



WHIRLPOOL AUSTRALASIA

CONSUMER SERVICES

SERVICE MANUAL

**FRONT LOAD
WASHING MACHINE**

**Model AWM5080
Version 8570 508 53000**

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This documentation is intended only for qualified technicians who possess the required qualifications and are aware of the regulatory requirements applicable to servicing electrical appliances.

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TECHNICAL DATA**Dimensions**

Height	845	mm
Width	595	mm
Depth	540	mm

Weight

Nett	73	kg
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Mains Connection

Voltage	230 - 240	V
Frequency	50	Hz
Power consumption	2.3	kW

Drum

Volume	42	l
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Capacity of dry laundry

Cotton/coloured	5.0	kg
Cotton rapid	3	kg
Cotton short	5.0	kg
Easy care	2.5	kg
Easy care rapid	1.5	kg
Easy care short	2.5	kg
Delicate	1.5	kg
Wool	1	kg

Water Level (as sensed by the pressure switch)

Level 1		
Switching point	65 ± 5	mmWc
Reset point	40 ± 5	mmWc
Overflow	280 ± 20	mmWc

Water (level visible inside the drum)

Level 1		
Switching point	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

Door lock

Lock time (20 °C)	3 - 6	s
Unlock time	60 - 90	s
Voltage	230 - 240	V
Rated current:		
Contact 4 - 5	16 (4)	A

Heating element

Heating Tubular heating element with NTC - sensor

Rated Voltage	230 - 240	V
Rated power	2050	W
Resistance @ 25°C	22 - 28	Ω

Resistance NTC :

0°C	35.9	kΩ
30°C	9.8	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 - Cold/hot fill :

Water temp (max)	60	°C
Rated flow <100 kPa	4	l/min
Pressure range	50 - 1000	kPa
Nominal voltage	220 - 240	V
Frequency	50	Hz
Minimum starting voltage:		
< 600 kPa	160	V
600 - 1000 kPa	170	V
Nominal current	35	mA
Nominal input	6	VA
Nominal (20 °C)	3.4 - 4.5	kΩ

Drain pump (synchronous)

Nominal Voltage	230 - 240	V
Nominal current	0,3	A
Nominal power	34	W
Frequency	50	Hz
Resistor (coil)	155 ± 7%	Ω
Motor protection	170	°C
Capacity(H=1,25m)	14 ± 2	l/min

TECHNICAL DATA (Cont.)

Program timer

Type SC1
 Timer basic 4619 712 52201
 Timer programmed 4619 744 80722
 Nominal voltage 230 - .240 V
 Frequency 50 Hz

Harness Connectors (See circuit diagram)

OA4.1 - OA4.2 Option 1
 OA4.3 - OA4.4 Option 6
 OB4.1 - OB4.2 Option 3
 OB4.3 - OB4.4 Option 4
 OC4.1 - OC4.2 Option 1
 OC4.3 - OC4.4 Option 2
 SLT3.1 - SLT3.3 Temperature 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
 Pi 5.5 negative supply
 PL3.1 - PL3.3 Pilot lamp

Connector

M7.1 - M7.7 Motor
 DP2.1 - DP2.2 Pump
 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

Step	Cotton / Colour	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

Speeds

Wash speed 54 rpm
 Ramp speed 95 rpm
 Spin speed 800 rpm

Ambient Temperatures

Ambient temperature up to 70 °C
 Storage temperature up to 85 °C

Output

Motor M7.6 - DSS 3.2 >40 V
 in pump step AQ2.1 -DSS 3.2 240 V
 NTC not measurable
 Pump DP2.1 -DP2.2 240 V
 Doorlock DSS3.1 -DSS 3.3 240 V
 Pressostat E4 - E2 240 V
 - empty PR2.1 - E2 240 V
 - full PR2.2 - E2 240 V
 Valve (Rast 2,5) V2.1 - V2.2 >170 V
 Options not measurable

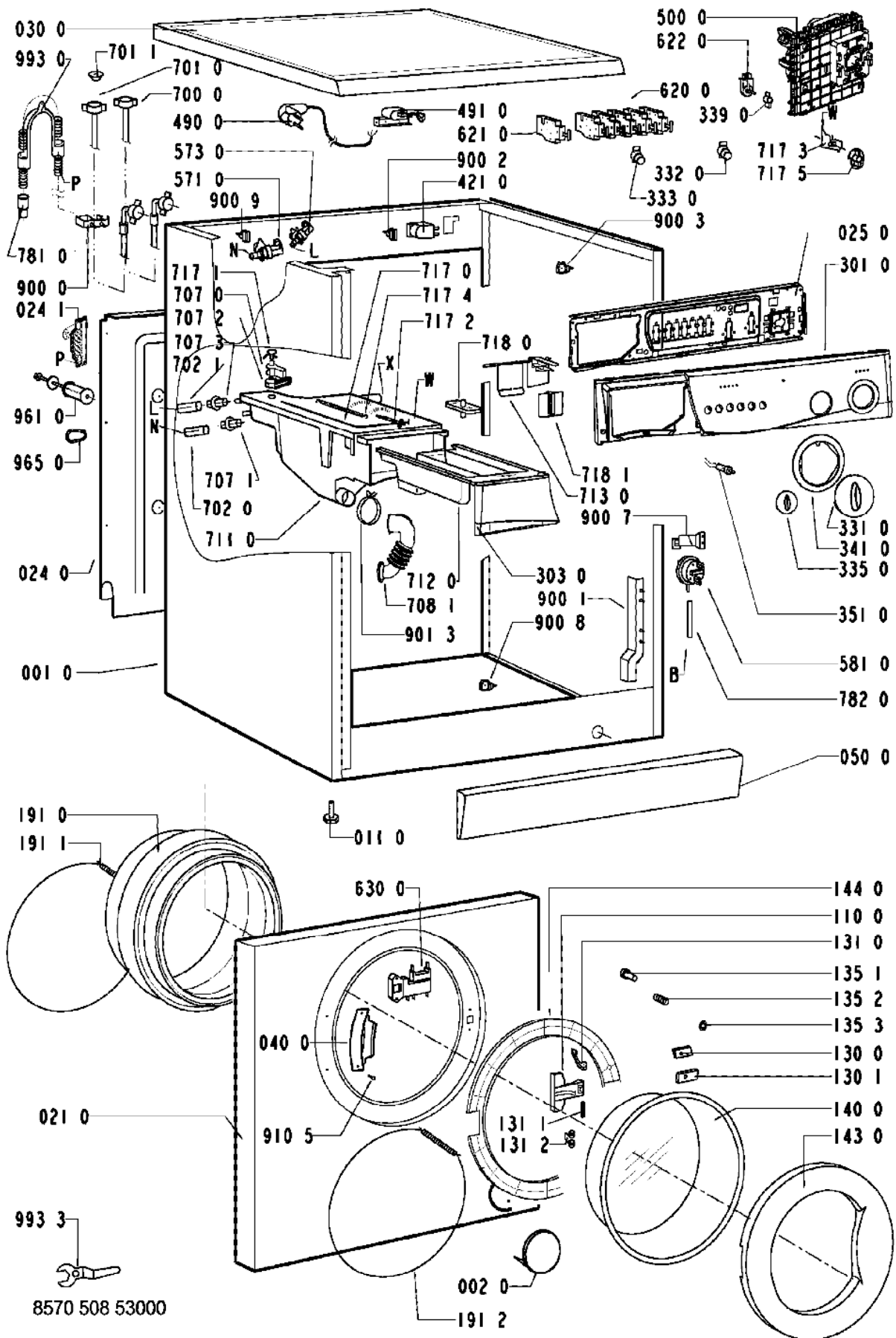
Motor

Type MCA38/64 - 148 t.f.
 WHE 3
 Belt ratio i = 1 : 15.9
 Resistance contacts
 6 - 7 68.7 ± 7% Ω
 4 - 5 2.25 ± 7% Ω
 2 - 3 2.04 ± 7% Ω
 1 - 3 0.84 ± 7% Ω

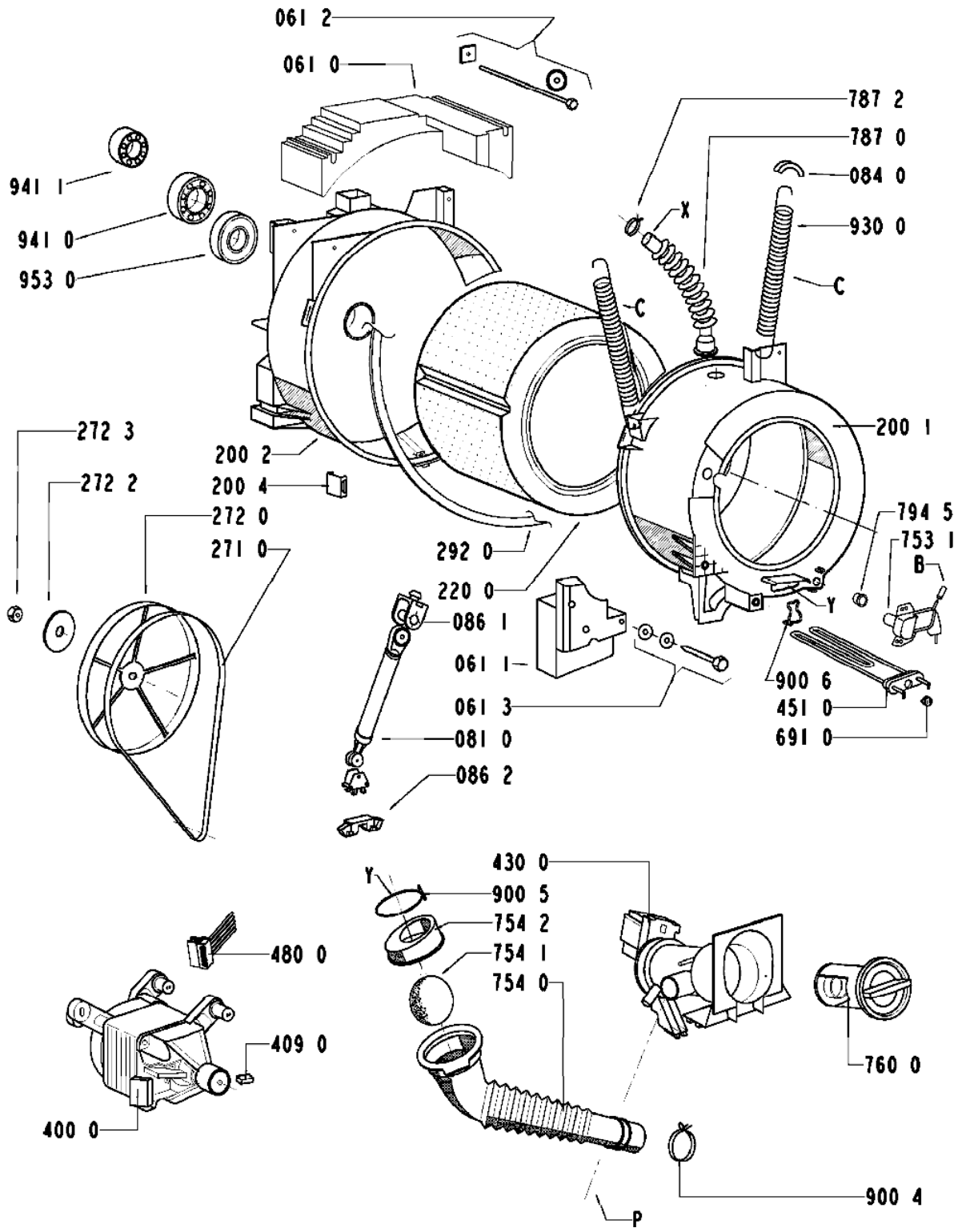
Temperature Selector Switch

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

EXPLODED VIEW - CABINET



EXPLODED VIEW - DRUM



PARTS LIST

Item	Part No	Description
001 0	4819 440 19716	Cabinet
002 0	4812 440 19343	Drain pump 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	Drain hox protector
025 0	4812 440 19817	Support control board
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 upto 1200rpm
084 0	4812 466 58001	Silent block (Suspension spring mount)
086 1	4812 401 18413	Foot, Shock absorber
086 2	4812 401 18412	Shock absorber upto 1200rpm
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 glass DE-WT
191 0	4812 460 68527	Door bellow, standard
191 0	4812 460 68532	Door bellow, 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 18377	Tub non removable 600/1000
200 4	4812 290 88054	Clamp for tub WH
220 0	4819 418 18333	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 18371	Nut M 12
292 0	4812 530 58101	Gasket Tub
301 0	4812 452 11102	Control panel
303 0	4812 498 78177	Handle, drawer

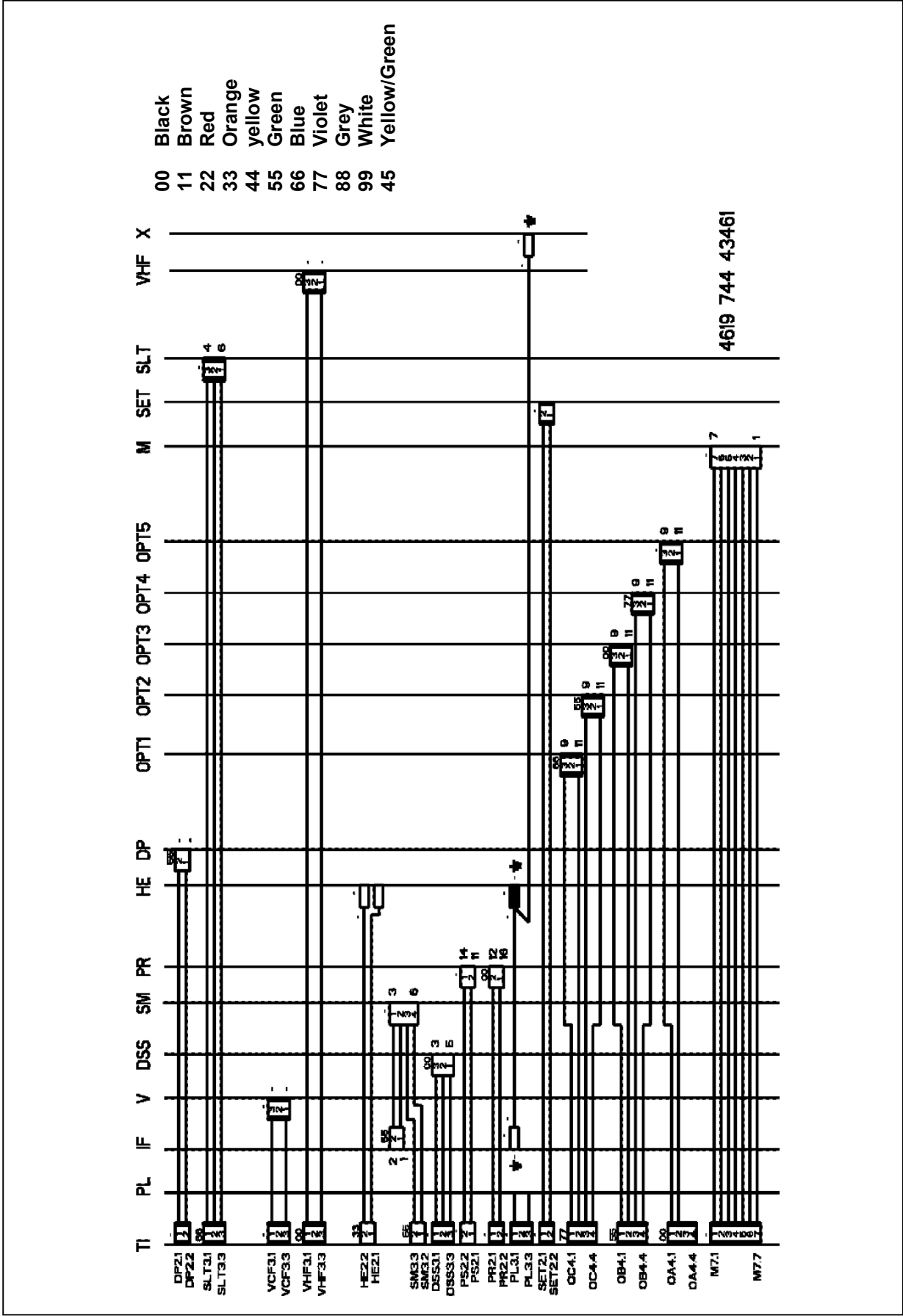
PARTS LIST (Cont.)

Item	Part No	Description
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	Adaptor for button
341 0	4812 414 58132	Indication disc
351 0	4812 134 18011	Lamp
400 0	4819 361 58259	Motor MCA 38/64-148/WHE 3
409 0	4812 362 48004	Brush, carbon, motor CESET
421 0	4812 121 18142	Interf.filter 1,00 µF
430 0	4812 310 38525	Pump, drain with thermal protection
451 0	4812 259 28765	Heating element 240V with NTC
480 0	4812 321 78109	Cable Motor SC1 PP
490 0	4812 310 18404	Kit cable, mains 5m 3x1,5
491 0	4812 321 28367	Strain relief
500 0	4812 282 18979	Timer SC1 (EC,RW,IR,EI,SR)
571 0	4812 281 28382	Valve, magnet cold
573 0	4812 271 28449	Valve, magnet hot
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)
700 0	4812 530 28869	Hose, inlet hot
701 0	4819 530 28848	Hose, inlet
701 1	4819 466 69704	Gasket and filter
702 0	4819 530 29019	Hose internal
702 1	4819 530 28971	Hose, inlet internal
707 0	4812 526 48031	Nozzle distribution
707 1	4812 526 48028	Nozzle
707 2	4812 526 48034	Nozzle hot
707 3	4812 526 48035	Nozzle hot
708 1	4812 530 48143	Bend
711 0	4819 418 79434	Dispenser
712 0	4812 418 68198	Drawer 3 Compartment 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, adjustable

PARTS LIST (Cont.)

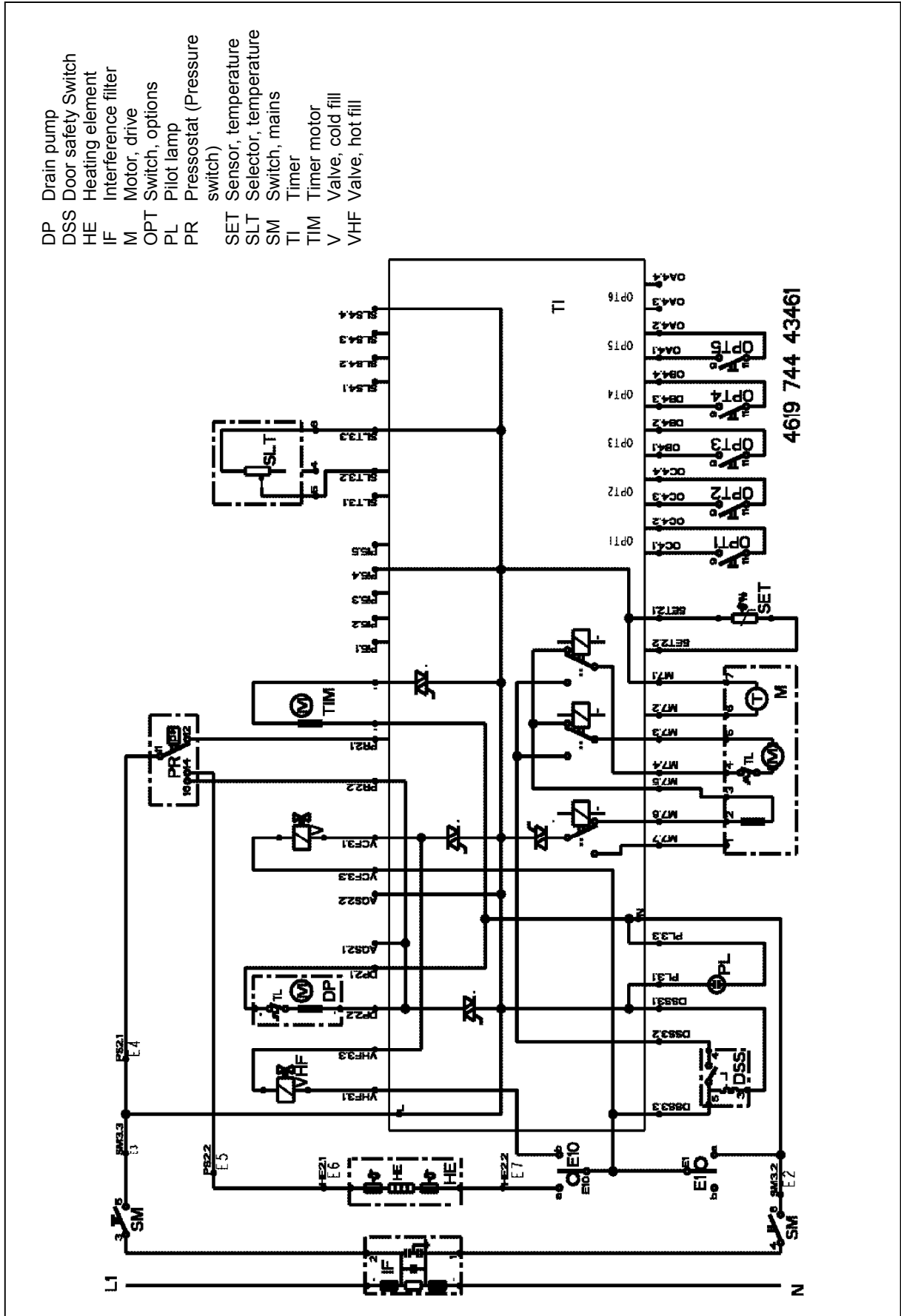
Item	Part No	Description
717 3	4812 278 88007	Slide
717 4	4812 492 38359	Spring , nozzle
717 5	4812 233 18004	Cam 3 Compartment incl. adapter
718 0	4812 526 48051	Siphon
718 1	4812 418 88018	Accessory
753 1	4819 418 68234	Chamber, air
754 0	4812 530 28826	Drain hose
754 1	4812 530 28832	Lock eco
754 2	4812 530 28829	Flange eco
760 0	4812 480 58105	Filter set pump
781 0	4819 530 28847	Hose, drain
782 0	4812 530 28827	Hose pressostat
787 0	4812 530 28813	Steam hose
787 2	4819 401 18868	Clamp, hose 26,8 mm
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 88077	Cable clamp
900 3	4812 401 18446	Cable clamp
900 4	4819 401 18872	Clamp, hose
900 5	4819 401 18529	Clamp, hose
900 6	4812 401 18444	Support heating element
900 7	4812 255 18205	Holder pressostat
900 8	4819 401 18823	Clamp
900 9	4819 404 78449	Support
901 3	4812 401 18549	Clamp, hose
910 5	4812 502 18516	Screw 4,2 x 13
930 0	4819 492 38139	Spring suspension
941 0	4812 520 28066	Bearing, ball 6204
941 1	4812 520 28002	Bearing, ball 6203 2Z C3
953 0	4819 532 78224	Ring
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

WIRING DIAGRAM

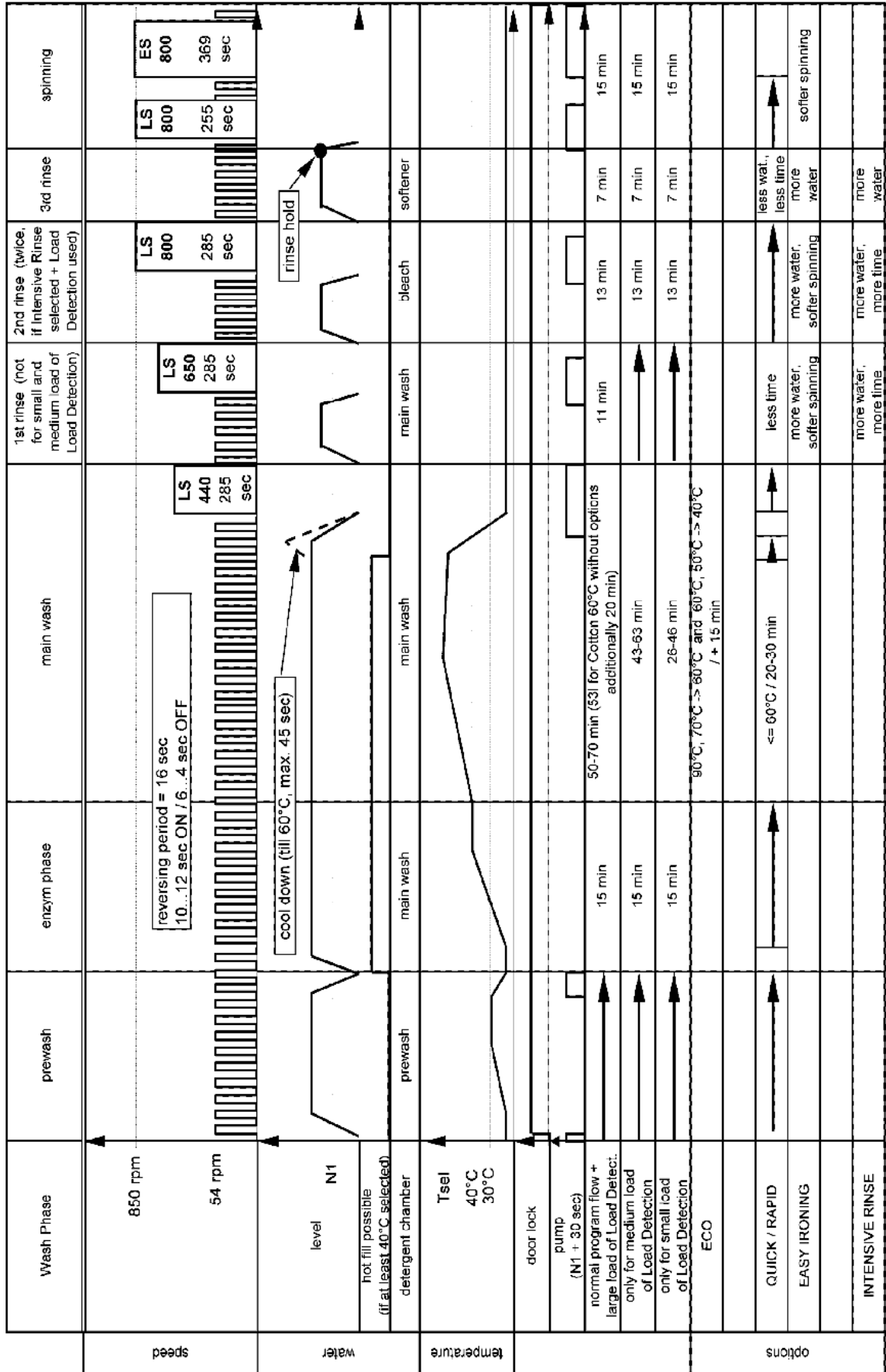


CIRCUIT DIAGRAM

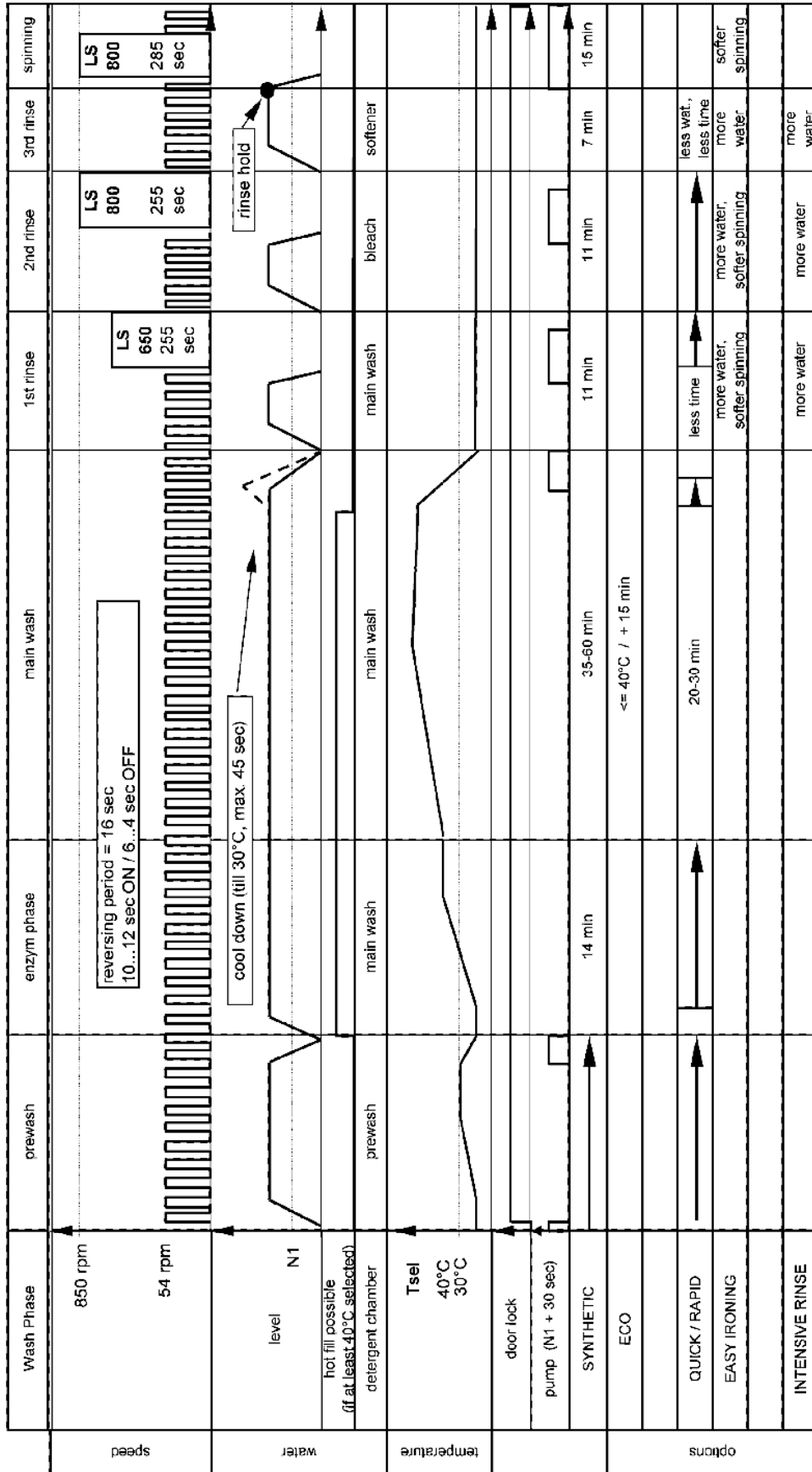
- DP Drain pump
- DSS Door safety Switch
- HE Heating element
- IF Interference filter
- M Motor, drive
- OPT Switch, options
- PL Pilot lamp
- PR Pressostat (Pressure switch)
- SET Sensor, temperature
- SLT Selector, temperature
- SM Switch, mains
- Ti Timer
- TIM Timer motor
- V Valve, cold fill
- VHF Valve, hot fill



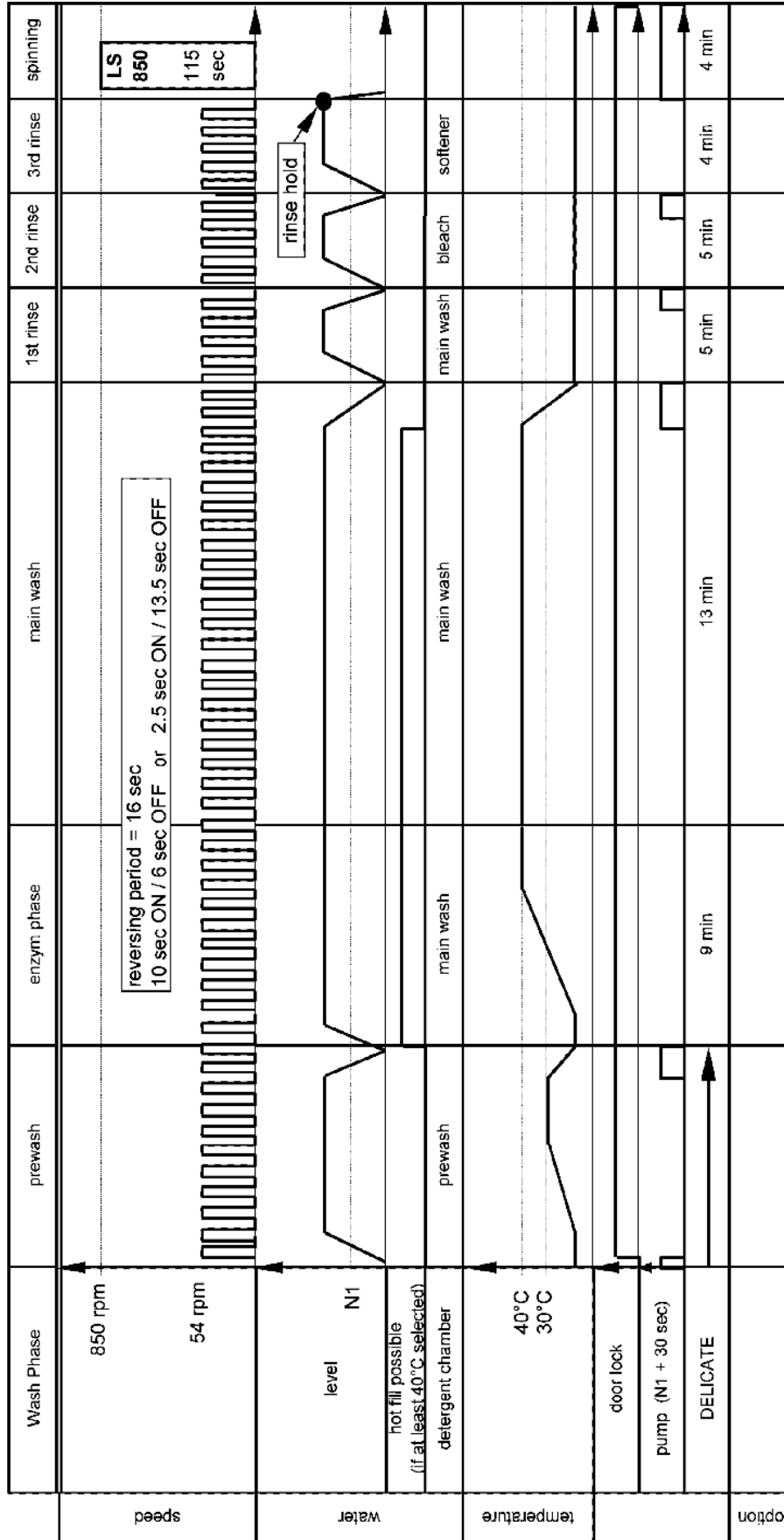
PROGRAM DIAGRAM - Cotton



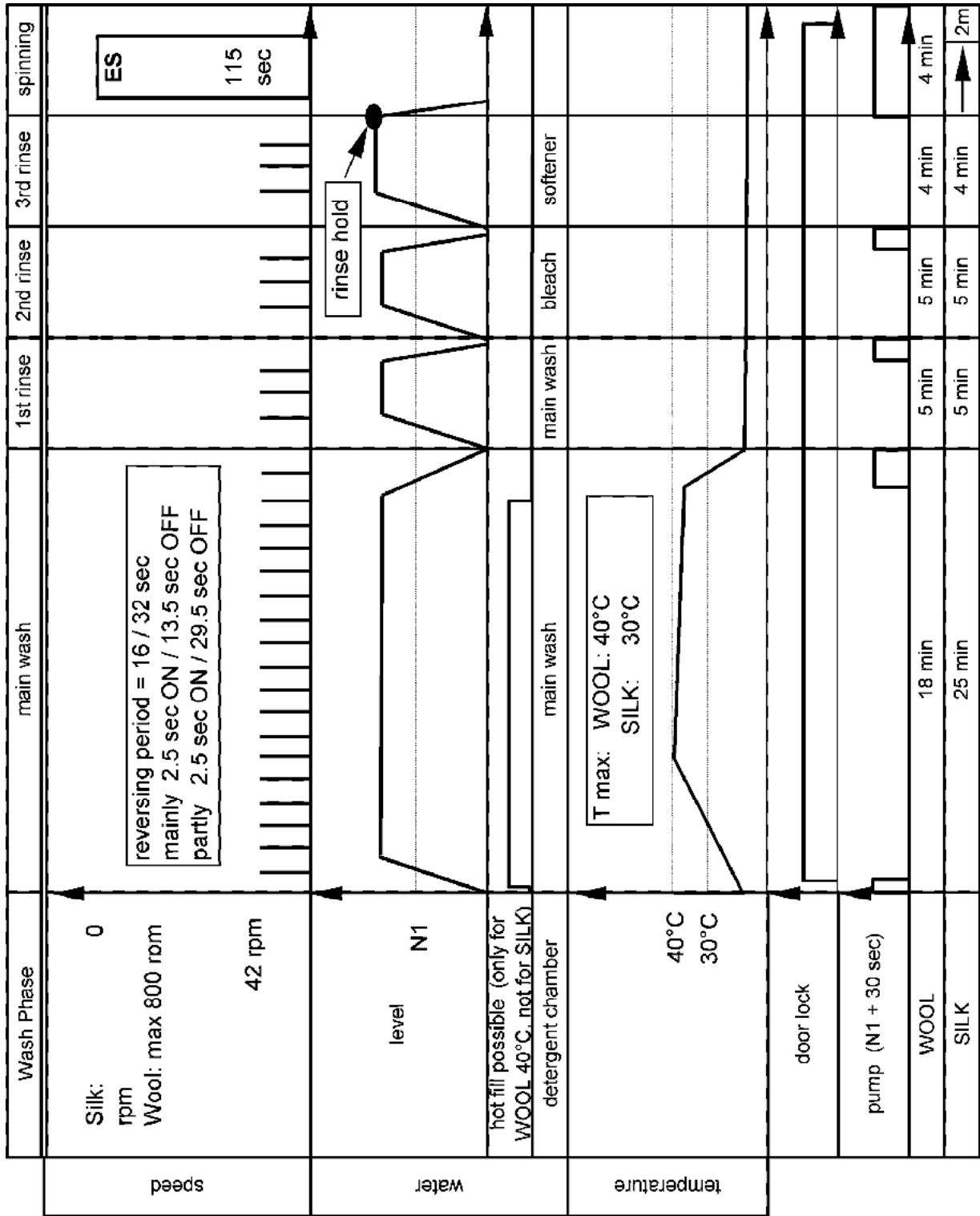
PROGRAM DIAGRAM - Synthetic



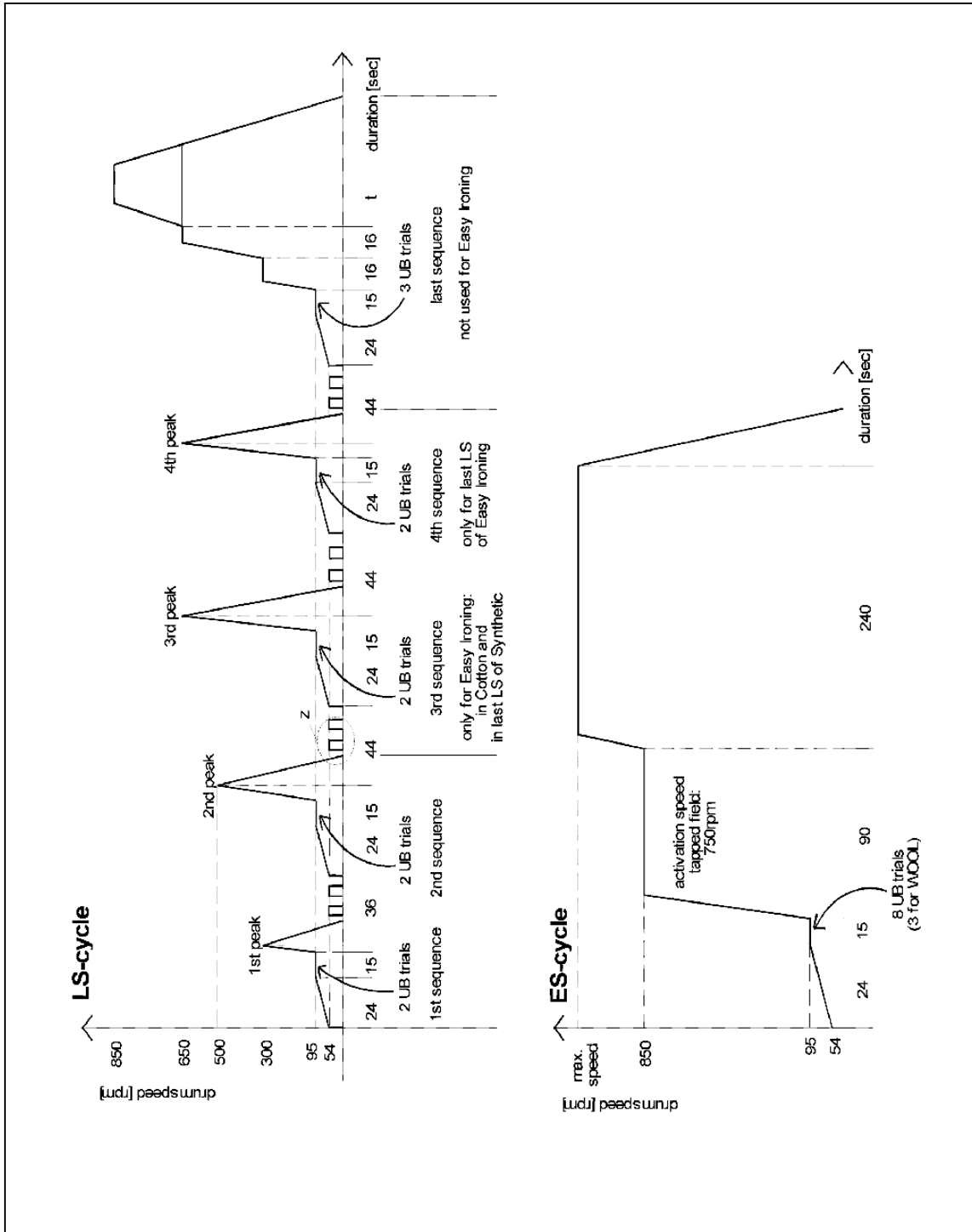
PROGRAM DIAGRAM - Delicate



PROGRAM DIAGRAM - Wool and Silk



PROGRAM DIAGRAM - Spinning Profiles



FAULT DIAGNOSIS

1. The diagnostic tests must be performed on the machine without a wash load because the out of balance detection system is disabled.
2. Ensure the machine door is closed. It is possible to fill the machine beyond overflow with the door open.
3. Ensure the On/Off button is out (Off) and set the timer knob to "D" (Drain)
4. Set Temperature to 30°C. Temperature may be set higher and machine will heat to set temperature (see Step 5 in Table over).
5. Press :
 - a) "Eco" button
 - b) "Rapid" button
 - c) "Intensive rinse" button
 - d) "Easy ironing" button
 - e) "800/500" button

These five buttons should now be in.

6. Press the On/Off button in (On) and wait for the pump to start. Allow the machine to pump away any water.
7. Press the "Eco" button three times and the timer will advance to a position between 2 and 3. This is Step 1 in the table over

Notes:

1. Each step of the test can be advanced by pressing the button in the next line of the "**Advance to step by pressing :**" column once without waiting for the step to complete.

e.g. When the machine starts to fill in Step 1, the "Rapid" button can be pressed once to advance to Step 2 without the 60 second fill.
2. If this method is used for every step, the fill at Step 5 will be warm and not cold.
3. Once water has started to enter in Step 5, each subsequent step can be advanced by pressing the Eco button twice.
4. If insufficient water has entered the machine, the pressure switch will not operate and hence the element will not operate. Also if the pressure switch has not operated, the machine will spin with some water still visible in the basket at Step 8.

TEST SEQUENCE

Step	Advance to step by pressing : (See Note 1)	Pump Out or Fill Via :	Temperature	Time	Drum Rhythm	Component(s) Checked	Comments
1	<i>Begin test by pressing Eco three times. Timer advances past 2</i>	Prewash	Cold fill	60 s (fill)	Stationary	Eco button and NTC	If test fails to start, check NTC or Eco button. If Rapid button is not pressed, the machine will pump out and stop
2	<i>Rapid button once Timer advances past 3</i>	Prewash	Cold fill	60 s (fill)	Stationary	Rapid button and prewash fill	If Rapid button is not pressed, the machine will pump out and stop
3	<i>Intensive rinse button once Timer advances 1 step</i>	Prewash	Cold fill, heater on	60 s (fill)	Stationary	Intensive rinse button, heating element, NTC	If Intensive rinse button is not pressed, the machine will pump out and stop
4	<i>Easy ironing button once. Timer advances 1 step</i>	Prewash	Cold fill, heater off	60 s (fill)	Stationary	Easy ironing button	If Easy ironing button is not pressed, the machine will pump out and stop
5	<i>800/500 button once. Timer advances to 9 and then past 10 after fill</i>	Main wash	Cold fill, heats to set temperature	60 s (fill)	10 s on, 6 s off	800/500 button, heater, door switch, NTC	If the 800/500 button is not pressed, the machine will pump out and stop. See Note 3, Page 18
6	<i>Timer advances automatically 3 steps</i>	Main wash	Cold fill, heater off	60 s (fill)	10s on, 6s off	Heater termination	If the test is advanced before the completion of each step the drum rhythm will change
7	<i>Timer advances automatically past A</i>	Fabric softener	Cold fill	60 s fill, Pump out	10s on, 6s off	Drain pump	-
8	<i>Timer advances automatically past B</i>	Pump out	-	Pump out	Spin max speed	Main motor	Spins for 300 s, then advances past C and stops

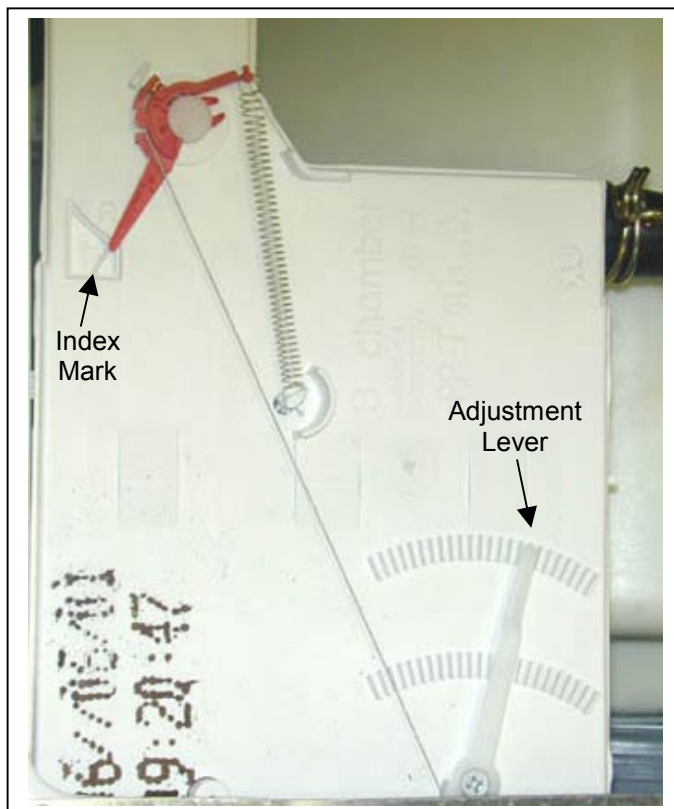
The test sequence can be terminated at any time by pressing the On/Off switch to Off, setting the timer on "D" and pressing the On/Off switch to on. The pump will run and then the timer will rotate to the Stop position.

If a failure is detected during the test sequence the timer will :

1. Initiate the safety step routine :
 - A. Drain pump runs until pressure switch resets plus 30 seconds.
 - I. Main motor is turned off.
 - II. Water inlet valves are turned off.
 - III. Element is turned off
2. Stop the machine but does not give a visual signal to indicate a fault.

ADJUSTING DISTRIBUTION NOZZLE

1. Select any COTTON wash cycle with the prewash off and wait until water begins to enter machine.
2. Turn the machine off at the power point.
3. Remove the machine lid.
4. Adjust the lever until the red pointer is over the index mark.
5. Replace the machine lid, turn on the power, open the detergent drawer slightly and make sure that water is only entering the main wash (middle) compartment and that no water is entering the fabric softener compartment.



TIMER CONNECTIONS

