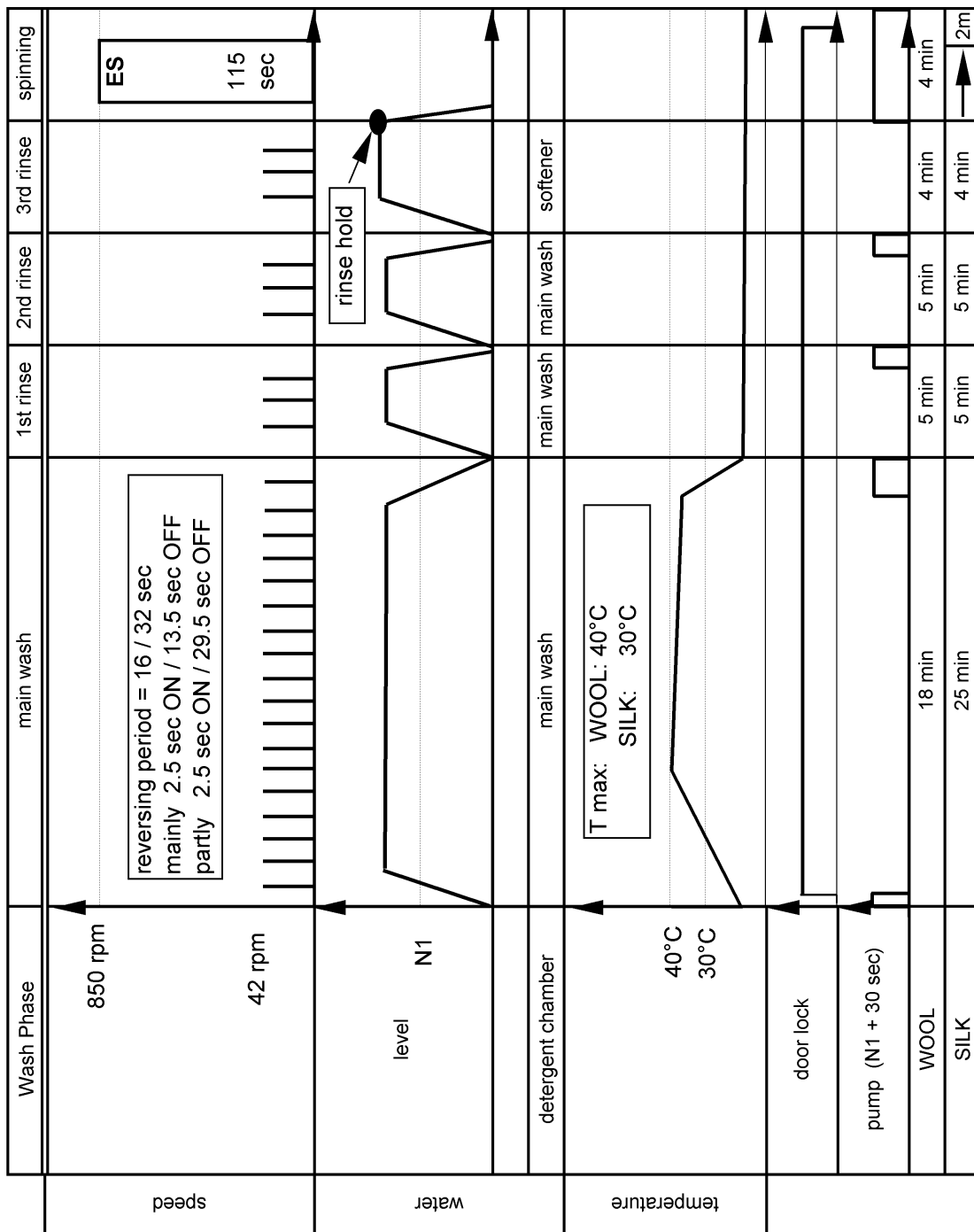


Program chart

4619 744 61551

Wash Cycles of WOOL and SILK

Delta SC1

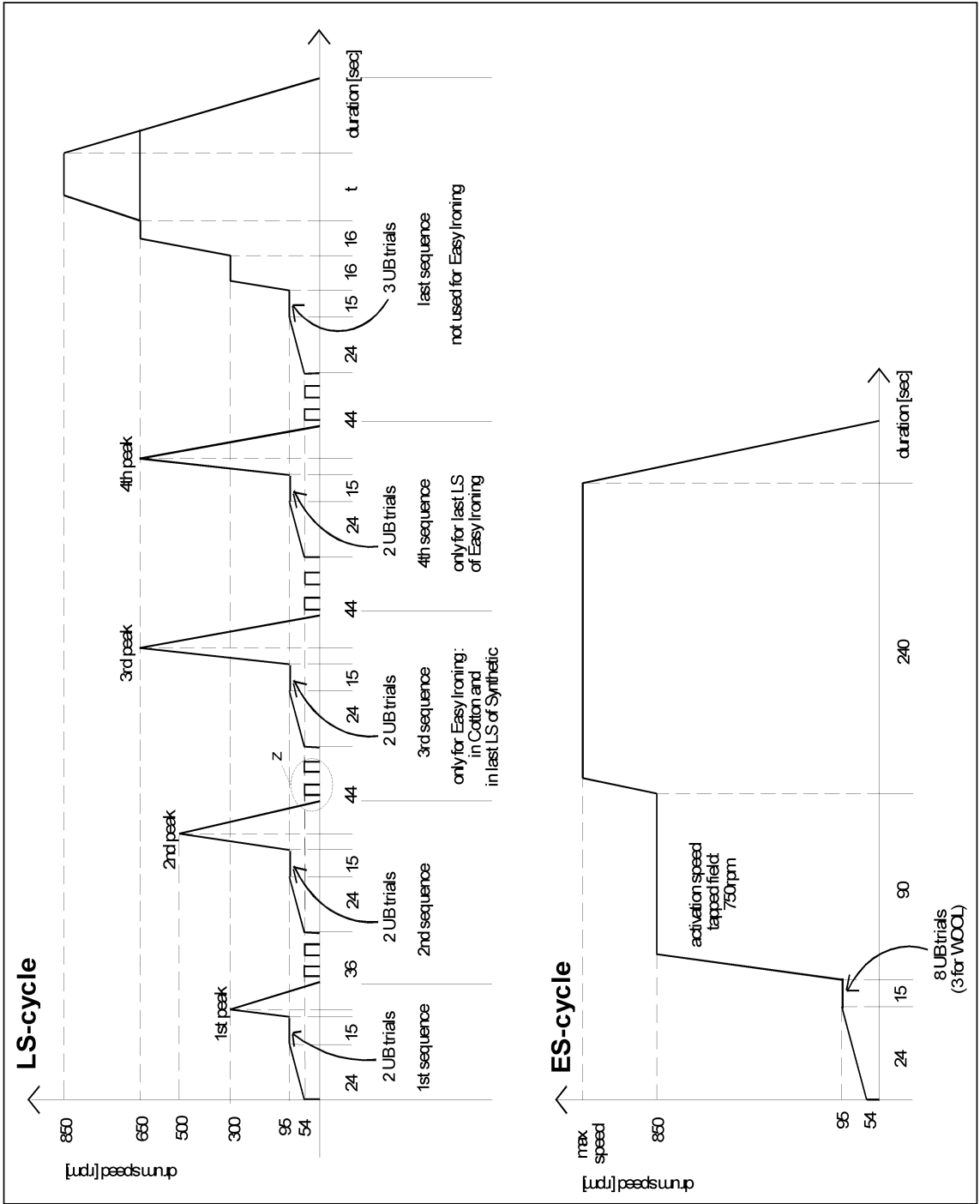


Program chart

4619 744 61551

Spinning Profiles

Delta SC1



Text/Legend

TEST PROGRAM FLOW SC1

1. Before start: **Attention! Use Testprogram only without laundry!**
2. Before start: All options must be pushed.
3. Select program: DRAIN
4. Start of test program: push start button,
 wait (1-2 sec.), till pump is running,
 push 1st option button 4 times (within max. 10 sec.).
 (1st option button = at left side of option buttons, 2nd option button = next one, etc.)
5. Stop of test program: - Stop, if timer reaches position 30.
 - Stop, turn program knob into off-position.
6. After test program: Move the knob into position off.

• = pro-gram start	timer position	door lock	detergent box	inlet outlet	T max	duration	rhythm drum	Advance by option button	checked
• D	31	locked	-						1 st push button
	3	locked	prewash	(hot) fill	hot fill	60"	nm	release 2 nd option	PW fill, hot fill, 2 nd push button
	4	locked		fill		60"	nm	release 3 rd option	3 rd push button
	5	locked		fill		60"	nm	release 4 th option	4 th push button
	6	locked	mainwash	fill		60"	nm	release 5 th option	5 th push button
	7	locked		fill		60"	nm	release 6 th option	6 th push button
	8	locked		(hot) fill	hot fill	6'	Sg1	push/release an option	mainwash fill, hot fill, N1
	16	locked		fill	90°C	60"	Sg1	push/release an option	
	20	locked		(fill)	90°C	55'	Sg1	push/release an option	heating, NTC, selector, leakage
	23	locked	* bleach	fill		60"	RR	push/release an option	bleach fill
	27	locked	softener	fill		60"	RL	push/release an option	softener fill
	28	locked	-	pump			Sg1		pump, N1
	29	locked		pump		4"	0 - 95 rpm		pump
				pump		300"	sel. speed	push/release an option	motor, selector
	30					-			

* 4 chamber detergent dispenser „bleach“ compartment
 3 chamber detergent dispenser „main wash“ compartment

Reaction to failure: SC1 goes into safety routine

- drain to level 1+30 sec. (time out for draining = 6 minutes)
- stop motor (relais in safety position)
- stop valve
- go out of heating step, if time out reached

Text/Legend

