SERVICE MANUAL
WE55 – WE55MP

471 1553-55/01
95.32

Electrolux
Wascator

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!

Fig (1) The washing machine described in this manual has a drum volume of 53 litres, high-speed extraction and fixed wash programs. It is made for use in appartment house laundries, hotels, factories, hospitals, small institutions and by other users who require a machine with a high level of reliability, good performance and simple maintenance.

This is a machine with flexible mounting, in other words the wash drum is not rigidly mounted on the base plate. This means that a minimum of vibration is transferred to the frame, which in turn simplifies installation as no cast foundation is required.

Vibration due to unbalance is further reduced because the drum begins with extraction cycle at distribution speed, to distribute the load before high-speed extraction.

On high-speed extraction the machine has a G factor of approx. 360, which achieves a low water retention.

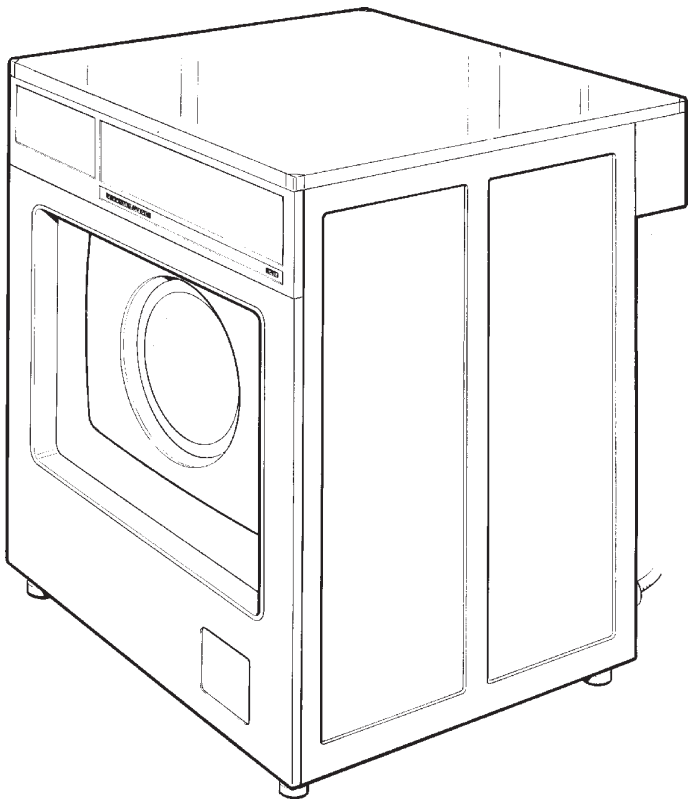
The machine is available with either of two types of timers:

- Electromechanical timer with fixed wash programs. The standard wash programs can be modified by selection of options.
- Electronic timer with fixed wash programs. The standard wash programs can be modified by selection of options. The timer also has a built-in fault-tracing program which assists in ensuring efficient servicing.

Machines are supplied equipped to meet customer requirements, with or without electric heating, and for connection to cold water supply only or both hot and cold intake. Machines can be adapted on-site with the aid of a special kit for connection to cold, hot or hard water supplies.

These machines can also be equipped with a coin operation mechanism, fitted on the right-hand side.

1



2211

Safety

- This machine can only be used with water. Never use dry cleaning agents.
- Do not allow children to operate the machine.
- Installation and servicing must be carried out by qualified, authorised personnel.
- Do not under any circumstances attempt to bypass the door locking device.
- Any leakage in the system, e.g. a worn door seal, must be repaired immediately.
- Before any repair or service is carried out, the technician involved must study the relevant user and service manuals.
- Do not hose down or spray the machine with water.

Capacity, dry weight		
filling factor 1:13		4.0 kg
filling factor 1:10		5.3 kg
Drum volume		53 litres
diameter		452 mm
depth		332 mm
no. of lifters		3
Drum speed	wash	54 rev/min
	wash, mild and wool programs	35 rev/min
	extraction	550/800/1300 rev/min
G factor	wash	0.7
	extraction	76/162/425
Dimensions	width	595 mm
	depth	680 mm
	height	850/875 mm
Clearance for servicing, recommended		
	sides	50 mm
	rear	500 mm
Weight	net	102kg
Max. floor load during extraction		1.02±0.3 kN
Frequency (dynamic load)		2.0 Hz
Water valves	connection	DN 20 BSP 3/4"
	rec. water pressure	200-600 kPa
	pressure limits	40-1000 kPa
Drain valve	connect. outer diameter	50 mm
	capacity	160 l/min

Machine with electromechanical timer

Fig (1) This is a machine with flexible mounting, which means that the outer drum and motor are supported by a ”cradle” resting on four dampers which take up unbalance arising in the machine.

The inner drum is driven by a motor via a drive belt. This motor is in the lower part of the machine and is mounted on the cradle. It has a belt-tensioning device. The inner drum is attached to the outer drum at the rear gable where there are two sealed bearings.

The drain valve is a water-controlled membrane valve. Alternatively a drain pump.

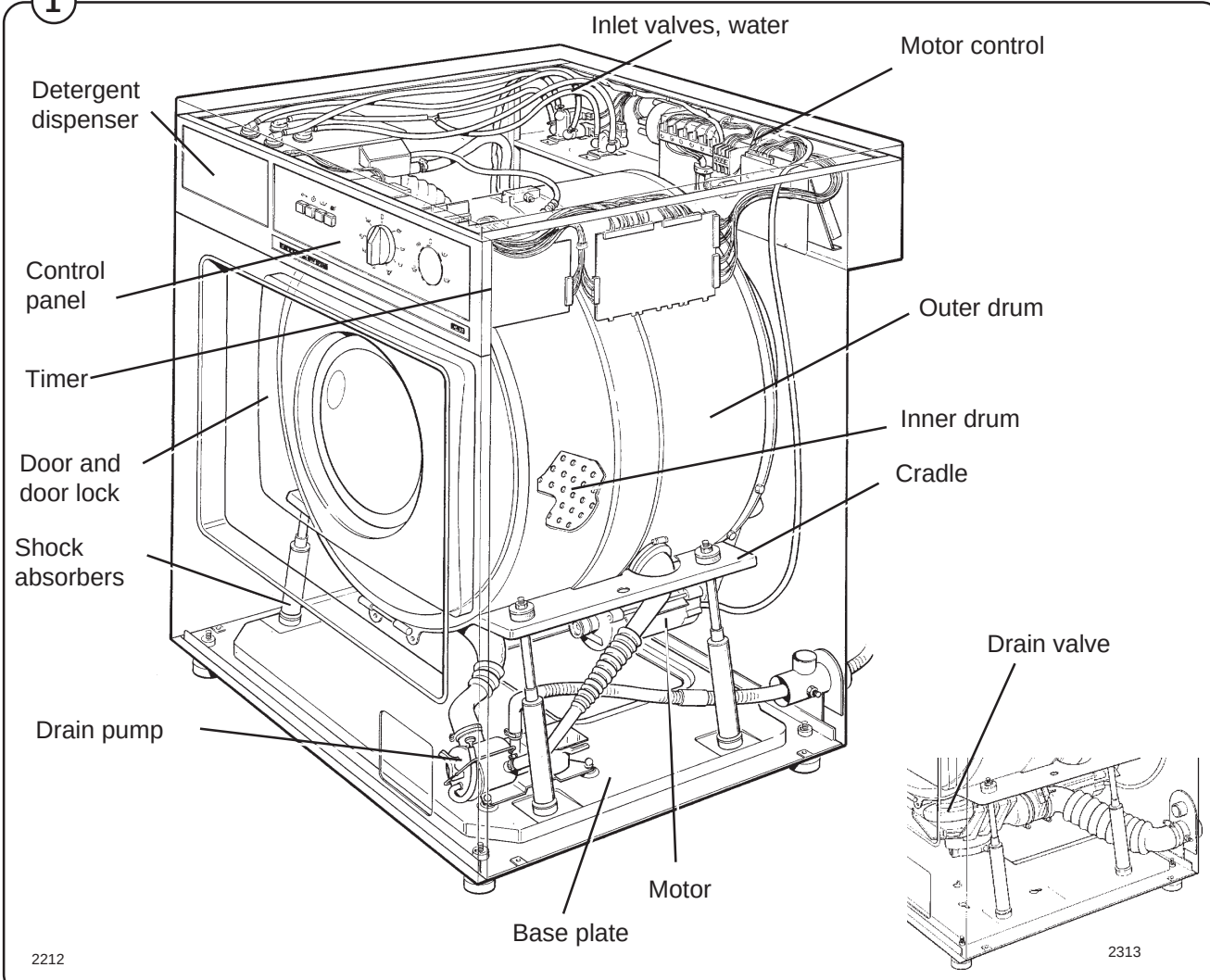
The door is a heavy-duty rectangular door, which is locked by a safety mechanism while the machine is operating.

The control panel has a program selector knob for selecting the wash programs, and option buttons for modifying them. It also has a program indicator to show the program sequence, a start button, button to open the door and an indicator light to show when the machine is operating.

The timer and program selector are located inside the control panel. The relays, level control, water valves, thermostat etc. are sited on a component shelf at the rear of the machine, with easy access from above.

The machine sides are enamelled and made from galvanised, cold-rolled sheet steel. The top cover is made from stainless steel.

1



Machine with electronic timer

Fig (2)

This is a machine with flexible mounting, which means that the outer drum and motor are supported by a ”cradle” resting on four dampers which take up unbalance arising in the machine.

The inner drum is driven by a motor via a drive belt. This motor is in the lower part of the machine and is mounted on the cradle. It has a belt-tensioning device. The inner drum is attached to the outer drum at the rear gable where there are two sealed bearings.

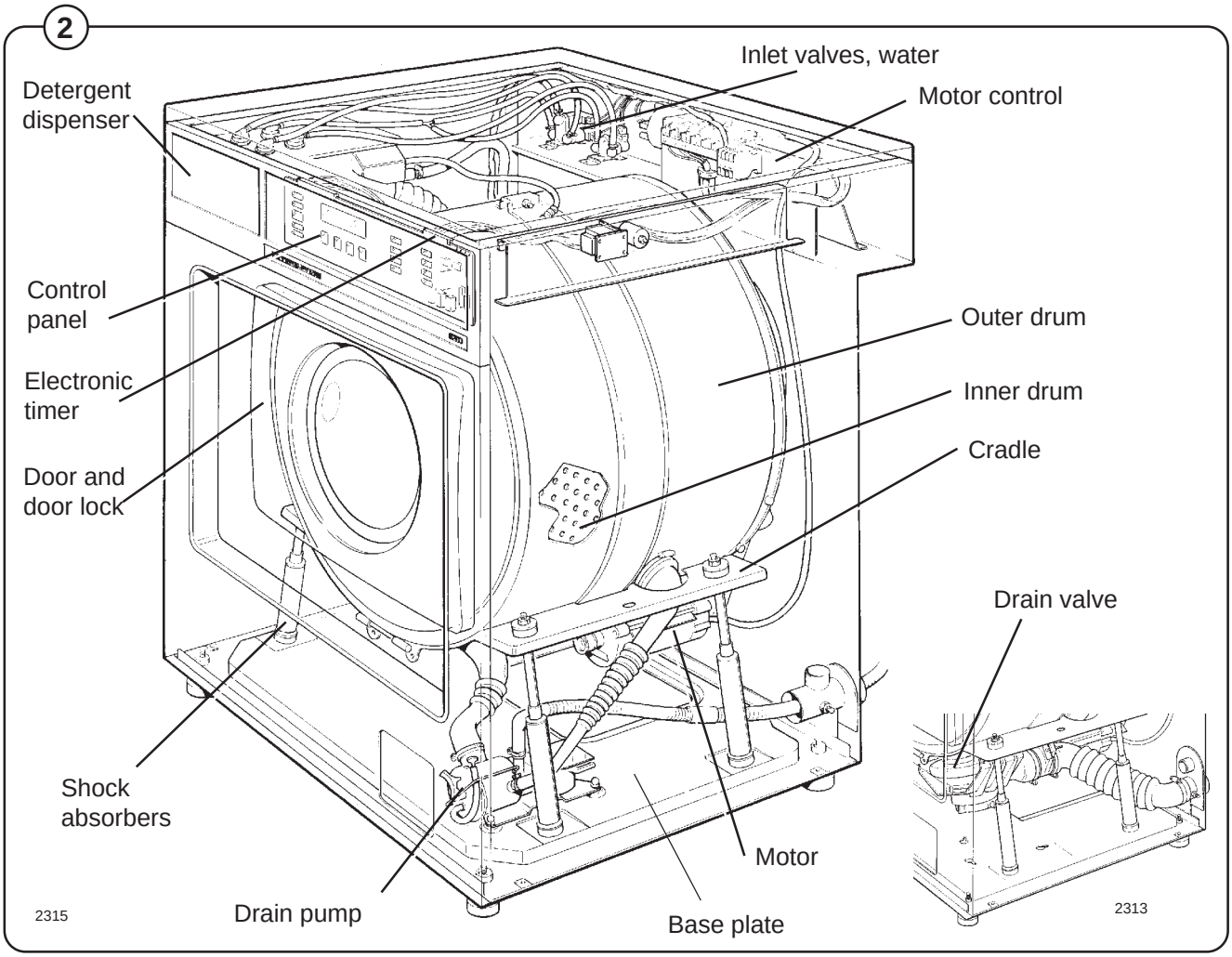
The drain valve is a water-controlled membrane valve. Alternatively a drain pump.

The door is a heavy-duty rectangular door, which is locked by a safety mechanism while the machine is operating.

The control panel has seven buttons for selecting the wash programs, two or four option buttons, and a combination start and door-opening button. Each button has an LED to indicate the program selected. The panel also has ten LEDs which function as a program indicator to show the program sequence, and a display to show the temperature inside the machine and for fault/ error indication.

The timer is located inside the control panel. The relays, water valves etc. are sited on a component shelf at the rear of the machine, with easy access from above.

The machine sides are enamelled and made from galvanised, cold-rolled sheet steel. The top cover is made from stainless steel.



Description of programs, electromechanical timer

These machines may have either 8 or 5 built-in programs, depending on which programmer is fitted. Programs are selected by means of a selector knob on the control panel.

The machine can be equipped for the following program variants:

P01CH*	P02CH*	P11C*	P21CH*	P31C*
Normal 95°	Hot	Normal 95°	Normal 95°	Normal 95°
Normal 60°	Warm	Normal 60°	Normal 60°	Normal 60°
Normal 40°	Cold	Normal 40°	Normal 40°	Normal 40°
Mild 30°	Mild	Mild 30°	Mild 30°	Mild 30°
Wool	Perm. press	Wool	Wool	Wool
Perm. press 40°		Perm. press 40°	Perm. press 40°	Perm. press 40°
Perm. press 60°		Perm. press 60°	Perm. press 60°	Perm. press 60°
Perm. press 95°		Perm. press 95°	Perm. press 95°	Perm. press 95°
Options:		**Options:**	**Options:**	**Options:**
• Intensive		• Heavily soiled	• Heavily soiled	• Heavily soiled
• Rinse stop		• No extraction	• Rinse stop	• Rinse stop

P41C*	P51CH*	P61CH*
Normal 95°	Normal 95°	Normal 95°
Normal 60°	Normal 60°	Normal 60°
Normal 40°	Normal 40°	Normal 40°
Mild 30°	Mild 30°	Mild 30°
Wool	Wool	Wool
Perm. press 40°	Perm. press 40°	Perm. press 40°
Perm. press 60°	Perm. press 60°	Perm. press 60°
Perm. press 95°	Perm. press 95°	Perm. press 95°
Options:	**Options:**	**Options:**
• Intensive	• Intensive	• Heavily soiled
• Rinse stop	• Rinse stop	• No extraction
• Extra rinse		

* The program number shows which market the program is intended for, as follows:

P01 = Wascator, export	P31 = Osby, Sweden
P02 = All sales channels	P41 = Wascator, Switzerland
P11 = Wascator, Sweden	P51 = Zanussi
P21 = Nyborg	P61 = Wascator, Finland

The letters after the program number show the water intakes required for the program. C = cold water and CH = cold and hot water.

The times, temperatures, water levels etc. of the various programs are shown in the special tables for each program. The programmer is at a standstill during cool-down, water filling and heating. The times required for these parts of the cycle are not included in the times stated in the tables.

The temperature during the main wash (and prewash if selected) is automatically controlled by the thermostat.

During cool-down after the main wash (for permanent press 95° and 60°) the water intake is pulsed to prevent creasing. The temperature normally falls to 55°C.

Program table P 01 CH

PROGRAM / PROGRAM STEP	NORMAL 95°						NORMAL 60°					
	1						2					
	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION
PREWASH												
DRAIN												
SOAKING	3	W	-	LL	2	N	3	W	-	LL	2	N
MAIN WASH	15	W	90	LL	2	N	15	W	60	LL	2	N
COOL-DOWN	-					-	-					-
DRAIN	0,5					N	0,5					N
EXTRACTION												
RINSE 1												
DRAIN												
EXTRACTION												
RINSE 2	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					N	0,5					N
EXTRACTION	1					E	1					E
RINSE 3	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					N	0,5					N
EXTRACTION	1					E	1					E
RINSE 4	2	C	-	HL	3	N	2	C	-	HL	3	N
DRAIN	0,5					N	0,5					N
LOW EXTRACTION	2,5					E	2,5					E
HIGH EXTRACTION	4					E	4					E
TUMBLING	0,5					N	0,5					N
PROGRAM TIME	34,5						34,5					

PROGRAM / PROGRAM STEP	NORMAL 40°						MILD 30°					
	3						4					
	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION
PREWASH												
DRAIN												
SOAKING	3	W	-	LL	2	N	-					-
MAIN WASH	15	W	40	LL	2	N	15	C	30	HL	2	R
COOL-DOWN	-					-	-					-
DRAIN	0,5					N	0,5					-
EXTRACTION							-					-
RINSE 1												
DRAIN												
EXTRACTION												
RINSE 2	2	C	-	HL	1	N	1	C	-	HL	1	R
DRAIN	0,5					N	0,5					-
EXTRACTION	1					E	-					-
RINSE 3	2	C	-	HL	1	N	1	C	-	HL	1	R
DRAIN	0,5					N	0,5					-
EXTRACTION	1					E	-					-
RINSE 4	2	C	-	HL	3	N	1	C	-	HL	3	R
DRAIN	0,5					N	0,5					-
LOW EXTRACTION	2,5					E	2					E
HIGH EXTRACTION	4					E	-					-
TUMBLING	0,5					N	0,5					-
PROGRAM TIME	34,5						22,5					

PROGRAM / PROGRAM STEP	WOOL						PERM. PRESS 40°					
	5						6					
	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION
PREWASH												
DRAIN												
SOAKING	-					-	3	W	-	LL	2	N
MAIN WASH	15	C	40	HL	2	R	15	W	40	LL	2	N
COOL-DOWN	-					-	-					-
DRAIN	0,5					-	0,5					N
EXTRACTION	-					-						
RINSE 1												
DRAIN												
EXTRACTION												
RINSE 2	1	C	-	HL	1	R	2	C	-	HL	1	N
DRAIN	0,5					-	0,5					N
EXTRACTION	-					-	1					E
RINSE 3	1	C	-	HL	1	R	2	C	-	HL	1	N
DRAIN	0,5					-	0,5					N
EXTRACTION	-					-	1					E
RINSE 4	1	C	-	HL	3	R	2	C	-	HL	3	N
DRAIN	0,5					-	0,5					N
LOW EXTRACTION	2					E	2					E
HIGH EXTRACTION	-					-	-					-
TUMBLING	0,5					-	0,5					N
PROGRAM TIME	22,5						30					

PROGRAM / PROGRAM STEP	PERM. PRESS 60°						PERM. PRESS 95°					
	7						8					
	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION
PREWASH												
DRAIN												
SOAKING	3	W	-	LL	2	N	3	W	-	LL	2	N
MAIN WASH	15	W	60	LL	2	N	15	W	90	LL	2	N
COOL-DOWN	-					-		C	60		1	N
DRAIN	0,5					N	0,5					N
EXTRACTION												
RINSE 1												
DRAIN												
EXTRACTION												
RINSE 2	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					N	0,5					N
EXTRACTION	1					E	1					E
RINSE 3	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					N	0,5					N
EXTRACTION	1					E	1					E
RINSE 4	2	C	-	HL	3	N	2	C	-	HL	3	N
DRAIN	0,5					N	0,5					N
LOW EXTRACTION	2					E	2					E
HIGH EXTRACTION	-					-	-					-
TUMBLING	0,5					N	0,5					N
PROGRAM TIME	30						30					

- = NO DRUM ACTION
G = GENTLE ACTION
N = NORMAL ACTION
D = DISTRIBUTION SPEED
E = EXTRACTION
R = REDUCED GENTLE ACTION
C = COLD WATER (APPROX. 15° C)

W = WARM WATER (APPROX. 35° C)
H = HOT WATER (APPROX 65° C)
Hd = HARD WATER
LL = LOW WATER LEVEL
ML = MEDIUM WATER LEVEL
HL = HIGH WATER LEVEL

Program table P 01 CH (with options)

PROGRAM	NORMAL 95°						NORMAL 60°						NORMAL 40°						MILD 30°					
	9						10						11						12					
PROGRAM STEP	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION
PREWASH	4	W	30	LL	1	N	4	W	30	LL	1	N	4	W	30	LL	1	N						
DRAIN	0,5					N	0,5					N	0,5					N						
SOAKING	-					-	-					-	-					-	-					-
MAIN WASH	24	H	90	LL	2	N	24	H	60	LL	2	N	24	W	40	LL	2	N	15	C	30	HL	2	R
COOL-DOWN																								
DRAIN	0,5					N	0,5					N	0,5					N	0,5					-
EXTRACTION																			-					-
RINSE 1	2	C	-	HL	1	N	2	C	-	HL	1	N	2	C	-	HL	1	N						
DRAIN	0,5					N	0,5					N	0,5					N						
EXTRACTION	1					E	1					E	1					E						
RINSE 2	2	C	-	HL	1	N	2	C	-	HL	1	N	2	C	-	HL	1	N	1	C	-	HL	1	R
DRAIN	0,5					N	0,5					N	0,5					N	0,5					-
EXTRACTION	1					E	1					E	1					E	-					-
RINSE 3	2	C	-	HL	1	N	2	C	-	HL	1	N	2	C	-	HL	1	N	1	C	-	HL	1	R
DRAIN	0,5					N	0,5					N	0,5					N	0,5					-
EXTRACTION	1					E	1					E	1					E	-					-
RINSE 4	2	C	-	HL	3	N	2	C	-	HL	3	N	2	C	-	HL	3	N	1	C	-	HL	3	R
DRAIN	0,5					N	0,5					N	0,5					N	0,5					-
LOW EXTRACTION	2,5					E	2,5					E	2,5					E	2					E
HIGH EXTRACTION	4					E	4					E	4					E	-					-
TUMBLING	0,5					N	0,5					N	0,5					N	0,5					-
PROGRAM TIME	49						49						49						22,5					

PROGRAM	WOOL						PERM. PRESS 40°						PERM. PRESS 60°						PERM. PRESS 95°					
	13						14						15						16					
PROGRAM STEP	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION
PREWASH							4	W	30	LL	1	N	4	W	30	LL	1	N	4	W	30	LL	1	N
DRAIN							0,5					N	0,5					N	0,5					N
SOAKING	-					-	-					-	-					-	-					-
MAIN WASH	15	C	40	HL	2	R	24	W	40	LL	2	N	24	W	60	LL	2	N	24	H	90	LL	2	N
COOL-DOWN																				C	60		1	N
DRAIN	0,5					-	0,5					N	0,5					N	0,5					N
EXTRACTION	-					-																		
RINSE 1																								
DRAIN																								
EXTRACTION																								
RINSE 2	1	C	-	HL	1	R	2	C	-	HL	1	N	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					-	0,5					N	0,5					N	0,5					N
EXTRACTION	-					-	1					E	1					E	1					E
RINSE 3	1	C	-	HL	1	R	2	C	-	HL	1	N	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					-	0,5					N	0,5					N	0,5					N
EXTRACTION	-					-	1					E	1					E	1					E
RINSE 4	1	C	-	HL	3	R	2	C	-	HL	3	N	2	C	-	HL	3	N	2	C	-	HL	3	N
DRAIN	0,5					-	0,5					N	0,5					N	0,5					N
LOW EXTRACTION	2					E	2					E	2					E	2					E
HIGH EXTRACTION	-					-	-					-	-					-	-					-
TUMBLING	0,5					-	0,5					N	0,5					N	0,5					N
PROGRAM TIME	22,5						41						41						41					

- = NO DRUM ACTION
G = GENTLE ACTION
N = NORMAL ACTION
D = DISTRIBUTION SPEED
E = EXTRACTION
R = REDUCED GENTLE ACTION
C = COLD WATER (APPROX. 15° C)

W = WARM WATER (APPROX. 35° C)
H = HOT WATER (APPROX 65° C)
Hd = HARD WATER
LL = LOW WATER LEVEL
ML = MEDIUM WATER LEVEL
HL = HIGH WATER LEVEL

Program table P 02 CH

PROGRAM / PROGRAM STEP	HOT 1					WARM 2					COLD 3					MILD 4					PERM. PRESS 5							
	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION				
PREWASH	4	W	-	HL	1	N	4	W	-	HL	1	N	4	C	-	HL	1	N										
DRAIN	0,5					N	0,5					N	0,5															
																			0,5					N				
SOAKING																												
MAIN WASH	6	H	-	LL	2	N	6	W	-	LL	2	N	6	W	-	HL	2	G	6	W	-	LL	2	N				
COOL-DOWN																												
DRAIN	0,5					N	0,5					N	0,5					N	0,5					N				
EXTRACTION																												
RINSE 1																												
DRAIN																												
EXTRACTION																												
RINSE 2	2	C	-	HL	1	N	2	C	-	HL	1	N	2	C	-	HL	1	N	1	C	-	HL	1	N				
DRAIN	0,5					N	0,5					N	0,5					-	0,5					N				
EXTRACTION	1					E	1					E	1					-	1					E				
RINSE 3	2	C	-	HL	1	N	2	C	-	HL	1	N	2	C	-	HL	1	N	1	C	-	HL	1	N				
DRAIN	0,5					N	0,5					N	0,5					-	0,5					N				
EXTRACTION	1					E	1					E	1					-	1					E				
RINSE 4	2	C	-	HL	3	N	2	C	-	HL	3	N	2	C	-	HL	3	N	1	C	-	HL	3	N				
DRAIN	0,5					N	0,5					N	0,5					-	0,5					N				
LOW EXTRACTION	2,5					E	2,5					E	2,5					E	2,5					E				
HIGH EXTRACTION	4					E	4					E	4					E	-					-				
TUMBLING	0,5					N	0,5					N	0,5					-	0,5					N				
PROGRAM TIME	27,5						27,5						27,5						14						23,5			

- = NO DRUM ACTION
G = GENTLE ACTION
N = NORMAL ACTION
D = DISTRIBUTION SPEED
E = EXTRACTION
R = REDUCED GENTLE ACTION
C = COLD WATER (APPROX. 15° C)

W = WARM WATER (APPROX. 35° C)
H = HOT WATER (APPROX 65° C)
Hd = HARD WATER
LL = LOW WATER LEVEL
ML = MEDIUM WATER LEVEL
HL = HIGH WATER LEVEL

Program table P 11 C

PROGRAM	NORMAL 95°						NORMAL 60°					
	1						2					
PROGRAM STEP	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION
PREWASH												
DRAIN												
SOAKING	3	C	-	LL	2	N	3	C	-	LL	2	N
MAIN WASH	15	C	90	LL	2	N	15	C	60	LL	2	N
COOL-DOWN	-					-	-					-
DRAIN	0,5					N	0,5					N
EXTRACTION												
RINSE 1												
DRAIN												
EXTRACTION												
RINSE 2	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					N	0,5					N
EXTRACTION	1					E	1					E
RINSE 3	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					N	0,5					N
EXTRACTION	1					E	1					E
RINSE 4	2	C	-	HL	3	N	2	C	-	HL	3	N
DRAIN	0,5					N	0,5					N
LOW EXTRACTION	2,5					E	2,5					E
HIGH EXTRACTION	4					E	4					E
TUMBLING	0,5					N	0,5					N
PROGRAM TIME	35						35					

PROGRAM	NORMAL 40°						MILD 30°					
	3						4					
PROGRAM STEP	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION
PREWASH												
DRAIN												
SOAKING	3	C	-	LL	2	N	-					-
MAIN WASH	15	C	40	LL	2	N	15	C	30	HL	2	R
COOL-DOWN	-				-	-					-	-
DRAIN	0,5					N	0,5					-
EXTRACTION							-					-
RINSE 1												
DRAIN												
EXTRACTION												
RINSE 2	2	C	-	HL	1	N	1	C	-	HL	1	R
DRAIN	0,5					N	0,5					-
EXTRACTION	1					E	-					-
RINSE 3	2	C	-	HL	1	N	1	C	-	HL	1	R
DRAIN	0,5					N	0,5					-
EXTRACTION	1					E	-					-
RINSE 4	2	C	-	HL	3	N	1	C	-	HL	3	R
DRAIN	0,5					N	0,5					-
LOW EXTRACTION	2,5					E	2					E
HIGH EXTRACTION	4					E	-					-
TUMBLING	0,5					N	0,5					-
PROGRAM TIME	35						22,5					

PROGRAM	WOOL						PERM. PRESS 40°					
	5						6					
PROGRAM STEP	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION
PREWASH												
DRAIN												
SOAKING	-					-	3	C	-	LL	2	N
MAIN WASH	15	C	40	HL	2	R	15	C	40	LL	2	N
COOL-DOWN	-					-	-					-
DRAIN	0,5					-	0,5					N
EXTRACTION	-					-						
RINSE 1												
DRAIN												
EXTRACTION												
RINSE 2	1	C	-	HL	1	R	2	C	-	HL	1	N
DRAIN	0,5					-	0,5					N
EXTRACTION	-					-	1					E
RINSE 3	1	C	-	HL	1	R	2	C	-	HL	1	N
DRAIN	0,5					-	0,5					N
EXTRACTION	-					-	1					E
RINSE 4	1	C	-	HL	3	R	2	C	-	HL	3	N
DRAIN	0,5					-	0,5					N
LOW EXTRACTION	2					E	2					E
HIGH EXTRACTION	-					-	-					-
TUMBLING	0,5					-	0,5					N
PROGRAM TIME	22,5						30,5					

PROGRAM	PERM. PRESS 60°						PERM. PRESS 95°					
	7						8					
PROGRAM STEP	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION
PREWASH												
DRAIN												
SOAKING	3	C	-	LL	2	N	3	C	-	LL	2	N
MAIN WASH	15	C	60	LL	2	N	15	C	90	LL	2	N
COOL-DOWN	-					-		C	60			
DRAIN	0,5					N	0,5					N
EXTRACTION												
RINSE 1												
DRAIN												
EXTRACTION												
RINSE 2	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					N	0,5					N
EXTRACTION	1					E	1					E
RINSE 3	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					N	0,5					N
EXTRACTION	1					E	1					E
RINSE 4	2	C	-	HL	3	N	2	C	-	HL	3	N
DRAIN	0,5					N	0,5					N
LOW EXTRACTION	2					E	2					E
HIGH EXTRACTION	-					-	-					-
TUMBLING	0,5					N	0,5					N
PROGRAM TIME	30,5						30,5					

- = NO DRUM ACTION
G = GENTLE ACTION
N = NORMAL ACTION
D = DISTRIBUTION SPEED
E = EXTRACTION
R = REDUCED GENTLE ACTION
C = COLD WATER (APPROX. 15° C)

W = WARM WATER (APPROX. 35° C)
H = HOT WATER (APPROX 65° C)
Hd = HARD WATER
LL = LOW WATER LEVEL
ML = MEDIUM WATER LEVEL
HL = HIGH WATER LEVEL

Program table P 11 C (with options)

PROGRAM STEP \ PROGRAM	9 NORMAL 95° TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	10 NORMAL 60° TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	11 NORMAL 40° TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION
PREWASH	4	C	-	LL	1	N	4	C	-	LL	1	N	4	C	-	LL	1	N
DRAIN	0,5					N	0,5					N	0,5					N
SOAKING	-					-	-					-	-					-
MAIN WASH	15	C	90	LL	2	N	15	C	60	LL	2	N	15	C	40	LL	2	N
COOL-DOWN																		
DRAIN	0,5					N	0,5					N	0,5					N
EXTRACTION																		
RINSE 1	2	C	-	HL	1	N	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					N	0,5					N	0,5					N
EXTRACTION	1					E	1					E	1					E
RINSE 2	2	C	-	HL	1	N	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					N	0,5					N	0,5					N
EXTRACTION	1					E	1					E	1					E
RINSE 3	2	C	-	HL	1	N	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					N	0,5					N	0,5					N
EXTRACTION	1					E	1					E	1					E
RINSE 4	2	C	-	HL	3	N	2	C	-	HL	3	N	2	C	-	HL	3	N
DRAIN	0,5					N	0,5					N	0,5					N
LOW EXTRACTION	2,5					E	2,5					E	2,5					E
HIGH EXTRACTION	4					E	4					E	4					E
TUMBLING	0,5					N	0,5					N	0,5					N
PROGRAM TIME	49						49						49					

PROGRAM STEP \ PROGRAM	12 MILD 30° TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	13 WOOL TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION
PREWASH												
DRAIN												
SOAKING												
MAIN WASH	15	C	30	HL	2	R	15	C	40	HL	2	R
COOL-DOWN												
DRAIN	0,5					-	0,5					-
EXTRACTION	-					-	-					-
RINSE 1												
DRAIN												
EXTRACTION												
RINSE 2	1	C	-	HL	1	R	1	C	-	HL	1	R
DRAIN	0,5					-	0,5					-
EXTRACTION	-					-	-					-
RINSE 3	1	C	-	HL	1	R	1	C	-	HL	1	R
DRAIN	0,5					-	0,5					-
EXTRACTION	-					-	-					-
RINSE 4	1	C	-	HL	3	R	1	C	-	HL	3	R
DRAIN	0,5					-	0,5					-
LOW EXTRACTION	2					E	2					E
HIGH EXTRACTION	-					-	-					-
TUMBLING	0,5					-	0,5					-
PROGRAM TIME	22,5						22,5					

PROGRAM STEP \ PROGRAM	14 PERM. PRESS 40° TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	15 PERM. PRESS 60° TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	16 PERM. PRESS 95° TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION
PREWASH																		
DRAIN																		
SOAKING																		
MAIN WASH	15	C	40	LL	2	N	15	C	60	LL	2	N	15	C	90	LL	2	N
COOL-DOWN														C	60		1	N
DRAIN	0,5					N	0,5					N	0,5					N
EXTRACTION																		
RINSE 1																		
DRAIN																		
EXTRACTION																		
RINSE 2	2	C	-	HL	1	N	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					N	0,5					N	0,5					N
EXTRACTION	1					E	1					E	1					E
RINSE 3	2	C	-	HL	1	N	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					N	0,5					N	0,5					N
EXTRACTION	1					E	1					E	1					E
RINSE 4	2	C	-	HL	3	N	2	C	-	HL	3	N	2	C	-	HL	3	N
DRAIN	0,5					N	0,5					N	0,5					N
LOW EXTRACTION	2					E	2					E	2					E
HIGH EXTRACTION	-					-	-					-	-					-
TUMBLING	0,5					N	0,5					N	0,5					N
PROGRAM TIME	27,5						27,5						27,5					

- = NO DRUM ACTION
G = GENTLE ACTION
N = NORMAL ACTION
D = DISTRIBUTION SPEED
E = EXTRACTION
R = REDUCED GENTLE ACTION
C = COLD WATER (APPROX. 15° C)

W = WARM WATER (APPROX. 35° C)
H = HOT WATER (APPROX 65° C)
Hd = HARD WATER
LL = LOW WATER LEVEL
ML = MEDIUM WATER LEVEL
HL = HIGH WATER LEVEL

Program table P 21 CH

PROGRAM	NORMAL 95°						NORMAL 60°						NORMAL 40°						MILD 30°					
	1						2						3						4					
PROGRAM STEP	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION
PREWASH																								
DRAIN																								
SOAKING	3	W	-	LL	2	N	3	W	-	LL	2	N	3	W	-	LL	2	N	-					-
MAIN WASH	15	W	90	LL	2	N	15	W	60	LL	2	N	15	W	40	LL	2	N	15	C	30	HL	2	R
COOL-DOWN	-					-	-					-	-					-	-					-
DRAIN	0,5					N	0,5					N	0,5					N	0,5					-
EXTRACTION																			-					-
RINSE 1																								
DRAIN																								
EXTRACTION																								
RINSE 2	2	C	-	HL	1	N	2	C	-	HL	1	N	2	C	-	HL	1	N	1	C	-	HL	1	R
DRAIN	0,5					N	0,5					N	0,5					N	0,5					-
EXTRACTION	1					E	1					E	1					E	-					-
RINSE 3	2	C	-	HL	1	N	2	C	-	HL	1	N	2	C	-	HL	1	N	1	C	-	HL	1	R
DRAIN	0,5					N	0,5					N	0,5					N	0,5					-
EXTRACTION	1					E	1					E	1					E	-					-
RINSE 4	2	C	-	HL	3	N	2	C	-	HL	3	N	2	C	-	HL	3	N	1	C	-	HL	3	R
DRAIN	0,5					N	0,5					N	0,5					N	0,5					-
LOW EXTRACTION	2,5					E	2,5					E	2,5					E	2					E
HIGH EXTRACTION	4					E	4					E	4					E	-					-
TUMBLING	0,5					N	0,5					N	0,5					N	0,5					-
PROGRAM TIME	34,5						34,5						34,5						22,5					

PROGRAM	WOOL						PERM. PRESS 40°						PERM. PRESS 60°						PERM. PRESS 95°					
	5						6						7						8					
PROGRAM STEP	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION
PREWASH																								
DRAIN																								
SOAKING	-					-	3	W	-	LL	2	N	3	W	-	LL	2	N	3	W	-	LL	2	N
MAIN WASH	15	C	40	HL	2	R	15	W	40	LL	2	N	15	W	60	LL	2	N	15	W	90	LL	2	N
COOL-DOWN	-					-	-					-	-					-		C	60		1	N
DRAIN	0,5					-	0,5					N	0,5					N	0,5					N
EXTRACTION	-					-																		
RINSE 1																								
DRAIN																								
EXTRACTION																								
RINSE 2	1	C	-	HL	1	R	2	C	-	HL	1	N	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					-	0,5					N	0,5					N	0,5					N
EXTRACTION	-					-	1					E	1					E	1					E
RINSE 3	1	C	-	HL	1	R	2	C	-	HL	1	N	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					-	0,5					N	0,5					N	0,5					N
EXTRACTION	-					-	1					E	1					E	1					E
RINSE 4	1	C	-	HL	3	R	2	C	-	HL	3	N	2	C	-	HL	3	N	2	C	-	HL	3	N
DRAIN	0,5					-	0,5					N	0,5					N	0,5					N
LOW EXTRACTION	2					E	2					E	2					E	2					E
HIGH EXTRACTION	-					-	-					-	-					-	-					-
TUMBLING	0,5					-	0,5					N	0,5					N	0,5					N
PROGRAM TIME	22,5						30						30						30					

- = NO DRUM ACTION
G = GENTLE ACTION
N = NORMAL ACTION
D = DISTRIBUTION SPEED
E = EXTRACTION
R = REDUCED GENTLE ACTION
C = COLD WATER (APPROX. 15° C)

W = WARM WATER (APPROX. 35° C)
H = HOT WATER (APPROX 65° C)
Hd = HARD WATER
LL = LOW WATER LEVEL
ML = MEDIUM WATER LEVEL
HL = HIGH WATER LEVEL

Program table P 21 CH (with options)

PROGRAM	NORMAL 95° (9)						NORMAL 60° (10)					
PROGRAM STEP	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION
PREWASH	4	W	30	LL	1	N	4	W	30	LL	1	N
DRAIN	0,5					N	0,5					N
SOAKING	-					-	-					-
MAIN WASH	24	H	90	LL	2	N	24	H	60	LL	2	N
COOL-DOWN												
DRAIN	0,5					N	0,5					N
EXTRACTION												
RINSE 1	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					N	0,5					N
EXTRACTION	1					E	1					E
RINSE 2	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					N	0,5					N
EXTRACTION	1					E	1					E
RINSE 3	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					N	0,5					N
EXTRACTION	1					E	1					E
RINSE 4	2	C	-	HL	3	N	2	C	-	HL	3	N
DRAIN	0,5					N	0,5					N
LOW EXTRACTION	2,5					E	2,5					E
HIGH EXTRACTION	4					E	4					E
TUMBLING	0,5					N	0,5					N
PROGRAM TIME	49						49					

PROGRAM	NORMAL 40° (11)						MILD 30° (12)					
PROGRAM STEP	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION
PREWASH	4	W	30	LL	1	N						
DRAIN	0,5					N						
SOAKING	-					-	-					-
MAIN WASH	24	W	40	LL	2	N	15	C	30	HL	2	R
COOL-DOWN												
DRAIN	0,5					N	0,5					-
EXTRACTION							-					-
RINSE 1	2	C	-	HL	1	N						
DRAIN	0,5					N						
EXTRACTION	1					E						
RINSE 2	2	C	-	HL	1	N	1	C	-	HL	1	R
DRAIN	0,5					N	0,5					-
EXTRACTION	1					E	-					-
RINSE 3	2	C	-	HL	1	N	1	C	-	HL	1	R
DRAIN	0,5					N	0,5					-
EXTRACTION	1					E	-					-
RINSE 4	2	C	-	HL	3	N	1	C	-	HL	3	R
DRAIN	0,5					N	0,5					-
LOW EXTRACTION	2,5					E	2					E
HIGH EXTRACTION	4					E	-					-
TUMBLING	0,5					N	0,5					-
PROGRAM TIME	49						22,5					

PROGRAM	WOOL (13)						PERM. PRESS 40° (14)					
PROGRAM STEP	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION
PREWASH							4	W	30	LL	1	N
DRAIN							0,5					N
SOAKING	-					-	-					-
MAIN WASH	15	C	40	HL	2	R	24	W	40	LL	2	N
COOL-DOWN												
DRAIN	0,5					-	0,5					N
EXTRACTION	-					-						
RINSE 1												
DRAIN												
EXTRACTION												
RINSE 2	1	C	-	HL	1	R	2	C	-	HL	1	N
DRAIN	0,5					-	0,5					N
EXTRACTION	-					-	1					E
RINSE 3	1	C	-	HL	1	R	2	C	-	HL	1	N
DRAIN	0,5					-	0,5					N
EXTRACTION	-					-	1					E
RINSE 4	1	C	-	HL	3	R	2	C	-	HL	3	N
DRAIN	0,5					-	0,5					N
LOW EXTRACTION	2					E	2					E
HIGH EXTRACTION	-					-	-					-
TUMBLING	0,5					-	0,5					N
PROGRAM TIME	22,5						41					

PROGRAM	PERM. PRESS 60° (15)						PERM. PRESS 95° (16)					
PROGRAM STEP	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION
PREWASH	4	W	30	LL	1	N	4	W	30	LL	1	N
DRAIN	0,5					N	0,5					N
SOAKING	-					-	-					-
MAIN WASH	24	W	60	LL	2	N	24	H	90	LL	2	N
COOL-DOWN								C	60		1	N
DRAIN	0,5					N	0,5					N
EXTRACTION												
RINSE 1												
DRAIN												
EXTRACTION												
RINSE 2	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					N	0,5					N
EXTRACTION	1					E	1					E
RINSE 3	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					N	0,5					N
EXTRACTION	1					E	1					E
RINSE 4	2	C	-	HL	3	N	2	C	-	HL	3	N
DRAIN	0,5					N	0,5					N
LOW EXTRACTION	2					E	2					E
HIGH EXTRACTION	-					-	-					-
TUMBLING	0,5					N	0,5					N
PROGRAM TIME	41						41					

- = NO DRUM ACTION
G = GENTLE ACTION
N = NORMAL ACTION
D = DISTRIBUTION SPEED
E = EXTRACTION
R = REDUCED GENTLE ACTION
C = COLD WATER (APPROX. 15° C)

W = WARM WATER (APPROX. 35° C)
H = HOT WATER (APPROX 65° C)
Hd = HARD WATER
LL = LOW WATER LEVEL
ML = MEDIUM WATER LEVEL
HL = HIGH WATER LEVEL

Program table P 31 C

PROGRAM / PROGRAM STEP	NORMAL 95°						NORMAL 60°					
	1						2					
	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION
PREWASH												
DRAIN												
SOAKING	3	C	-	LL	2	N	3	C	-	LL	2	N
MAIN WASH	15	C	90	LL	2	N	15	C	60	LL	2	N
COOL-DOWN												
DRAIN	0,5					N	0,5					N
EXTRACTION												
RINSE 1												
DRAIN												
EXTRACTION												
RINSE 2	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					N	0,5					N
EXTRACTION	1					E	1					E
RINSE 3	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					N	0,5					N
EXTRACTION	1					E	1					E
RINSE 4	2	C	-	HL	3	N	2	C	-	HL	3	N
DRAIN	0,5					N	0,5					N
LOW EXTRACTION	2,5					E	2,5					E
HIGH EXTRACTION	4					E	4					E
TUMBLING	0,5					N	0,5					N
PROGRAM TIME	34,5						34,5					

PROGRAM / PROGRAM STEP	NORMAL 40°						MILD 30°					
	3						4					
	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION
PREWASH												
DRAIN												
SOAKING	3	C	-	LL	2	N	-					-
MAIN WASH	15	C	40	LL	2	N	15	C	30	HL	2	R
COOL-DOWN												
DRAIN	0,5					N	0,5					-
EXTRACTION							-					
RINSE 1												
DRAIN												
EXTRACTION												
RINSE 2	2	C	-	HL	1	N	1	C	-	HL	1	R
DRAIN	0,5					N	0,5					-
EXTRACTION	1					E	-					-
RINSE 3	2	C	-	HL	1	N	1	C	-	HL	1	R
DRAIN	0,5					N	0,5					-
EXTRACTION	1					E	-					-
RINSE 4	2	C	-	HL	3	N	1	C	-	HL	3	R
DRAIN	0,5					N	0,5					-
LOW EXTRACTION	2,5					E	2					E
HIGH EXTRACTION	4					E	-					-
TUMBLING	0,5					N	0,5					-
PROGRAM TIME	34,5						22,5					

PROGRAM / PROGRAM STEP	WOOL						PERM. PRESS 40°					
	5						6					
	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION
PREWASH												
DRAIN												
SOAKING	-					-	3	C	-	LL	2	N
MAIN WASH	15	C	40	HL	2	R	15	C	40	LL	2	N
COOL-DOWN												
DRAIN	0,5					-	0,5					N
EXTRACTION	-					-	-					-
RINSE 1												
DRAIN												
EXTRACTION												
RINSE 2	1	C	-	HL	1	R	2	C	-	HL	1	N
DRAIN	0,5					-	0,5					N
EXTRACTION	-					-	1					E
RINSE 3	1	C	-	HL	1	R	2	C	-	HL	1	N
DRAIN	0,5					-	0,5					N
EXTRACTION	-					-	1					E
RINSE 4	1	C	-	HL	3	R	2	C	-	HL	3	N
DRAIN	0,5					-	0,5					N
LOW EXTRACTION	2					E	2					E
HIGH EXTRACTION	-					-	-					-
TUMBLING	0,5					-	0,5					N
PROGRAM TIME	22,5						30					

PROGRAM / PROGRAM STEP	PERM. PRESS 60°						PERM. PRESS 95°					
	7						8					
	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION
PREWASH												
DRAIN												
SOAKING	3	C	-	LL	2	N	3	C	-	LL	2	N
MAIN WASH	15	C	60	LL	2	N	15	C	90	LL	2	N
COOL-DOWN								C	60			
DRAIN	0,5					N	0,5					N
EXTRACTION	-					-	-					-
RINSE 1												
DRAIN												
EXTRACTION												
RINSE 2	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					N	0,5					N
EXTRACTION	1					E	1					E
RINSE 3	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					N	0,5					N
EXTRACTION	1					E	1					E
RINSE 4	2	C	-	HL	3	N	2	C	-	HL	3	N
DRAIN	0,5					N	0,5					N
LOW EXTRACTION	2					E	2					E
HIGH EXTRACTION	-					-	-					-
TUMBLING	0,5					N	0,5					N
PROGRAM TIME	30						30					

- = NO DRUM ACTION
G = GENTLE ACTION
N = NORMAL ACTION
D = DISTRIBUTION SPEED
E = EXTRACTION
R = REDUCED GENTLE ACTION
C = COLD WATER (APPROX. 15° C)

W = WARM WATER (APPROX. 35° C)
H = HOT WATER (APPROX 65° C)
Hd = HARD WATER
LL = LOW WATER LEVEL
ML = MEDIUM WATER LEVEL
HL = HIGH WATER LEVEL

Program table P 31 C (with options)

PROGRAM	NORMAL 95°						NORMAL 60°					
	9						10					
PROGRAM STEP	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION
PREWASH	4	C	-	LL	1	N	4	C	-	LL	1	N
DRAIN	0,5					N	0,5					N
SOAKING	-					-	-					-
MAIN WASH	15	C	90	LL	2	N	15	C	60	LL	2	N
COOL-DOWN												
DRAIN	0,5					N	0,5					N
EXTRACTION												
RINSE 1	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					N	0,5					N
EXTRACTION	1					E	1					E
RINSE 2	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					N	0,5					N
EXTRACTION	1					E	1					E
RINSE 3	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					N	0,5					N
EXTRACTION	1					E	1					E
RINSE 4	2	C	-	HL	3	N	2	C	-	HL	3	N
DRAIN	0,5					N	0,5					N
LOW EXTRACTION	2,5					E	2,5					E
HIGH EXTRACTION	4					E	4					E
TUMBLING	0,5					N	0,5					N
PROGRAM TIME	49						49					

PROGRAM	NORMAL 40°						MILD 30°					
	11						12					
PROGRAM STEP	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION
PREWASH	4	C	-	LL	1	N						
DRAIN	0,5					N						
SOAKING	-					-	-					-
MAIN WASH	15	C	40	LL	2	N	15	C	30	HL	2	R
COOL-DOWN												
DRAIN	0,5					N	0,5					-
EXTRACTION							-					-
RINSE 1	2	C	-	HL	1	N						
DRAIN	0,5					N						
EXTRACTION	1					E						
RINSE 2	2	C	-	HL	1	N	1	C	-	HL	1	R
DRAIN	0,5					N	0,5					-
EXTRACTION	1					E	-					-
RINSE 3	2	C	-	HL	1	N	1	C	-	HL	1	R
DRAIN	0,5					N	0,5					-
EXTRACTION	1					E	-					-
RINSE 4	2	C	-	HL	3	N	1	C	-	HL	3	R
DRAIN	0,5					N	0,5					-
LOW EXTRACTION	2,5					E	2					E
HIGH EXTRACTION	4					E	-					-
TUMBLING	0,5					N	0,5					-
PROGRAM TIME	49						22,5					

PROGRAM	WOOL						PERM. PRESS 40°					
	13						14					
PROGRAM STEP	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION
PREWASH												
DRAIN												
SOAKING	-					-	-					-
MAIN WASH	15	C	40	HL	2	R	15	C	40	LL	2	N
COOL-DOWN												
DRAIN	0,5					-	0,5					N
EXTRACTION	-					-						
RINSE 1												
DRAIN												
EXTRACTION												
RINSE 2	1	C	-	HL	1	R	2	C	-	HL	1	N
DRAIN	0,5					-	0,5					N
EXTRACTION	-					-	1					E
RINSE 3	1	C	-	HL	1	R	2	C	-	HL	1	N
DRAIN	0,5					-	0,5					N
EXTRACTION	-					-	1					E
RINSE 4	1	C	-	HL	3	R	2	C	-	HL	3	N
DRAIN	0,5					-	0,5					N
LOW EXTRACTION	2					E	2					E
HIGH EXTRACTION	-					-	-					-
TUMBLING	0,5					-	0,5					N
PROGRAM TIME	22,5						41					

PROGRAM	PERM. PRESS 60°						PERM. PRESS 95°					
	15						16					
PROGRAM STEP	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION
PREWASH												
DRAIN												
SOAKING	-					-	-					-
MAIN WASH	15	C	60	LL	2	N	15	C	90	LL	2	N
COOL-DOWN								C	60		1	N
DRAIN	0,5					N	0,5					N
EXTRACTION												
RINSE 1												
DRAIN												
EXTRACTION												
RINSE 2	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					N	0,5					N
EXTRACTION	1					E	1					E
RINSE 3	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					N	0,5					N
EXTRACTION	1					E	1					E
RINSE 4	2	C	-	HL	3	N	2	C	-	HL	3	N
DRAIN	0,5					N	0,5					N
LOW EXTRACTION	2					E	2					E
HIGH EXTRACTION	-					-	-					-
TUMBLING	0,5					N	0,5					N
PROGRAM TIME	41						41					

- = NO DRUM ACTION
G = GENTLE ACTION
N = NORMAL ACTION
D = DISTRIBUTION SPEED
E = EXTRACTION
R = REDUCED GENTLE ACTION
C = COLD WATER (APPROX. 15° C)

W = WARM WATER (APPROX. 35° C)
H = HOT WATER (APPROX 65° C)
Hd = HARD WATER
LL = LOW WATER LEVEL
ML = MEDIUM WATER LEVEL
HL = HIGH WATER LEVEL

Program table P 41 C

PROGRAM / PROGRAM STEP	NORMAL 95°						NORMAL 60°					
	1						2					
	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION
PREWASH												
DRAIN												
SOAKING	3	C	-	LL	2	N	3	C	-	LL	2	N
MAIN WASH	15	C	90	LL	2	N	15	C	60	LL	2	N
COOL-DOWN	-					-	-					-
DRAIN	0,5					N	0,5					N
EXTRACTION	0,1					E	0,1					E
RINSE 1												
DRAIN												
EXTRACTION												
RINSE 2	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					N	0,5					N
EXTRACTION	1					E	1					E
RINSE 3	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					N	0,5					N
EXTRACTION	1					E	1					E
RINSE 4	2	C	-	HL	3	N	2	C	-	HL	3	N
DRAIN	0,5					N	0,5					N
LOW EXTRACTION	2,5					E	2,5					E
HIGH EXTRACTION	4					E	4					E
TUMBLING	0,5					N	0,5					N
PROGRAM TIME	34,6						34,6					

PROGRAM / PROGRAM STEP	NORMAL 40°						MILD 30°					
	3						4					
	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION
PREWASH												
DRAIN												
SOAKING	3	C	-	LL	2	N						
MAIN WASH	15	C	40	LL	2	N	15	C	30	HL	2	R
COOL-DOWN	-					-	-					-
DRAIN	0,5					N	0,5					-
EXTRACTION	0,1					E	-					-
RINSE 1												
DRAIN												
EXTRACTION												
RINSE 2	2	C	-	HL	1	N	1	C	-	HL	1	R
DRAIN	0,5					N	0,5					-
EXTRACTION	1					E	-					-
RINSE 3	2	C	-	HL	1	N	1	C	-	HL	1	R
DRAIN	0,5					N	0,5					-
EXTRACTION	1					E	-					-
RINSE 4	2	C	-	HL	3	N	1	C	-	HL	3	R
DRAIN	0,5					N	0,5					-
LOW EXTRACTION	2,5					E	2					E
HIGH EXTRACTION	4					E	-					-
TUMBLING	0,5					N	0,5					-
PROGRAM TIME	34,6						22,5					

PROGRAM / PROGRAM STEP	WOOL						PERM. PRESS 40°					
	5						6					
	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION
PREWASH												
DRAIN												
SOAKING							3	C	-	LL	2	N
MAIN WASH	15	C	40	HL	2	R	15	C	40	LL	2	N
COOL-DOWN	-					-	-					-
DRAIN	0,5					-	0,5					N
EXTRACTION	-					-	0,1					E
RINSE 1												
DRAIN												
EXTRACTION												
RINSE 2	1	C	-	HL	1	R	2	C	-	HL	1	N
DRAIN	0,5					-	0,5					N
EXTRACTION	-					-	1					E
RINSE 3	1	C	-	HL	1	R	2	C	-	HL	1	N
DRAIN	0,5					-	0,5					N
EXTRACTION	-					-	1					E
RINSE 4	1	C	-	HL	3	R	2	C	-	HL	3	N
DRAIN	0,5					-	0,5					N
LOW EXTRACTION	2					E	2					E
HIGH EXTRACTION	-					-	-					-
TUMBLING	0,5					-	0,5					N
PROGRAM TIME	22,5						30,1					

PROGRAM / PROGRAM STEP	PERM. PRESS 60°						PERM. PRESS 95°					
	7						8					
	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION
PREWASH												
DRAIN												
SOAKING	3	C	-	LL	2	N	3	C	-	LL	2	N
MAIN WASH	15	C	60	LL	2	N	15	C	90	LL	2	N
COOL-DOWN	-					-		C	60		1	N
DRAIN	0,5					N	0,5					N
EXTRACTION	0,1					E	0,1					E
RINSE 1												
DRAIN												
EXTRACTION												
RINSE 2	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					N	0,5					N
EXTRACTION	1					E	1					E
RINSE 3	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					N	0,5					N
EXTRACTION	1					E	1					E
RINSE 4	2	C	-	HL	3	N	2	C	-	HL	3	N
DRAIN	0,5					N	0,5					N
LOW EXTRACTION	2					E	2					E
HIGH EXTRACTION	-					-	-					-
TUMBLING	0,5					N	0,5					N
PROGRAM TIME	30,1						30,1					

- = NO DRUM ACTION
G = GENTLE ACTION
N = NORMAL ACTION
D = DISTRIBUTION SPEED
E = EXTRACTION
R = REDUCED GENTLE ACTION
C = COLD WATER (APPROX. 15° C)

W = WARM WATER (APPROX. 35° C)
H = HOT WATER (APPROX 65° C)
Hd = HARD WATER
LL = LOW WATER LEVEL
ML = MEDIUM WATER LEVEL
HL = HIGH WATER LEVEL

Program table P 41 C (cont.)

PROGRAM / PROGRAM STEP	NORMAL 95° (9) TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	NORMAL 60° (10) TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	NORMAL 40° (11) TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION
PREWASH	4	C	40	LL	1	N	4	C	40	LL	1	N	4	C	40	LL	1	N
DRAIN	0,5					N	0,5					N	0,5					N
SOAKING	-					-	-					-	-					-
MAIN WASH	24	C	90	LL	2	N	24	C	60	LL	2	N	24	C	40	LL	2	N
COOL-DOWN																		
DRAIN	0,5					N	0,5					N	0,5					N
EXTRACTION	0,1					E	0,1					E	0,1					E
RINSE 1	2	C	-	HL	1	N	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					N	0,5					N	0,5					N
EXTRACTION	1					E	1					E	1					E
RINSE 2	2	C	-	HL	1	N	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					N	0,5					N	0,5					N
EXTRACTION	1					E	1					E	1					E
RINSE 3	2	C	-	HL	1	N	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					N	0,5					N	0,5					N
EXTRACTION	1					E	1					E	1					E
RINSE 4	2	C	-	HL	3	N	2	C	-	HL	3	N	2	C	-	HL	3	N
DRAIN	0,5					N	0,5					N	0,5					N
LOW EXTRACTION	2,5					E	2,5					E	2,5					E
HIGH EXTRACTION	4					E	4					E	4					E
TUMBLING	0,5					N	0,5					N	0,5					N
PROGRAM TIME	49,1						49,1						49,1					

PROGRAM / PROGRAM STEP	MILD 30° (12) TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	WOOL (13) TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION
PREWASH												
DRAIN												
SOAKING	-					-	-					-
MAIN WASH	15	C	30	HL	2	R	15	C	40	HL	2	R
COOL-DOWN												
DRAIN	0,5					-	0,5					-
EXTRACTION	-					-	-					-
RINSE 1												
DRAIN												
EXTRACTION												
RINSE 2	1	C	-	HL	1	R	1	C	-	HL	1	R
DRAIN	0,5					-	0,5					-
EXTRACTION	-					-	-					-
RINSE 3	1	C	-	HL	1	R	1	C	-	HL	1	R
DRAIN	0,5					-	0,5					-
EXTRACTION	-					-	-					-
RINSE 4	1	C	-	HL	3	R	1	C	-	HL	3	R
DRAIN	0,5					-	0,5					-
LOW EXTRACTION	2					E	2					E
HIGH EXTRACTION	-					-	-					-
TUMBLING	0,5					-	0,5					-
PROGRAM TIME	22,5						22,5					

PROGRAM / PROGRAM STEP	PERM. PRESS 40° (14) TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	PERM. PRESS 60° (15) TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	PERM. PRESS 95° (16) TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION
PREWASH	4	C	40	LL	1	N	4	C	40	LL	1	N	4	C	40	LL	1	N
DRAIN	0,5					N	0,5					N	0,5					N
SOAKING	-					-	-					-	-					-
MAIN WASH	24	C	40	LL	2	N	24	C	60	LL	2	N	24	C	90	LL	2	N
COOL-DOWN														C	60		1	N
DRAIN	0,5					N	0,5					N	0,5					N
EXTRACTION	0,1					E	0,1					E	0,1					E
RINSE 1																		
DRAIN																		
EXTRACTION																		
RINSE 2	2	C	-	HL	1	N	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					N	0,5					N	0,5					N
EXTRACTION	1					E	1					E	1					E
RINSE 3	2	C	-	HL	1	N	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					N	0,5					N	0,5					N
EXTRACTION	1					E	1					E	1					E
RINSE 4	2	C	-	HL	3	N	2	C	-	HL	3	N	2	C	-	HL	3	N
DRAIN	0,5					N	0,5					N	0,5					N
LOW EXTRACTION	2					E	2					E	2					E
HIGH EXTRACTION	-					-	-					-	-					-
TUMBLING	0,5					N	0,5					N	0,5					N
PROGRAM TIME	41,1						41,1						41,1					

- = NO DRUM ACTION
G = GENTLE ACTION
N = NORMAL ACTION
D = DISTRIBUTION SPEED
E = EXTRACTION
R = REDUCED GENTLE ACTION
C = COLD WATER (APPROX. 15° C)

W = WARM WATER (APPROX. 35° C)
H = HOT WATER (APPROX 65° C)
Hd = HARD WATER
LL = LOW WATER LEVEL
ML = MEDIUM WATER LEVEL
HL = HIGH WATER LEVEL

Program table P 51 CH

PROGRAM / PROGRAM STEP	NORMAL 95°						NORMAL 60°					
	1						2					
	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION
PREWASH												
DRAIN												
SOAKING	3	W	-	LL	2	N	3	W	-	LL	2	N
MAIN WASH	15	W	90	LL	2	N	15	W	60	LL	2	N
COOL-DOWN	-					-	-					-
DRAIN	0,5					N	0,5					N
EXTRACTION												
RINSE 1												
DRAIN												
EXTRACTION												
RINSE 2	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					N	0,5					N
EXTRACTION	1					E	1					E
RINSE 3	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					N	0,5					N
EXTRACTION	1					E	1					E
RINSE 4	2	C	-	HL	3	N	2	C	-	HL	3	N
DRAIN	0,5					N	0,5					N
LOW EXTRACTION	2,5					E	2,5					E
HIGH EXTRACTION	4					E	4					E
TUMBLING	0,5					N	0,5					N
PROGRAM TIME	34,5						34,5					

PROGRAM / PROGRAM STEP	NORMAL 40°						MILD 30°					
	3						4					
	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION
PREWASH												
DRAIN												
SOAKING	3	W	-	LL	2	N						
MAIN WASH	15	W	40	LL	2	N	15	C	30	HL	2	R
COOL-DOWN	-					-	-					-
DRAIN	0,5					N	0,5					-
EXTRACTION							-					-
RINSE 1												
DRAIN												
EXTRACTION												
RINSE 2	2	C	-	HL	1	N	1	C	-	HL	1	R
DRAIN	0,5					N	0,5					-
EXTRACTION	1					E	-					-
RINSE 3	2	C	-	HL	1	N	1	C	-	HL	1	R
DRAIN	0,5					N	0,5					-
EXTRACTION	1					E	-					-
RINSE 4	2	C	-	HL	3	N	1	C	-	HL	3	R
DRAIN	0,5					N	0,5					-
LOW EXTRACTION	2,5					E	2					E
HIGH EXTRACTION	4					E	-					-
TUMBLING	0,5					N	0,5					-
PROGRAM TIME	34,5						22,5					

PROGRAM / PROGRAM STEP	WOOL						PERM. PRESS 40°					
	5						6					
	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION
PREWASH												
DRAIN												
SOAKING							3	W	-	LL	2	N
MAIN WASH	15	C	40	HL	2	R	15	W	40	LL	2	N
COOL-DOWN	-					-	-					-
DRAIN	0,5					-	0,5					N
EXTRACTION	-					-						
RINSE 1												
DRAIN												
EXTRACTION												
RINSE 2	1	C	-	HL	1	R	2	C	-	HL	1	N
DRAIN	0,5					-	0,5					N
EXTRACTION	-					-	1					E
RINSE 3	1	C	-	HL	1	R	2	C	-	HL	1	N
DRAIN	0,5					-	0,5					N
EXTRACTION	-					-	1					E
RINSE 4	1	C	-	HL	3	R	2	C	-	HL	3	N
DRAIN	0,5					-	0,5					N
LOW EXTRACTION	2					E	2					E
HIGH EXTRACTION	-					-	-					-
TUMBLING	0,5					-	0,5					N
PROGRAM TIME	22,5						30					

PROGRAM / PROGRAM STEP	PERM. PRESS 60°						PERM. PRESS 95°					
	7						8					
	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION
PREWASH												
DRAIN												
SOAKING	3	W	-	LL	2	N	3	W	-	LL	2	N
MAIN WASH	15	W	60	LL	2	N	15	W	90	LL	2	N
COOL-DOWN	-					-		C	60		1	N
DRAIN	0,5					N	0,5					N
EXTRACTION												
RINSE 1												
DRAIN												
EXTRACTION												
RINSE 2	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					N	0,5					N
EXTRACTION	1					E	1					E
RINSE 3	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					N	0,5					N
EXTRACTION	1					E	1					E
RINSE 4	2	C	-	HL	3	N	2	C	-	HL	3	N
DRAIN	0,5					N	0,5					N
LOW EXTRACTION	2					E	2					E
HIGH EXTRACTION	-					-	-					-
TUMBLING	0,5					N	0,5					N
PROGRAM TIME	30						30					

- = NO DRUM ACTION
G = GENTLE ACTION
N = NORMAL ACTION
D = DISTRIBUTION SPEED
E = EXTRACTION
R = REDUCED GENTLE ACTION
C = COLD WATER (APPROX. 15° C)

W = WARM WATER (APPROX. 35° C)
H = HOT WATER (APPROX 65° C)
Hd = HARD WATER
LL = LOW WATER LEVEL
ML = MEDIUM WATER LEVEL
HL = HIGH WATER LEVEL

Program table P 51 CH (with options)

PROGRAM / PROGRAM STEP	NORMAL 95° 9: TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	NORMAL 60° 10: TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	NORMAL 40° 11: TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION
PREWASH	4	W	30	LL	1	N	4	W	30	LL	1	N	4	W	30	LL	1	N
DRAIN	0,5					N	0,5					N	0,5					N
SOAKING	-					-	-					-	-					-
MAIN WASH	24	H	90	LL	2	N	24	H	60	LL	2	N	24	W	40	LL	2	N
COOL-DOWN																		
DRAIN	0,5					N	0,5					N	0,5					N
EXTRACTION																		
RINSE 1	2	C	-	HL	1	N	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					N	0,5					N	0,5					N
EXTRACTION	1					E	1					E	1					E
RINSE 2	2	C	-	HL	1	N	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					N	0,5					N	0,5					N
EXTRACTION	1					E	1					E	1					E
RINSE 3	2	C	-	HL	1	N	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					N	0,5					N	0,5					N
EXTRACTION	1					E	1					E	1					E
RINSE 4	2	C	-	HL	3	N	2	C	-	HL	3	N	2	C	-	HL	3	N
DRAIN	0,5					N	0,5					N	0,5					N
LOW EXTRACTION	2,5					E	2,5					E	2,5					E
HIGH EXTRACTION	4					E	4					E	4					E
TUMBLING	0,5					N	0,5					N	0,5					N
PROGRAM TIME	49						49						49					

PROGRAM / PROGRAM STEP	MILD 30° 12: TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	WOOL 13: TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION
PREWASH												
DRAIN												
SOAKING	-					-	-					-
MAIN WASH	15	C	30	HL	2	R	15	C	40	HL	2	R
COOL-DOWN												
DRAIN	0,5					-	0,5					-
EXTRACTION	-					-	-					-
RINSE 1												
DRAIN												
EXTRACTION												
RINSE 2	1	C	-	HL	1	R	1	C	-	HL	1	R
DRAIN	0,5					-	0,5					-
EXTRACTION	-					-	-					-
RINSE 3	1	C	-	HL	1	R	1	C	-	HL	1	R
DRAIN	0,5					-	0,5					-
EXTRACTION	-					-	-					-
RINSE 4	1	C	-	HL	3	R	1	C	-	HL	3	R
DRAIN	0,5					-	0,5					-
LOW EXTRACTION	2					E	2					E
HIGH EXTRACTION	-					-	-					-
TUMBLING	0,5					-	0,5					-
PROGRAM TIME	22,5						22,5					

PROGRAM / PROGRAM STEP	PERM. PRESS 40° 14: TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	PERM. PRESS 60° 15: TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	PERM. PRESS 95° 16: TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION
PREWASH	4	W	30	LL	1	N	4	W	30	LL	1	N	4	W	30	LL	1	N
DRAIN	0,5					N	0,5					N	0,5					N
SOAKING	-					-	-					-	-					-
MAIN WASH	24	W	40	LL	2	N	24	W	60	LL	2	N	24	H	90	LL	2	N
COOL-DOWN														C	60		1	N
DRAIN	0,5					N	0,5					N	0,5					N
EXTRACTION																		
RINSE 1																		
DRAIN																		
EXTRACTION																		
RINSE 2	2	C	-	HL	1	N	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					N	0,5					N	0,5					N
EXTRACTION	1					E	1					E	1					E
RINSE 3	2	C	-	HL	1	N	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					N	0,5					N	0,5					N
EXTRACTION	1					E	1					E	1					E
RINSE 4	2	C	-	HL	3	N	2	C	-	HL	3	N	2	C	-	HL	3	N
DRAIN	0,5					N	0,5					N	0,5					N
LOW EXTRACTION	2					E	2					E	2					E
HIGH EXTRACTION	-					-	-					-	-					-
TUMBLING	0,5					N	0,5					N	0,5					N
PROGRAM TIME	41						41						41					

- = NO DRUM ACTION
G = GENTLE ACTION
N = NORMAL ACTION
D = DISTRIBUTION SPEED
E = EXTRACTION
R = REDUCED GENTLE ACTION
C = COLD WATER (APPROX. 15° C)

W = WARM WATER (APPROX. 35° C)
H = HOT WATER (APPROX 65° C)
Hd = HARD WATER
LL = LOW WATER LEVEL
ML = MEDIUM WATER LEVEL
HL = HIGH WATER LEVEL

Program table P 61 CH

PROGRAM / PROGRAM STEP	NORMAL 95°						NORMAL 60°					
	1						2					
	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION
PREWASH												
DRAIN												
SOAKING	3	W	-	LL	2	N	3	W	-	LL	2	N
MAIN WASH	15	W	90	LL	2	N	15	W	60	LL	2	N
COOL-DOWN	-					-	-					-
DRAIN	0,5					N	0,5					N
EXTRACTION												
RINSE 1												
DRAIN												
EXTRACTION												
RINSE 2	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					N	0,5					N
EXTRACTION	1					E	1					E
RINSE 3	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					N	0,5					N
EXTRACTION	1					E	1					E
RINSE 4	2	C	-	HL	3	N	2	C	-	HL	3	N
DRAIN	0,5					N	0,5					N
LOW EXTRACTION	2,5					E	2,5					E
HIGH EXTRACTION	4					E	4					E
TUMBLING	0,5					N	0,5					N
PROGRAM TIME	34,5						34,5					

PROGRAM / PROGRAM STEP	NORMAL 40°						MILD 30°					
	3						4					
	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION
PREWASH												
DRAIN												
SOAKING	3	W	-	LL	2	N						
MAIN WASH	15	W	40	LL	2	N	15	C	30	HL	2	R
COOL-DOWN	-					-	-					-
DRAIN	0,5					N	0,5					N
EXTRACTION							-					-
RINSE 1												
DRAIN												
EXTRACTION												
RINSE 2	2	C	-	HL	1	N	1	C	-	HL	1	R
DRAIN	0,5					N	0,5					-
EXTRACTION	1					E	-					-
RINSE 3	2	C	-	HL	1	N	1	C	-	HL	1	R
DRAIN	0,5					N	0,5					-
EXTRACTION	1					E	-					-
RINSE 4	2	C	-	HL	3	N	1	C	-	HL	3	R
DRAIN	0,5					N	0,5					-
LOW EXTRACTION	2,5					E	2					E
HIGH EXTRACTION	4					E	-					-
TUMBLING	0,5					N	0,5					-
PROGRAM TIME	34,5						22,5					

PROGRAM / PROGRAM STEP	WOOL						PERM. PRESS 40°					
	5						6					
	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION
PREWASH												
DRAIN												
SOAKING							3	W	-	LL	2	N
MAIN WASH	15	C	40	HL	2	R	15	W	40	LL	2	N
COOL-DOWN	-					-	-					-
DRAIN	0,5					N	0,5					N
EXTRACTION	-					-						
RINSE 1												
DRAIN												
EXTRACTION												
RINSE 2	1	C	-	HL	1	R	2	C	-	HL	1	N
DRAIN	0,5					-	0,5					N
EXTRACTION	-					-	1					E
RINSE 3	1	C	-	HL	1	R	2	C	-	HL	1	N
DRAIN	0,5					-	0,5					N
EXTRACTION	-					-	1					E
RINSE 4	1	C	-	HL	3	R	2	C	-	HL	3	N
DRAIN	0,5					-	0,5					N
LOW EXTRACTION	2					E	2					E
HIGH EXTRACTION	-					-	-					-
TUMBLING	0,5					-	0,5					N
PROGRAM TIME	22,5						30					

PROGRAM / PROGRAM STEP	PERM. PRESS 60°						PERM. PRESS 95°					
	7						8					
	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION
PREWASH												
DRAIN												
SOAKING	3	W	-	LL	2	N	3	W	-	LL	2	N
MAIN WASH	15	W	60	LL	2	N	15	W	90	LL	2	N
COOL-DOWN	-					-		C	60		1	N
DRAIN	0,5					N	0,5					N
EXTRACTION												
RINSE 1												
DRAIN												
EXTRACTION												
RINSE 2	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					N	0,5					N
EXTRACTION	1					E	1					E
RINSE 3	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					N	0,5					N
EXTRACTION	1					E	1					E
RINSE 4	2	C	-	HL	3	N	2	C	-	HL	3	N
DRAIN	0,5					N	0,5					N
LOW EXTRACTION	2					E	2					E
HIGH EXTRACTION	-					-	-					-
TUMBLING	0,5					N	0,5					N
PROGRAM TIME	30						30					

- = NO DRUM ACTION
G = GENTLE ACTION
N = NORMAL ACTION
D = DISTRIBUTION SPEED
E = EXTRACTION
R = REDUCED GENTLE ACTION
C = COLD WATER (APPROX. 15° C)

W = WARM WATER (APPROX. 35° C)
H = HOT WATER (APPROX 65° C)
Hd = HARD WATER
LL = LOW WATER LEVEL
ML = MEDIUM WATER LEVEL
HL = HIGH WATER LEVEL

Program table P 61 CH (with options)

PROGRAM / PROGRAM STEP	NORMAL 95° 9						NORMAL 60° 10					
	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION
PREWASH	4	W	-	LL	1	N	4	W	-	LL	1	N
DRAIN	0,5					N	0,5					N
SOAKING	-					-	-					-
MAIN WASH	15	H	90	LL	2	N	15	H	60	LL	2	N
COOL-DOWN												
DRAIN	0,5					N	0,5					N
EXTRACTION												
RINSE 1	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					N	0,5					N
EXTRACTION	1					E	1					E
RINSE 2	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					N	0,5					N
EXTRACTION	1					E	1					E
RINSE 3	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					N	0,5					N
EXTRACTION	1					E	1					E
RINSE 4	2	C	-	HL	3	N	2	C	-	HL	3	N
DRAIN	0,5					N	0,5					N
LOW EXTRACTION	2,5					E	2,5					E
HIGH EXTRACTION	4					E	4					E
TUMBLING	0,5					N	0,5					N
PROGRAM TIME	49						49					

PROGRAM / PROGRAM STEP	NORMAL 40° 11						MILD 30° 12					
	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION
PREWASH	4	W	-	LL	1	N						
DRAIN	0,5					N						
SOAKING	-					-	-					-
MAIN WASH	15	W	40	LL	2	N	15	C	30	HL	2	R
COOL-DOWN												
DRAIN	0,5					N	0,5					-
EXTRACTION							-					-
RINSE 1	2	C	-	HL	1	N						
DRAIN	0,5					N						
EXTRACTION	1					E						
RINSE 2	2	C	-	HL	1	N	1	C	-	HL	1	R
DRAIN	0,5					N	0,5					-
EXTRACTION	1					E	-					-
RINSE 3	2	C	-	HL	1	N	1	C	-	HL	1	R
DRAIN	0,5					N	0,5					-
EXTRACTION	1					E	-					-
RINSE 4	2	C	-	HL	3	N	1	C	-	HL	3	R
DRAIN	0,5					N	0,5					-
LOW EXTRACTION	2,5					E	2					E
HIGH EXTRACTION	4					E	-					-
TUMBLING	0,5					N	0,5					-
PROGRAM TIME	49						22,5					

PROGRAM / PROGRAM STEP	WOOL 13						PERM. PRESS 40° 14					
	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION
PREWASH												
DRAIN												
SOAKING	-					-						
MAIN WASH	15	C	40	HL	2	R	15	W	40	LL	2	N
COOL-DOWN												
DRAIN	0,5					-	0,5					N
EXTRACTION	-					-						
RINSE 1												
DRAIN												
EXTRACTION												
RINSE 2	1	C	-	HL	1	R	2	C	-	HL	1	N
DRAIN	0,5					-	0,5					N
EXTRACTION	-					-	1					E
RINSE 3	1	C	-	HL	1	R	2	C	-	HL	1	N
DRAIN	0,5					-	0,5					N
EXTRACTION	-					-	1					E
RINSE 4	1	C	-	HL	3	R	2	C	-	HL	3	N
DRAIN	0,5					-	0,5					N
LOW EXTRACTION	2					E	2					E
HIGH EXTRACTION	-					-	-					-
TUMBLING	0,5					-	0,5					N
PROGRAM TIME	22,5						41					

PROGRAM / PROGRAM STEP	PERM. PRESS 60° 15						PERM. PRESS 95° 16					
	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION	TIME, MIN	INTAKE WATER	TEMP °C	LEVEL	COMPARTMENT	DRUM ACTION
PREWASH												
DRAIN												
SOAKING												
MAIN WASH	15	W	60	LL	2	N	15	W	90	LL	2	N
COOL-DOWN								C	60		1	N
DRAIN	0,5					N	0,5					N
EXTRACTION												
RINSE 1												
DRAIN												
EXTRACTION												
RINSE 2	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					N	0,5					N
EXTRACTION	1					E	1					E
RINSE 3	2	C	-	HL	1	N	2	C	-	HL	1	N
DRAIN	0,5					N	0,5					N
EXTRACTION	1					E	1					E
RINSE 4	2	C	-	HL	3	N	2	C	-	HL	3	N
DRAIN	0,5					N	0,5					N
LOW EXTRACTION	2					E	2					E
HIGH EXTRACTION	-					-	-					-
TUMBLING	0,5					N	0,5					N
PROGRAM TIME	41						41					

- = NO DRUM ACTION
G = GENTLE ACTION
N = NORMAL ACTION
D = DISTRIBUTION SPEED
E = EXTRACTION
R = REDUCED GENTLE ACTION
C = COLD WATER (APPROX. 15° C)

W = WARM WATER (APPROX. 35° C)
H = HOT WATER (APPROX 65° C)
Hd = HARD WATER
LL = LOW WATER LEVEL
ML = MEDIUM WATER LEVEL
HL = HIGH WATER LEVEL

Description of programs, electronic timer

These machines have 7 built-in programs. These basic programmes can also be modified with the aid of the option buttons. Programs are selected by means of push-buttons on the control panel.

The machine can be equipped for the following program variants:

PE01aCH*	PE01bCH*	PE01dCHd	PE11aC*	PE21aCHd*
Normal 95°	Normal 95°	Normal 95°	Normal 95°	Normal 95°
Normal 60°	Normal 60°	Normal 60°	Normal 60°	Normal 60°
Normal 40°	Normal 40°	Normal 40°	Normal 40°	Normal 40°
Mild 30°	Mild 30°	Mild 30°	Mild 30°	Mild 30°
Wool	Wool	Wool	Wool	Wool
Perm. press 40°	Perm. press 40°	Perm. press 40°	Perm. press 40°	Perm. press 40°
Perm. press 60°	Perm. press 60°	Perm. press 60°	Perm. press 60°	Perm. press 60°
Options: • Express • Intensive • Rinse stop • Extra rinse	**Options:** • Heavily soiled • No extract.	**Options:** • Heavily soiled • Gentle extract.	**Options:** • Heavily soiled • No extract.	**Options:** • Heavily soiled • Gentle extract.

PE31aC*	PE41aC*	PE51aCH*	P61aCH*	
Normal 95°	Normal 95°	Normal 95°	Normal 95°	
Normal 60°	Normal 60°	Normal 60°	Normal 60°	
Normal 40°	Normal 40°	Normal 40°	Normal 40°	
Mild 30°	Mild 30°	Mild 30°	Mild 30°	
Wool	Wool	Wool	Wool	
Perm. press 40°	Perm. press 40°	Perm. press 40°	Perm. press 40°	
Perm. press 60°	Perm. press 60°	Perm. press 60°	Perm. press 60°	
Options: • Heavily soiled • Rinse stop	**Options:** • Express • Intensive • Rinse stop • Extra rinse	**Options:** • Express • Intensive • Rinse stop • Extra rinse	**Options:** • Heavily soiled • No extraction	

* The program number shows which market the program is intended for, as follows:

PE01 = Wascator, export	PE41 = Wascator, Switzerland
PE11 = Wascator, Sweden	PE51 = Zanussi
PE21 = Nyborg	PE61 = Wascator, Finland
PE31 = Osby, Sweden	

The letters after the program number show the water intakes required for the program. C = cold water and CH = cold and hot water, and Hd = hard water.

The times, temperatures, water levels etc. of the various programs are shown in the special tables for each program. The programmer is at a standstill during cool-down, water filling and heating. The times required for these parts of the cycle are not included in the times stated in the tables.

The temperature during the main wash (and prewash if selected) is automatically controlled by the thermostat.

During cool-down after the main wash (for permanent press 95° and 60°) the water intake is pulsed to prevent creasing. The temperature normally falls to 55°C.

Program table PE 01a CH

NORMAL 95° (Program 1)

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION	3					30	E
PREWASH							
DRAIN							
MAIN WASH	3	W	2	L	-	-	N
SOAKING	3	W	-	L	-	6	N
HEATING	3	-	-	L	80	-	N
WASHING	3	-	-	-	80	12	N
DRAIN	4	-	-	-	-	1	D
EXTRACTION							
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	h	-	3	N
DRAIN	6					40	ND
EXTRACTION	6					30	E
RINSE 3	7	C	-	h	-	3	ND
DRAIN	7					40	ND
EXTRACTION	7					30	E
RINSE 4	8	C	3	h	-	3	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DRAIN	9					50	ND
EXTRACTION	9					4	E
PROGRAM TIME	37						

NORMAL 60° (Program 2)

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION	3					30	E
PREWASH							
DRAIN							
MAIN WASH	3	W	2	L	-	-	N
SOAKING	3	W	-	L	-	6	N
HEATING	3	-	-	L	55	-	N
WASHING	3	-	-	-	55	12	N
DRAIN	4	-	-		-	1	D
EXTRACTION							
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	h	-	3	N
DRAIN	6					40	ND
EXTRACTION	6					30	E
RINSE 3	7	C	-	h	-	3	N
DRAIN	7					40	ND
EXTRACTION	7					30	E
RINSE 4	8	C	3	h	-	3	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DRAIN	9					50	ND
EXTRACTION	9					4	E
PROGRAM TIME	37						

NORMAL 40° (Program 3)

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION	3					30	E
PREWASH							
DRAIN							
MAIN WASH	3	W	2	L	-	-	N
SOAKING	3	W	-	L	-	6	N
HEATING	3	-	-	L	40	-	N
WASHING	3	-			40	12	N
DRAIN	4	-	-	-	-	1	D
EXTRACTION							
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	h	-	3	N
DRAIN	6					40	ND
EXTRACTION	6					30	E
RINSE 3	7	C	-	h	-	3	N
DRAIN	7					40	ND
EXTRACTION	7					30	E
RINSE 4	8	C	3	h	-	3	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DRAIN	9					50	ND
EXTRACTION	9					4	E
PROGRAM TIME	37						

MILD 30° (Program 4)

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION							
PREWASH							
DRAIN							
MAIN WASH	3	C	2	h	-	-	-
SOAKING							
HEATING	3	C	2	h	30	-	R
WASHING	3				30	15	R
DRAIN	4					1	-
EXTRACTION							
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	h	-	2	R
DRAIN	6					1	-
EXTRACTION	-					-	
RINSE 3	7	C	-	h	-	2	R
DRAIN	7					1	-
EXTRACTION	-					-	
RINSE 4	8	C	3	h	-	2	R
DRAIN	9					40	RD
EXTRACTION	9					6	E
DRAIN	9					50	RD
EXTRACTION	9					1,5	E
PROGRAM TIME	28						

WOOL (Program 5)

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION							
PREWASH							
DRAIN							
MAIN WASH	3	C	2	h	-	-	-
SOAKING							
HEATING	3	C	2	h	40	-	R
WASHING	3				40	15	R
DRAIN	4					1	-
EXTRACTION							
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	h	-	2	R
DRAIN	6					1	-
EXTRACTION	-						-
RINSE 3	7	C	-	h	-	2	R
DRAIN	7					1	-
EXTRACTION	-				-	-	
RINSE 4	8	C	3	h	-	2	R
DRAIN	9					40	RD
EXTRACTION	9					6	E
DRAIN	9					50	RD
EXTRACTION	9					1,5	E
PROGRAM TIME	28						

PERM. PRESS 40° (Program 6)

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION	3					30	E
PREWASH							
DRAIN							
MAIN WASH	3	W	2	L	-	-	N
SOAKING	3	W	2	L	-	6	N
HEATING	3	-	-	-	40	-	N
WASHING	3	-	-	-	40	12	N
DRAIN	4	-	-	-	-	1	D
EXTRACTION							
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	M	-	3	N
DRAIN	6					1	D
EXTRACTION	-						
RINSE 3	7	C	-	M	-	3	N
DRAIN	7					1	D
EXTRACTION	-						
RINSE 4	8	C	3	M	-	3	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DRAIN						50	ND
EXTRACTION						1,5	E
PROGRAM TIME	34						

PERM. PREESS60° (Program 7)

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION	3					30	E
PREWASH							
DRAIN							
MAIN WASH	3	W	2	L	-	-	N
SOAKING	3	W	2	L	-	6	N
HEATING	3	-	-	-	55	-	N
WASHING	3	-	-		55	12	N
DRAIN	4	-	-		-	1	D
EXTRACTION							
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	M	-	3	N
DRAIN	6					1	D
EXTRACTION	-						
RINSE 3	7	C	-	M	-	3	N
DRAIN	7					1	D
EXTRACTION	-						
RINSE 4	8	C	3	M	-	3	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DRAIN						50	ND
EXTRACTION						1,5	E
PROGRAM TIME	34						

- = NO DRUM ACTION
G = GENTLE ACTION
N = NORMAL ACTION
D = DISTRIBUTION SPEED
E = EXTRACTION
R = REDUCED GENTLE ACTION
C = COLD WATER (APPROX. 15° C)

W = WARM WATER (APPROX. 35° C)
H = HOT WATER (APPROX. 65° C)
Hd = HARD WATER
LL = LOW WATER LEVEL
ML = MEDIUM WATER LEVEL
HL = HIGH WATER LEVEL
(grey box) = TIME IN SECONDS
(white box) = TIME IN MINUTES

Program table PE 01a CH

PROGRAM: NORMAL 95° — 1

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION	3					30	E
PREWASH							
DRAIN							
MAIN WASH	3	W	2	L	-	-	N
SOAKING	3	W	-	L	-	6	N
HEATING	3	-	-	L	80	-	N
WASHING	3	-	-	-	80	12	N
DRAIN	4	-	-	-	-	1	D
EXTRACTION							
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	h	-	3	N
DRAIN	6					40	ND
EXTRACTION	6					30	E
RINSE 3	7	C	-	h	-	3	ND
DRAIN	7					40	ND
EXTRACTION	7					30	E
RINSE 4	8	C	3	h	-	3	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DRAIN	9					50	ND
EXTRACTION	9					4	E
PROGRAM TIME	37						

PROGRAM: NORMAL 60° — 2

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION	3					30	E
PREWASH							
DRAIN							
MAIN WASH	3	W	2	L	-	-	N
SOAKING	3	W	-	L	-	6	N
HEATING	3	-	-	L	55	-	N
WASHING	3	-	-	-	55	12	N
DRAIN	4	-	-		-	1	D
EXTRACTION							
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	h	-	3	N
DRAIN	6					40	ND
EXTRACTION	6					30	E
RINSE 3	7	C	-	h	-	3	N
DRAIN	7					40	ND
EXTRACTION	7					30	E
RINSE 4	8	C	3	h	-	3	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DRAIN	9					50	ND
EXTRACTION	9					4	E
PROGRAM TIME	37						

PROGRAM: NORMAL 40° — 3

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION	3					30	E
PREWASH							
DRAIN							
MAIN WASH	3	W	2	L	-	-	N
SOAKING	3	W	-	L	-	6	N
HEATING	3	-	-	L	40	-	N
WASHING	3	-			40	12	N
DRAIN	4	-	-	-	-	1	D
EXTRACTION							
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	h	-	3	N
DRAIN	6					40	ND
EXTRACTION	6					30	E
RINSE 3	7	C	-	h	-	3	N
DRAIN	7					40	ND
EXTRACTION	7					30	E
RINSE 4	8	C	3	h	-	3	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DRAIN	9					50	ND
EXTRACTION	9					4	E
PROGRAM TIME	37						

PROGRAM: MILD 30° — 4

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION							
PREWASH							
DRAIN							
MAIN WASH	3	C	2	h	-	-	-
SOAKING							
HEATING	3	C	2	h	30	-	R
WASHING	3				30	15	R
DRAIN	4					1	-
EXTRACTION							
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	h	-	2	R
DRAIN	6					1	-
EXTRACTION	-					-	
RINSE 3	7	C	-	h	-	2	R
DRAIN	7					1	-
EXTRACTION	-					-	
RINSE 4	8	C	3	h	-	2	R
DRAIN	9					40	RD
EXTRACTION	9					6	E
DRAIN	9					50	RD
EXTRACTION	9					1,5	E
PROGRAM TIME	28						

PROGRAM: WOOL — 5

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION							
PREWASH							
DRAIN							
MAIN WASH	3	C	2	h	-	-	-
SOAKING							
HEATING	3	C	2	h	40	-	R
WASHING	3				40	15	R
DRAIN	4					1	-
EXTRACTION							
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	h	-	2	R
DRAIN	6					1	-
EXTRACTION	-					-	
RINSE 3	7	C	-	h	-	2	R
DRAIN	7					1	-
EXTRACTION	-				-	-	
RINSE 4	8	C	3	h	-	2	R
DRAIN	9					40	RD
EXTRACTION	9					6	E
DRAIN	9					50	RD
EXTRACTION	9					1,5	E
PROGRAM TIME	28						

PROGRAM: PERM. PRESS 40° — 6

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION	3					30	E
PREWASH							
DRAIN							
MAIN WASH	3	W	2	L	-	-	N
SOAKING	3	W	2	L	-	6	N
HEATING	3	-	-	-	40	-	N
WASHING	3	-	-	-	40	12	N
DRAIN	4	-	-	-	-	1	D
EXTRACTION							
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	M	-	3	N
DRAIN	6					1	D
EXTRACTION	-						
RINSE 3	7	C	-	M	-	3	N
DRAIN	7					1	D
EXTRACTION	-						
RINSE 4	8	C	3	M	-	3	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DRAIN						50	ND
EXTRACTION						1,5	E
PROGRAM TIME	34						

PROGRAM: PERM. PREESS60° — 7

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION	3					30	E
PREWASH							
DRAIN							
MAIN WASH	3	W	2	L	-	-	N
SOAKING	3	W	2	L	-	6	N
HEATING	3	-	-	-	55	-	N
WASHING	3	-	-		55	12	N
DRAIN	4	-	-		-	1	D
EXTRACTION							
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	M	-	3	N
DRAIN	6					1	D
EXTRACTION	-						
RINSE 3	7	C	-	M	-	3	N
DRAIN	7					1	D
EXTRACTION	-						
RINSE 4	8	C	3	M	-	3	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DRAIN						50	ND
EXTRACTION						1,5	E
PROGRAM TIME	34						

- = NO DRUM ACTION
G = GENTLE ACTION
N = NORMAL ACTION
D = DISTRIBUTION SPEED
E = EXTRACTION
R = REDUCED GENTLE ACTION
C = COLD WATER (APPROX. 15° C)

W = WARM WATER (APPROX. 35° C)
H = HOT WATER (APPROX. 65° C)
Hd = HARD WATER
LL = LOW WATER LEVEL
ML = MEDIUM WATER LEVEL
HL = HIGH WATER LEVEL
(grey box) = TIME IN SECONDS
(white box) = TIME IN MINUTES

Program table PE 01a CH

NORMAL 95° — Program 8

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	1					40	E
DRY EXTRACTION	1					30	E
PREWASH	1	W	1	L	-	-	N
	1	W	1	L	30	6	N
DRAIN	2					1	D
MAIN WASH	3	H	2	L	-	-	N
SOAKING	-	-	-	-	-	-	-
HEATING	3	-	-	L	85	-	N
WASHING	3	-	-	-	85	24	N
DRAIN	4	-	-	-	-	1	D
EXTRACTION							
RINSE 1	5	C	-	M		2	N
DRAIN	5					1	D
EXTRACTION	-						
RINSE 2	6	C	-	M	-	2	N
DRAIN	6					40	ND
EXTRACTION	6					30	E
RINSE 3	7	C	-	h	-	2	N
DRAIN	7					40	ND
EXTRACTION	7					30	E
RINSE 4	8	C	3	h	-	2	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DRAIN	9					50	ND
EXTRACTION	9					4	E
PROGRAM TIME	50						

NORMAL 60° — Program 9

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	1					40	E
DRY EXTRACTION	1					30	E
PREWASH	1	W	1	L	-	-	N
	1	W	1	L	30	6	N
DRAIN	2					1	D
MAIN WASH	3	H	2	L	-	-	N
SOAKING	-	-	-	-	-	-	-
HEATING	3	-	-	L	60	-	N
WASHING	3	-	-	-	60	24	N
DRAIN	4	-	-	-	-	1	D
EXTRACTION							
RINSE 1	5	C	-	M	-	2	N
DRAIN	5					1	D
EXTRACTION	-						
RINSE 2	6	C	-	M	-	2	N
DRAIN	6					40	ND
EXTRACTION	6					30	E
RINSE 3	7	C	-	h	-	2	N
DRAIN	7					40	ND
EXTRACTION	7					30	E
RINSE 4	8	C	3	h	-	2	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DRAIN	9					50	ND
EXTRACTION	9					4	E
PROGRAM TIME	50						

NORMAL 40° — Program 10

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	1					40	E
DRY EXTRACTION	1					30	E
PREWASH	1	W	1	L	-	-	N
	1	W	1	L	30	6	N
DRAIN	2					1	D
MAIN WASH	3	W	2	L	-	-	N
SOAKING	-	-	-	-	-	-	-
HEATING	3	-	-	L	40	-	N
WASHING	3	-	-	-	40	24	N
DRAIN	4	-	-	-	-	1	D
EXTRACTION	-						
RINSE 1	5	C	-	M	-	2	N
DRAIN	5					1	D
EXTRACTION	-						
RINSE 2	6	C	-	M	-	2	N
DRAIN	6					40	ND
EXTRACTION	6					30	E
RINSE 3	7	C	-	h	-	2	N
DRAIN	7					40	ND
EXTRACTION	7					30	E
RINSE 4	8	C	3	h	-	2	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DRAIN	9					50	ND
EXTRACTION	9					4	E
PROGRAM TIME	50						

MILD 30° — Program 11

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION							
PREWASH							
DRAIN							
MAIN WASH	3	C	2	h	-	-	-
SOAKING	-						
HEATING	3	C	2	h	30	-	R
WASHING	3				30	15	R
DRAIN	4					1	-
EXTRACTION							
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	h	-	2	R
DRAIN	6					1	-
EXTRACTION	-						-
RINSE 3	7	C	-	h	-	2	R
DRAIN	7					1	-
EXTRACTION	-						-
RINSE 4	8	C	3	h	-	2	R
DRAIN	9					40	RD
EXTRACTION	9					6	E
DRAIN	9					50	RD
EXTRACTION	9					1,5	E
PROGRAM TIME	28						

WOOL — Program 12

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION							
PREWASH							
DRAIN							
MAIN WASH	3	C	2	h	-	-	-
SOAKING							
HEATING	3	C	2	h	40	-	R
WASHING	3				40	15	R
DRAIN	4					1	-
EXTRACTION							
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	h	-	2	R
DRAIN	6					1	-
EXTRACTION	-						-
RINSE 3	7	C	-	h	-	2	R
DRAIN	7					1	-
EXTRACTION	-					-	-
RINSE 4	8	C	3	h	-	2	R
DRAIN	9					40	RD
EXTRACTION	9					6	E
DRAIN	9					50	RD
EXTRACTION	9					1,5	E
PROGRAM TIME	28						

PERM. PRESS 40° — Program 13

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	1					40	E
DRY EXTRACTION	1					30	E
PREWASH	1	W	1	L	-	-	N
	1	W	1	L	30	6	N
DRAIN	2					1	D
MAIN WASH	3	W	2	L	-	-	N
SOAKING	-	-	-	-	-	-	-
HEATING	3	-	-	-	40	-	N
WASHING	3	-	-	-	40	24	N
DRAIN	4	-	-	-	-	1	D
EXTRACTION							
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	M	-	3	N
DRAIN	6					1	D
EXTRACTION	-						
RINSE 3	7	C	-	M	-	3	N
DRAIN	7					1	D
EXTRACTION	-						
RINSE 4	8	C	3	M	-	3	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DRAIN	9					50	RD
EXTRACTION	9					1,5	E
PROGRAM TIME	47						

PERM. PRESS 60° — Program 14

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	1					40	E
DRY EXTRACTION	1					30	E
PREWASH	1	W	1	L	-	-	N
	1	W	1	L	30	6	N
DRAIN	2					1	D
MAIN WASH	3	W	2	L	-	-	N
SOAKING	-	-	-	-	-	-	-
HEATING	3	-	-	-	60	-	N
WASHING	3	-	-	-	60	24	N
DRAIN	4	-	-	-	-	1	D
EXTRACTION							
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	M	-	3	N
DRAIN	6					1	D
EXTRACTION	-						
RINSE 3	7	C	-	M	-	3	N
DRAIN	7					1	D
EXTRACTION	-						
RINSE 4	8	C	3	M	-	3	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DRAIN	9					50	RD
EXTRACTION	9					1,5	E
PROGRAM TIME	47						

- = NO DRUM ACTION
G = GENTLE ACTION
N = NORMAL ACTION
D = DISTRIBUTION SPEED
E = EXTRACTION
R = REDUCED GENTLE ACTION
C = COLD WATER (APPROX. 15° C)

W = WARM WATER (APPROX. 35° C)
H = HOT WATER (APPROX. 65° C)
Hd = HARD WATER
LL = LOW WATER LEVEL
ML = MEDIUM WATER LEVEL
HL = HIGH WATER LEVEL
(grey box) = TIME IN SECONDS
(white box) = TIME IN MINUTES

Program table PE 01b CH

PROGRAM STEP \ PROGRAM	NORMAL 95° (1) PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION	NORMAL 60° (2) PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E	3					40	E
DRY EXTRACTION	3					30	E	3					30	E
PREWASH														
DRAIN														
MAIN WASH	3	W	2	L	-	-	N	3	W	2	L	-	-	N
SOAKING	3	W	-	L		6	N	3	W	-	L	-	6	N
HEATING	3	-	-	L	80	-	N	3	-	-	L	55	-	N
WASHING	3	-	-	-	80	12	N	3	-	-	-	55	12	N
DRAIN	4	-	-	-	-	1	D	4	-	-		-	1	D
EXTRACTION														
RINSE 1														
DRAIN														
EXTRACTION														
RINSE 2	6	C	-	h	-	3	N	6	C	-	h	-	3	N
DRAIN	6					40	ND	6					40	ND
EXTRACTION	6					30	E	6					30	E
RINSE 3	7	C	-	h	-	3	N	7	C	-	h	-	3	N
DRAIN	7					40	ND	7					40	ND
EXTRACTION	7					30	E	7					30	E
RINSE 4	8	C	3	h	-	3	N	8	C	3	h	-	3	N
DRAIN	9					40	ND	9					40	ND
EXTRACTION	9					6	E	9					6	E
DISTRIBUTION	9					50	ND	9					50	ND
EXTRACTION	9					4	E	9					4	E
PROGRAM TIME	37							37						

PROGRAM STEP \ PROGRAM	NORMAL 40° (3) PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION	MILD 30° (4) PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E	3					40	3
DRY EXTRACTION	3					30	E							
PREWASH														
DRAIN														
MAIN WASH	3	W	2	L	-	-	N	3	C	2	h	-	-	-
SOAKING	3	W	-	L	-	6	N	-						
HEATING	3	-	-	L	40	-	N	3	C	2	h	30	-	R
WASHING	3	-			40	12	N	3				30	15	R
DRAIN	4	-	-	-	-	1	D	4					1	-
EXTRACTION														
RINSE 1														
DRAIN														
EXTRACTION														
RINSE 2	6	C	-	h	-	3	N	6	C	-	h	-	2	R
DRAIN	6					40	ND	6					1	-
EXTRACTION	6					30	E	-					-	
RINSE 3	7	C	-	h	-	3	N	7	C	-	h	-	2	R
DRAIN	7					40	ND	7					1	-
EXTRACTION	7					30	E	-						-
RINSE 4	8	C	3	h	-	3	N	8	C	3	h	-	2	R
DRAIN	9					40	ND	9					40	RD
EXTRACTION	9					6	E	9					6	E
DISTRIBUTION	9					50	ND	9					50	RD
EXTRACTION	9					4	E	9						
PROGRAM TIME	37							28						

PROGRAM STEP \ PROGRAM	WOOL (5) PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION	PERM. PRESS 40° (6) PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E	3					40	E
DRY EXTRACTION								3					30	E
PREWASH														
DRAIN														
MAIN WASH	3	C	2	h	-	-	-	3	W	2	L	-	-	N
SOAKING								3	W	2	L	-	6	N
HEATING	3	C	2	h	40	-	R	3	-	-	-	40	-	N
WASHING	3				40	15	R	3	-	-	-	40	12	N
DRAIN	4					1	-	4	-	-	-	-	1	D
EXTRACTION														
RINSE 1														
DRAIN														
EXTRACTION														
RINSE 2	6	C	-	h	-	2	R	6	C	-	M	-	3	N
DRAIN	6					1	-	6					1	D
EXTRACTION	-						-	-						
RINSE 3	7	C	-	h	-	2	R	7	C	-	M	-	3	N
DRAIN	7					1	-	7					1	D
EXTRACTION	-				-	-		-						
RINSE 4	8	C	3	h	-	2	R	8	C	3	M	-	3	N
DRAIN	9					40	RD	9					40	ND
EXTRACTION	9					6	E	9					6	E
DISTRIBUTION	9					50	RD	9					50	RD
EXTRACTION	9							9					1,5	E
PROGRAM TIME	28							34						

PROGRAM STEP \ PROGRAM	PERM. PRESS 60° (7) PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION	3					30	E
PREWASH							
DRAIN							
MAIN WASH	3	W	2	L	-	-	N
SOAKING	3	W	2	L	-	6	N
HEATING	3	-	-	-	55	-	N
WASHING	3	-	-		55	12	N
DRAIN	4	-	-		-	1	D
EXTRACTION							
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	M	-	3	N
DRAIN	6					1	D
EXTRACTION	-						
RINSE 3	7	C	-	M	-	3	N
DRAIN	7					1	D
EXTRACTION	-						
RINSE 4	8	C	3	M	-	3	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DISTRIBUTION	9					50	RD
EXTRACTION	9					1,5	E
PROGRAM TIME	34						

- = NO DRUM ACTION
G = GENTLE ACTION
N = NORMAL ACTION
D = DISTRIBUTION SPEED
E = EXTRACTION
R = REDUCED GENTLE ACTION
C = COLD WATER (APPROX. 15° C)

W = WARM WATER (APPROX. 35° C)
H = HOT WATER (APPROX. 65° C)
Hd = HARD WATER
LL = LOW WATER LEVEL
ML = MEDIUM WATER LEVEL
HL = HIGH WATER LEVEL
(grey box) = TIME IN SECONDS
(white box) = TIME IN MINUTES

Program table PE 01b CH

Grey-shaded time values = time in seconds; unshaded = time in minutes.

NORMAL 95° (Program 8)

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	1					40	E
DRY EXTRACTION	1					30	E
PREWASH	1	W	1	L	-	-	N
SOAKING	1	W	1	L	30	6	N
DRAIN	2					1	D
MAIN WASH	3	H	2	L	-	-	N
SOAKING	-	-	-	-	-	-	-
HEATING	3	-	-	L	85	-	N
WASHING	3	-	-	-	85	12	N
DRAIN	4	-	-	-	-	1	D
EXTRACTION							
RINSE 1	5	C	-	M		2	N
DRAIN	5					1	D
EXTRACTION	-						
RINSE 2	6	C	-	M	-	2	N
DRAIN	6					40	ND
EXTRACTION	6					30	E
RINSE 3	7	C	-	h	-	2	N
DRAIN	7					40	ND
EXTRACTION	7					30	E
RINSE 4	8	C	3	h	-	2	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DISTRIBUTION	9					50	ND
EXTRACTION	9					4	E
PROGRAM TIME	38						

NORMAL 60° (Program 9)

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	1					40	E
DRY EXTRACTION	1					30	E
PREWASH	1	W	1	L	-	-	N
SOAKING	1	W	1	L	30	6	N
DRAIN	2					1	D
MAIN WASH	3	H	2	L	-	-	N
SOAKING	-	-	-	-	-	-	-
HEATING	3	-	-	L	60	-	N
WASHING	3	-	-	-	60	12	N
DRAIN	4	-	-	-	-	1	D
EXTRACTION	-						
RINSE 1	5	C	-	M	-	2	N
DRAIN	5					1	D
EXTRACTION	-						
RINSE 2	6	C	-	M	-	2	N
DRAIN	6					40	ND
EXTRACTION	6					30	E
RINSE 3	7	C	-	h	-	2	N
DRAIN	7					40	ND
EXTRACTION	7					30	E
RINSE 4	8	C	3	h	-	2	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DISTRIBUTION	9					50	ND
EXTRACTION	9					4	E
PROGRAM TIME	38						

NORMAL 40° (Program 10)

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	1					40	E
DRY EXTRACTION	1					30	E
PREWASH	1	W	1	L	-	-	N
SOAKING	1	W	1	L	30	6	N
DRAIN	2					1	D
MAIN WASH	3	W	2	L	-	-	N
SOAKING	-	-	-	-	-	-	-
HEATING	3	-	-	L	40	-	N
WASHING	3	-	-	-	40	12	N
DRAIN	4	-	-	-	-	1	D
EXTRACTION	-						
RINSE 1	5	C	-	M	-	2	N
DRAIN	5					1	D
EXTRACTION	-						
RINSE 2	6	C	-	M	-	2	N
DRAIN	6					40	ND
EXTRACTION	6					30	E
RINSE 3	7	C	-	h	-	2	N
DRAIN	7					40	ND
EXTRACTION	7					30	E
RINSE 4	8	C	3	h	-	2	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DISTRIBUTION	9					50	ND
EXTRACTION	9					4	E
PROGRAM TIME	38						

MILD 30° (Program 11)

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION							
PREWASH							
SOAKING							
DRAIN							
MAIN WASH	3	C	2	h	-	-	-
SOAKING	-						
HEATING	3	C	2	h	30	-	R
WASHING	3				30	15	R
DRAIN	4					1	-
EXTRACTION							
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	h	-	2	R
DRAIN	6					1	-
EXTRACTION	-						-
RINSE 3	7	C	-	h	-	2	R
DRAIN	7					1	-
EXTRACTION	-						-
RINSE 4	8	C	3	h	-	2	R
DRAIN	9					40	RD
EXTRACTION	9					6	E
DISTRIBUTION	9					50	RD
EXTRACTION	9					1,5	E
PROGRAM TIME	28						

WOOL (Program 12)

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION							
PREWASH							
SOAKING							
DRAIN							
MAIN WASH	3	C	2	h	-	-	-
SOAKING							
HEATING	3	C	2	h	40	-	R
WASHING	3				40	15	R
DRAIN	4					1	-
EXTRACTION							
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	h	-	2	R
DRAIN	6					1	-
EXTRACTION	-						-
RINSE 3	7	C	-	h	-	2	R
DRAIN	7					1	-
EXTRACTION	-					-	-
RINSE 4	8	C	3	h	-	2	R
DRAIN	9					40	RD
EXTRACTION	9					6	E
DISTRIBUTION	9					50	RD
EXTRACTION	9					1,5	E
PROGRAM TIME	28						

PERM. PRESS 40° (Program 13)

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	1					40	E
DRY EXTRACTION	1					30	E
PREWASH	1	W	1	L	-	-	N
SOAKING	1	W	1	L	30	6	N
DRAIN	2					1	D
MAIN WASH	3	W	2	L	-	-	N
SOAKING	-	-	-	-	-	-	-
HEATING	3	-	-	-	40	-	N
WASHING	3	-	-	-	40	12	N
DRAIN	4	-	-	-	-	1	D
EXTRACTION							
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	M	-	3	N
DRAIN	6					1	D
EXTRACTION	-						
RINSE 3	7	C	-	M	-	3	N
DRAIN	7					1	D
EXTRACTION	-						
RINSE 4	8	C	3	M	-	3	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DISTRIBUTION	9					50	ND
EXTRACTION	9					1,5	E
PROGRAM TIME	35						

PERM. PRESS 60° (Program 14)

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	1					40	E
DRY EXTRACTION	1					30	E
PREWASH	1	W	1	L	-	-	N
SOAKING	1	W	1	L	30	6	N
DRAIN	2					1	D
MAIN WASH	3	W	2	L	-	-	N
SOAKING	-	-	-	-	-	-	-
HEATING	3	-	-	-	60	-	N
WASHING	3	-	-	-	60	12	N
DRAIN	4	-	-		-	1	D
EXTRACTION							
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	M	-	3	N
DRAIN	6					1	D
EXTRACTION	-						
RINSE 3	7	C	-	M	-	3	N
DRAIN	7					1	D
EXTRACTION	-						
RINSE 4	8	C	3	M	-	3	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DISTRIBUTION	9					50	ND
EXTRACTION	9					1,5	E
PROGRAM TIME	35						

- = NO DRUM ACTION
G = GENTLE ACTION
N = NORMAL ACTION
D = DISTRIBUTION SPEED
E = EXTRACTION
R = REDUCED GENTLE ACTION
C = COLD WATER (APPROX. 15° C)

W = WARM WATER (APPROX. 35° C)
H = HOT WATER (APPROX. 65° C)
Hd = HARD WATER
LL = LOW WATER LEVEL
ML = MEDIUM WATER LEVEL
HL = HIGH WATER LEVEL
(grey box) = TIME IN SECONDS
(white box) = TIME IN MINUTES

Program table PE 11C

PROGRAM 1 – NORMAL 95°

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION	3					30	E
PREWASH							
MAIN WASH	3	C	2	L	-	-	N
SOAKING	3	C	-	L	-	6	N
HEATING	3	-	-	L	73	-	N
WASHING	3	-	-	L	-	12	N
DRAIN	4	-	-	-	-	1	D
RINSE 1	5	C	-	M	-	2	N
DRAIN	5	-	-			1	D
EXTRACTION	5					-	-
RINSE 2	6	C	-	M	-	2	N
DRAIN	6					40	ND
EXTRACTION	6					30	E
RINSE 3	7	C	-	M	-	2	N
DRAIN	7					40	ND
EXTRACTION	7					30	E
RINSE 4	8	C	3	M	-	2	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DRAIN	9					50	ND
EXTRACTION	9					5	E
PROGRAM TIME	38						

PROGRAM 2 – NORMAL 60°

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION	3					30	E
PREWASH							
MAIN WASH	3	C	2	L	-	-	N
SOAKING	3	C	-	L	-	6	N
HEATING	3	-	-	L	55	-	N
WASHING	3	-	-	L	55	12	N
DRAIN	4	-	-	-		1	D
RINSE 1	5	C	-	M	-	2	N
DRAIN	5					1	D
EXTRACTION	5						
RINSE 2	6	C	-	M	-	2	N
DRAIN	6					40	ND
EXTRACTION	6					30	E
RINSE 3	7	C	-	M	-	2	N
DRAIN	7					40	ND
EXTRACTION	7					30	E
RINSE 4	8	C	3	M	-	2	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DRAIN						50	ND
EXTRACTION	9					4	E
PROGRAM TIME	37						

PROGRAM 3 – NORMAL 40°

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION	3					30	E
PREWASH							
MAIN WASH	3	C	2	L	-	-	N
SOAKING	3	C	-	L	-	6	N
HEATING	3	-	-	L	40	-	N
WASHING	3	-	-	L	40	12	N
DRAIN	4						1
	D						
RINSE 1	5	C	-	M	-	2	N
DRAIN	5					1	D
EXTRACTION	5						
RINSE 2	6	C	-	M	-	2	N
DRAIN	6					40	ND
EXTRACTION	6					30	E
RINSE 3	7	C	-	M	-	2	N
DRAIN	7					40	ND
EXTRACTION	7					30	E
RINSE 4	8	C	3	M	-	2	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DRAIN	9					50	N
EXTRACTION	9					4	E
PROGRAM TIME	37						

PROGRAM 4 – MILD 30°

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION							
PREWASH							
MAIN WASH	3	C	2	h	-	-	-
SOAKING	-						-
HEATING	3	C	2	h	30	-	R
WASHING	-				30	15	R
DRAIN	4					1	-
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	h	-	2	R
DRAIN	6					1	-
EXTRACTION	-						-
RINSE 3	7	C	-	h	-	2	R
DRAIN	7					1	-
EXTRACTION	-						-
RINSE 4	8	C	3	h	-	2	R
DRAIN	9					40	RD
EXTRACTION	9					6	E
DRAIN	9					50	RD
EXTRACTION	9					1,5	E
PROGRAM TIME	28						

PROGRAM 5 – WOOL 40°

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION							
PREWASH							
MAIN WASH	3	C	2	h	-	-	-
SOAKING	-						-
HEATING	3	C	2	h	40	-	R
WASHING	-				40	15	R
DRAIN	4					1	-
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	h	-	2	R
DRAIN	6					1	-
EXTRACTION	-						-
RINSE 3	7	C	-	h	-	2	R
DRAIN	7					1	-
EXTRACTION	-						-
RINSE 4	8	C	3	h	-	2	R
DRAIN	9					40	RD
EXTRACTION	9					6	E
DRAIN	9					50	RD
EXTRACTION	9					1,5	E
PROGRAM TIME	28						

PROGRAM 6 – PERM. PRESS 40°

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION	3					30	E
PREWASH							
MAIN WASH	3	C	2	L	-	-	N
SOAKING	3	C	2	L	-	6	N
HEATING	3	-	-	-	40	-	N
WASHING	3	-	-	-	40	12	N
DRAIN	4	-	-	-	-	1	D
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	M	-	3	N
DRAIN	6					1	D
EXTRACTION	-						-
RINSE 3	7	C	-	M	-	3	N
DRAIN	7					1	D
EXTRACTION	-						-
RINSE 4	8	C	3	M	-	3	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DRAIN	9					50	RD
EXTRACTION	9					1,5	E
PROGRAM TIME	34						

PROGRAM 7 – PERM. PRESS 60°

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION	3					30	E
PREWASH							
MAIN WASH	3	C	2	L	-	-	N
SOAKING	3	C	2	L	-	6	N
HEATING	3	-	-	-	55	-	N
WASHING	3	-	-	-	55	12	N
DRAIN	4	-	-		-	1	D
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	M	-	3	N
DRAIN	6					1	D
EXTRACTION	-						-
RINSE 3	7	C	-	M	-	3	N
DRAIN	7					1	D
EXTRACTION	-						-
RINSE 4	8	C	3	M	-	3	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DRAIN	9					50	ND
EXTRACTION	9					1.5	E
PROGRAM TIME	34						

- = NO DRUM ACTION
G = GENTLE ACTION
N = NORMAL ACTION
D = DISTRIBUTION SPEED
E = EXTRACTION
R = REDUCED GENTLE ACTION
C = COLD WATER (APPROX. 15° C)

W = WARM WATER (APPROX. 35° C)
H = HOT WATER (APPROX. 65° C)
Hd = HARD WATER
LL = LOW WATER LEVEL
ML = MEDIUM WATER LEVEL
HL = HIGH WATER LEVEL
(grey box) = TIME IN SECONDS
(white box) = TIME IN MINUTES

Program table PE 11C

PROGRAM STEP	NORMAL 95° (8) PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION	NORMAL 60° (9) PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	1					40	E	1					40	E
DRY EXTRACTION	1					30	E	1					30	E
PREWASH	1	C	1	L	-	-	N	1	C	1	L	-	-	N
SOAKING	1	C	1	L	-	6	N	1	C	1	L	-	6	N
DRAIN	2					1	D	2					1	D
MAIN WASH	3	C	2	L	-	-	N	3	C	2	L	-	-	N
SOAKING	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HEATING	3	-	-	L	80	-	N	3	-	-	L	60	-	N
WASHING	3	-	-	-	80	12	N	3	-	-	-	60	12	N
DRAIN	4	-	-	-	-	1	D	4	-	-	-	-	1	D
RINSE 1	5	C	-	M	-	2	N	5	C	-	M	-	2	N
DRAIN	5					1	D	5					1	D
EXTRACTION	5					-	-	5						
RINSE 2	6	C	-	M	-	2	N	6	C	-	M	-	2	N
DRAIN	6					40	ND	6					40	ND
EXTRACTION	6					30	E	6					30	E
RINSE 3	7	C	-	h	-	2	N	7	C	-	h	-	2	N
DRAIN	7					40	ND	7					40	ND
EXTRACTION	7					30	E	7					30	E
RINSE 4	8	C	3	h	-	2	N	8	C	3	h	-	2	N
DRAIN	9					40	ND	9					40	ND
EXTRACTION	9					6	E	9					6	E
DRAIN	9					50	ND	9					50	ND
EXTRACTION	9					5	E	9					4	E
PROGRAM TIME	39							38						

PROGRAM STEP	NORMAL 40° (10) PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION	MILD 30° (11) PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	1					40	E	3					40	E
DRY EXTRACTION	1					30	E							
PREWASH	1	C	1	L	-	-	N							
SOAKING	1	C	1	L	-	6	N							
DRAIN	2					1	D							
MAIN WASH	3	C	2	L	-	-	N	3	C	2	h	-	-	-
SOAKING	-	-	-	-	-	-	-	-						-
HEATING	3	-	-	L	40	-	N	3	C	2	h	30	-	R
WASHING	3	-	-	-	40	12	N	-				30	15	R
DRAIN	4	-	-	-	-	1	D	4					1	-
RINSE 1	5	C	-	M	-	2	N							
DRAIN	5					1	D							
EXTRACTION	5													
RINSE 2	6	C	-	M	-	2	N	6	C	-	h	-	2	R
DRAIN	6					40	ND	6					1	-
EXTRACTION	6					30	E	-						-
RINSE 3	7	C	-	h	-	2	N	7	C	-	h	-	2	R
DRAIN	7					40	ND	7					1	-
EXTRACTION	7					30	E	-						-
RINSE 4	8	C	3	h	-	2	N	8	C	3	h	-	2	R
DRAIN	9					40	ND	9					40	RD
EXTRACTION	9					6	E	9					6	E
DRAIN	9					50	ND	9					50	RD
EXTRACTION	9					4	E	9					1,5	E
PROGRAM TIME	38							28						

PROGRAM STEP	WOOL 40° (12) PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION	PERM. PRESS 40° (13) PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION	PERM. PRESS 60° (14) PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E	3					40	E	3					40	E
DRY EXTRACTION								3					30	E	3					30	E
PREWASH																					
SOAKING																					
DRAIN																					
MAIN WASH	3	C	2	h	-	-	-	3	C	2	L	-	-	N	3	C	2	L	-	-	N
SOAKING	-							3	C	2	L	-	6	N	3	C	2	L	-	6	N
HEATING	3	C	2	h	40	-	R	3	-	-	-	40	-	N	3	-	-	-	60	-	N
WASHING	-				40	15	R	3	-	-	-	40	12	N	3	-	-	-	60	12	N
DRAIN	4					1	-	4	-	-	-	-	1	D	4	-	-	-	-	1	D
RINSE 1																					
DRAIN																					
EXTRACTION																					
RINSE 2	6	C	-	h	-	2	R	6	C	-	M	-	3	N	6	C	-	M	-	3	N
DRAIN	6					1	-	6					1	D	6					1	D
EXTRACTION	-						-	-						-	-						-
RINSE 3	7	C	-	h	-	2	R	7	C	-	M	-	3	N	7	C	-	M	-	3	N
DRAIN	7					1	-	7					1	D	7					1	D
EXTRACTION	-						-	-						-	-						-
RINSE 4	8	C	3	h	-	2	R	8	C	3	M	-	3	N	8	C	3	M	-	3	N
DRAIN	9					40	RD	9					40	ND	9					40	ND
EXTRACTION	9					6	E	9					6	E	9					6	E
DRAIN	9					50	RD	9					50	RD	9					50	ND
EXTRACTION	9					1,5	E	9					1,5	E	9					1,5	E
PROGRAM TIME	28							34							34						

- = NO DRUM ACTION
G = GENTLE ACTION
N = NORMAL ACTION
D = DISTRIBUTION SPEED
E = EXTRACTION
R = REDUCED GENTLE ACTION
C = COLD WATER (APPROX. 15° C)

W = WARM WATER (APPROX. 35° C)
H = HOT WATER (APPROX. 65° C)
Hd = HARD WATER
LL = LOW WATER LEVEL
ML = MEDIUM WATER LEVEL
HL = HIGH WATER LEVEL
[grey box] = TIME IN SECONDS
[white box] = TIME IN MINUTES

Program table PE 21a CHd

NORMAL 95° (Program 1)

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION	3					30	E
PREWASH							
MAIN WASH	3	C	2	L	-	-	N
SOAKING	3	C	-	L	-	6	N
HEATING	3	-	-	L	85	-	N
WASHING	3	-	-	-	85	12	N
DRAIN	4	-	-	-	-	1	D
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	h	-	3	N
DRAIN	6					40	ND
EXTRACTION	6					30	E
RINSE 3	7	C	-	h	-	3	N
DRAIN	7					40	ND
EXTRACTION	7					30	E
RINSE 4	8	Hd	3	h	-	3	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DRAIN	9					50	ND
EXTRACTION	9					4	E
PROGRAM TIME	37						

NORMAL 60° (Program 2)

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION	3					30	E
PREWASH							
MAIN WASH	3	C	2	L	-	-	N
SOAKING	3	C	-	L	-	6	N
HEATING	3	-	-	L	55	-	N
WASHING	3	-	-	L	55	12	N
DRAIN	4	-	-	-	-	1	D
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	h	-	3	N
DRAIN	6					40	ND
EXTRACTION	6					30	E
RINSE 3	7	C	-	h	-	3	N
DRAIN	7					40	ND
EXTRACTION	7					30	E
RINSE 4	8	Hd	3	h	-	3	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DRAIN	9					50	ND
EXTRACTION	9					4	E
PROGRAM TIME	37						

NORMAL 40° (Program 3)

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION	3					30	E
PREWASH							
MAIN WASH	3	C	2	L	-	-	N
SOAKING	3	C	-	L	-	6	N
HEATING	3	-	-	L	40	-	N
WASHING	3	-	-	-	40	12	N
DRAIN	4	-	-	-	-	1	D
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	h	-	3	N
DRAIN	6					40	ND
EXTRACTION	6					30	E
RINSE 3	7	C	-	h	-	3	N
DRAIN	7					40	ND
EXTRACTION	7					30	E
RINSE 4	8	Hd	3	h	-	3	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DRAIN	9					50	ND
EXTRACTION	9					4	E
PROGRAM TIME	37						

MILD 30° (Program 4)

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION							
PREWASH							
MAIN WASH	3	C	2	h	-	-	-
SOAKING	-						
HEATING	3	C	2	h	30	-	R
WASHING	3	-	-	-	30	15	R
DRAIN	4					1	-
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	h	-	2	R
DRAIN	6					1	-
EXTRACTION	-						-
RINSE 3	7	C	-	h	-	2	R
DRAIN	7					1	-
EXTRACTION	-						-
RINSE 4	8	Hd	3	h	-	2	R
DRAIN	9					40	RD
EXTRACTION	9					6	E
DRAIN	9					50	RD
EXTRACTION	9					1,5	E
PROGRAM TIME	28						

WOOL (Program 5)

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION							
PREWASH							
MAIN WASH	3	C	2	h	-		-
SOAKING							
HEATING	3	C	2	h	40	-	R
WASHING	3	-	-	-	40	15	R
DRAIN	4					1	-
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	h	-	2	R
DRAIN	6					1	-
EXTRACTION	-						-
RINSE 3	7	C	-	h	-	2	R
DRAIN	7					1	-
EXTRACTION	-						-
RINSE 4	8	Hd	3	h	-	2	R
DRAIN	9					40	RD
EXTRACTION	9					6	E
DRAIN	9					50	RD
EXTRACTION	9					1,5	E
PROGRAM TIME	28						

PERM. PRESS 40° (Program 6)

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION	3					30	E
PREWASH							
MAIN WASH	3	C	2	L	-	-	N
SOAKING	3	C	2	L	-	6	N
HEATING	3	-	-	-	40	-	N
WASHING	3	-	-	-	40	12	N
DRAIN	4	-	-	-	-	1	D
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	M	-	3	N
DRAIN	6					1	D
EXTRACTION	-						-
RINSE 3	7	C	-	M	-	3	N
DRAIN	7					1	D
EXTRACTION	-						-
RINSE 4	8	Hd	3	M	-	3	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DRAIN	9					50	ND
EXTRACTION	9					1,5	E
PROGRAM TIME	34						

PERM. PRESS 60° (Program 7)

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION	3					30	E
PREWASH							
MAIN WASH	3	C	2	L	-	-	N
SOAKING	3	C	2	L	-	6	N
HEATING	3	-	-	-	55	-	N
WASHING	3	-	-	-	55	12	N
DRAIN	4	-	-		-	1	D
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	M	-	3	N
DRAIN	6					1	D
EXTRACTION	-						-
RINSE 3	7	C	-	M	-	3	N
DRAIN	7					1	D
EXTRACTION	-						-
RINSE 4	8	Hd	3	M	-	3	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DRAIN	9					50	ND
EXTRACTION	9					1,5	E
PROGRAM TIME	34						

- = NO DRUM ACTION
G = GENTLE ACTION
N = NORMAL ACTION
D = DISTRIBUTION SPEED
E = EXTRACTION
R = REDUCED GENTLE ACTION
C = COLD WATER (APPROX. 15° C)

W = WARM WATER (APPROX. 35° C)
H = HOT WATER (APPROX. 65° C)
Hd = HARD WATER
LL = LOW WATER LEVEL
ML = MEDIUM WATER LEVEL
HL = HIGH WATER LEVEL
(grey box) = TIME IN SECONDS
(white box) = TIME IN MINUTES

Program table PE 21a CHd

PROGRAM: NORMAL 95° — 8

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	1					40	E
DRY EXTRACTION	1					30	E
PREWASH	1	C	1	L	-	-	N
SOAKING	1	C	1	L	-	6	N
DRAIN	2					1	D
MAIN WASH	3	C	2	L	-	-	N
SOAKING	-	-	-	-	-	-	-
HEATING	3	-	-	L	90	-	N
WASHING	3	-	-	-	90	12	N
DRAIN	4	-	-	-	-	1	D
EXTRACTION							
RINSE 1	5	C	-	M	-	2	N
DRAIN	5					1	D
EXTRACTION	-						-
RINSE 2	6	C	-	M	-	2	N
DRAIN	6					40	ND
EXTRACTION	6					30	E
RINSE 3	7	C	-	h	-	2	N
DRAIN	7					40	ND
EXTRACTION	7					30	E
RINSE 4	8	Hd	3	h	-	2	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DRAIN	9					50	ND
EXTRACTION	9					4	E
PROGRAM TIME	38						

PROGRAM: NORMAL 60° — 9

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	1					40	E
DRY EXTRACTION	1					30	E
PREWASH	1	C	1	L	-	-	N
SOAKING	1	C	1	L	-	6	N
DRAIN	2					1	D
MAIN WASH	3	C	2	L	-	-	N
SOAKING	-	-	-	-	-	-	-
HEATING	3	-	-	L	60	-	N
WASHING	3	-	-	-	60	12	N
DRAIN	4	-	-	-	-	1	D
EXTRACTION	-						
RINSE 1	5	C	-	M	-	2	N
DRAIN	5					1	D
EXTRACTION	-						-
RINSE 2	6	C	-	M	-	2	N
DRAIN	6					40	ND
EXTRACTION	6					30	E
RINSE 3	7	C	-	h	-	2	N
DRAIN	7					40	ND
EXTRACTION	7					30	E
RINSE 4	8	Hd	3	h	-	2	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DRAIN	9					50	ND
EXTRACTION	9					4	E
PROGRAM TIME	38						

PROGRAM: NORMAL 40° — 10

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	1					40	E
DRY EXTRACTION	1					30	E
PREWASH	1	C	1	L	-	-	N
SOAKING	1	C	1	L	-	6	N
DRAIN	2					1	D
MAIN WASH	3	C	2	L	-	-	N
SOAKING	-	-	-	-	-	-	-
HEATING	3	-	-	L	40	-	N
WASHING	3	-			40	12	N
DRAIN	4	-	-	-	-	1	D
EXTRACTION							
RINSE 1	5	C	-	M	-	2	N
DRAIN	5					1	D
EXTRACTION	-						-
RINSE 2	6	C	-	M	-	2	N
DRAIN	6					40	ND
EXTRACTION	6					30	E
RINSE 3	7	C	-	h	-	2	N
DRAIN	7					40	ND
EXTRACTION	7					30	E
RINSE 4	8	Hd	3	h	-	2	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DRAIN	9					50	ND
EXTRACTION	9					4	E
PROGRAM TIME	38						

PROGRAM: MILD 30° — 11

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION							
PREWASH							
SOAKING							
DRAIN							
MAIN WASH	3	C	2	h	-	-	-
SOAKING	-						-
HEATING	3	C	2	h	30	-	R
WASHING	3				30	15	R
DRAIN	4					1	-
EXTRACTION							
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	h	-	2	R
DRAIN	6					1	-
EXTRACTION	-						-
RINSE 3	7	C	-	h	-	2	R
DRAIN	7					1	-
EXTRACTION	-						-
RINSE 4	8	Hd	3	h	-	2	R
DRAIN	9					40	RD
EXTRACTION	9					6	E
DRAIN	9					50	RD
EXTRACTION	9					1,5	E
PROGRAM TIME	28						

PROGRAM: WOOL 40° — 12

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION							
PREWASH							
SOAKING							
DRAIN							
MAIN WASH	3	C	2	h	-		-
SOAKING	-						
HEATING	3	C	2	h	40	-	R
WASHING	3				40	15	R
DRAIN	4					1	-
EXTRACTION							
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	h	-	2	R
DRAIN	6					1	-
EXTRACTION	-						-
RINSE 3	7	C	-	h	-	2	R
DRAIN	7					1	-
EXTRACTION	-						-
RINSE 4	8	Hd	3	h	-	2	R
DRAIN	9					40	RD
EXTRACTION	9					6	E
DRAIN	9					50	RD
EXTRACTION	9					1,5	E
PROGRAM TIME	28						

PROGRAM: PERM. PRESS 40° — 13

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION	3					30	E
PREWASH	1	C	1	L	-	-	N
SOAKING	1	C	1	L	-	6	N
DRAIN	2					1	D
MAIN WASH	3	C	2	L	-	-	N
SOAKING	-	-	-	-	-	-	-
HEATING	3	-	-	-	40	-	N
WASHING	3	-	-	-	40	12	N
DRAIN	4	-	-	-	-	1	D
EXTRACTION							
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	M	-	3	N
DRAIN	6					1	D
EXTRACTION	-					-	
RINSE 3	7	C	-	M	-	3	N
DRAIN	7					1	D
EXTRACTION	-						
RINSE 4	8	Hd	3	M	-	3	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DRAIN						50	ND
EXTRACTION						1,5	E
PROGRAM TIME	35						

PROGRAM: PERM. PRESS 60° — 14

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION	3					30	E
PREWASH	1	C	1	L	-	-	N
SOAKING	1	C	1	L	-	6	N
DRAIN	2					1	D
MAIN WASH	3	C	2	L	-	-	N
SOAKING	-	-	-	-	-	-	-
HEATING	3	-	-	-	60	-	N
WASHING	3	-	-	-	60	12	N
DRAIN	4	-	-	-	-	1	D
EXTRACTION							
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	M	-	3	N
DRAIN	6					1	D
EXTRACTION	-						-
RINSE 3	7	C	-	M	-	3	N
DRAIN	7					1	D
EXTRACTION	-						
RINSE 4	8	Hd	3	M	-	3	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DRAIN						50	ND
EXTRACTION						1,5	E
PROGRAM TIME	35						

- = NO DRUM ACTION
G = GENTLE ACTION
N = NORMAL ACTION
D = DISTRIBUTION SPEED
E = EXTRACTION
R = REDUCED GENTLE ACTION
C = COLD WATER (APPROX. 15° C)

W = WARM WATER (APPROX. 35° C)
H = HOT WATER (APPROX. 65° C)
Hd = HARD WATER
LL = LOW WATER LEVEL
ML = MEDIUM WATER LEVEL
HL = HIGH WATER LEVEL
(grey box) = TIME IN SECONDS
(white box) = TIME IN MINUTES

Program table PE 31 C

NORMAL 95° — Program 1

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION	3					30	E
PREWASH							
DRAIN							
MAIN WASH	3	C	2	L	-	-	N
SOAKING	3	C	-	L	-	6	N
HEATING	3	-	-	L	73	-	N
WASHING	3	-	-	L	-	12	N
DRAIN	4	-	-	-	-	1	D
RINSE 1	5	C	-	M	-	2	N
DRAIN	5	-	-			1	D
EXTRACTION	5					-	-
RINSE 2	6	C	-	M	-	2	N
DRAIN	6					40	ND
EXTRACTION	6					30	E
RINSE 3	7	C	-	M	-	2	N
DRAIN	7					40	ND
EXTRACTION	7					30	E
RINSE 4	8	C	3	M	-	2	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DRAIN	9					50	ND
EXTRACTION	9					5	E
PROGRAM TIME	38						

NORMAL 60° — Program 2

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION	3					30	E
PREWASH							
DRAIN							
MAIN WASH	3	C	2	L	-	-	N
SOAKING	3	C	-	L	-	6	N
HEATING	3	-	-	L	55	-	N
WASHING	3	-	-	L	55	2	N
DRAIN	4	-	-	-	-	1	D
RINSE 1	5	C	-	M	-	2	N
DRAIN	5					1	D
EXTRACTION	5						
RINSE 2	6	C	-	M	-	2	N
DRAIN	6					40	ND
EXTRACTION	6					30	E
RINSE 3	7	C	-	M	-	2	N
DRAIN	7					40	ND
EXTRACTION	7					30	E
RINSE 4	8	C	3	M	-	2	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DRAIN	9					50	ND
EXTRACTION	9					4	E
PROGRAM TIME	37						

NORMAL 40° — Program 3

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION	3					30	E
PREWASH							
DRAIN							
MAIN WASH	3	C	2	L	-	-	N
SOAKING	3	C	-	L	-	6	N
HEATING	3	-	-	L	40	-	N
WASHING	3	-	-	L	40	12	N
DRAIN	4						1
	D						
RINSE 1	5	C	-	M	-	2	N
DRAIN	5					1	D
EXTRACTION	5						
RINSE 2	6	C	-	M	-	2	N
DRAIN	6					40	ND
EXTRACTION	6					30	E
RINSE 3	7	C	-	M	-	2	N
DRAIN	7					40	ND
EXTRACTION	7					30	E
RINSE 4	8	C	3	M	-	2	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DRAIN	9					50	ND
EXTRACTION	9					4	E
PROGRAM TIME	37						

MILD 30° — Program 4

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION							
PREWASH							
DRAIN							
MAIN WASH	3	C	2	M	-	-	-
SOAKING	-						
HEATING	3	C	2	M	30	-	R
WASHING	-				30	15	R
DRAIN	4					1	-
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	M	-	2	R
DRAIN	6					1	-
EXTRACTION	-						-
RINSE 3	7	C	-	M	-	2	R
DRAIN	7					1	-
EXTRACTION	-						-
RINSE 4	8	C	3	M	-	2	R
DRAIN	9					40	RD
EXTRACTION	9					6	E
DRAIN	9					50	RD
EXTRACTION	9					1,5	E
PROGRAM TIME	28						

WOOL — Program 5

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION							
PREWASH							
DRAIN							
MAIN WASH	3	C	2	M	-	-	-
SOAKING	-						
HEATING	3	C	2	M	40	-	R
WASHING	-				40	15	R
DRAIN	4					1	-
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	M	-	2	R
DRAIN	6					1	-
EXTRACTION	-						-
RINSE 3	7	C	-	M	-	2	R
DRAIN	7					1	-
EXTRACTION	-						-
RINSE 4	8	C	3	M	-	2	R
DRAIN	9					40	RD
EXTRACTION	9					6	E
DRAIN	9					50	RD
EXTRACTION	9					1,5	E
PROGRAM TIME	28						

PERM. PRESS 40° — Program 6

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION	3					30	E
PREWASH							
DRAIN							
MAIN WASH	3	C	2	L	-	-	N
SOAKING	3	C	2	L	-	6	N
HEATING	3	-	-	-	40	-	N
WASHING	3	-	-	-	40	12	N
DRAIN	4	-	-	-	-	1	D
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	M	-	3	N
DRAIN	6					1	D
EXTRACTION	-						-
RINSE 3	7	C	-	M	-	3	N
DRAIN	7					1	D
EXTRACTION	-						-
RINSE 4	8	C	3	M	-	3	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DRAIN	9					50	ND
EXTRACTION	9					1,5	E
PROGRAM TIME	34						

PERM. PRESS 60° — Program 7

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION	3					30	E
PREWASH							
DRAIN							
MAIN WASH	3	C	2	L	-	-	N
SOAKING	3	C	2	L	-	6	N
HEATING	3	-	-	-	55	-	N
WASHING	3	-	-	-	55	12	N
DRAIN	4	-	-	-	-	1	D
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	M	-	3	N
DRAIN	6					1	D
EXTRACTION	-						-
RINSE 3	7	C	-	M	-	3	N
DRAIN	7					1	D
EXTRACTION	-						-
RINSE 4	8	C	3	M	-	3	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DRAIN	9					50	ND
EXTRACTION	9					1,5	E
PROGRAM TIME	34						

- = NO DRUM ACTION
G = GENTLE ACTION
N = NORMAL ACTION
D = DISTRIBUTION SPEED
E = EXTRACTION
R = REDUCED GENTLE ACTION
C = COLD WATER (APPROX. 15° C)

W = WARM WATER (APPROX. 35° C)
H = HOT WATER (APPROX. 65° C)
Hd = HARD WATER
LL = LOW WATER LEVEL
ML = MEDIUM WATER LEVEL
HL = HIGH WATER LEVEL
(grey box) = TIME IN SECONDS
(white box) = TIME IN MINUTES

Program table PE 31 C

NORMAL 95° (Program 8)

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	1					40	E
DRY EXTRACTION	1					30	E
PREWASH	1	C	1	L	-	-	N
SOAKING	1	C	1	L	-	6	N
DRAIN	2					1	D
MAIN WASH	3	C	2	L	-	-	N
SOAKING	-	-	-	-	-	-	-
HEATING	3	-	-	L	80	-	N
WASHING	3	-	-	-	80	12	N
DRAIN	4	-	-	-	-	1	D
RINSE 1	5	C	-	M	-	2	N
DRAIN	5	-	-			1	D
EXTRACTION	5					-	-
RINSE 2	6	C	-	M	-	2	N
DRAIN	6					40	ND
EXTRACTION	6					30	E
RINSE 3	7	C	-	h	-	2	N
DRAIN	7					40	ND
EXTRACTION	7					30	E
RINSE 4	8	C	3	h	-	2	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DRAIN	9					50	ND
EXTRACTION	9					5	E
PROGRAM TIME	39						

NORMAL 60° (Program 9)

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	1					40	E
DRY EXTRACTION	1					30	E
PREWASH	1	C	1	L	-	-	N
SOAKING	1	C	1	L	-	6	N
DRAIN	2					1	D
MAIN WASH	3	C	2	L	-	-	N
SOAKING	-	-	-	-	-	-	-
HEATING	3	-	-	L	60	-	N
WASHING	3	-	-	-	60	12	N
DRAIN	4	-	-	-	-	1	D
	-						
RINSE 1	5	C	-	M	-	2	N
DRAIN	5					1	D
EXTRACTION	5						
RINSE 2	6	C	-	M	-	2	N
DRAIN	6					40	ND
EXTRACTION	6					30	E
RINSE 3	7	C	-	h	-	2	N
DRAIN	7					40	ND
EXTRACTION	7					30	E
RINSE 4	8	C	3	h	-	2	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DRAIN	9					50	ND
EXTRACTION	9					4	E
PROGRAM TIME	38						

NORMAL 40° (Program 10)

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	1					40	E
DRY EXTRACTION	1					30	E
PREWASH	1	C	1	L	-	-	N
SOAKING	1	C	1	L	-	6	N
DRAIN	2					1	D
MAIN WASH	3	C	2	L	-	-	N
SOAKING	-	-	-	-	-	-	-
HEATING	3	-	-	L	40	-	N
WASHING	3	-	-	-	40	12	N
DRAIN	4					1	D
RINSE 1	5	C	-	M	-	2	N
DRAIN	5					1	D
EXTRACTION	5						
RINSE 2	6	C	-	M	-	2	N
DRAIN	6					40	ND
EXTRACTION	6					30	E
RINSE 3	7	C	-	h	-	2	N
DRAIN	7					40	ND
EXTRACTION	7					30	E
RINSE 4	8	C	3	h	-	2	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DRAIN	9					50	ND
EXTRACTION	9					4	E
PROGRAM TIME	38						

MILD 30° (Program 11)

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION							
PREWASH							
SOAKING							
DRAIN							
MAIN WASH	3	C	2	M	-	-	-
SOAKING	-						
HEATING	3	C	2	h	30	-	R
WASHING	-				30	15	R
DRAIN	4					1	-
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	M	-	2	R
DRAIN	6					1	-
EXTRACTION	-						-
RINSE 3	7	C	-	M	-	2	R
DRAIN	7					1	-
EXTRACTION	-						-
RINSE 4	8	C	3	h	-	2	R
DRAIN	9					40	RD
EXTRACTION	9					6	E
DRAIN	9					50	RD
EXTRACTION	9					1,5	E
PROGRAM TIME	28						

WOOL 40° (Program 12)

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION							
PREWASH							
SOAKING							
DRAIN							
MAIN WASH	3	C	2	M	-	-	-
SOAKING	-						
HEATING	3	C	2	h	40	-	R
WASHING	-				40	15	R
DRAIN	4					1	-
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	M	-	2	R
DRAIN	6					1	-
EXTRACTION	-						-
RINSE 3	7	C	-	M	-	2	R
DRAIN	7					1	-
EXTRACTION	-						-
RINSE 4	8	C	3	h	-	2	R
DRAIN	9					40	RD
EXTRACTION	9					6	E
DRAIN	9					50	RD
EXTRACTION	9					1,5	E
PROGRAM TIME	28						

PERM. PRESS 40° (Program 13)

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION	3					30	E
PREWASH	1	C	1	L	-	-	N
SOAKING	1	C	1	L	-	6	N
DRAIN	2					1	D
MAIN WASH	3	C	2	L	-	-	N
SOAKING	3	C	2	L	-	6	N
HEATING	3	-	-	-	40	-	N
WASHING	3	-	-	-	40	12	N
DRAIN	4	-	-	-	-	1	D
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	M	-	3	N
DRAIN	6					1	D
EXTRACTION	-					-	
RINSE 3	7	C	-	M	-	3	N
DRAIN	7					1	D
EXTRACTION	-					-	
RINSE 4	8	C	3	M	-	3	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DRAIN	9					50	ND
EXTRACTION	9					1,5	E
PROGRAM TIME	41						

PERM. PRESS 60° (Program 14)

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION	3					30	E
PREWASH	1	C	1	L	-	6	N
SOAKING	1	C	1	L	-	6	N
DRAIN	2					1	D
MAIN WASH	3	C	2	L	-	-	N
SOAKING	3	C	2	L	-	6	N
HEATING	3	-	-	-	60	-	N
WASHING	3	-	-	-	60	12	N
DRAIN	4	-	-	-	-	1	D
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	M	-	3	N
DRAIN	6					1	D
EXTRACTION	-						-
RINSE 3	7	C	-	M	-	3	N
DRAIN	7					1	D
EXTRACTION	-						-
RINSE 4	8	C	3	M	-	3	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DRAIN	9					50	ND
EXTRACTION	9					1,5	E
PROGRAM TIME	41						

- = NO DRUM ACTION
G = GENTLE ACTION
N = NORMAL ACTION
D = DISTRIBUTION SPEED
E = EXTRACTION
R = REDUCED GENTLE ACTION
C = COLD WATER (APPROX. 15° C)

W = WARM WATER (APPROX. 35° C)
H = HOT WATER (APPROX. 65° C)
Hd = HARD WATER
LL = LOW WATER LEVEL
ML = MEDIUM WATER LEVEL
HL = HIGH WATER LEVEL
(shaded box) = TIME IN SECONDS
(white box) = TIME IN MINUTES

Program table PE 41a C

Program 1 – NORMAL 95°

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION	3					30	E
PREWASH							
DRAIN							
MAIN WASH	3	C	2	L	-	-	N
SOAKING	3	C	2	L	-	6	N
HEATING	3	-	-	L	90	-	N
WASHING	3	-	-	L	90	12	N
DRAIN	4	-	-	-	-	40	ND
EXTRACTION	4					6	E
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	h	-	3	N
DRAIN	6					40	ND
EXTRACTION	6					30	E
RINSE 3	7	C	-	h	-	3	N
DRAIN	7					40	ND
EXTRACTION	7					30	E
RINSE 4	8	C	3	h	-	3	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DRAIN	9					50	N
EXTRACTION	9					4	E
PROGRAM TIME	38						

Program 2 – NORMAL 60°

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION	3					30	E
PREWASH							
DRAIN							
MAIN WASH	3	C	2	L	-	-	N
SOAKING	3	C	2	L	-	6	N
HEATING	3	-	-	L	60	-	N
WASHING	3	-	-	-	60	12	N
DRAIN	4	-	-		-	40	ND
EXTRACTION	4					6	E
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	h	-	3	N
DRAIN	6					40	ND
EXTRACTION	6					30	E
RINSE 3	7	C	-	h	-	3	N
DRAIN	7					40	ND
EXTRACTION	7					30	E
RINSE 4	8	C	3	h	-	3	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DRAIN	9					50	N
EXTRACTION	9					4	E
PROGRAM TIME	38						

Program 3 – NORMAL 40°

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION	3					30	E
PREWASH							
DRAIN							
MAIN WASH	3	C	2	L	-	-	N
SOAKING	3	C	2	L	-	6	N
HEATING	3	-	-	L	40	-	N
WASHING	3	-	-	-	40	12	N
DRAIN	4	-	-	-	-	40	ND
EXTRACTION	4					6	E
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	h	-	2	N
DRAIN	6					40	ND
EXTRACTION	6					30	E
RINSE 3	7	C	-	h	-	2	N
DRAIN	7					40	ND
EXTRACTION	7					30	E
RINSE 4	8	C	3	h	-	3	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DRAIN	9					50	N
EXTRACTION	9					4	E
PROGRAM TIME	38						

Program 4 – MILD 30°

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION							
PREWASH							
DRAIN							
MAIN WASH	3	C	2	h	-	-	-
SOAKING	-						
HEATING	3	C	2	h	30	-	R
WASHING	3	-	-	-	30	15	R
DRAIN	4					1	-
EXTRACTION	-						-
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	h	-	2	R
DRAIN	6					1	-
EXTRACTION	-						-
RINSE 3	7	C	-	h	-	2	R
DRAIN	7					1	-
EXTRACTION	-						-
RINSE 4	8	C	3	h	-	2	R
DRAIN	9					40	RD
EXTRACTION	9					6	E
DRAIN	9					50	RD
EXTRACTION	9					1,5	E
PROGRAM TIME	28						

Program 5 – WOOL

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION							
PREWASH							
DRAIN							
MAIN WASH	3	C	2	h	-	-	-
SOAKING	-						
HEATING	3	C	2	h	40	-	R
WASHING	3	-	-	-	40	15	R
DRAIN	4					1	-
EXTRACTION	-						-
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	h	-	2	R
DRAIN	6					1	-
EXTRACTION	-						-
RINSE 3	7	C	-	h	-	2	R
DRAIN	7					1	-
EXTRACTION	-						-
RINSE 4	8	C	3	h	-	2	R
DRAIN	9					40	RD
EXTRACTION	9					6	E
DRAIN	9					50	RD
EXTRACTION	9					1,5	RD
PROGRAM TIME	28						

Program 6 – PERM. PRESS 40°

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION	3					30	E
PREWASH							
DRAIN							
MAIN WASH	3	C	2	L	-	-	N
SOAKING	3	C	2	L	-	6	N
HEATING	3	-	-	-	40	-	N
WASHING	3	-	-	-	40	12	N
DRAIN	4	-	-	-	-	40	ND
EXTRACTION	4					6	E
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	M	-	3	N
DRAIN	6					1	D
EXTRACTION	-						
RINSE 3	7	C	-	h	-	3	N
DRAIN	7					1	D
EXTRACTION	-						
RINSE 4	8	C	3	M	-	3	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DRAIN	9					50	ND
EXTRACTION	9					1,5	E
PROGRAM TIME	35						

Program 7 – PERM. PRESS 60°

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION	3					30	E
PREWASH							
DRAIN							
MAIN WASH	3	C	2	L	-	-	N
SOAKING	3	C	2	L	-	6	N
HEATING	3	-	-	-	60	-	N
WASHING	3	-	-	-	60	12	N
DRAIN	4	-	-	-	-	40	ND
EXTRACTION	4					6	E
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	M	-	3	N
DRAIN	6					1	D
EXTRACTION	-						
RINSE 3	7	C	-	M	-	3	N
DRAIN	7					1	D
EXTRACTION	-						
RINSE 4	8	C	3	M	-	3	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DRAIN	9					50	N
EXTRACTION						1,5	E
PROGRAM TIME	35						

- = NO DRUM ACTION
G = GENTLE ACTION
N = NORMAL ACTION
D = DISTRIBUTION SPEED
E = EXTRACTION
R = REDUCED GENTLE ACTION
C = COLD WATER (APPROX. 15° C)

W = WARM WATER (APPROX. 35° C)
H = HOT WATER (APPROX. 65° C)
Hd = HARD WATER
LL = LOW WATER LEVEL
ML = MEDIUM WATER LEVEL
HL = HIGH WATER LEVEL
(shaded) = TIME IN SECONDS
(unshaded) = TIME IN MINUTES

Program table PE 41a C

NORMAL 95° — 8

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	1					40	E
DRY EXTRACTION	1					30	E
PREWASH	1	C	1	L	-	-	N
SOAKING	1	C	1	L	40	6	N
DRAIN	2					1	D
MAIN WASH	3	C	2	L	-	-	N
SOAKING	-	-	-	-	-	-	-
HEATING	3	-	-	L	90	-	N
WASHING	3	-	-	-	90	24	N
DRAIN	4	-	-	-	-	40	ND
EXTRACTION	4					6	E
RINSE 1	5	C	-	M	-	2	N
DRAIN	5	-	-			40	ND
EXTRACTION	5					30	E
RINSE 2	6	C	-	M	-	2	N
DRAIN	6					40	ND
EXTRACTION	6					30	E
RINSE 3	7	C	-	h	-	2	N
DRAIN	7					40	ND
EXTRACTION	7					30	E
RINSE 4	8	C	3	h	-	2	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DRAIN	9					50	ND
EXTRACTION	9					4	E
PROGRAM TIME	51						

NORMAL 60° — 9

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	1					40	E
DRY EXTRACTION	1					30	E
PREWASH	1	C	1	L	-	-	N
SOAKING	1	C	1	L	40	6	N
DRAIN	2					1	D
MAIN WASH	3	C	2	L	-	-	N
SOAKING	-	-	-	-	-	-	-
HEATING	3	-	-	L	60	-	N
WASHING	3	-	-	-	60	24	N
DRAIN	4	-	-	-	-	40	ND
EXTRACTION	4					6	E
RINSE 1	5	C	-	M	-	2	N
DRAIN	5					40	ND
EXTRACTION	5					30	E
RINSE 2	6	C	-	M	-	2	N
DRAIN	6					40	ND
EXTRACTION	6					30	E
RINSE 3	7	C	-	h	-	2	N
DRAIN	7					40	ND
EXTRACTION	7					30	E
RINSE 4	8	C	3	h	-	2	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DRAIN	9					50	ND
EXTRACTION	9					4	E
PROGRAM TIME	51						

NORMAL 40° — 10

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	1					40	E
DRY EXTRACTION	1					30	E
PREWASH	1	C	1	L	-	-	N
SOAKING	1	C	1	L	40	6	N
DRAIN	2					1	D
MAIN WASH	3	C	2	L	-	-	N
SOAKING	-	-	-	-	-	-	-
HEATING	3	-	-	L	40	-	N
WASHING	3	-			40	24	N
DRAIN	4					40	ND
EXTRACTION	4					6	E
RINSE 1	5	C	-	M	-	2	N
DRAIN	5					40	ND
EXTRACTION	5					30	E
RINSE 2	6	C	-	M	-	2	N
DRAIN	6					40	ND
EXTRACTION	6					30	E
RINSE 3	7	C	-	h	-	2	N
DRAIN	7					40	ND
EXTRACTION	7					30	E
RINSE 4	8	C	3	h	-	2	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DRAIN	9					50	ND
EXTRACTION	9					4	E
PROGRAM TIME	51						

MILD 30° — 11

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION							
PREWASH							
SOAKING							
DRAIN							
MAIN WASH	3	C	2	h	-	-	-
SOAKING	-						-
HEATING	3	C	2	h	30	-	R
WASHING	3				30	15	R
DRAIN	4					1	-
EXTRACTION	-						
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	h	-	2	R
DRAIN	6					1	-
EXTRACTION	-						-
RINSE 3	7	C	-	h	-	2	R
DRAIN	7					1	-
EXTRACTION	-						-
RINSE 4	8	C	3	h	-	2	R
DRAIN	9					40	RD
EXTRACTION	9					6	E
DRAIN	9					50	RD
EXTRACTION	9					1,5	E
PROGRAM TIME	28						

WOOL 40° — 12

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	3					40	E
DRY EXTRACTION							
PREWASH							
SOAKING							
DRAIN							
MAIN WASH	3	C	2	h	-	-	-
SOAKING	-						
HEATING	3	C	2	h	40	-	R
WASHING	3				40	15	R
DRAIN	4					1	-
EXTRACTION	-						
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	h	-	2	R
DRAIN	6					1	-
EXTRACTION	-						-
RINSE 3	7	C	-	h	-	2	R
DRAIN	7					1	-
EXTRACTION	-						-
RINSE 4	8	C	3	h	-	2	R
DRAIN	9					40	RD
EXTRACTION	9					6	E
DRAIN	9					50	RD
EXTRACTION	9					1,5	E
PROGRAM TIME	28						

PERM. PRESS 40° — 13

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	1					40	E
DRY EXTRACTION	1					30	E
PREWASH	1	C	1	L	-	-	N
SOAKING	1	C	1	L	40	6	N
DRAIN	2					1	D
MAIN WASH	3	C	2	L	-	-	N
SOAKING	-	-	-	-	-	-	-
HEATING	3	-	-	-	40	-	N
WASHING	3	-	-	-	40	24	N
DRAIN	4	-	-	-	-	40	ND
EXTRACTION	4					6	E
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	M	-	3	N
DRAIN	6					1	D
EXTRACTION	-					-	-
RINSE 3	7	C	-	M	-	3	N
DRAIN	7					1	D
EXTRACTION	-						-
RINSE 4	8	C	3	M	-	3	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DRAIN	9					50	ND
EXTRACTION	9					1,5	E
PROGRAM TIME	47						

PERM. PRESS 60° — 14

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	1					40	E
DRY EXTRACTION	1					30	E
PREWASH	1	C	1	L	-	-	N
SOAKING	1	C	1	L	40	6	N
DRAIN	2					1	D
MAIN WASH	3	C	2	L	-	-	N
SOAKING	-	-	-	-	-	-	-
HEATING	3	-	-	-	60	-	N
WASHING	3	-	-	-	60	24	N
DRAIN	4	-	-	-	-	40	ND
EXTRACTION	4					6	E
RINSE 1							
DRAIN							
EXTRACTION							
RINSE 2	6	C	-	M	-	3	N
DRAIN	6					1	D
EXTRACTION	-						-
RINSE 3	7	C	-	M	-	3	N
DRAIN	7					1	D
EXTRACTION	-						-
RINSE 4	8	C	3	M	-	3	N
DRAIN	9					40	ND
EXTRACTION	9					6	E
DRAIN	9					50	ND
EXTRACTION	9					1,5	E
PROGRAM TIME	47						

- = NO DRUM ACTION
G = GENTLE ACTION
N = NORMAL ACTION
D = DISTRIBUTION SPEED
E = EXTRACTION
R = REDUCED GENTLE ACTION
C = COLD WATER (APPROX. 15° C)

W = WARM WATER (APPROX. 35° C)
H = HOT WATER (APPROX. 65° C)
Hd = HARD WATER
LL = LOW WATER LEVEL
ML = MEDIUM WATER LEVEL
HL = HIGH WATER LEVEL
(grey box) = TIME IN SECONDS
(white box) = TIME IN MINUTES

Program table PE 08a CH

HOT – 1

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	1					40	E
PREWASH 1							
SOAKING							
DRAIN							
PREWASH 2	2	W	1	HL	-	3	N
SOAKING							
DRAIN	2						D
MAIN WASH	3	H	2	ML		6	N
DRAIN	4					40	ND
EXTRACTION	4					30	E
RINSE 1	5	W		HL		1	N
DRAIN	5					40	ND
EXTRACTION	5					30	E
RINSE 2	6	C		HL		1	N
DRAIN	6					40	ND
EXTRACTION	6					30	E
RINSE 3	7	C	3	HL		2	N
DRAIN	8					40	ND
EXTRACTION	8					4	E
PROGRAM TIME	22						

WARM – 2

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	1					40	E
PREWASH 1							
SOAKING							
DRAIN							
PREWASH 2	2	W	1	HL		3	N
SOAKING							
DRAIN	2						D
MAIN WASH	3	W	2	ML		6	N
DRAIN	4					40	ND
EXTRACTION	4					30	E
RINSE 1	5	C		HL		1	N
DRAIN	5					40	ND
EXTRACTION	5					30	E
RINSE 2	6	C		HL		1	N
DRAIN	6					40	ND
EXTRACTION	6					30	E
RINSE 3	7	C	3	HL		2	N
DRAIN	8					40	ND
EXTRACTION	8					4	E
PROGRAM TIME	22						

COLD – 3

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	1					40	E
PREWASH 1							
SOAKING							
DRAIN							
PREWASH 2	2	C	1	HL		3	N
SOAKING							
DRAIN	2						D
MAIN WASH	3	C	2	ML		6	N
DRAIN	4					40	ND
EXTRACTION	4					30	E
RINSE 1	5	C		HL		1	N
DRAIN	5					40	ND
EXTRACTION	5					30	E
RINSE 2	6	C		HL		1	N
DRAIN	6					40	ND
EXTRACTION	6					30	E
RINSE 3	7	C	3	HL		2	N
DRAIN	8					40	ND
EXTRACTION	8					4	E
PROGRAM TIME	22						

DELICATE – 4

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	1					40	E
PREWASH 1							
SOAKING							
DRAIN							
PREWASH 2							
SOAKING							
DRAIN							
MAIN WASH	3	W	2	HL		4	G
DRAIN	4					40	GD
EXTRACTION	4					30	E
RINSE 1	5	C		HL		1	G
DRAIN	5					1	G
EXTRACTION							
RINSE 2	6	C		HL		1	G
DRAIN	6					1	G
EXTRACTION							
RINSE 3	7	C	3	HL		2	G
DRAIN	8					40	GD
EXTRACTION	8					1,5	E
PROGRAM TIME	14						

PERM. PRESS – 5

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	1					40	E
PREWASH 1							
SOAKING							
DRAIN							
PREWASH 2	2	W	1	HL		3	N
SOAKING							
DRAIN	2						D
MAIN WASH	3	W	2	ML		6	N
DRAIN	4					40	ND
EXTRACTION	4					30	E
RINSE 1	5	C		HL		1	N
DRAIN	5					40	ND
EXTRACTION	5					30	E
RINSE 2	6	C		HL		1	N
DRAIN	6					40	ND
EXTRACTION	6					30	E
RINSE 3	7	C	3	HL		2	N
DRAIN	8					40	ND
EXTRACTION	9					1,5	E
PROGRAM TIME	19,5						

QUICK-WASH – 6

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	1					40	E
PREWASH 1							
SOAKING							
DRAIN							
PREWASH 2							
SOAKING							
DRAIN							
MAIN WASH	3	H	2	ML		5	N
DRAIN	4					40	ND
EXTRACTION	4					30	E
RINSE 1	5	C		HL		1	N
DRAIN	5					1	D
EXTRACTION							
RINSE 2	6	C	-	HL		1	N
DRAIN	6					1	D
EXTRACTION							
RINSE 3	7	C	3	HL		2	N
DRAIN	8					40	ND
EXTRACTION	8					3	E
PROGRAM TIME	16,5						

HEAVY SOILED – 7

PROGRAM STEP	PROGRAM INDIC.	INTAKE WATER	COMPARTMENT	LEVEL	TEMP °C	TIME	DRUM ACTION
WEIGHING	1					40	E
PREWASH 1	1	W	1	HL		2	N
SOAKING							
DRAIN	1					1	D
PREWASH 2	2	W	1	HL		3	N
SOAKING							
DRAIN	2					1	D
MAIN WASH	3	H	2	ML		8	N
DRAIN	4					40	ND
EXTRACTION	4					30	E
RINSE 1	5	W		HL		1	N
DRAIN	5					40	ND
EXTRACTION	5					30	E
RINSE 2	6	C		HL		1	N
DRAIN	6					1	D
EXTRACTION							
RINSE 3	7	C	3	HL		2	N
DRAIN	8					40	ND
EXTRACTION	8					4	E
PROGRAM TIME	28						

- = NO DRUM ACTION
G = GENTLE ACTION
N = NORMAL ACTION
D = DISTRIBUTION SPEED
E = EXTRACTION
R = REDUCED GENTLE ACTION
C = COLD WATER (APPROX. 15° C)

W = WARM WATER (APPROX. 35° C)
H = HOT WATER (APPROX. 65° C)
Hd = HARD WATER
LL = LOW WATER LEVEL
ML = MEDIUM WATER LEVEL
HL = HIGH WATER LEVEL
(grey box) = TIME IN SECONDS
(white box) = TIME IN MINUTES

The following maintenance routines should be adhered to for safe and efficient functioning and to prevent machine downtime.

The precise maintenance intervals should be adjusted according to the amount that the machine is used.

Every day

- Check the door and door lock:
  - Open the door and try to start the machine. The machine should not start.
  - Shut the door, start the machine and try to open the door. It should not be possible to open the door.
  - Check that the door is not leaking.
  - Clean the door seal, removing any traces of detergent or lint.
- Check that the drain valve does not leak while the machine is washing.
- Clean any left-over detergent from the detergent dispenser by using rapid advance through a program and letting the water flush the compartment clean.

Every three months


To be carried out by authorised personnel only.

- Check that the door has not been leaking.
- Check the drain for the machine and remove any lint present.
- Inspect the machine internally (straight after a wash so that any leaks will be apparent). Procedure:
  - Switch off the machine's main power switch.
  - Remove the top cover and the front and back panels.
  - Check that all internal hose connections are sound, without leaks.
  - Check the drive belt, tighten or replace if necessary (see section 30. Motor).
  - Check that no water has leaked onto the floor. The machine interior does not have any drain or ventilation outlets built in, but a defect in the machine's permanent seal could allow water through.
  - If the heating time was abnormally long, check the elements (see section 40. Heating).
  - Check the dampers.
  - If the mains supply is very hard water check to see whether the elements have limescale deposits. If necessary descale them with a suitable descaling product. Follow the manufacturer's instructions concerning quantity of descaler.
  - Never activate the heating elements without water in the machine. Doing so will cause the element fuses to blow.

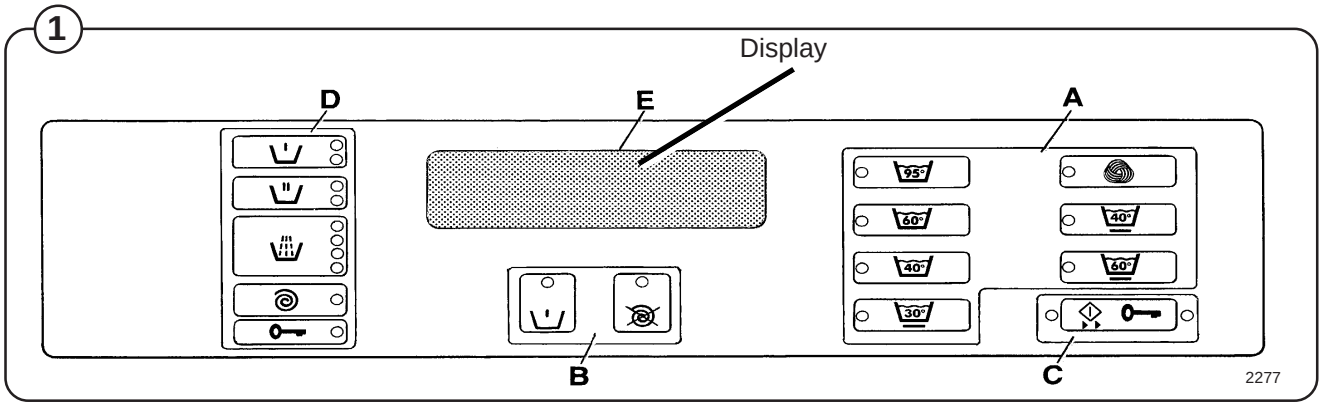
Fault location

If the power supply to the machine should be cut while it is working, the timer has a memory which stores the program selected for about 8 to 10 minutes.

Within this period the machine will restart automatically once the power supply is restored.

Indication of faults/errors

Fig. 1 Faults/errors in the program or machine are indicated by a numerical error code on the control panel display.



In the case of error code 01, an attempt to restart the machine may be made as soon as the fault has been remedied. For the other error codes, a service technician must be called.

Error code	Cause/Action
01	Water level not reached. • Check that the manual stopcocks are open. • Restart machine (can be done without switching off power supply.
02	Door lock malfunction • Open and/or shut door. Restart machine.
03	Malfunction in bimetallic component in door lock.
04	Short-circuit in or on route to temperature sensor.
05	Temperature too high. Fault in or on route to temperature sensor.
06	Drain or pump blocked. Water in machine before attempt to start program.
07	Machine is taking in too much water. Water valve not closing.
08	No heating or heating too slow.
10	Drain fault. Water has not discharged within allocated drain time. Drain or pump blocked.
12	Fault in program memory.
13	Failure in communications between programmer and motor control. Motor control faulty.
14	Water-level system not calibrated. Press START for start of wash program. The program will now run, but with the wrong water level.
15	Door lock fault. The lock has a mechanical fault.
16	Wrong calibrated weight measuring system. Press START to start wash program. The program will now run, but the weight will be set to 5 kgs.
30-31	Communications fault between motor control and programmer.
38	Tachometer fault. The motor is inactive when it should be working.
40	Fault in motor control. Motor has been working faster than expected.

Built-in service program

The machine has a built-in service program to facilitate function checking and fault location.

This program may only be used by trained and authorised service personnel.

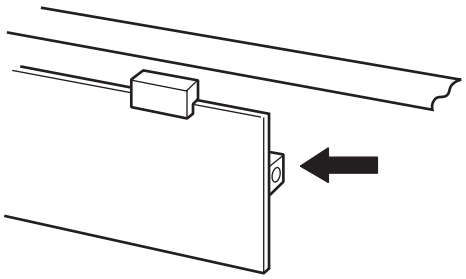
To switch to the service program

Fig. 2

- Remove the machine top.
- Press the service switch. This switch is on the left-hand edge of the circuit board when viewed from above. The display will now show SE, which shows that the service program is activated.

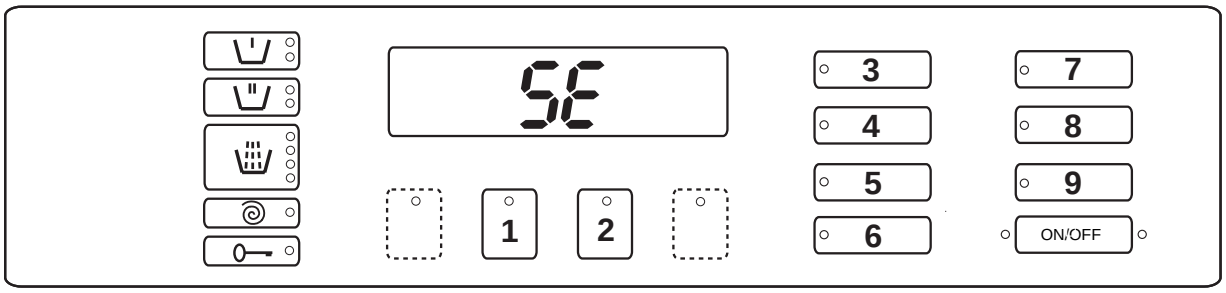
Fig. 3 Now certain of the buttons switch to being number keys (1 to 9). The START/door-open button becomes an **ON/OFF** button.

2



2269

3



2224

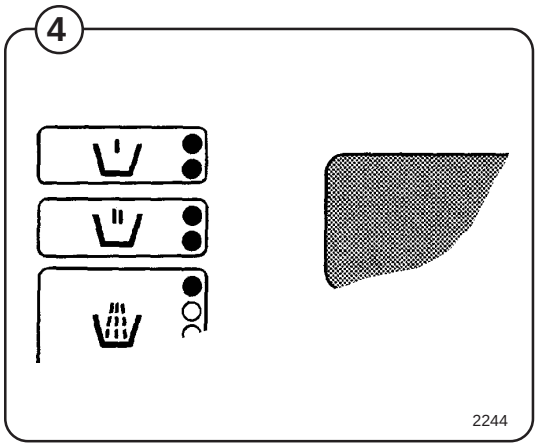
Checking functions

Fig. 4

The LEDs to the left of the display show certain input signals by lighting during the function check. For example, LED 7 comes on when the door is closed. When the particular function is activated, the corresponding LED should come on.

Indicator	Function
1	Key switch for price=zero
2	Coin slot 1
3	Coin slot 2
4	Price programming button
6	Bimetallic component in door lock in closed position
7	Door closed
8	Remote start, e.g. for a payment system

Certain functions can be simulated by entering a numerical code via the buttons. The function can then be switched on and off using the **ON/OFF** switch.



The following functions can be simulated using a numerical code:

Code	Function
11	Detergent compartment, prewash
12	Detergent compartment, main wash, cold water
13	Fabric conditioner compartment
14	Detergent compartment, main wash, hot water
(15	Detergent signal for connection of liquid detergent dispenser)
16	Water valve, hot water
17	Water valve, cold water
18	Water valve, hard water
19	Heat, display shows actual temperature in drum, not code 19
21	Drain valve/pump
22	Bimetallic component in door lock
23	Door lock, opening
24	Level check. Shows level on display. When START is pressed, water filling takes place.
25	Motor, wash speed low, clockwise
26	Motor, wash speed low, anticlockwise
27	Motor, wash speed high, clockwise
28	Motor, wash speed high, anticlockwise
29	Distribution speed
31	Extraction, low speed
32	Extraction, medium speed
33	Extraction, high speed
34	Display, test of all segments, also LED test
35	Buzzer
36	Only LED test
41-42	Counter for coins
43-44	Counter (hours) for accumulated operating time
45	Last error code
51-54	Shows the article number of the program memory (EPROM)
61	Weight calibration – empty machine
62	Weight calibration – loaded machine with 3 kgs
91	Coin value, coin slot 1
92	Coin value, coin slot 2 The coin values displayed are the ratio of the coin for slot 1 to the coin for slot 2.
93	Pause function
94	Rapid advance function
95	Reservation indication

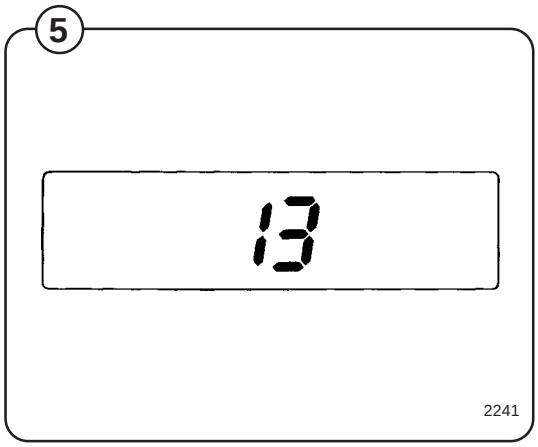
Accumulated operating time

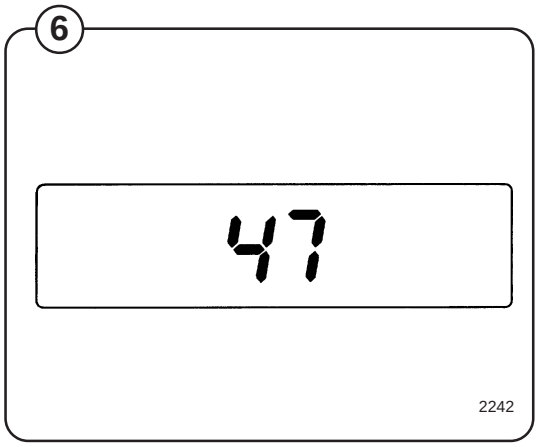
The service program can be used to display the accumulated operating time in hours.

Fig. 5 Enter code 43. The first two digits in a four-digit number will now be displayed, e.g. 13.

Fig. 6 Enter code 44. The last two digits in a four-digit number will now be displayed, e.g. 47.

This means an accumulated operating time of 1347 hours.





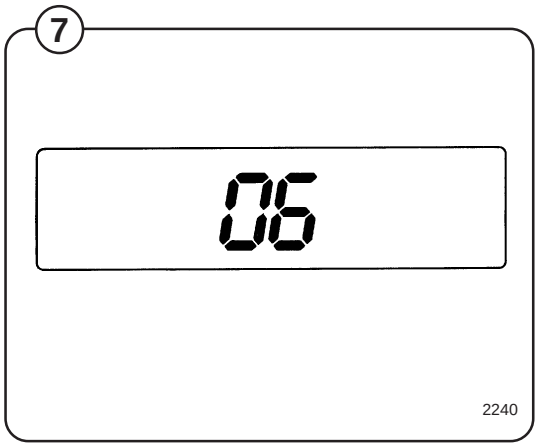
Accumulated coin value

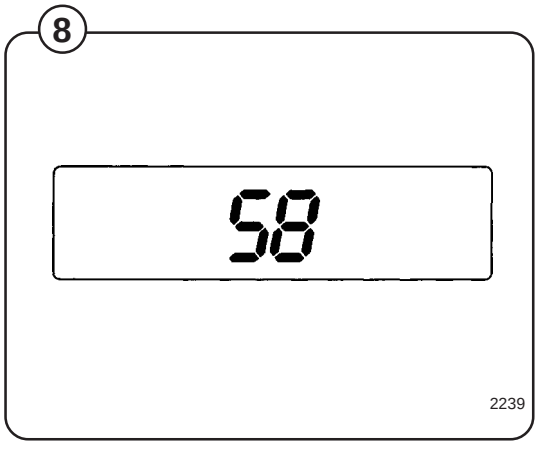
The service program can be used to display the accumulated coin value in coin-operated machines.

Fig. 7 Enter code 41. The first two digits in a four-digit number will now be displayed, e.g. 06.

Fig. 8 Enter code 42. The last two digits in a four-digit number will now be displayed, e.g. 58.

This means an accumulated coin value of 658 currency units or 658 tokens. In other words, it shows that 658 currency units or tokens have been inserted into the coin mechanism up until the time of the check.





Article number of program memory (EPROM)

The machine's EPROM is tagged with an article number. This article number can be read off via the service program. By doing this there is no need to remove the circuit board.

Start the service program.

For this operation use the codes 51 to 55 in the service program.

Fig. 9 Enter code 51. The letter A (for "article number") plus two digits will now be displayed., e.g. A47.

Fig. 10 Enter code 52. The display will show 195.

Fig. 11 Enter code 53. The display will show 803.

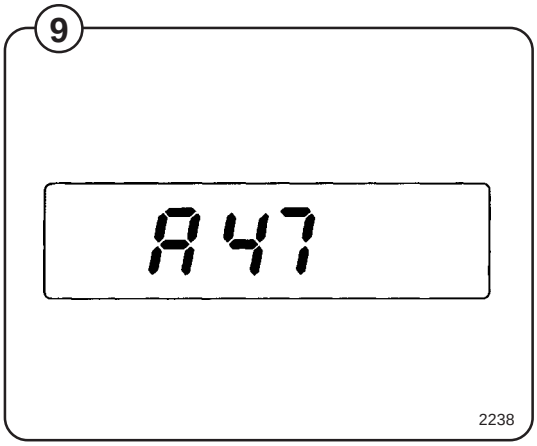
Fig. 12 Enter code 54. The display will show 480.

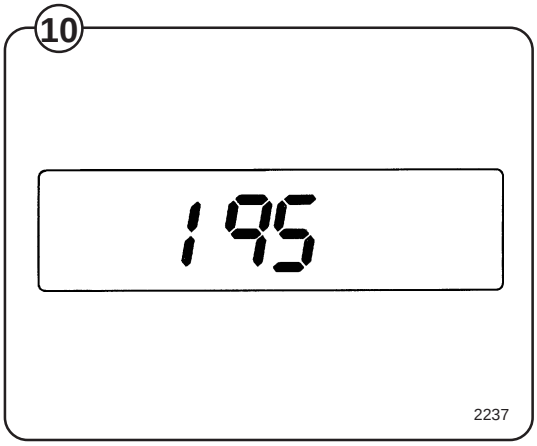
Put together in order, these digits show the EPROM article number:

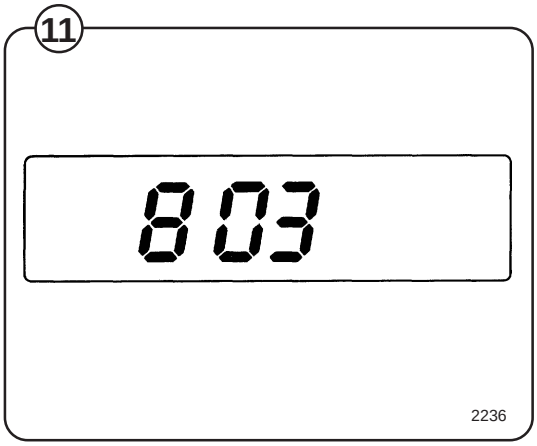
A (art. no.) 471 958034. The remaining digits are an internal revision number.

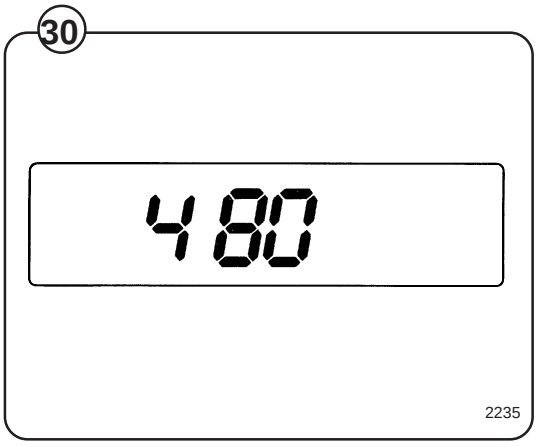
To exit the service program:

- Press the service switch, or switch off the power supply to the machine.









Component units

Electromechanical timer

1

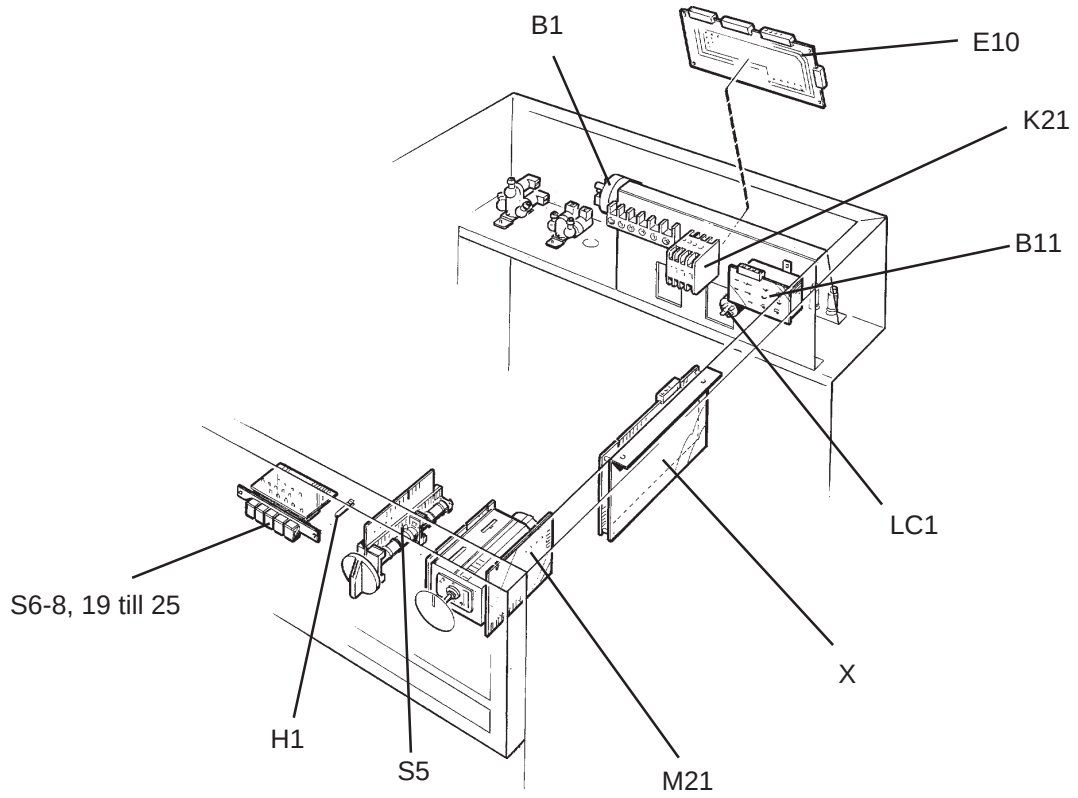


Fig 1

B1 Level control for monitoring water levels. The level control also prevents the machine from boiling dry and from extracting with water in the machine.

B11 Thermostat which controls the wash temperature by switching off the heating elements when correct temperature is reached. This thermostat also controls cool-down.

E10 Motor control for motor rotation direction, speed and times in the various program steps.

H1 Indicator light which comes on when the program has started.

K21 Relay for switching the heating elements.

LC1 Interference suppression unit.

M21 Timer which controls the sequences of the different programs as shown in relevant program table.

S5 Wash program selector knob.

S6 Start button.

S7 Option button ”Heavily soiled”.

S8 Option button ”Rinse stop”, which stops the programmer before final extraction, or optionally ”No extraction”.

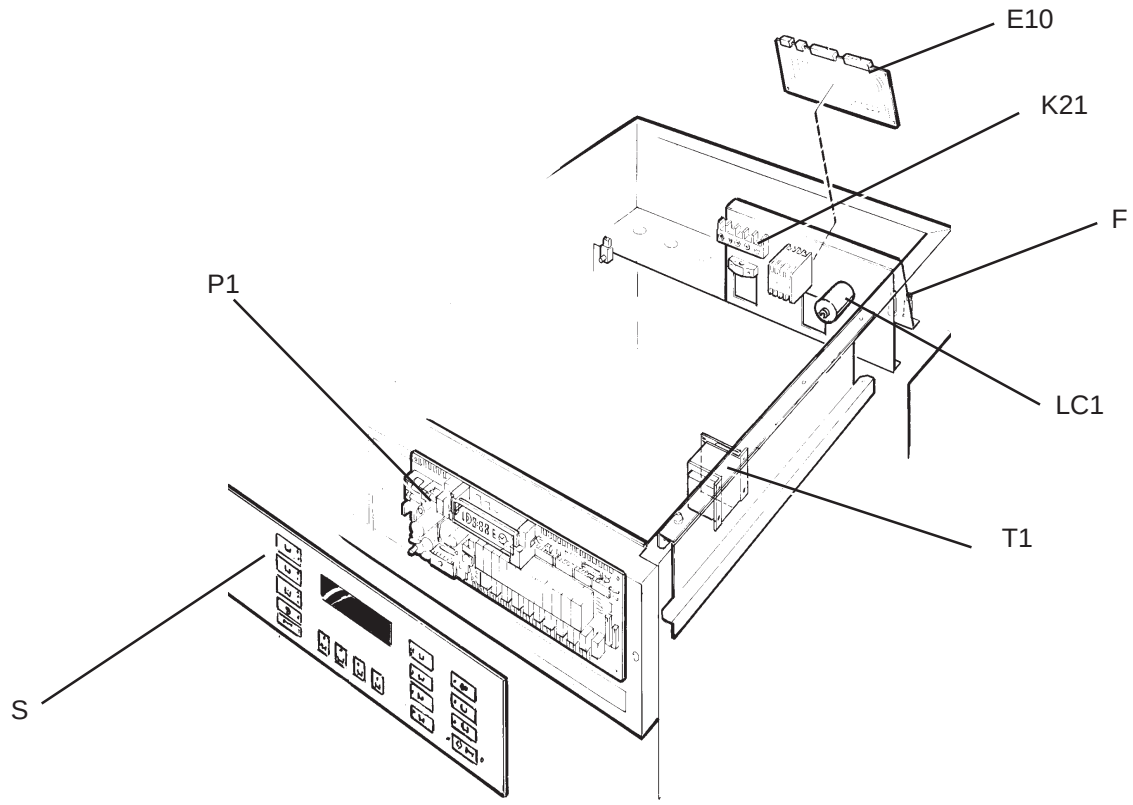
S19 Option button ”Extra rinse” (program variant P41 only). This button affects normal programs only.

S25 Push-button for door opening.

X Machine variant circuit board.

Electronic timer

2



P1 Electronic, microprocessor-controlled timer which controls the sequences of the different programs as shown in relevant program table.

E10 Motor control for motor rotation direction, speed and times in the various program steps.

K21 Relay for switching the heating elements.

LC1 Interference suppression unit.

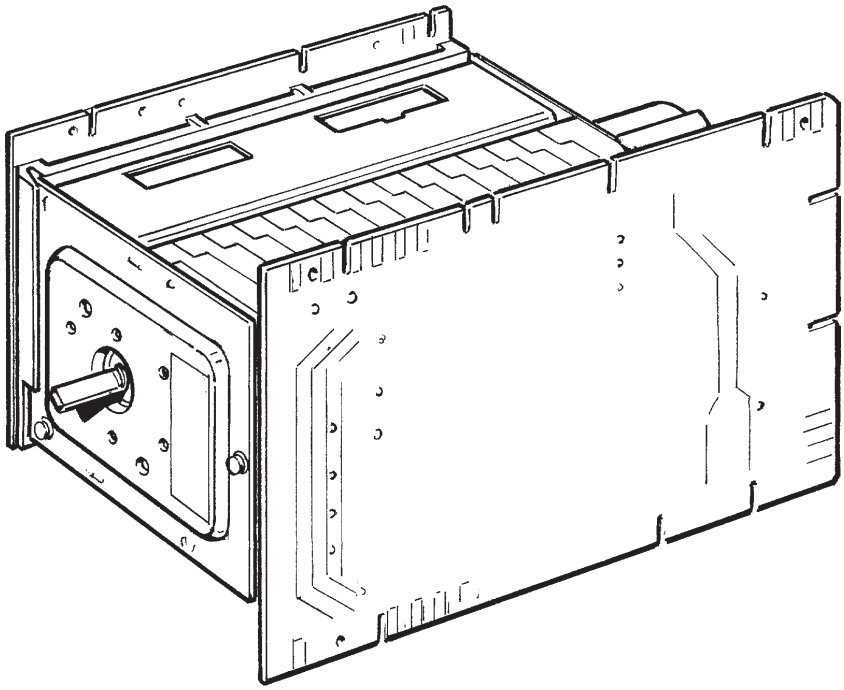
T1 Transformer.

F Fuse.

S Panel front with integral push-buttons.

Electromechanical timer

1



2214

Fig 1 The timer controls the various functions of the machine, such as water filling, drain and heating. The machine does not have a separate reverser (to control reverse operation of the motor), but instead this function is built into the timer, using signal codes to the motor control unit.

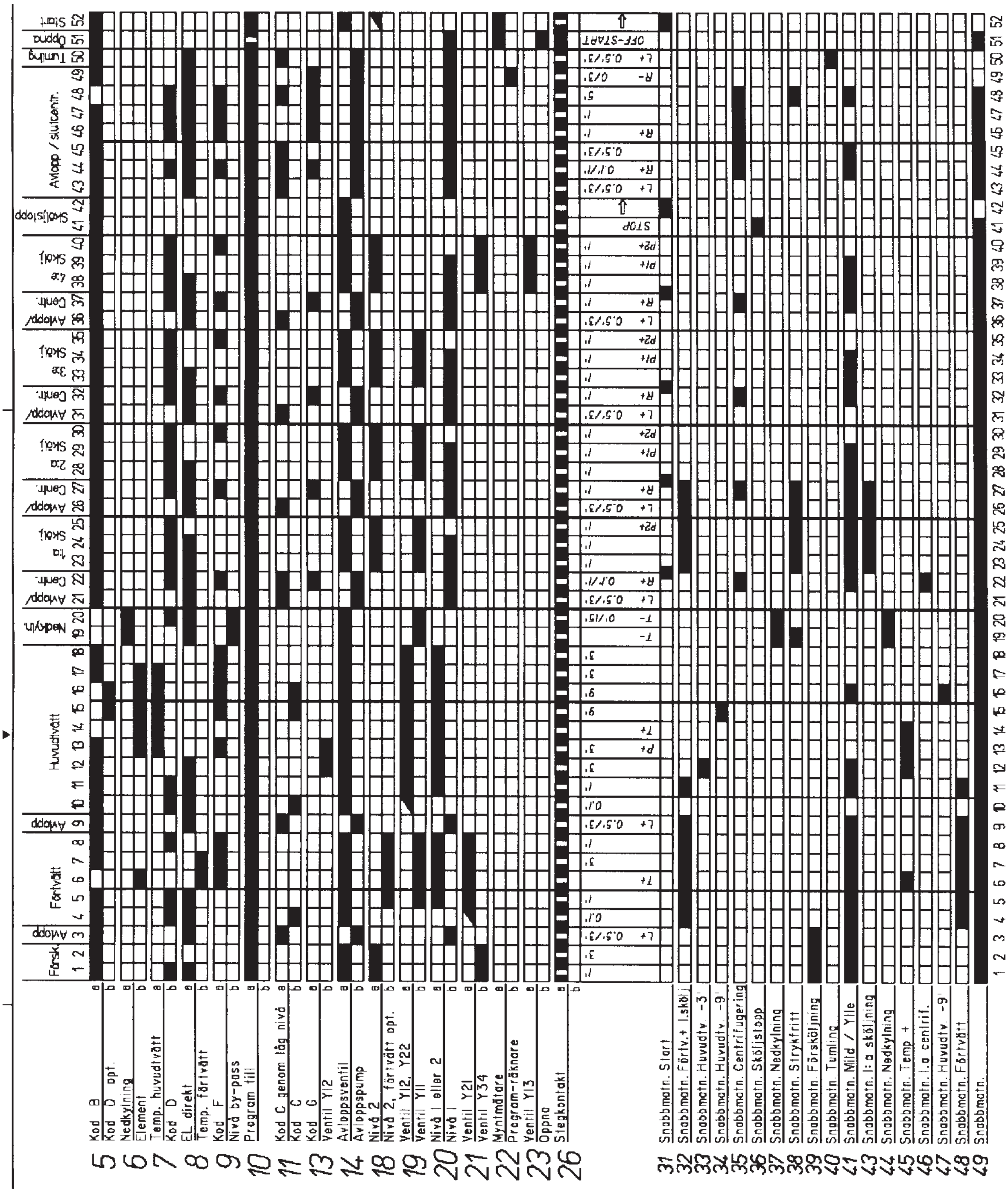
The timer consists of a program cylinder with fixed cams which actuate closing and opening contacts. The cylinder is driven by a synchronous motor.

Fig 2 The table on the next page shows how the various contacts of the timer are activated as the timer advances.

Rapid advance past various program sequences is achieved by activating the start button (S6), which sends a signal via the motor control unit to the synchronous motor.

The motor control unit ceases timing while water filling and heating are in progress, which means that the time these take is not included in the program times stated in the program tables.

2


Förskl
Avlopp
Förtvätt
Avlopp
Huvudtvätt
Nedkyln.
Avlopp/Centr.
1:a Skölj
Avlopp/Centr.
2:a Skölj
Avlopp/Centr.
3:e Skölj
Avlopp/Centr.
4:e Skölj
Sköljstopp
Avlopp / slutcentr.
Tumling
Öppna
Start
5 Kod B
Kod D opt.
6 Nedkylning
7 Element
Temp. huvudtvätt
8 Kod D
EL direkt
9 Temp. förtvätt
Kod F
10 Nivå by-pass
Program till
11 Kod C genom låg nivå
Kod C
13 Kod G
Ventil Y12
14 Avloppsventil
Avloppspump
18 Nivå 2
Nivå 2, förtvätt opt.
19 Ventil Y12, Y22
Ventil Y11
20 Nivå 1 eller 2
Nivå 1
21 Ventil Y21
Ventil Y34
22 Myntmätare
Program-räknare
23 Ventil Y13
Öppna
26 Stegkontakt
OFF-START
STOP
31 Snabbmatn. Start
32 Snabbmatn. Förtv.+ 1.sklj.
33 Snabbmatn. Huvudtv. -3'
34 Snabbmatn. Huvudtv. -9'
35 Snabbmatn. Centrifugering
36 Snabbmatn. Sköljstopp
37 Snabbmatn. Nedkylning
38 Snabbmatn. Strykfritt
39 Snabbmatn. Försköljning
40 Snabbmatn. Tumling
41 Snabbmatn. Mild / Ylle
43 Snabbmatn. 1:a sköljning
44 Snabbmatn. Nedkylning
45 Snabbmatn. Temp +
46 Snabbmatn. l.g centrif.
47 Snabbmatn. Huvudtv. -9'
48 Snabbmatn. Förtvätt
49 Snabbmatn.

2215

Instructions for repair

In the event of a wash program fault, the cause of the fault must first be established. The fault may be caused by:

- Fault in timer. Replace the timer.
- Faulty variant circuit board. Replace circuit board.
- Fault in program selector. Replace program selector.

To replace the timer.

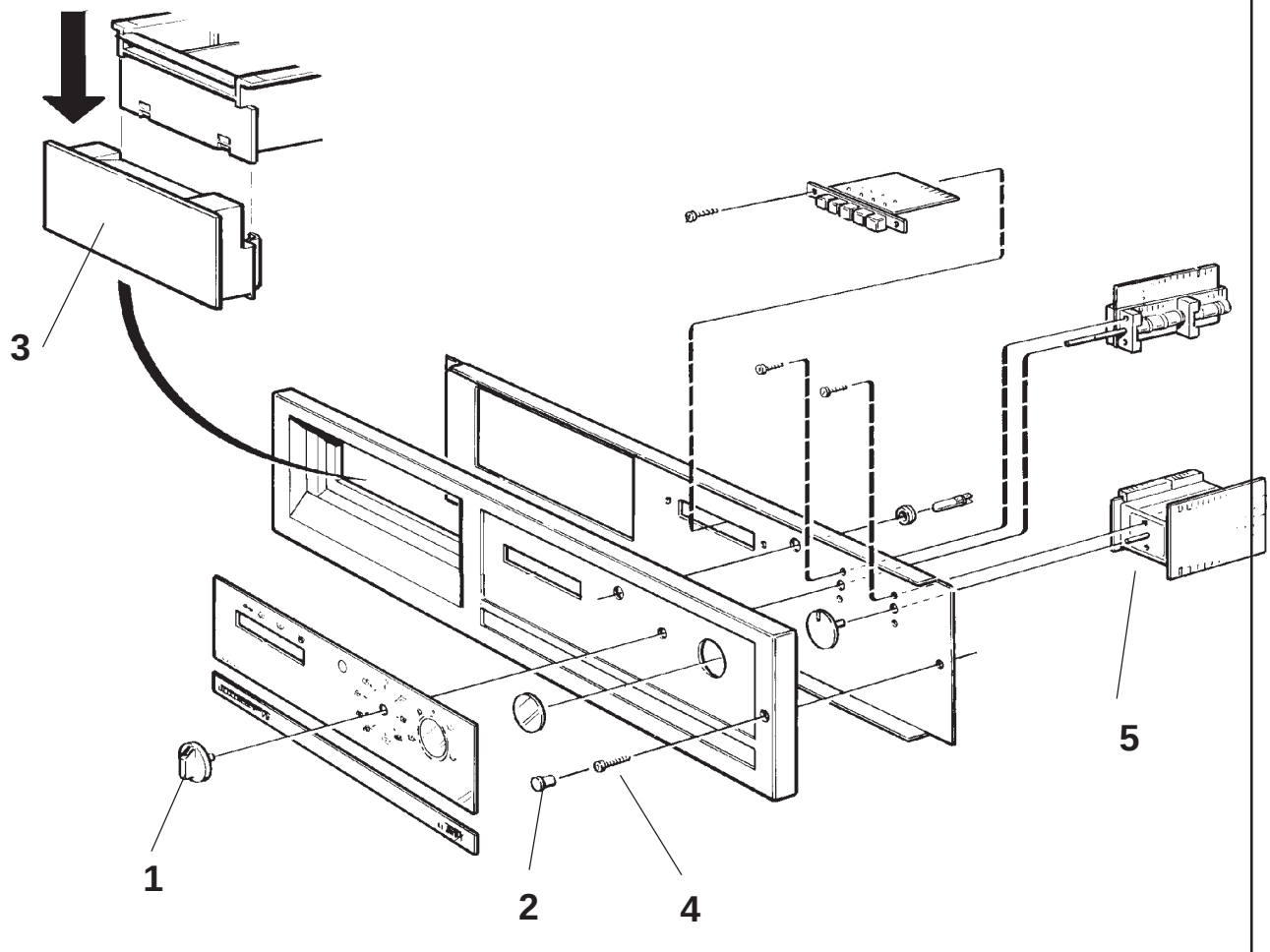
To be carried out by authorised personnel only.

To remove the timer

Fig (3)

1. Remove the knob of the program selector using a 2 mm Allen key.
2. Remove the trim cap on the right-hand side of the panel (viewed from front).
3. Remove the handle of the detergent dispenser.
4. Remove the panel (5 screws).
5. Remove the program indicator disk. Remove the screws holding the timer and take out the timer.

3



Installation

Fig (4) Check on the timer's two circuit boards that the following contacts are strapped:

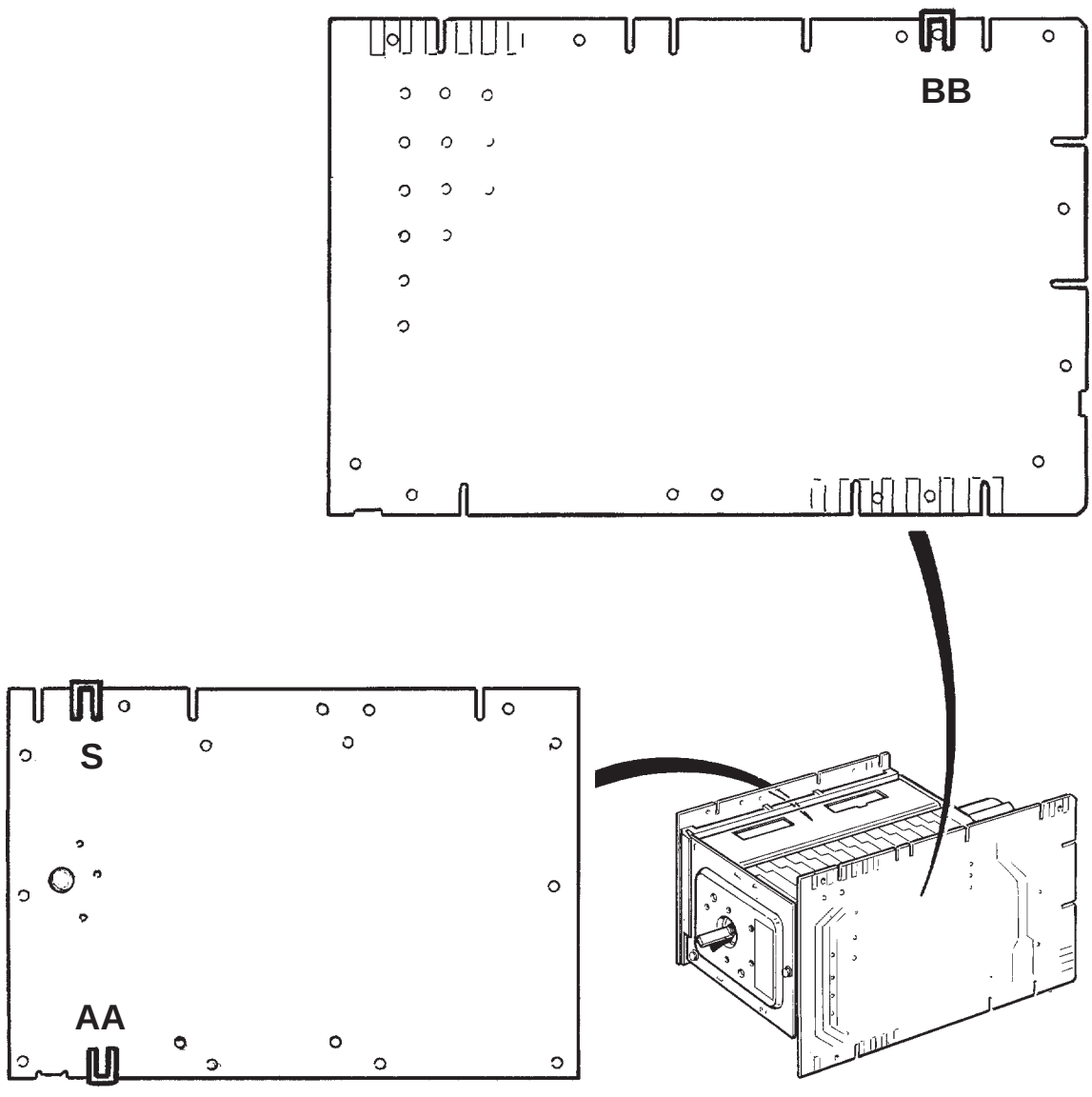
- Timer pcb: **BB**
- Rapid advance pcb **S** and **AA**

Any other jumper should be removed.

To install the new timer, repeat the steps shown under ”To remove the timer” in the reverse order.

Test the machine by running a program.

4



To replace a variant circuit board

To be carried out by authorised personnel only.

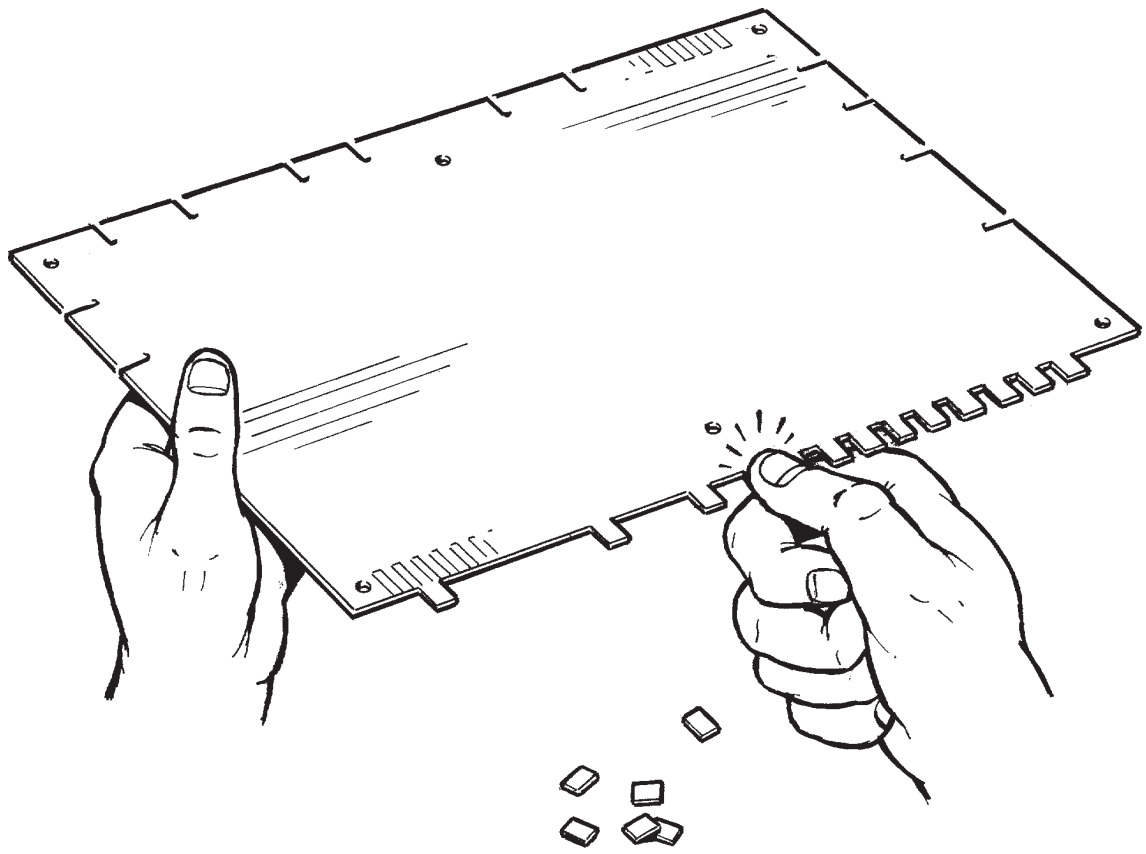
1. Disconnect the circuit board - all connections.
2. Remove the old circuit board.
3. Study the old circuit board carefully and make sure that the new one is strapped in the same way, or check in the table below to see which straps must be closed for the program installed in the machine.

Program	Closed straps
P01CH	A, F, I, N, P and V
P02CH	D, E, F, H, J, M, N, O, X and Z
P11C	C, F, G, I, K, N, O, V, Y and Z
P21CH	A, F, I, N, P and V
P31C	C, F, G, I, K, N, O, and V
P41C	B, F, G, I, P, and T
P51CH	A, F, I, N, P, and V
P61CH	C, F, I, K, N, O, V, Y, and Z

Fig (5)

4. Remove other jumper by breaking them off the board.
5. Install the new board in the machine.
6. Connect up the new circuit board.
7. Test the machine by running a program.

5



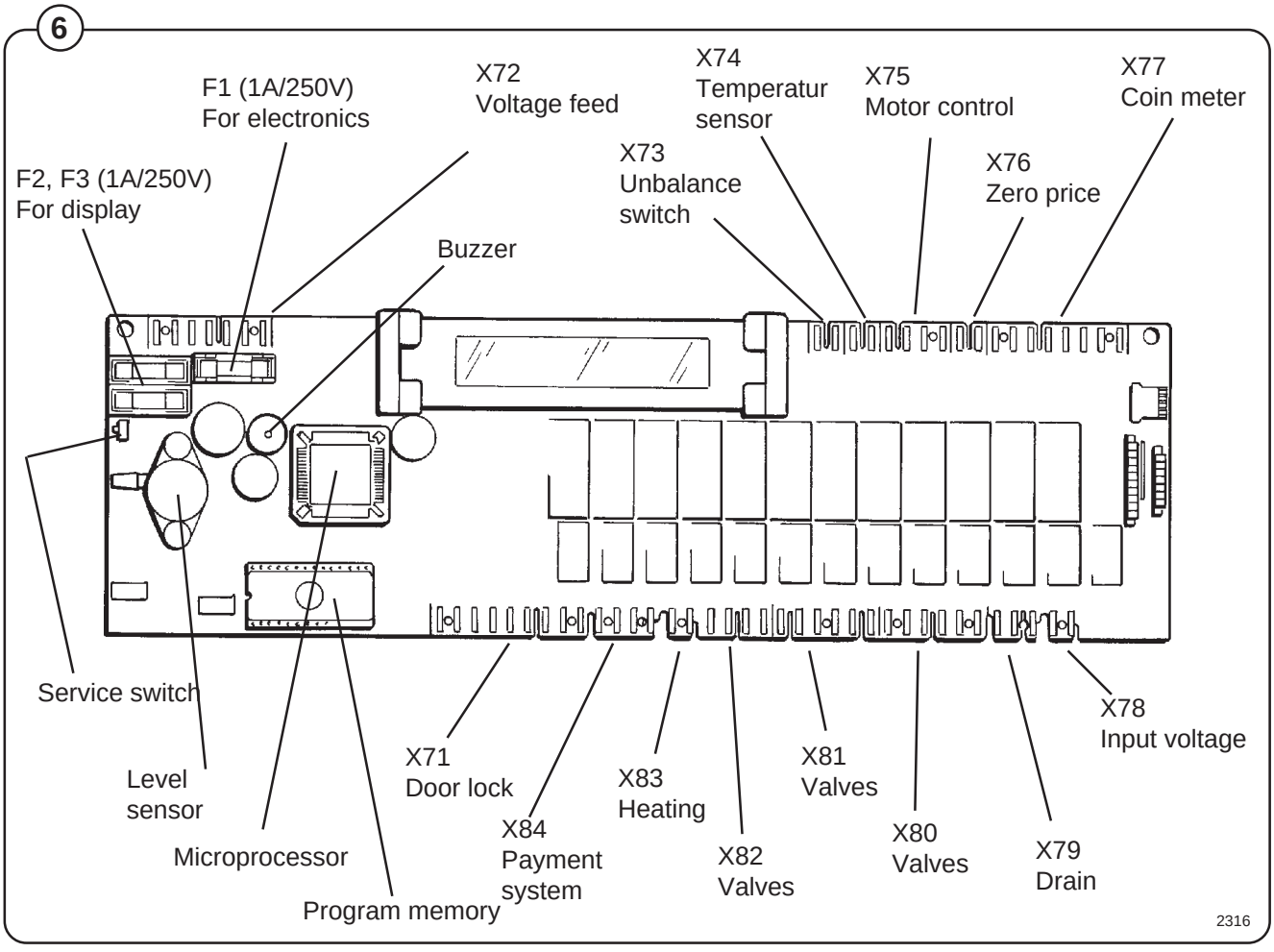
Electronic programmer

Description

Fig (6) The timer is electronic and consists of a circuit board. On one half are the microprocessor, program memory, current supply circuits, temperature and level controls etc. On the other half are the relays and interference suppression components. The timer has the following inputs and outputs:

- Inputs which detect when buttons on the control panel are pushed.
- Inputs which provide information on the machine's status, from the door lock, level control, temperature sensors and coin mechanism if installed.
- Outputs which via relays directly control the various functions of the machine, e.g. motor control, water valves and door lock.
- Outputs which control which information will be shown on the display.
- Communications port for communication with motor control.

The timer is controlled by the microprocessor, which fetches its instructions from the program memory. The program memory contains instructions for operation, the service program, control of relays, sensing of inputs etc. The memory also contains the standard programs built into the machine.



Instructions for repair

To be carried out by authorised personnel only.

To check the voltage feed

Check the following if a functioning fault arises:

- Check that the fuse on rear of machine beside motor control circuit board is sound.
- Check that the input feed voltages for the board are correct. Measure at board contact X72 between the following inputs:

  - X72: 1 - 3 approx. 3.75 V ~

  - X72: 4 - 5 approx. 14.5 V ~

  - X72: 6 - 7 approx. 13.5 V ~

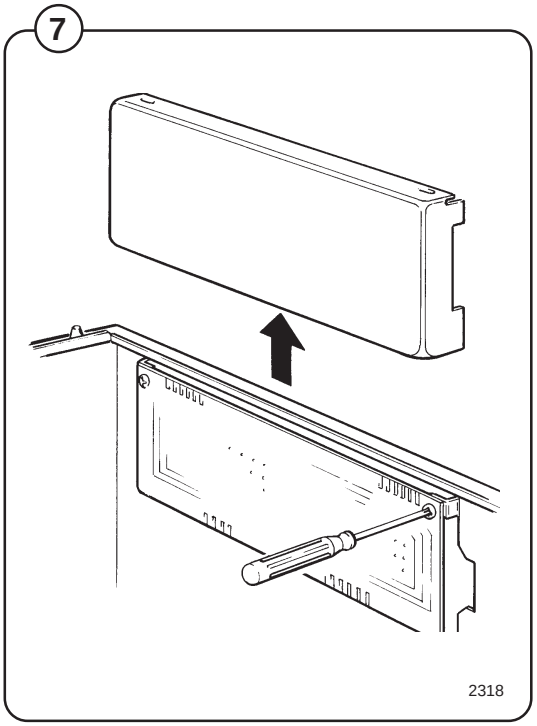
- Check the three fuses on the circuit board (see Fig. on last page). Fuse rating 1 A/250 V.

If the fault remains after all these checks have been carried out, the whole circuit board will have to be replaced.

To remove the circuit board

Fig (7)

1. Remove the cover over the circuit board (snap-on cover).
2. Disconnect the electrical connections to the board.
3. Remove level hose.
4. Undo the screws holding the circuit board.
5. Lift the board out carefully.



Electronic weighing system

Machines with an electronic programmer have a load weighing system which utilises the controllability of the motor system and the ability to determine motor speed.

Description of functions

The drum is accelerated up to distribution speed to detect any imbalance present. After that it is accelerated further at a controlled motor power, and the time taken to reach given speeds is measured.

Then the motor is shut off and the slow-down times are measured.

These time measurements are carried out by the motor control unit and relayed to the programmer.

The electronic programmer then calculates the weight of the load on the basis of these times.

All machines are calibrated before dispatch. In calibration, two machine constants are calculated which are stored in the programmer´s EEPROM.

Manuel calibration takes place as follows: With the machine empty, code 61 of the service program is used, which activates a weight measurement. The programmer knows then that the load in the drum is 0 kg. The weight measured is stored in the programmer. Next a load of 3 kg (dry weight) is put into the machine and code 62 of the service program is used. The programmer knows then that the load is 3 kg and a further machine constant is obtained. With the aid of these machine constants, the programmer can then compensate for differences between different machines.

Replacing the programmer

If the programmer is replaced (changed over), the stored machine constants are lost.

For this reason, programmers supplied as replacement parts are preprogrammed and can be used without further calibration. The precalibration carried out makes use of an average value. To achieve optimum values for water and energy consumption, recalibration should performed when the programmer is in the machine.

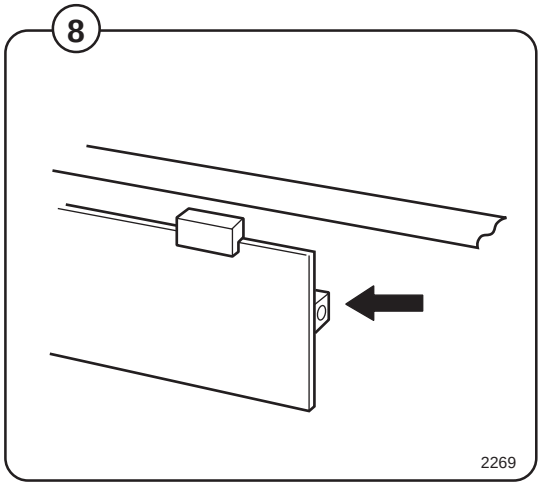
If error code 16 appears on the display, weight measurement will need to be calibrated. It is still possible to wash a load, however, by pressing "START" a second time, but no weighing will take place and water saving will not be possible.

The motor control unit does not have any stored constants for weight measurement: all motor control units are the same. No special action is needed if the motor control unit has to be replaced.

Calibration of weighing system

The program may only be used by trained, authorised service personnel.

Weight calibration set, art. No. 472 9903-53 should be used. If this is not used, three kgs of dry load can be used. But remember that the accurancy will be less than with the calibration set.



Switching to service mode

- Empty the drum.
- Remove the machine top.

Fig. 8

- Press the service switch. The switch is located on the left-hand edge of the circuit board as viewed from above. The display will now show SE, which indicates that you are in the service program.

Fig. 9

Now the buttons switch to being number keys from 1 to 9. The START/door-opening button has an ON/OFF function.

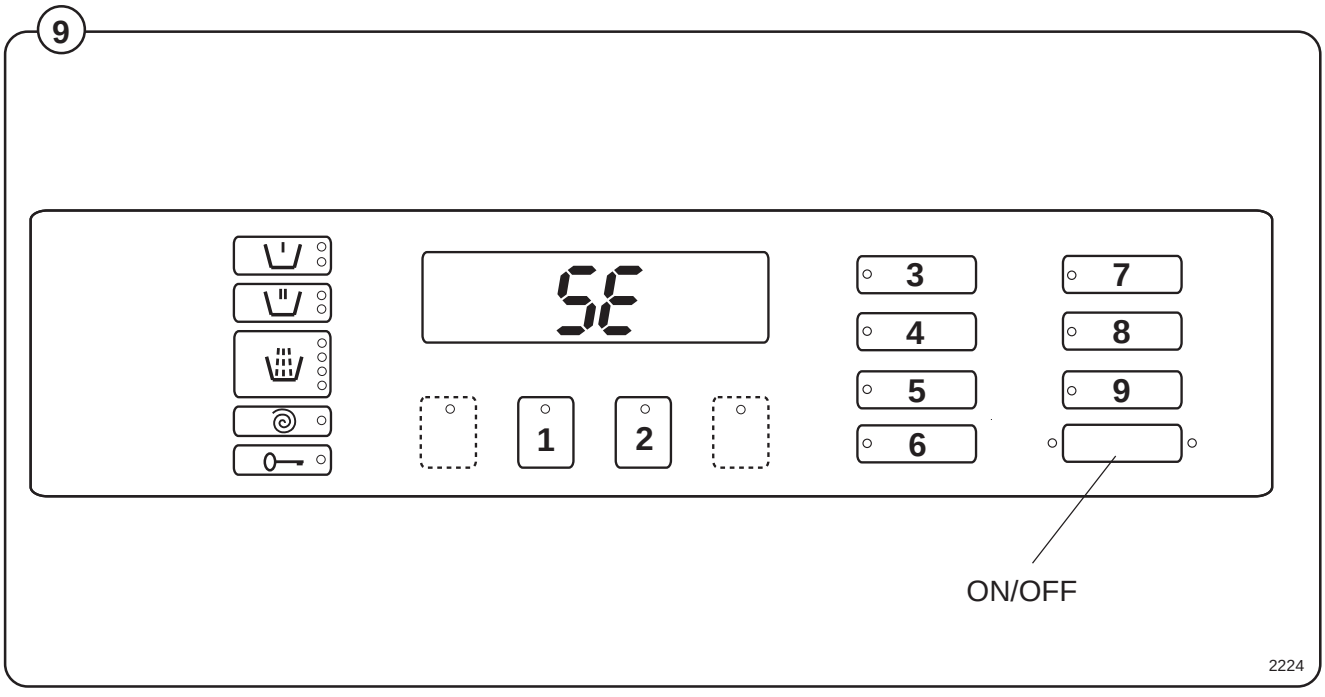


Fig. 10
- Enter code 61.

Fig. 11
- Press and hold the START button. Press the service switch and release.

  (Double command to prevent unintentional calibration.)
- The machine will now start the calibration phase and will show code 61 flashing when calibration with the drum empty is finished. If code 61E flashes on and off on the display, this means that calibration was unsuccessful. Try again.

Fig. 12
- Open the door using code 23.

Fig. 13-15
- Lock the drum with the calibration set (alt. 3 kgs of dry laundry) and close the door.

Fig. 16
- Enter code 62.
- Press and hold the START button.

  Press the service switch and release both buttons.
- The machine will now start the calibration phase and will show code 62 flashing when calibration with a load in the drum is finished. If code 62E flashes on and off on the display, this means that calibration was unsuccessful. Try again.
- Exit from the service program by pressing the service switch.

The machine´s weighing system is now calibrated.

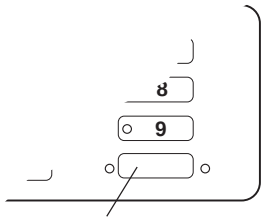
- Open the door and remove the weight calibration set alt. the load.

Calibration with the drum empty, code 61, must always be carried out before performing calibration with a load, code 62.

10

2669

11

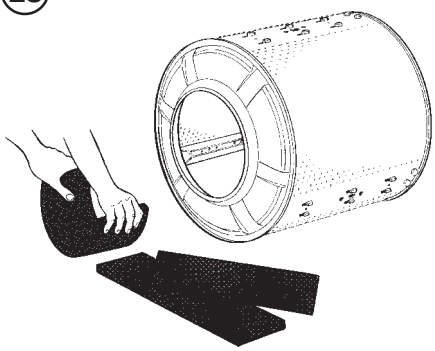


2666

12

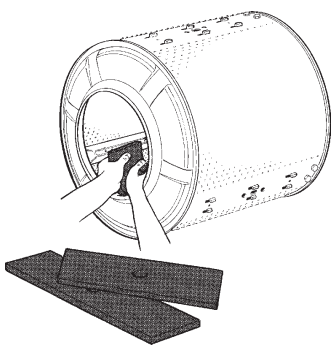
2668

13



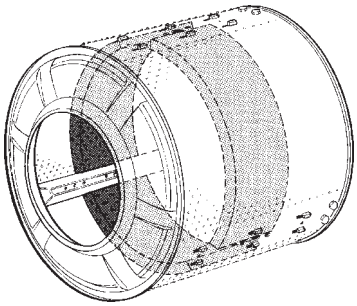
3101

14



3102

15



3103

16

2667

Description

The relay consists of:

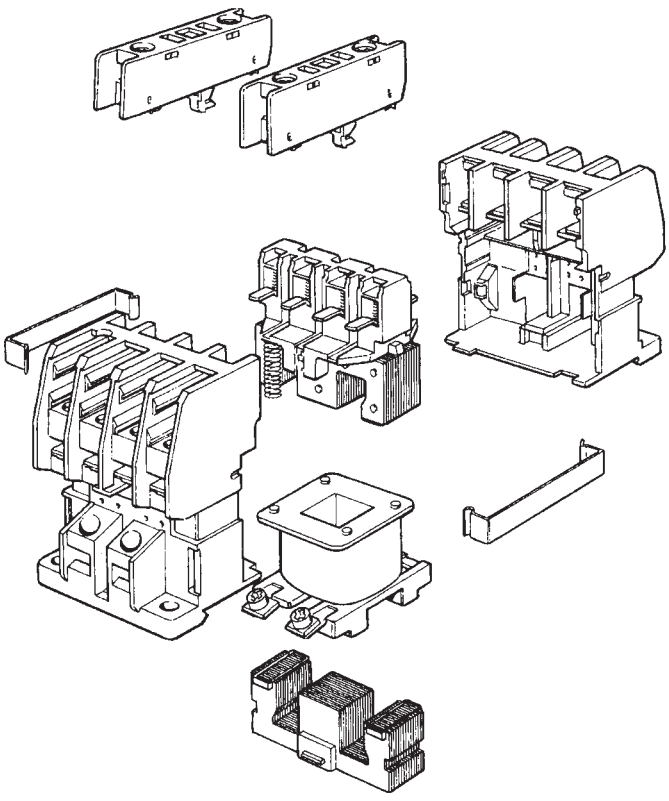
Fig 1

- Housing in two halves with fixed, closing and/or opening contacts. The separate halves are held together by spring clips.
- Movable contact bridge with movable contacts.
- Magnet with coil and core.
- In some cases an auxiliary relay block, to increase the number of contacts.

The upper section of the core is sprung, and attached to the movable contact bridge.

The fixed, lower section of the core has shielded windings which distribute the flow through the core. In this way the flow never sinks to 0 and alternating-current hum is prevented.

1



G016

Instructions for repair

To be carried out by authorised personnel only.

Relay will not close or open

- Check that the coil is energised. If it is, measure on the coil to find the site of interruption.

The relay is humming loudly

- Undo and dismantle the relay:
  - Remove the auxiliary relay block as described in ”To replace an auxiliary relay block”.
  - Release the relay and lift it out.

Note!

The contact cables do not need to be removed!

  - Release the spring clips and carefully separate the two halves of the housing. Take care so that the movable contacts do not spring out of place.
  - Before reassembling the relay, check that the magnetic core contact surfaces are clean and undamaged. Reassemble and put back the relay.
- Check that the shielded windings are intact. (Damaged shielded windings cause a loud hum.) If the windings are damaged, replace the relay.
- Check that there is no foreign matter on the contact surfaces of the magnetic core. Clean carefully with a fine emery cloth if necessary.

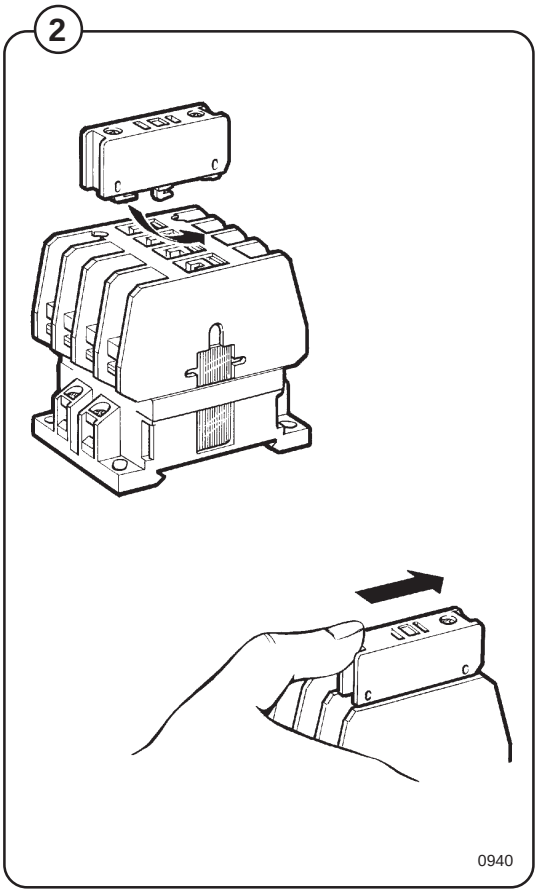
The relay is binding

- Undo and dismantle the relay as described above.
- Check that the coil bobbin does not have any burrs which might hinder the movement of the movable half of the core. Remove any burrs if necessary.
- Check that the movable contact bridge can move freely in the relay housing and that the movable contacts are positioned correctly in their holders.
- If the fault persists, replace the relay.

To replace an auxiliary relay block

Fig (2)

- To remove the auxiliary relay block, use your thumb to press its rear edge forwards and upwards until it comes free (the rear edge is the one marked HN01/HN 10).
- To fit an auxiliary relay block:
  - Position the block on the relay so that its black catch is inserted by the pole clips and its red catch is inserted into the recess in the movable contact bridge.
  - Press the block towards the rear until its rear edge snaps down and locks in place.
- Check functioning of the auxiliary relay block by pressing and releasing its red/green pin (in middle of the block), making sure that the relay block is not binding.



Machines with electromechanical timer

Description

Fig (1) The ”level control” is a pressure switch which monitors two different water levels in the drum by sensing the air pressure in a tube which is connected to the bottom of the drum. As the water rises in the drum and the tube, the air inside the tube is compressed and at two set pressures (”cut-out-levels”) two different changeover contacts in the level control switch over.

Fig (2)

When the water is emptied from the drum the contacts switch back to their starting position again, but now at lower water levels than were needed to switch the contacts when the drum was filling. These levels are called ”on-levels”. If during a wash the water should sink below on-level, the machine will be filled with water again to cut-out-level.

Checking functioning and fault location

All level controls are preset at the factory for the various types of machine. As a general rule this setting should not be altered (for this reason level controls are sealed with lacquer).

A faulty level control cannot be repaired but should be replaced.

Note!
The machine warranty is invalidated if any modifications or repairs are made to the level control.

To check water levels

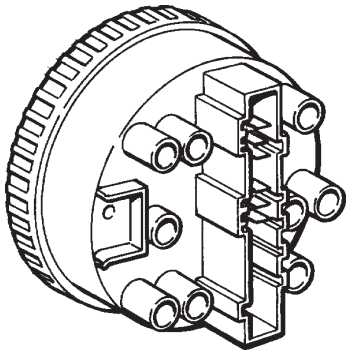
Fig (2)

- Start the machine and select a normal program. Check the low level during a prewash or main wash.
- Use the START button for rapid advance and check the high level during a rinse.

If machine is filling to a level which is too high:

- Check that the tube between the level control and the drain valve is not blocked. If necessary clean it by disconnecting it at the level control end with no water in the machine and blowing it clean.
- Check that no holes have been worn in the tube, something which could occur if the tube has been touching the pulley.
- Over-filling can also be caused by burnt contacts in the level control. If this is the case, replace the level control.
- Test the machine by running a program.

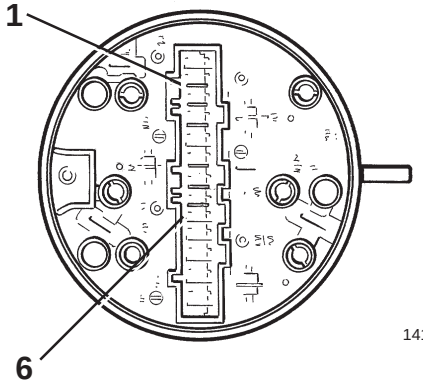
1



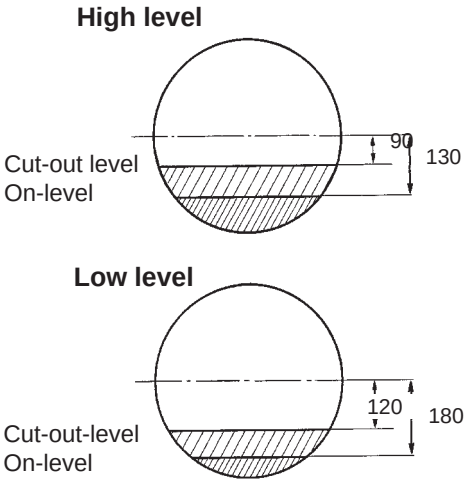
G120

2

2297



1417



1423

The machine is not taking in water

- Check functioning of level control as follows:
  - Connect meter across contact terminals.
  - Disconnect the tube at the drain valve end.
  - Blow gently into the tube and check the contact functions with the meter.
- Failure to take in water can also be caused by burnt contacts. If this is the case, replace the level control.

When replacing the level control

- Blow the tube clean before installing the new level control.
- There must be no water in the machine when the new level control is being fitted.

Adjustment of level control

The machine warranty will be invalidated if the seal on the level control is broken without permission from the manufacturer. After any adjustment a new seal must be put in place.

Fig (3) The level control has two adjustment screws for high water level and two for low water level.

For each level, the screws have the following function:

- The level screw raises (if turned clockwise) or lowers the switching point for both on-level and cut-out-level.

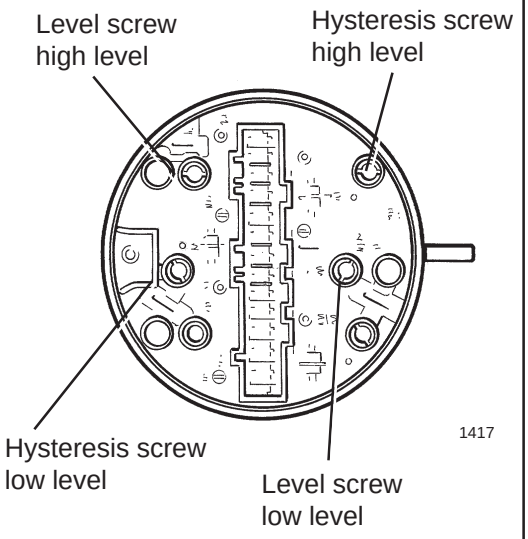
> **Note!**
>
> **These screws must not be turned too far in the clockwise direction. If they are, the springs under the screws can come loose and the level control will then be unusable.**

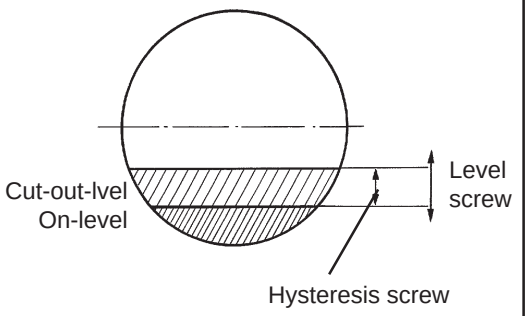
- The hysteresis screw increases (if turned clockwise) or reduces the distance between on-level and cut-out-level. The cut-out level is not altered by this adjustment.

Always adjust the cut-out-level first using the level screw, and then adjust the on-level with the hysteresis screw.

Test the machine by running a program.

3





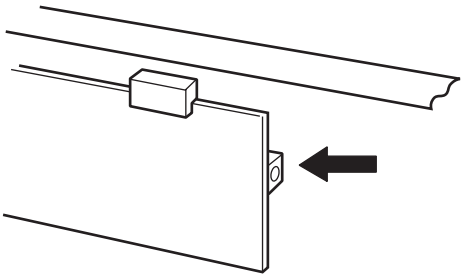
Machines with electronic timer

Description

The ”level control”, which is located on the circuit board, is a pressure switch which monitors the different water levels in the drum by sensing the air pressure in a tube which is connected to the bottom of the drum. As the water rises in the drum, the air inside the tube is compressed and at a set pressure (”cut-out-level”) the microprocessor cuts out water filling.

When the water is emptied from the drum the microprocessor switches back to the starting position again, but now at lower water levels than were needed to switch when the drum was filling. These levels are called ”on-levels”. If during a wash the water should sink below on-level, the machine will be filled with water again, to cut-out-level.

4



2269

Checking functioning and fault location

To be carried out by authorised personnel only.

A faulty level control cannot be repaired. Instead the whole circuit board must be replaced.

To check functioning of the level control

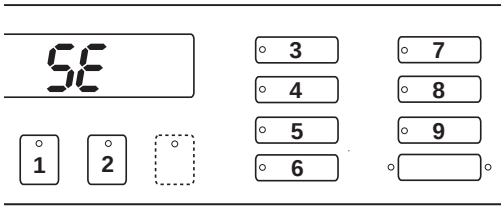
Fig (4)

- Start the service program by pressing the service button. Now certain of the buttons switch to being number keys (1 to 9).

Fig (5)

- Enter code 24. Now the display will show the current level in the machine on a scale of 1 to 200. An empty machine should show a value between 0 and 4.
- Press the START button. The machine will start to fill.
- Check that the figure shown on the display is counting upwards as the water level rises.
- After completing your check, stop filling by pressing the START button.
- Enter code 21 and open the drain valve to empty the machine.
- Quit the service program by pressing the service button.

5



2224

If machine is filling to a level which is too high:

- Check that the tube between the level control and drum is not blocked. If necessary clean it by disconnecting it at the level control end with no water in the machine and blowing it clean.
- Check that the tube is undamaged. It can be damaged if it has been touching the pulley.
- Test the machine by running a program.

Description

This description applies only to machines with an electromechanical timer (in those with an electronic timer the thermostat function is located on the circuit board).

Fig (1) The thermostat monitors temperatures through the program cycle. The relay for the heating elements is actuated with the aid of closing and opening contacts.

Fig (2) The sensor for the thermostat is at bottom rear of the outer drum, on the left of the heating elements. A capillary tube connects the sensor to the thermostat, which is on the component shelf in the machine rear. The temperature of the water affects the expansion of the liquid in the tube and therefore also the activation of the thermostat's various contacts.

Selection of contact, i.e. the relevant temperature 90°C, 60°C, 40°C or 30°C is controlled by the timer and program selector.

Data

Range off - on	approx. 4°C
Max. temperature for sensor	150°C
Sensor medium	Liquid

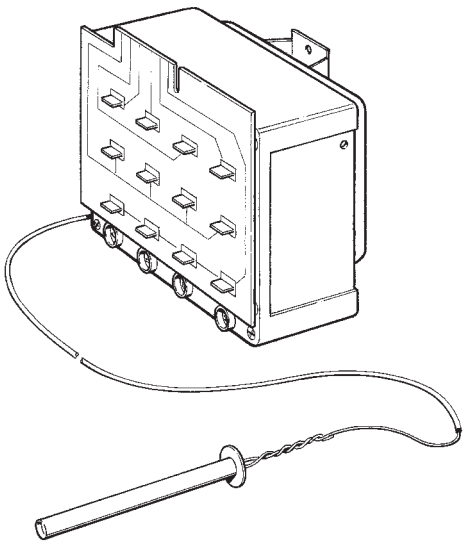
Instructions for repair

All thermostats are preset at the factory for the various types of machine. This setting must not be altered. For this reason thermostats are sealed with lacquer.

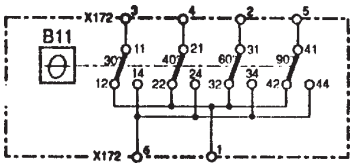
Note!

The machine warranty is invalidated if any modifications or repairs are made to the thermostat.

1

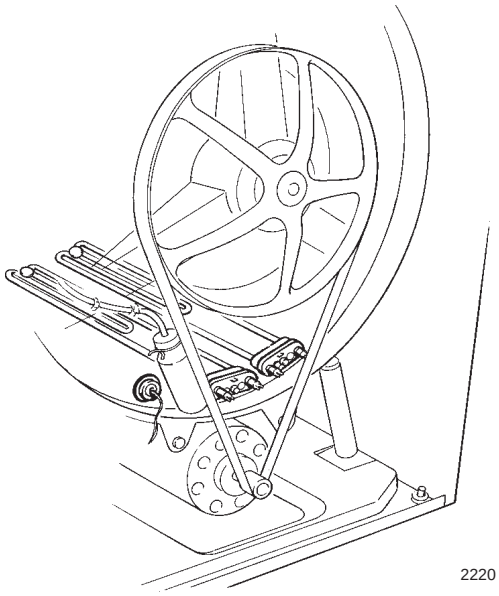


1453



1455

2



2220

To replace the thermostat

To be carried out by authorised personnel only.

- Remove the rear panel and pull the thermostat sensor out of the outer drum.
- Undo the strapping on the capillary tube.
- Replace the thermostat.
- Install the new capillary tube along the same route as the old one.

Make sure that you secure the capillary tube with its protective sleeves and the correct number of rings in exactly the same places as the old one. This is essential to minimise the risk of failure in the capillary tube when the drum is moving.

- Test the machine by running a program.

Door

Description

Fig 1

The door is mounted on the balance weight attached to the machine outer drum. The door glass is held in the door by the special door gasket, which also forms a seal directly against the outer drum when the door is shut. The glass is not bonded and is therefore easy to replace.

Leaking door seal

If the seal shows no signs of scratches or other damage, a loss of elasticity in the seal may be the cause of a leak. Replace the seal.

Leaks from the door seal can also be caused by dirt and build-up of lint. Clean the seal.

Door lock

Description

The machine door lock is a safety system which prevents injury because:

- The machine cannot be started until the door is closed.
- The door cannot be opened until the wash program is ended and the drum is at a standstill.

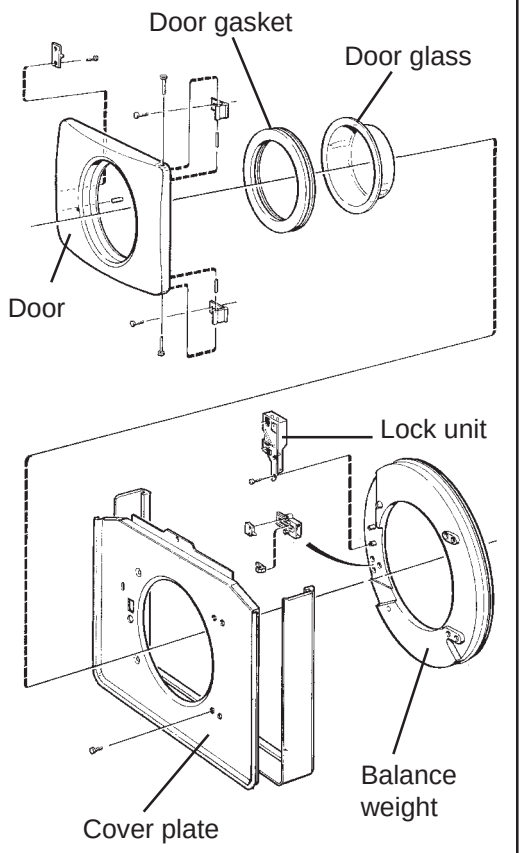
The lock is built on a lock housing and its electrical components are connected using flat pin connections. The lock consists of the following components:

Fig 2

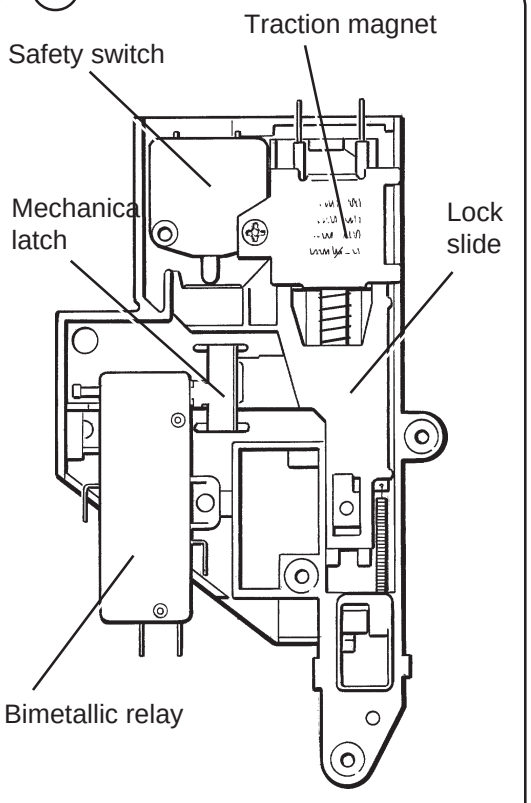
- Lock slide.
- Traction magnet which actuates the lock bolt.
- Safety switch which indicates the position of the lock slide (door open or door locked).
- Bimetallic relay, which works as follows:
  - In machines with an electromechanical programmer, the relay via its electrical contact prevents the motor from starting until the bimetallic strip has warmed up.
  - In machines with an electronic programmer, the relay sends a signal to stop the machine and display error code 03 if the relay's contacts have not closed within 30 seconds.

The movement of the bimetallic strip also controls a mechanical latch which prevents the door from being opened with tools when the bimetallic strip is hot.

1



2



Function

Machines with electromechanical timer

When the door is closed, the lock's safety switch closes, which indicates to the timer that the door is locked and the machine is ready to start.

Another safety switch, actuated by a pin on the lower edge of the door sends a go-ahead signal to the motor control.

By activating the start button the timer advances one step and at the same time the bimetallic relay is energised, so its bimetallic strip starts to heat up. The movement of the bimetallic strip moves the latch across the opening for mechanical operation of the locking mechanism and thus prevents the door from being opened when the machine is working and when there is water in the machine.

In the bimetallic relay there is an electrical contact which is actuated by the movement of the metal. When the bimetallic strip has warmed up the contact closes, and only then is the motor allowed to start. The time delay is approx. 20 seconds. Other functions in the machine are allowed to operate as soon as the door is closed.

At the end of the wash program the switch for door opening is energised. When the switch is pressed in, the traction magnet is activated, whereupon the lock catch is freed and the door is opened.

If the electrical supply to the machine should be cut during a wash cycle the delay unit will keep the door locked for approx. two minutes so that the drum will stop rotating and the machine will empty (the drain valve is opened automatically if the power supply is cut).

Machines with electronic timer

When the door is closed, the lock's safety switch closes, which indicates to the timer that the door is locked and the machine is ready to start.

A safety switch, actuated by a pin on the lower edge of the door, sends a go-ahead signal to the motor control.

When the start button is activated the machine starts the program selected. At the same time the bimetallic relay is energised, so its bimetallic strip starts to heat up. The movement of the bimetallic strip moves the latch across the opening for mechanical operation of the locking mechanism and thus prevents the door from being opened when the machine is working and when there is water in the machine.

In the bimetallic relay there is also an electrical contact which is actuated by the movement of the metal. When the bimetallic strip has warmed up the contact closes and sends a signal to the electronics that the wash program can start. If the contact does not close within 30 seconds, the wash program will be stopped and the machine will halt. The error code 03 will be shown on the display.

At the end of the wash program the go-ahead signal for door opening (green LED) is sent. When the button for opening the door is activated the traction magnet is energised, which moves the lock slide and the door is opened.

If the electrical supply to the machine should be cut during a wash cycle the delay unit will keep the door locked for approx. two minutes so that the drum will stop rotating and the machine will empty (the drain valve is opened automatically if the power supply is cut).

Instructions for repair

Possible faults

- Faulty safety switch
- Faulty traction magnet
- Faulty bimetallic relay
- Moving parts binding

To remove the door lock

To be carried out by authorised personnel only.

1. Undo the two screws on the front panel and lift the panel off.
2. Undo four bolts in the door hinges and remove the door from the cover plate.
3. Undo the remaining three screws on the cover plate and remove the panel.
4. Replace the entire lock.
5. Reassemble the components in the reverse order. Do not forget cover over locking unit.
6. Test the machine by running a program.

Description

General

Fig (1) The motor is mounted on a shaft under the outer drum and drives the inner drum by means of a drive belt. To reduce motor noise and vibrations the motor mountings have rubber mountings. Between the motor and the outer drum is a belt tensioner which also has a rubber damper.

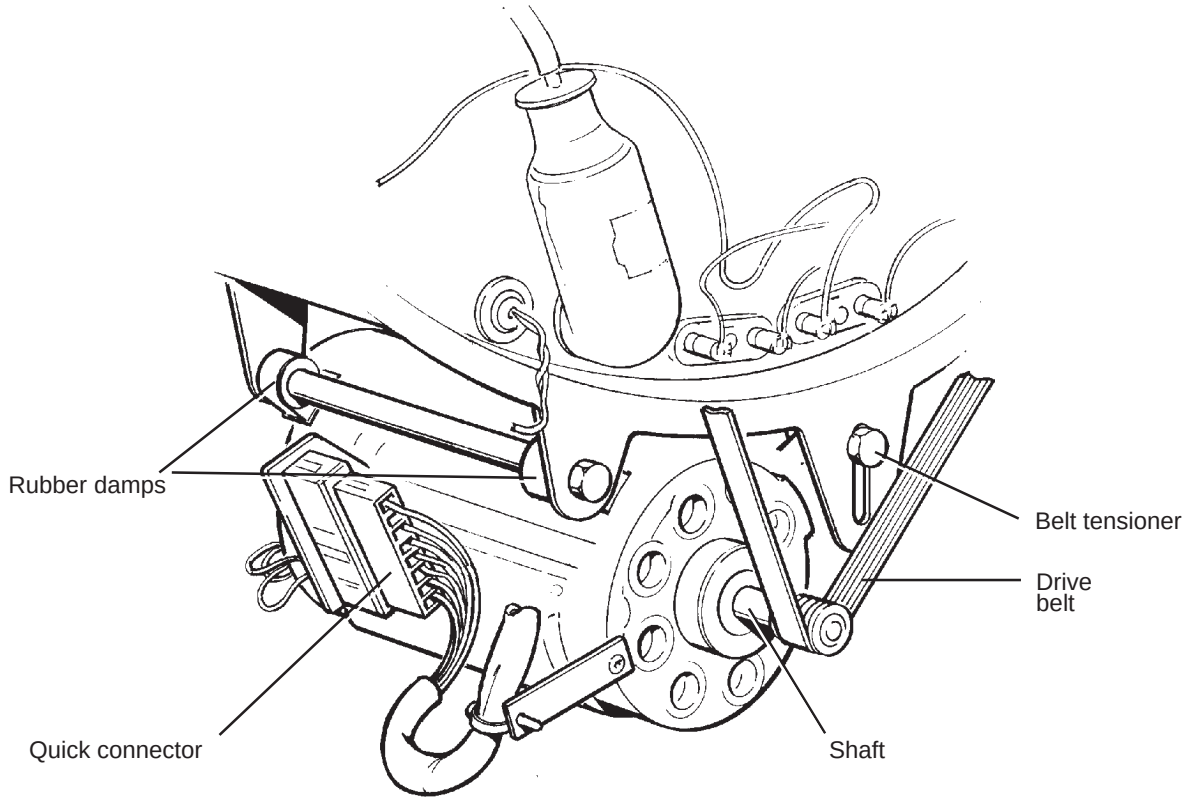
For its electrical connections the motor has a quick connector.

On the motor shaft there is a tachogenerator so the motor controller can keep the motor speed correct.

- It also gives the motor controller information so it can act as a rotation guard for checking that the drum is completely at a standstill before the door is opened.
- Act as a sensor for imbalance detection - checking that the load is properly distributed before extraction.

The motor is a DC motor, in which the field winding and armature winding are in series with one another. The various motor speeds for normal action, distribution speed and extraction are regulated by a microprocessor-based motor control located on circuit board E10 in the automatic control unit. The motor windings are protected against overheating by a thermal cut-out (klixon).

1



2256

Program start

Machines with electromechanical timer

The following conditions must be fulfilled before the motor can start:

- Motor not overloaded.
- Door shut.
- Go-ahead signal from timer (timer cam for motor operation activated).
- Bimetallic strip in door lock has heated up (contact closed).

Once the door is closed, a program is selected and the start button is activated, the machine starts to take in water but the motor cannot start before the end of a delay period of approx. 20 seconds. During this period a bimetallic strip is heating up and the door will be prevented from opening when the drum is rotating by means of a mechanical latch. If for some reason the bimetallic relay's electrical contact does not close, the motor will not start.

Machines with electronic timer

The following conditions must be fulfilled before the motor can start:

- Motor not overloaded.
- Door shut.
- Go-ahead signal from timer.

Once the door is closed, a program is selected and the start button is activated, the machine carries out a short extraction which does not form part of the program selected. During this extraction the electronics perform a weight measurement so that the optimum quantity of water can be used for the current wash load. After that the sequences of the program selected start up, the machine starts to fill and the motor to operate.

When the door is shut, a bimetallic relay is energised and its bimetallic strip heats up. An electrical contact in the relay is closed and sends a signal to the electronics that the door is closed. If for some reason the relay contact does not close within 30 seconds, the motor will stop and error code 03 will appear on the display.

Extraction

For extraction the motor operates in an extraction pattern which is always the same. The pattern is as follows:

Fig (2)

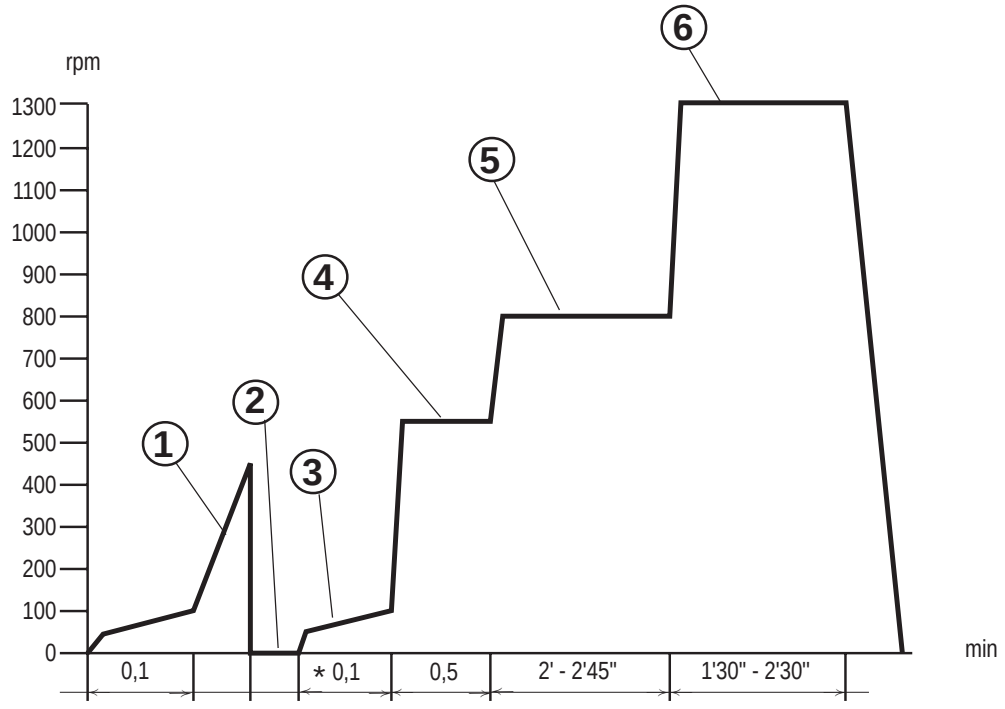
1. A brief, fast extraction, which removes most of the water from the wash load.
2. A brief reverse action to allow optimum distribution of the load.
3. A distribution period, with unbalance sensing
   - Machines with electromechanical timer - 6 seconds
   - Machines with electronic timer - 20 seconds
4. Extraction at 550 rpm - 30 seconds
5. Extraction at 800 rpm - 2 minutes
6. Extraction at 1300 rpm - remaining time out of the program's total extraction time.

The different extraction cycles in the different programs are achieved by varying the time that the motor will follow this extraction pattern.

During the distribution period the imbalance of the wash load is checked with the aid of a tachogenerator which signals the motor control whether extraction can take place or not. This is repeated a maximum of three times. After the third time the electronics unit decides whether the imbalance is "great" or "small".

- If the unbalance is "great" the wash program is ended without extraction.
- If the unbalance is "small", extraction will be performed, but at a reduced speed.

2



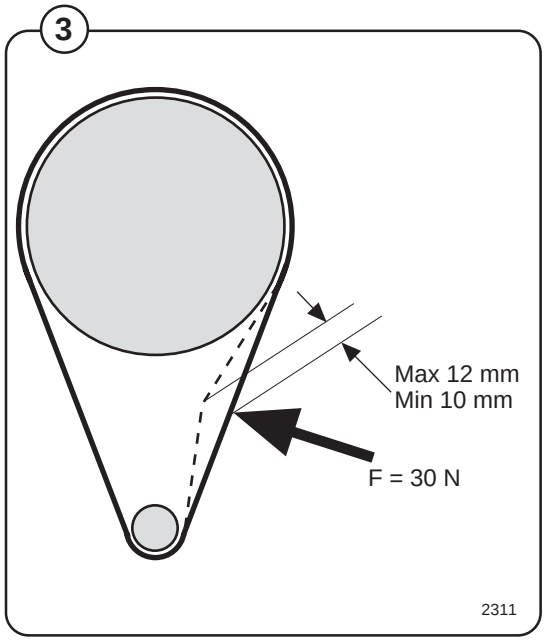
*Applies to machines with electromechanical timer

2219

Belt tension

Fig (3) The tensioning of the drive belt is preset at the factory.

When checking belt tension, or after replacing components which affect belt tension, follow Fig. 3 here.



> **Note!**
>
> **Belt tension is an important aspect of the machine's operation and should always be checked as part of service and maintenance.**

Motor speed for "gentle action"

The motor normally works at 35 rpm during gentle action.

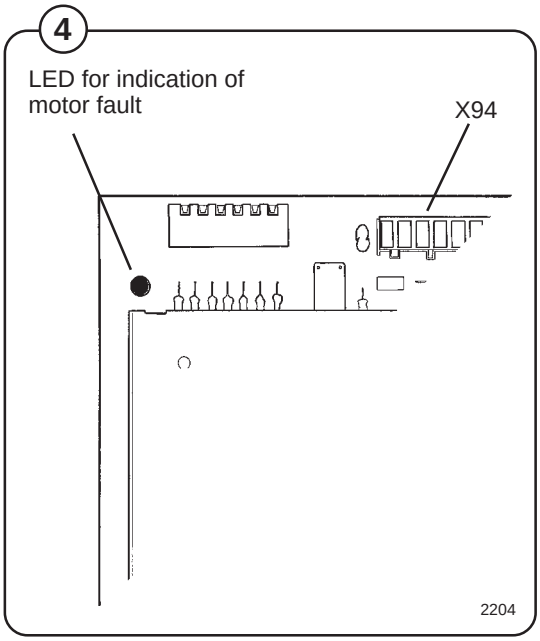
Fault location

> ⚠ ⚠
>
> **To be carried out by authorised personnel only.**

On the motor control circuit board there is an LED which indicates two types of fault:

Fig (4)

- If the LED is flashing, this indicates that motor is not operating at a time when it should be.
- If the LED comes on and stays on, this indicates that the motor has been operating faster that the motor control has expected.



LED on motor control circuit board flashing

- Cut the power supply to the machine for a few seconds by turning the program selector to the "0" position and then back to a program. After approx. 20 seconds the motor control will send a signal to the motor. Check to see whether the motor moves slightly before the LED starts flashing:
  - Motor does not move. Go to next point.
  - Motor does move. The fault is in the rotation sensing device (tachogenerator). Trace the fault as follows:

1. Switch off the power supply to the machine (switch on wall).
2. Disconnect contact X94 for the motor from the motor control circuit board.
3. Check the functioning of the tachometer by connecting one of the following between pins 1 and 2 on X94:

- an ohmmeter. A sound tachometer should give a reading of approx. 100 – 150 ohm.
- a voltmeter (AC) and rotate the armature by hand. The voltmeter should react when the tachogenerator is rotating.

- Check the voltage feed to the motor control:

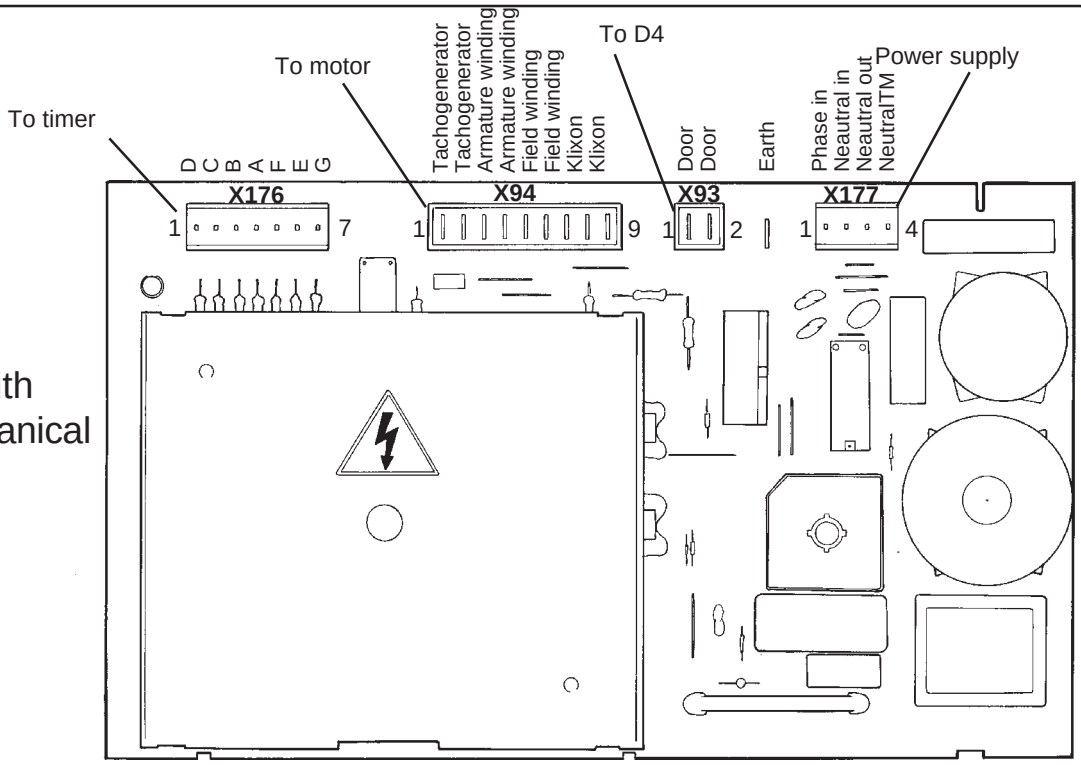
Fig 5

  - Disconnect quick connector X177.
  - Measure with voltmeter (AC) between pins 1 and 2 of X177. Right value = phase voltage.

- Check the motor's quick connector.

5

Machines with electromechanical timer



Machines with electronic timer

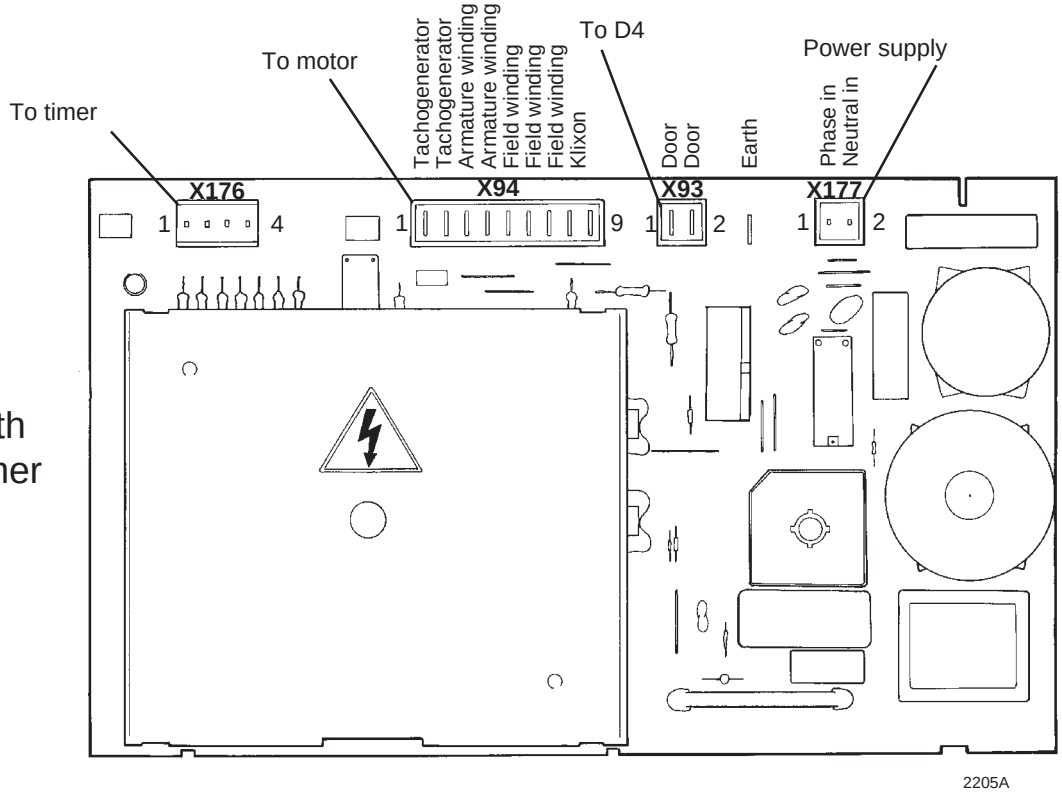


Fig 6

- Check the motor windings with an ohmmeter to detect any possible short-circuit or fault.
- Check that the motor's carbon brushes are sound and correctly positioned. See under "To replace carbon brushes".
- Check that the motor shaft can be turned. If it can't, the problem is probably bearing failure. Replace the motor (see under "To replace the motor").
- If the motor feels abnormally hot directly after it has stopped functioning, its thermal cut-out has probably been triggered. Investigate the cause of the overload. Check that the motor and drum can revolve freely.

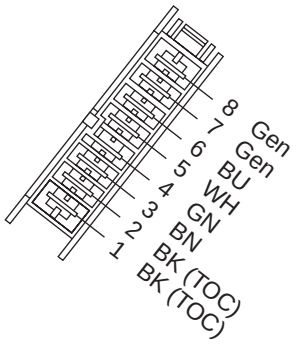
  The thermal cut-out will reset automatically after about 30 minutes when the motor has cooled. Start the machine again and listen carefully for any abnormal noise.

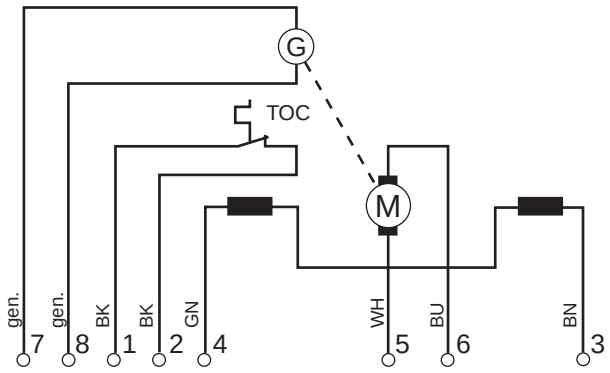
  If the thermal cut-out is triggered repeatedly the cause may be:

  - short-circuit
  - bearing failure in drum
  - bearing failure in motor.
- If the motor appears to be sound, the site of the fault will probably be the motor control. Replace the circuit board.

6

WE55, 451, HS255 –93/785

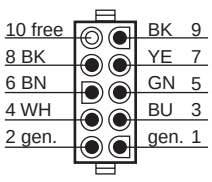


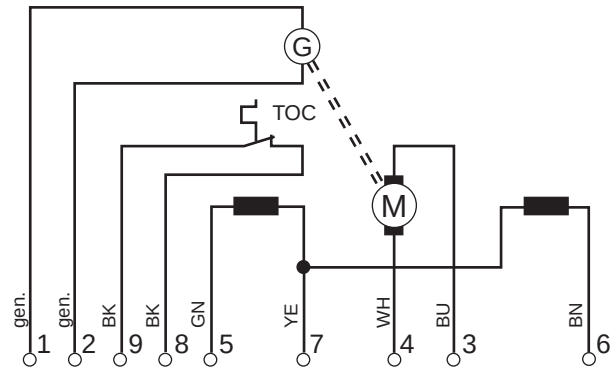


1-2 ≈ 0 ohm
3-4 ≈ 1.6 ohm
5-6 ≈ 5 ohm
7-8 ≈ 135 ohm

2655

WE55, 451, HS255 93/786–
WE55MP, 451E, HS255E





1-2 ≈ 135 ohm
3-4 ≈ 5 ohm
5-6 ≈ 1.6 ohm
5-7 ≈ 0.8 ohm
6-7 ≈ 0.8 ohm
8-9 ≈ 0 ohm

2656

LED on motor control circuit board comes on and stays on

- Cut the power supply to the machine for a few seconds by turning the program selector to ”0” and then back to a program. After approx. 20 seconds the motor control will send a signal to the motor.
  - If the motor now works normally again the problem was probably caused by a mains voltage surge temporarily affecting the microprocessor of the motor control.

    The fault will have been corrected by cutting the power supply.
  - If the motor races out of control the probable cause of the fault will be that the motor control output stage transistor is short-circuited.

    Replace the motor control circuit board.

The motor is very noisy or seizing

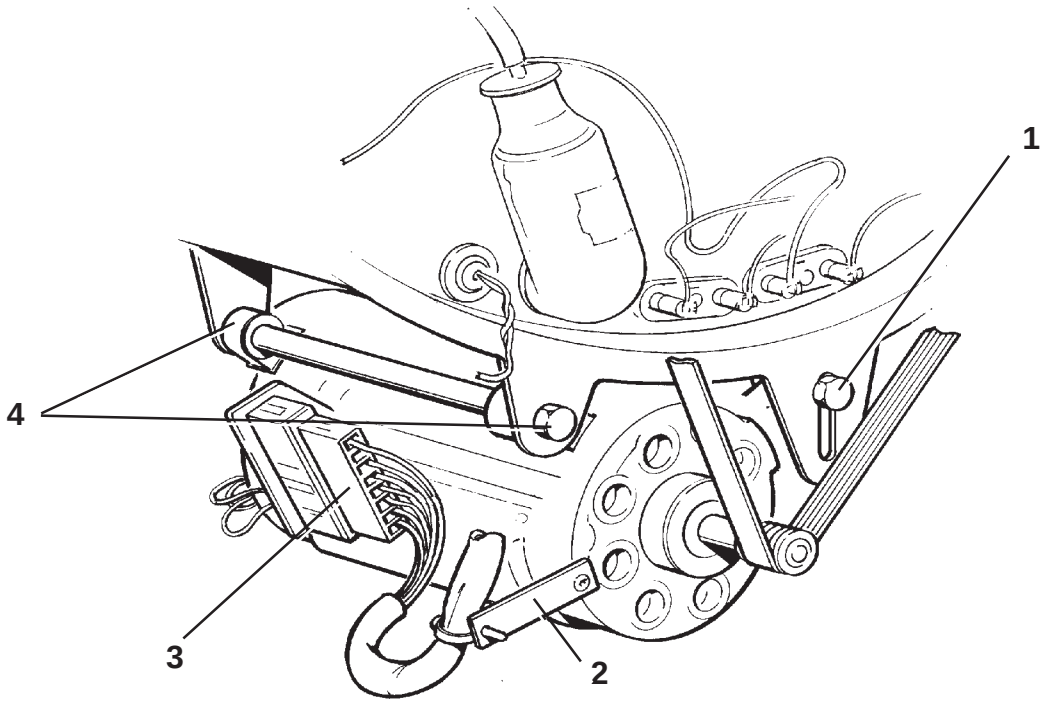
The cause will be bearing failure. Replace the motor (see below under ”To replace the motor”).

To replace the motor

Fig (7)

1. Release the belt tensioner and lift off the drive belt.
2. Undo and remove the holder securing the wiring harness to the motor’s quick connector.
3. Disconnect the motor’s quick connector.
4. Undo the motor’s two remaining mounting points and lift the motor out.

7



2256

To replace carbon brushes

Fig. 8

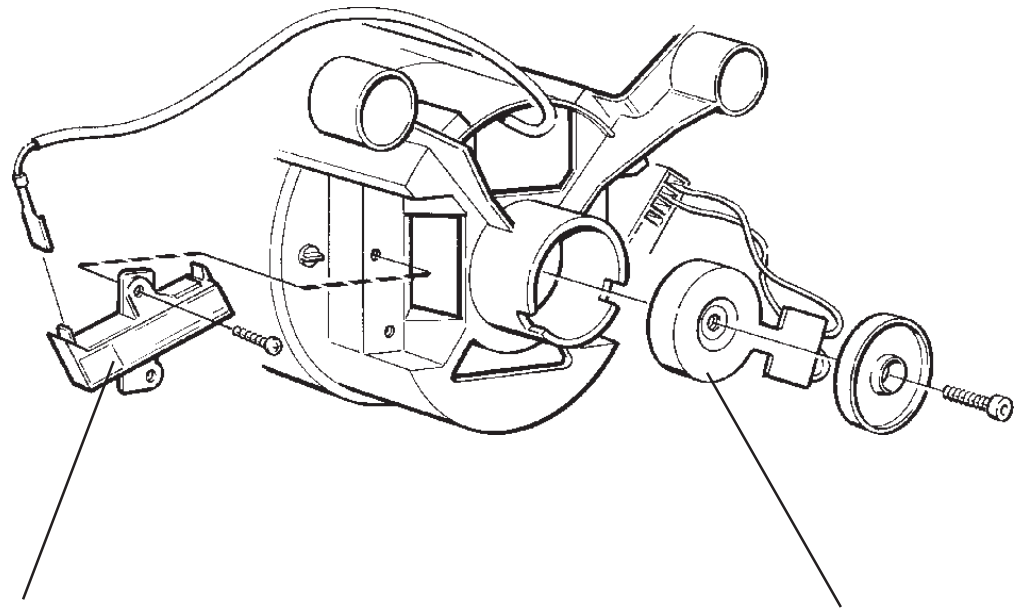
- Remove machine front panel.
- Disconnect electrical connections to the brushes (from both sides of motor).
- Remove both old brush holders from motor.
- Install the new brush holders and connect them.
- Test the machine by running a program.
- Refit the front panel.

To replace the tachogenerator

Fig. 8

- Remove machine front panel.
- Disconnect the tachogenerator connections from terminal X194:7-8.
- Remove the lock washer and lift it out of the old tachogenerator.
- Fit the new tachogenerator and use the lock washer to secure it.
- Connect the new tachogenerator to terminal X194:7-8.
- Test the machine by running a program.
- Refit the front panel.

8



2312

Description

Fig (1) The valve is electromagnetically controlled and has a rubber membrane as its opening and closing element. The valve utilises the pressure of the water supply in its opening and closing cycles.

Fig (2) When the valve coil is not activated the valve is closed. On account of the pilot pressure opening in the membrane, water pressure builds up above the membrane and keeps the valve closed.

When the coil is energised the armature is lifted and the water pressure above the membrane can be released through the pressure-equalisation duct to the valve outlet. Now the water pressure in the water supply can lift the membrane and the valve opens.

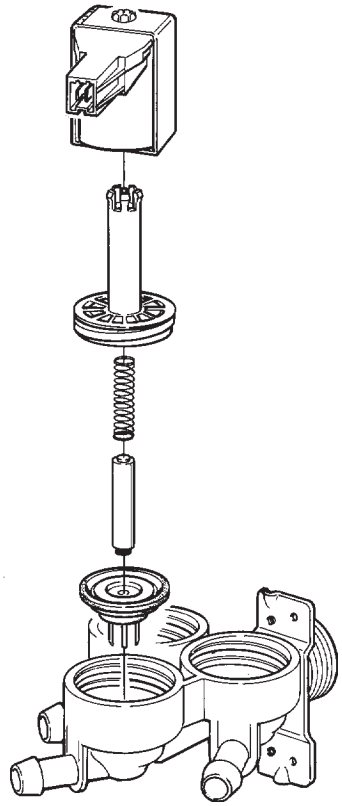
In the water intake line there is a fine-meshed filter to catch solid matter. This filter is easily removed for cleaning.

A suitable restrictor is fitted in the outlet to adapt the water flow to the requirements of the particular machine.

Data

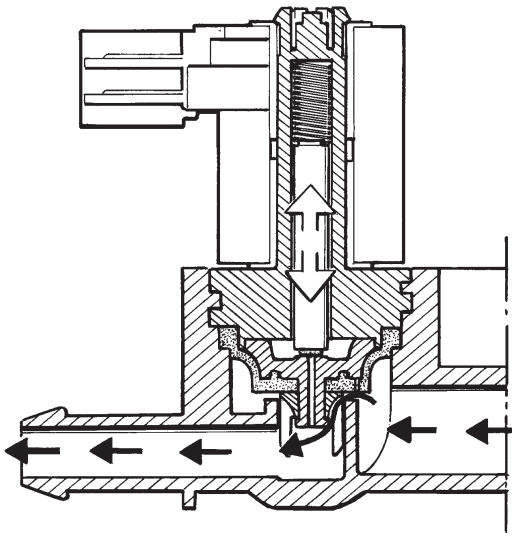
Max. capacity without restrictor	outlet 10 l/min inlet 10 l/min
Water pressure range	0.05 - 1 MPa
No. of outlets	1, 2 or 3

1



1456

2



G116

Instructions for repair

Limescale can block the holes in the valve membrane and affect valve functioning.

To be carried out by authorised personnel only.

For this reason it is advisable to dismantle and clean the valve at regular intervals, determined by machine use, hardness of water supply and water purity.

Valve will not open

- Check that the coil is energised.
- Measure on the coil to identify any failure or short-circuit.
- Dismantle the valve (see under ”To dismantle the valve”) and check the openings in the valve membrane.
- Check the inlet filter and clean if necessary.
- Take out the coil and clean the surfaces of the magnetic cores.

Valve will not close

- Check that the valve is not energised. The valve is normally closed when the coil is not energised.
- Check the return spring.
- Check the membrane (pilot pressure opening).

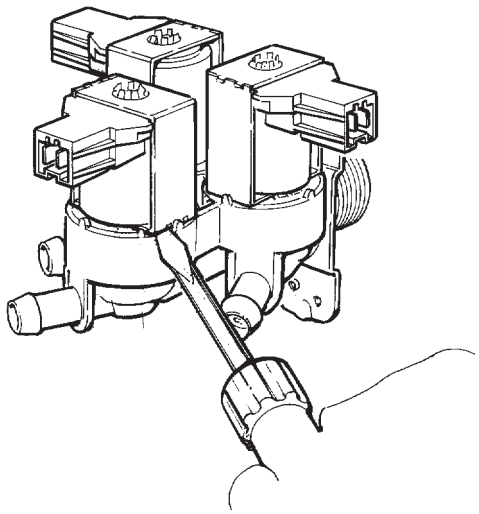
To dismantle the valve

Fig (3) 1. Prise the valve coil free carefully with a screwdriver and pull the coil free.

Fig (4) 2. Undo the valve cover using the special tool and an adjustable spanner. (The special tool is supplied with the machine, attached to one of the water hoses.)

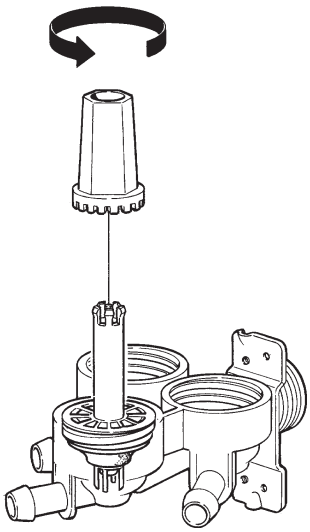
Fig (5) 3. Reassemble the valve and test the machine by running a program.

3



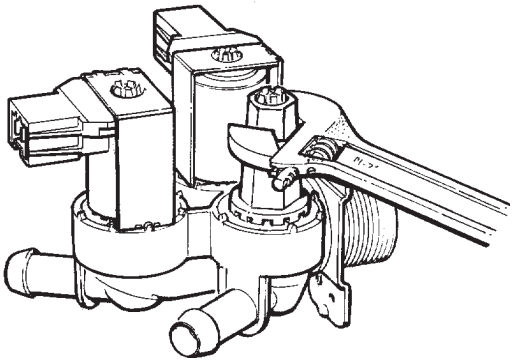
1187

4



0906

5



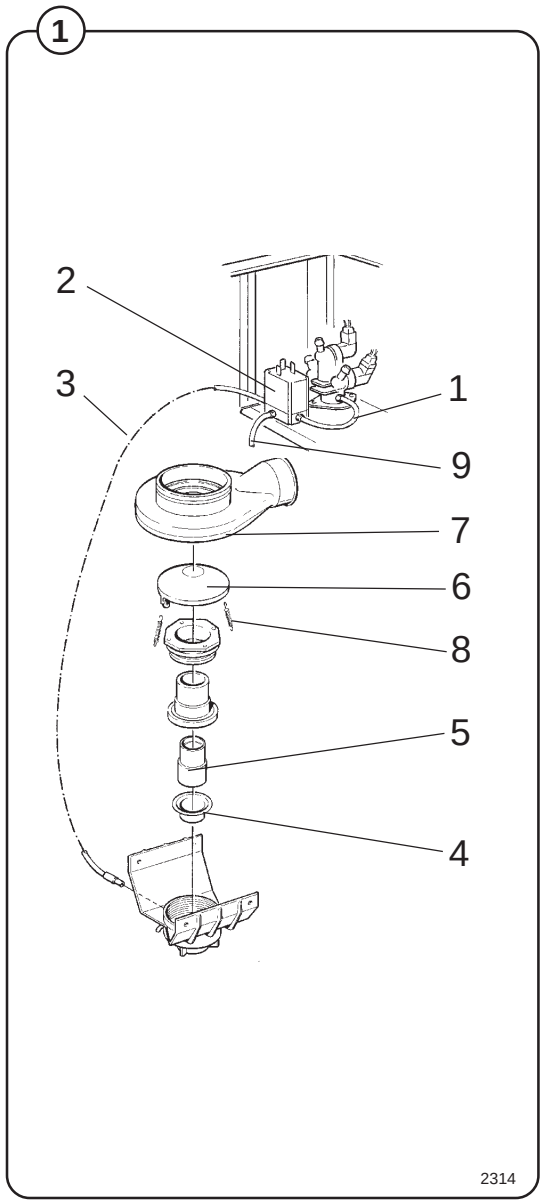
1181

Drain valve

Description

Fig (1) The water pressure in the cold water intake is used for closing the drain valve. There is a hose (1) connected between the water intake and the control valve (2). When the control valve is activated it opens and lets water into the supply line (3) which is connected to the drain valve. The water presses up a rubber membrane (4) and a plunger (5) with a pressure plate (6) which closes the valve's rubber membrane (7).

When the control valve shuts off water pressure to the drain valve the springs (8) pull back the plunger. The return water passes the control valve and runs out into the drain via the return hose (9).



Fault location

To be carried out by authorised personnel only.

Drain valve will not close

Check that:

- Control valve (2) is energised.
- Hoses and control valve are not blocked, by disconnecting the supply line (3) at the drain valve and then activating the control valve.
- The rubber membrane (4) is intact.
- The plunger (5) is not binding.

Drain valve will not open

Check that:

- The return hose (9) is not blocked.
- The plunger (5) is not binding.

To replace entire valve or valve components

This work can be carried out more easily if the machine is inclined backwards. Check first which way the individual machine is mounted on/in the floor.

Removal

Fig (2)

1. Remove the front panel. Use Torx T20.
2. Remove the door and its hinges. Use Torx T25.
3. Remove the trim panel (three screws). Use Torx T25.

Fig (3)

4. Remove the hose from the valve's nipple for water supply.
5. Undo the nut (leave bolt in place) securing the valve to the right-hand side of the saddle.
6. Undo and remove the bolts securing the valve on the left-hand side of the saddle. Pull the left side of the valve down a little and lift the valve off from the right-hand bolt. Separate the valve from the hose (6a).
7. Remove the valve from the machine.

Fig (4)

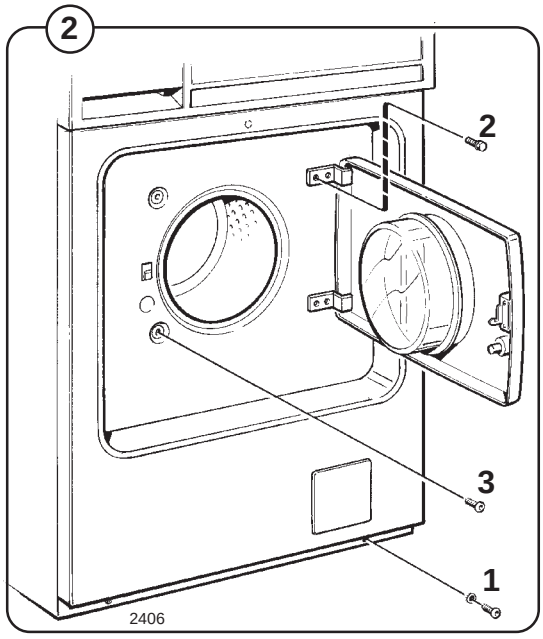
8. Replace the faulty valve with a new one or replace defective parts. For article numbers, see the spare parts list.

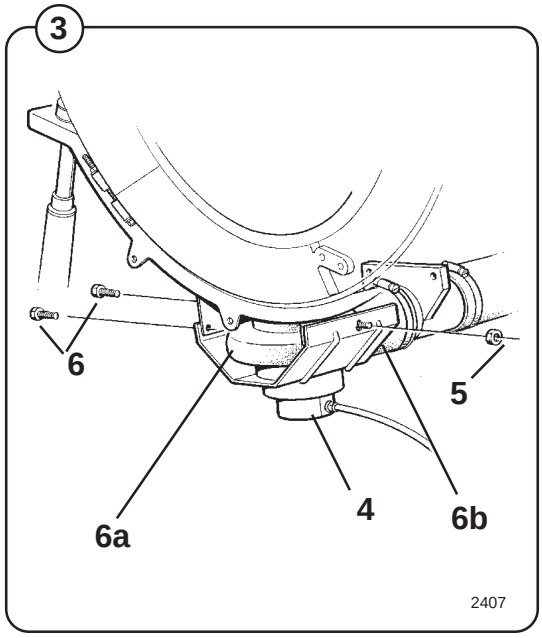
Installation

1. First fit the valve onto the right-hand bolt in the saddle.
2. Fit and then tighten the two bolts on the left-hand side. Tighten the bolt on the right.
3. Connect the hose for water supply.
4. Fit the hose from the drum on the valve. Use the rubber edge on the hose and pull down the hose over the valve cover. Check that the hose edge snaps into place over the lower edge of the cover.
5. Test the machine by running a program and check valve functioning and that the machine is not leaking.
6. Fit the trim panel, door and front panel. Lock the screws for the door and trim panel with locking fluid (Loctite no. 243).

To replace a component between the drum and the valve

This work can be carried out more easily if the machine is inclined backwards. Check first which way the individual machine is mounted on/in the floor.





Removal

Fig (2)

1. Remove the front panel. Use Torx T20.
2. Remove the door and its hinges. Use Torx T25.
3. Remove the trim panel (three screws). Use Torx T25.

Fig (3)

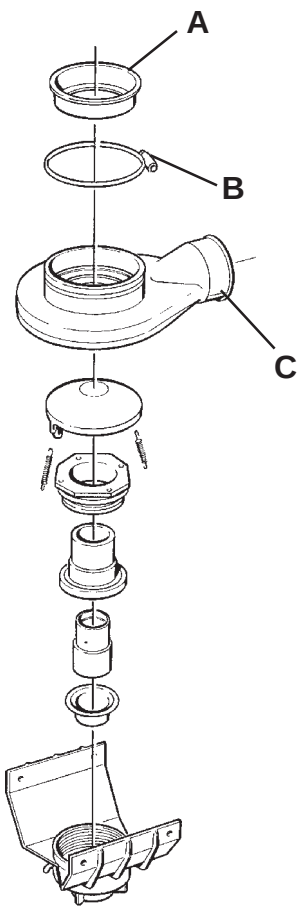
4. Undo the nut (leave bolt in place) securing the valve to the right-hand side of the saddle.
5. Undo and remove the bolts securing the valve on the left-hand side of the saddle. Pull the left side of the valve down a little and lift the valve off from the right-hand bolt. Separate the valve from the hose (6a).
6. Disconnect the hose from the drum (Fig. 3:6a).
7. Disconnect the hose from the junction (Fig. 3:6b).
8. Replace the faulty components.

Installation

Fig (4)

1. Fit the sleeve (A) on the drum's connector. Make sure that the collar is correctly positioned and is flush with the drum all around.
2. Place the hose clip (B) on the hose connector (C).
3. Fit the hose on the sleeve and check that it moves right up onto the groove on the sleeve, and that it is correctly aligned in relation to the junction.
4. Place the hose clip (B) in position and tighten it.
5. Place the other hose clip on the other hose connector (C). Fit the hose on the junction and tighten the hose clip. Check that the hose is pushed far enough into the junction.
6. First fit the valve onto the right-hand bolt in the saddle.
7. Fit and then tighten the two bolts on the left-hand side. Tighten the bolt on the right.
8. Fit the hose from the drum on the valve. Use the rubber edge on the hose and pull down the hose over the valve cover. Check that the hose edge snaps into place over the lower edge of the cover.
9. Test the machine by running a program and check valve functioning and that the machine is not leaking.
10. Fit the trim panel, door and front panel. Lock the screws for the door and trim panel with locking fluid (Loctite no. 243).

4



2410

To clean the hose between drum and junction

This work can be carried out more easily if the machine is inclined backwards. Check first which way the individual machine is mounted on/in the floor.

Removal

Fig (5)

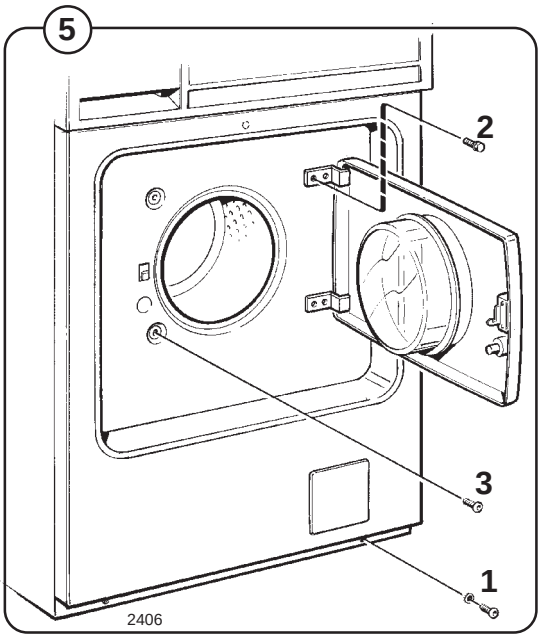
1. Remove the front panel. Use Torx T20.
2. Remove the door and its hinges. Use Torx T25.
3. Remove the trim panel (three screws). Use Torx T25.
4. Undo the nut (leave bolt in place) securing the valve to the right-hand side of the saddle.

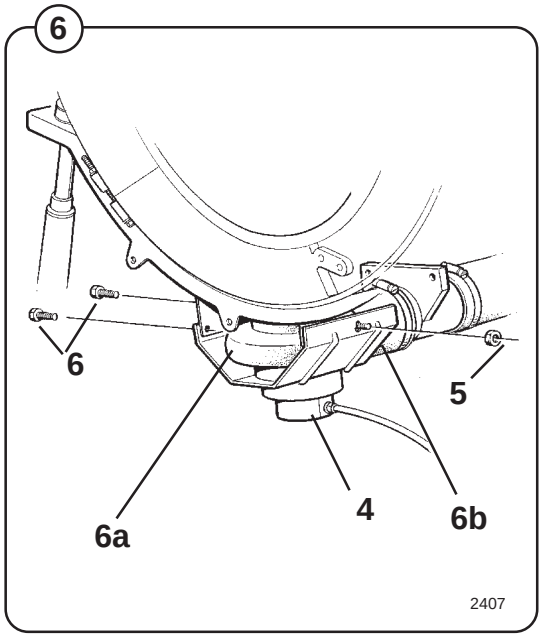
Fig (6)

5. Undo and remove the bolts securing the valve on the left-hand side of the saddle. Pull the left side of the valve down a little and lift the valve off from the right-hand bolt. Separate the valve from the hose (6a).
6. Disconnect the hose from the junction.
7. Push the hose's connection to one side. Clean the hose by pressing on the bellows around it and removing any solid matter.

Installation

1. Fit the hose to the junction.
2. First fit the valve onto the right-hand bolt in the saddle.
3. Fit and then tighten the two bolts on the left-hand side. Tighten the bolt on the right.
4. Fit the hose from the drum on the valve. Use the rubber edge on the hose and pull down the hose over the valve cover. Check that the hose edge snaps into place over the lower edge of the cover.
5. Test the machine by running a program and check valve functioning and that the machine is not leaking.
6. Fit the trim panel, door and front panel. Lock the screws for the door and trim panel with locking fluid (Loctite no. 243).





Drain pump

Description

Fig (7) The pump is located under the drum inside the front of the machine. Access for cleaning foreign matter (out of the discharge water) from the pump is through a cover on the machine front. The motor which drives the pump is activated from the timer.

Fault location

Machine not emptying

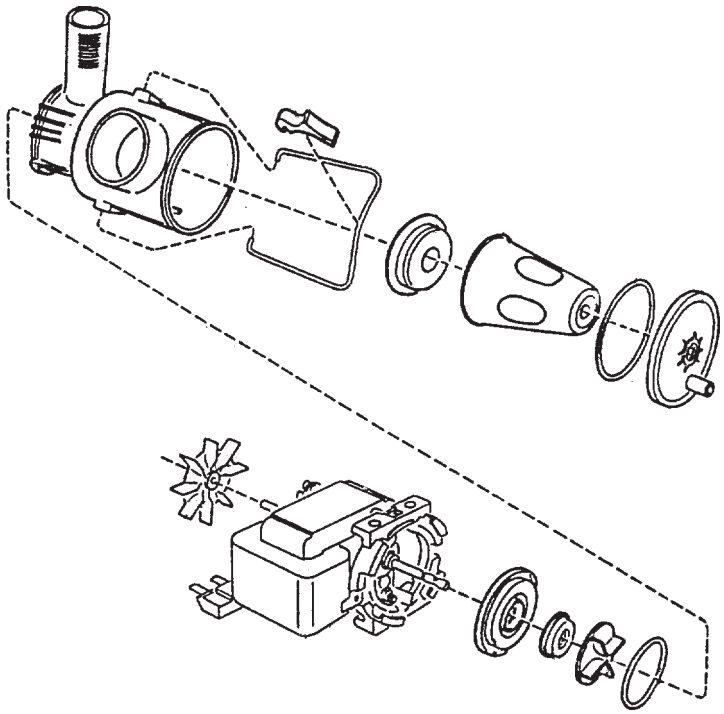
- Clean any foreign matter out of the pump.
- Check pump functioning:
  - Is the motor energised?
  - Has the impeller come loose from the motor shaft?

Machine cannot extract

This fault can arise if the drain pump is blocked.

- Clean any foreign matter out of the pump.

7



2257

Description

Fig 1

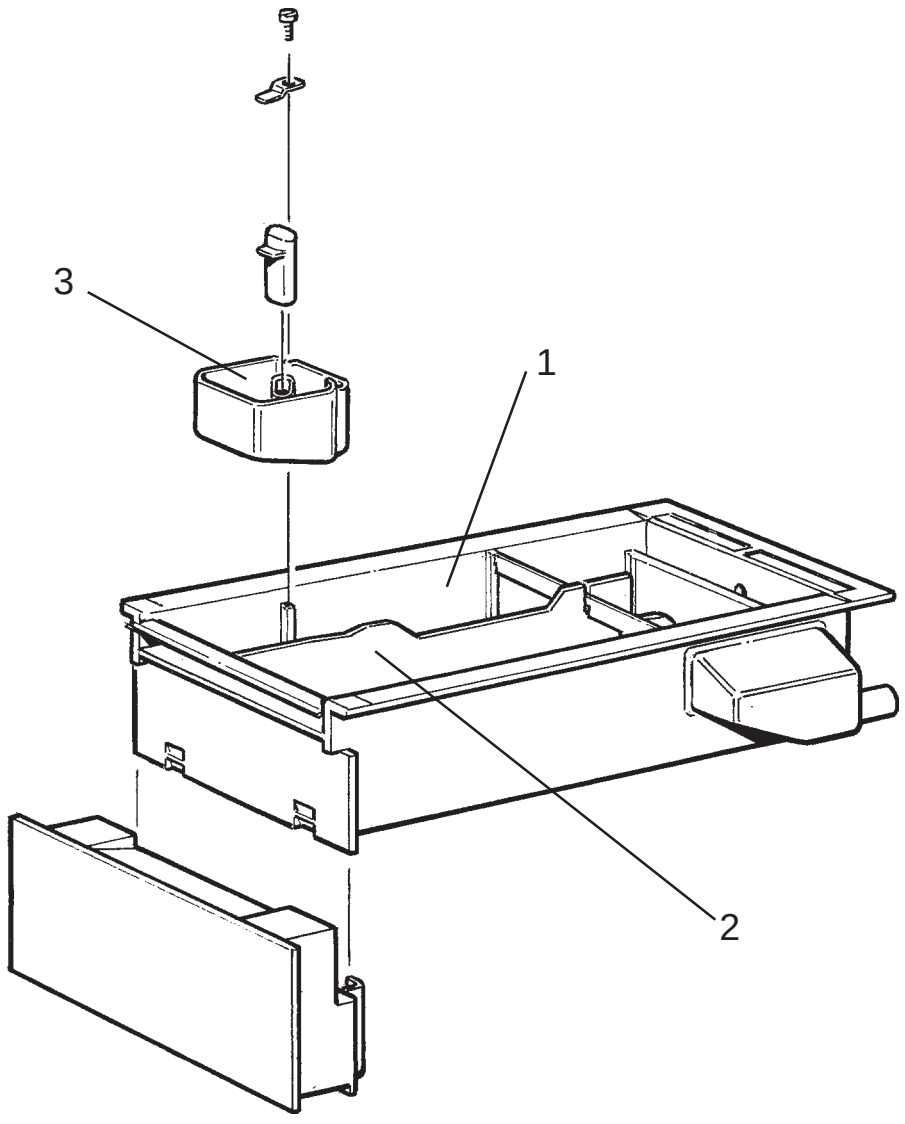
The detergent dispenser is divided into three compartments:

- Compartment 1 for prewash detergent
- Compartment 2 for main wash detergent
- Compartment 3 for fabric conditioner

Water connections into the dispenser are fitted with dispersers which mix the detergent thoroughly with water and flush the compartments clean.

From the bottom of the dispenser the water is channelled down to the outer drum.

1



2259

Description

Fig 1 The two heating elements are in the lower part of the outer drum, accessible from the machine rear. They are switched by a heating relay (K21), which is controlled by the timer, level control and thermostat.

Fig 2

The elements must never be activated without water in the drum. If they are, their fuses will blow.

Fault location

To be carried out by authorised personnel only.

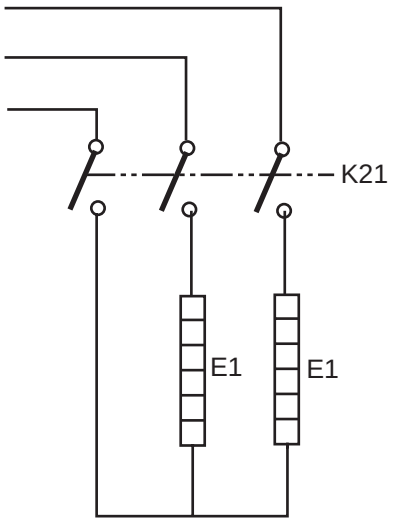
If heating time is abnormally long

- Check with a multimeter to see if one of the elements is burnt out. For access to the elements, remove the machine rear.
- Build-up of limescale can reduce the efficiency of the elements. If necessary descale them with a suitable descaling product. Follow the manufacturer's instructions concerning quantity of descaler.

To replace an element

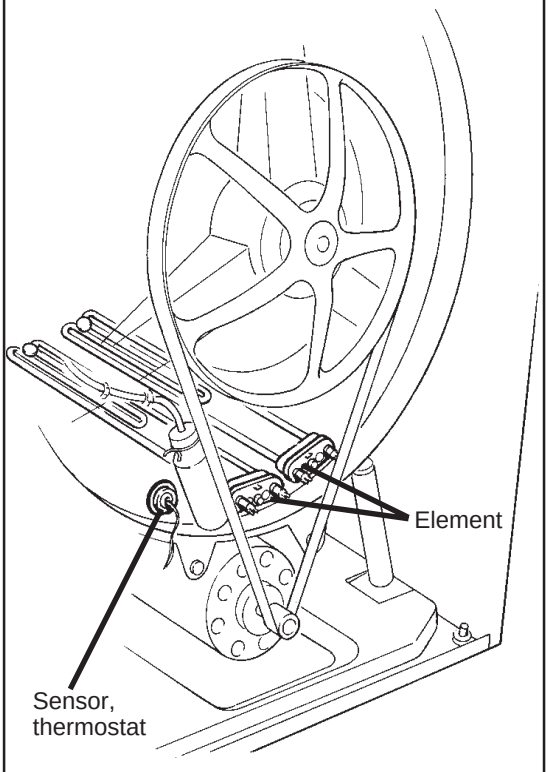
- Switch off the power supply to the machine at the main switch/wall switch and check that the power supply to the machine is off.
- Note how the elements are connected and then disconnect them.
- Undo the nut between the element connections and pull the element out.
- Guide the new element into its element holder in the bottom of the drum.
- Fit the new element and tighten the nut. Connect the element's electrical connections.
- Fill the machine and check that there are no leaks from the element.

1



2260

2



2212

Coin-operated machines

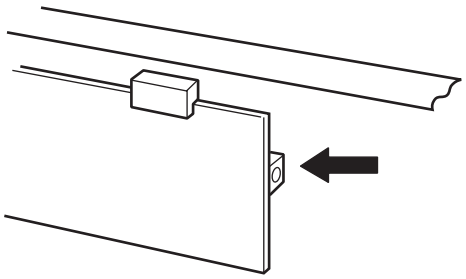
In coin-operated machines the prices for the various programs have to be programmed in.

Values from the coin mechanism (the accumulated value) can be read out with the aid of the service program.

If a machine is fitted with a coin mechanism after its original installation the relevant electronic circuitry will have to be activated before the prices can be programmed in.

Only trained service personnel may use the service program and program in prices for coin operation.

1



2269

Activation of electronic circuitry in machines fitted with coin operation after original installation.

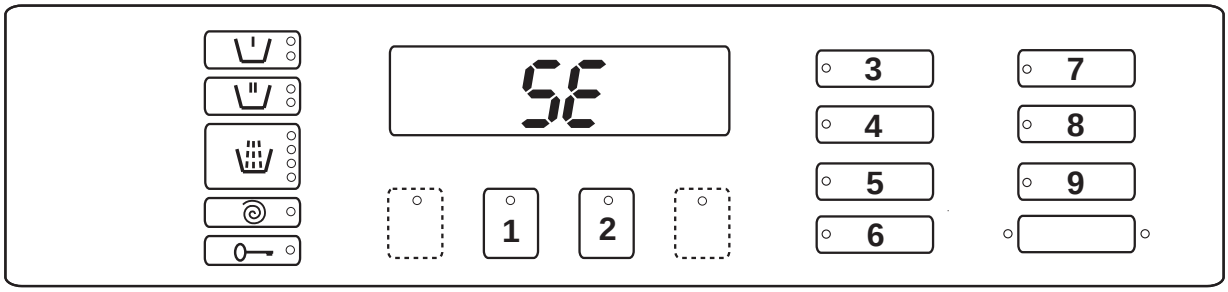
Fig. 1

Fig. 2

- Press the service button.

  Now certain of the buttons switch to being number keys (1 to 9).

2



2224

Codes 91 and 92 are used to store the values for coin slots 1 and 2. For mechanisms with only one slot, only code 91 is used.

The values to be stored are the ratio of one coin to the other.

For example: if the coin slots are for a 1 crown coin and a 5 crown coin. The value 1 should be stored under code 91, and the value 5 should be stored under code 92.

Fig. 3

- Enter code 91 using the buttons which have become number keys 9 and 1.

  The display will now show 91.

Fig. 4

- When entering the actual value: keep the price-programming button activated (the switch is located under te top cover at the right front edge). Enter the value 1 and then release the button.

Fig. 5

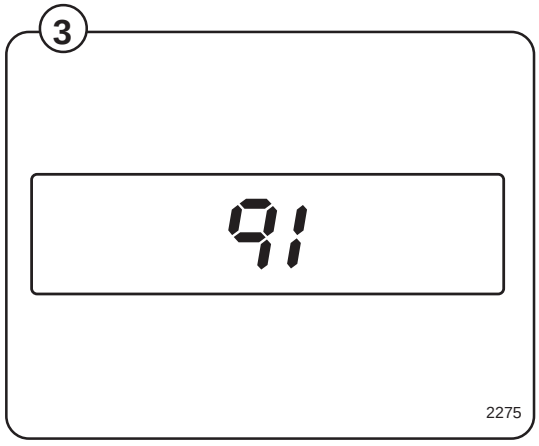
- Enter code 92. The display will now show 92.

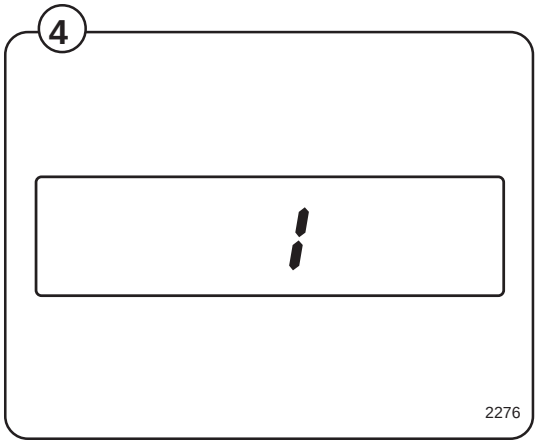
Fig. 6

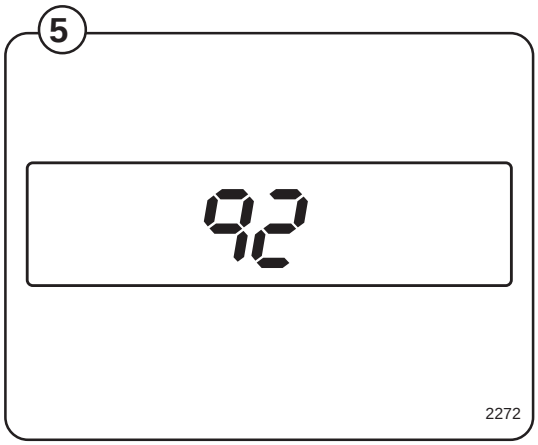
- Enter the value 5.

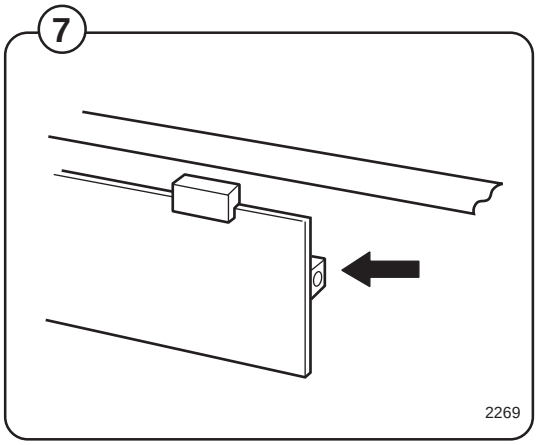
Fig. 7

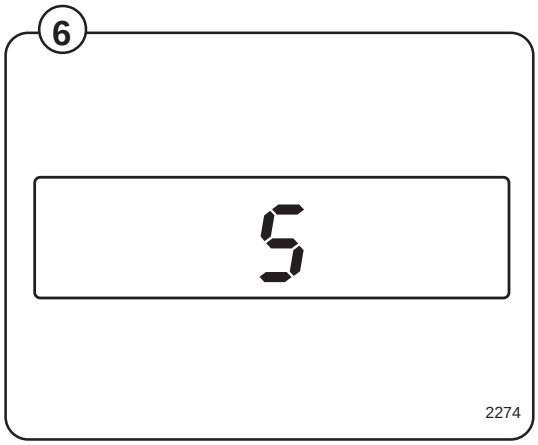
- Exit the service program by pressing the service button again.











Price programming:

- Press the relevant program selector button.

When programming the price of a wash program plus option, press both the relevant program selector button and the option button.

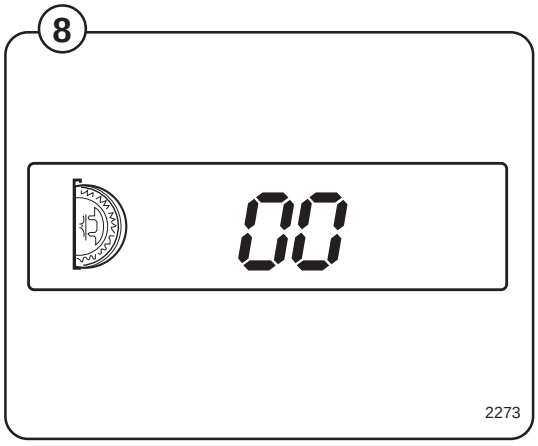
Fig. 8

- Keep the price-programming button activated.

  Now the display shows 00 plus the coin symbol.

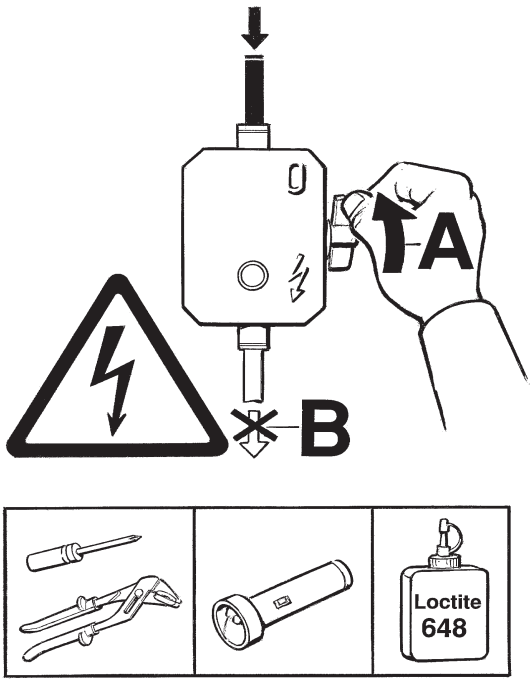
- Enter the price via the numerical key functions. The START button can now be used to enter 0.
- Release the price-programming button.

This procedure should be repeated for all programs.



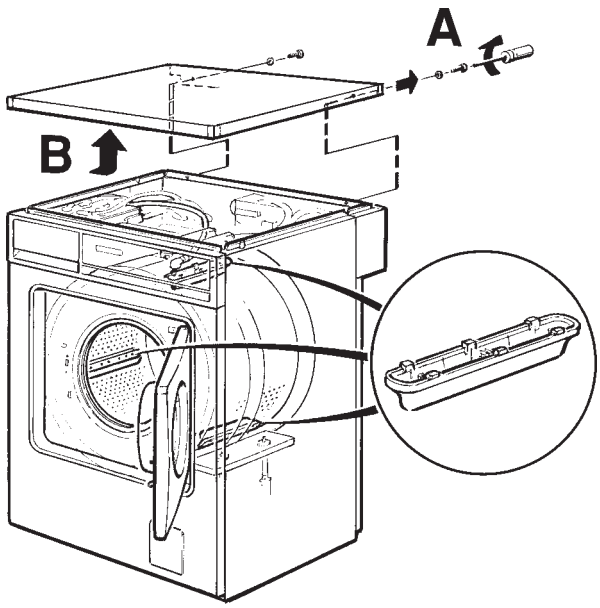
Changing lifters

1



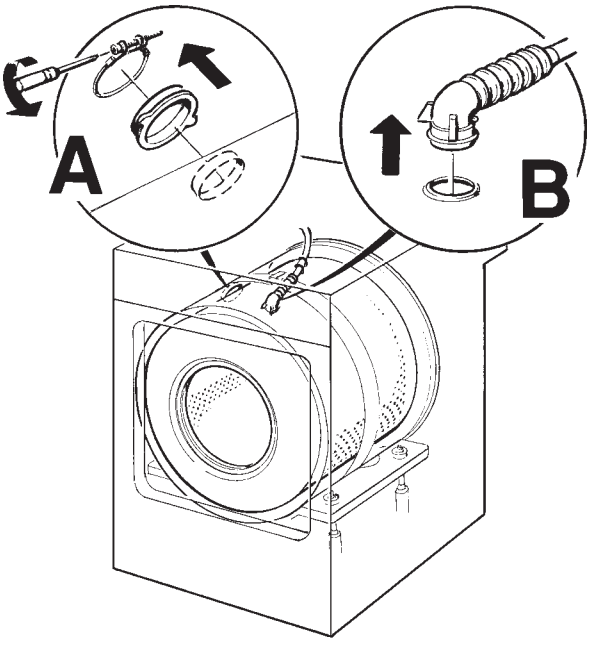
2595

2



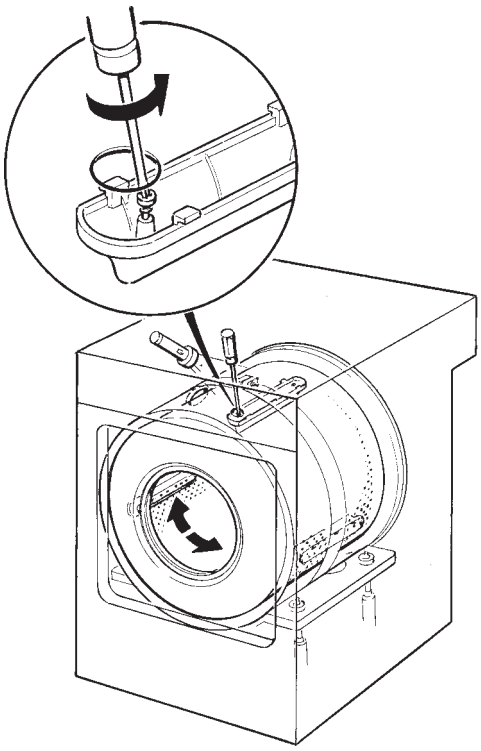
2596

3



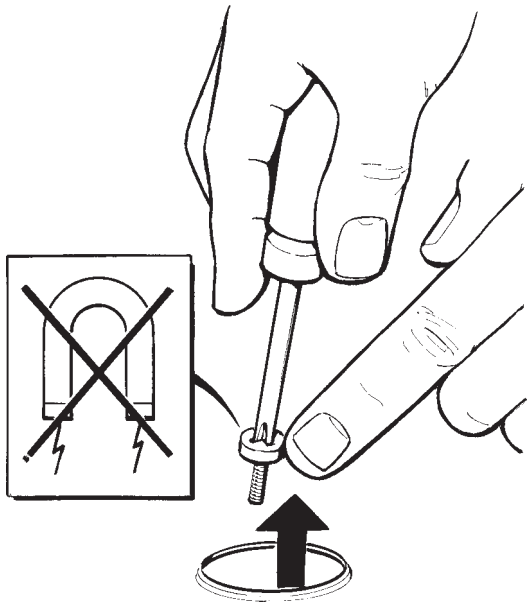
2597

4



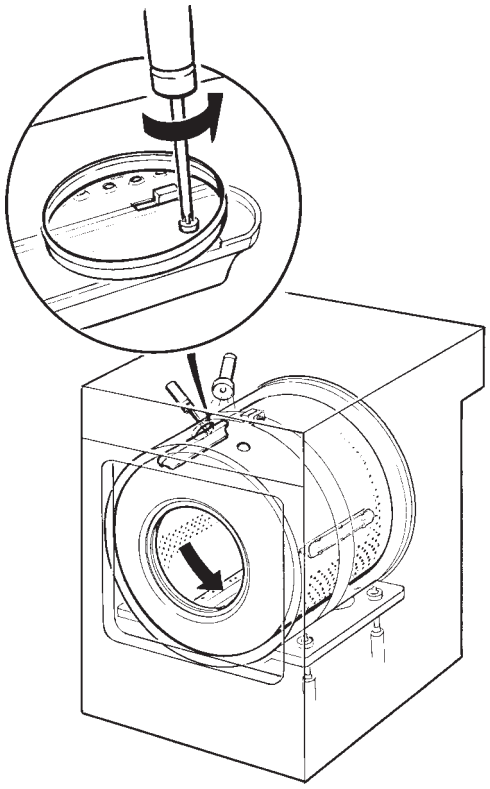
2598

5



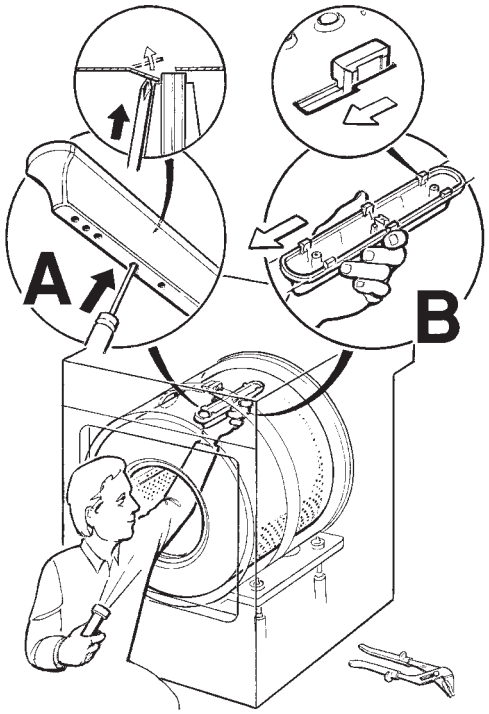
2599

6



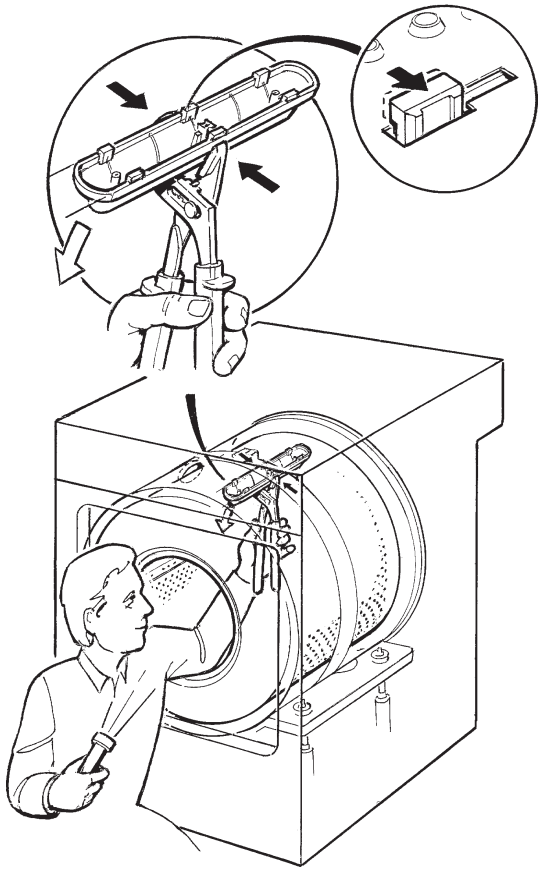
2600

7



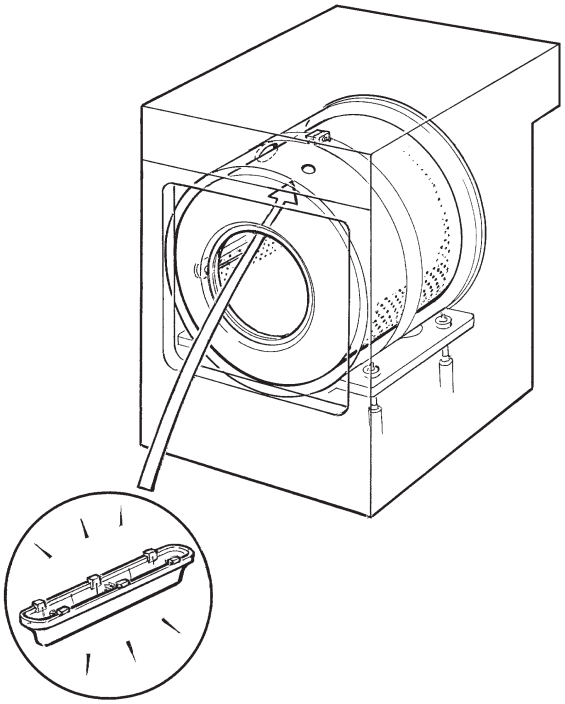
2601

8



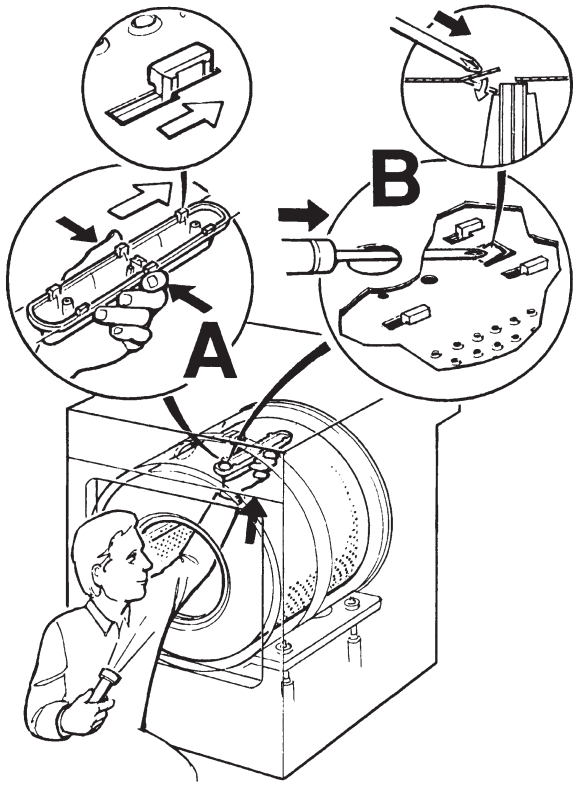
2660

9



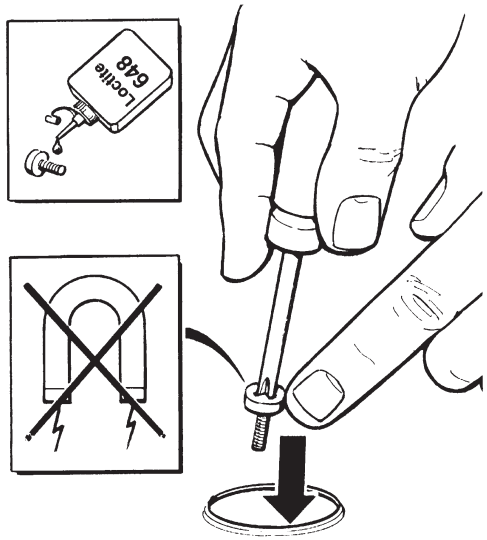
2602

10



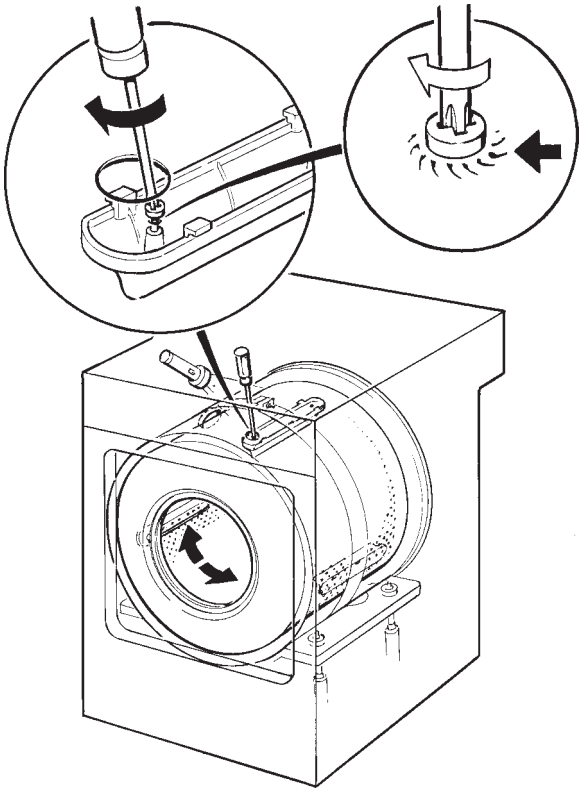
2603

11



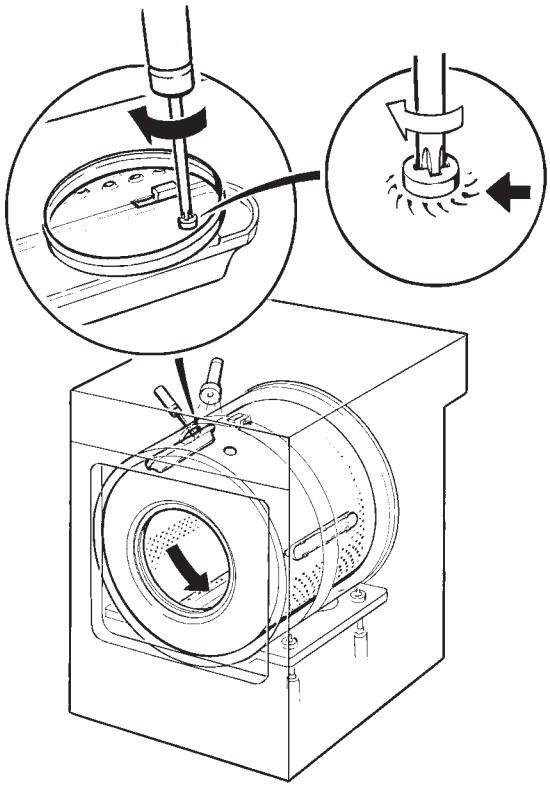
2604

12



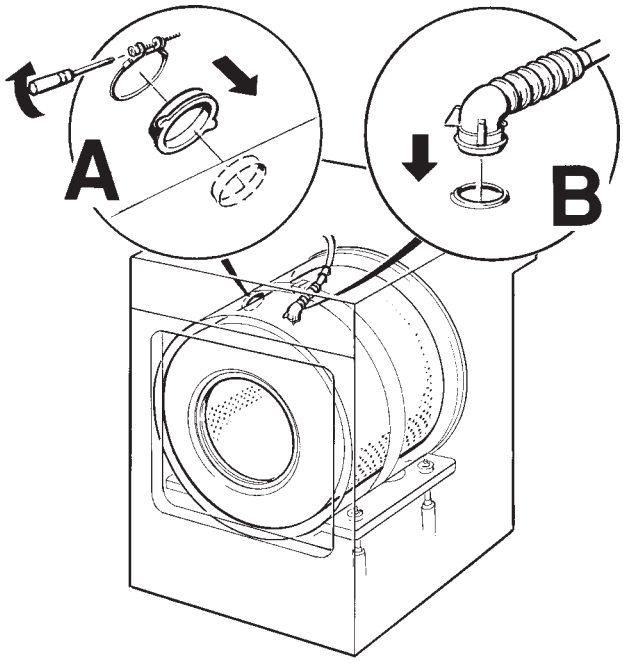
2605

13



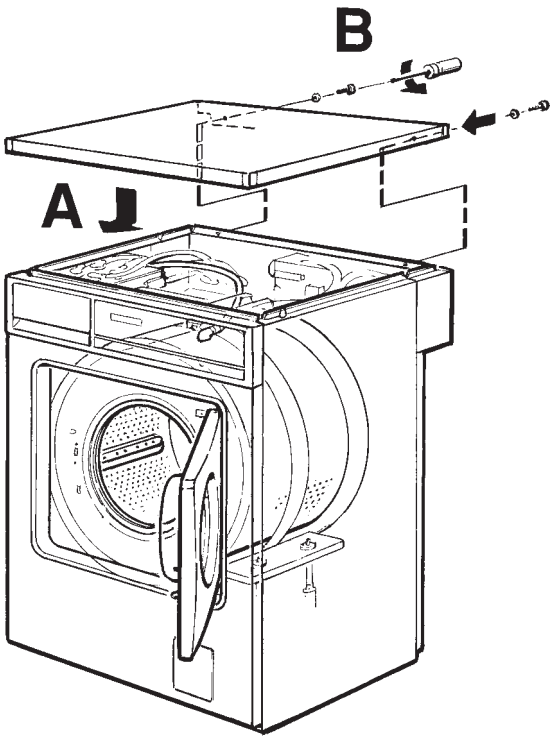
2606

14



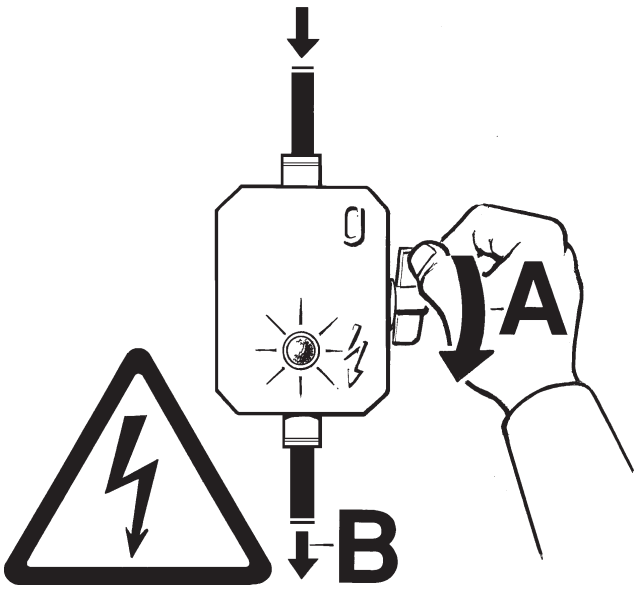
2622

15



2623

16



2624

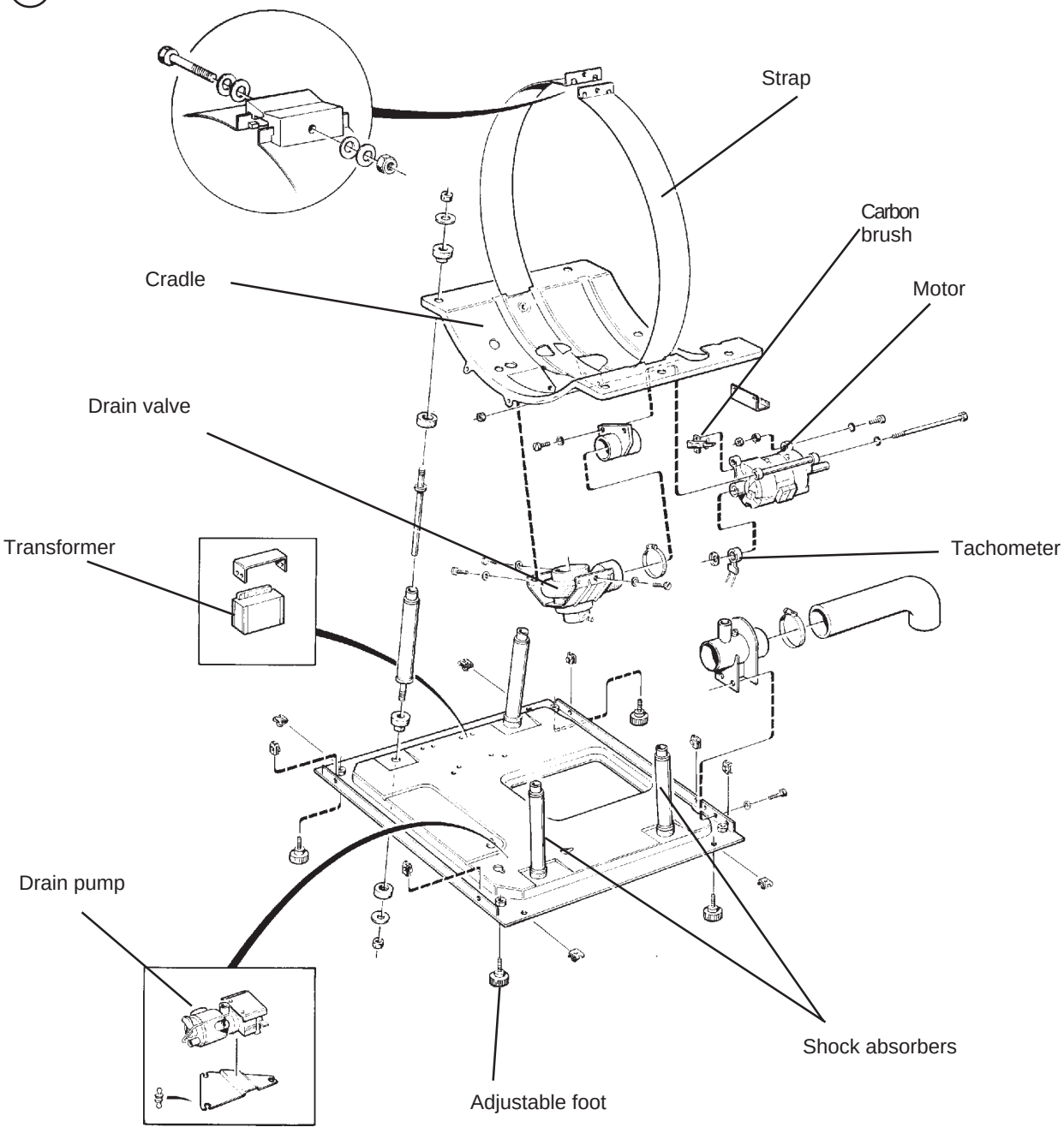
Description

Fig (1) The frame consists of a ”saddle” with straps which is attached to a base plate by four strut dampers. The drum unit is mounted on the cradle and secured by the strap which is held together at the top of the outer drum.

The base plate stands on four adjustable feet on the floor.

The motor unit and drain valve are mounted on the underside of the cradle. In machines equipped with a drain pump, this is mounted on the base plate.

1



Tightening torques for especially important bolted unions

The following unions must be tightened to the torques specified here:

Fig (1)

A. Between bearing strut and outer drum. 38 ±5.7 Nm

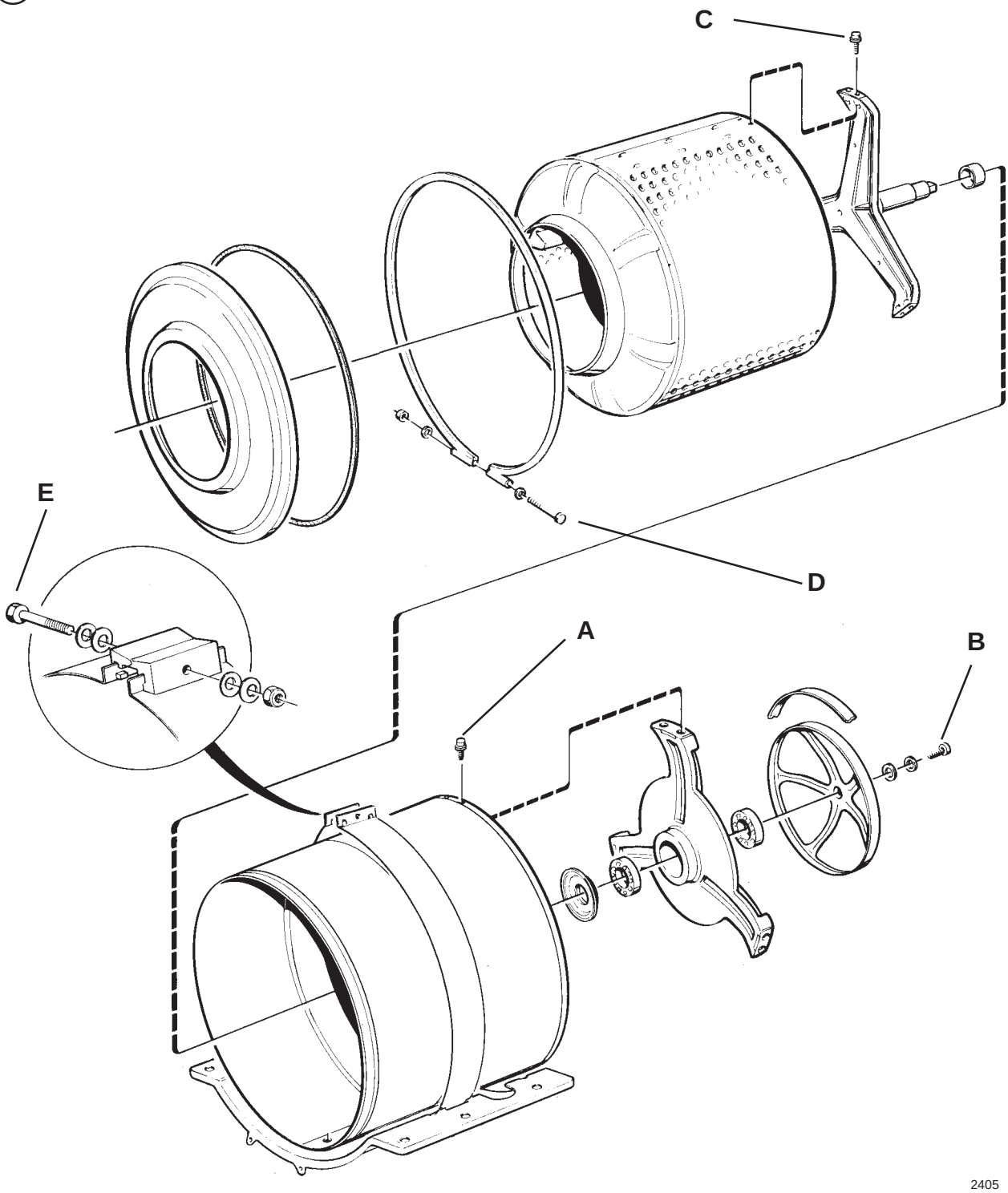
B. Between pulley and shaft. 38 ±5.7 Nm

C. Between shaft strut and inner drum. 38 ±5.7 Nm

D. For strap between front gable and outer drum. 24 ±1.2 Nm

E. For strap between cradle and outer drum. 24 ±1.2 Nm

1



Electrolux
Wascator

Electrolux-Wascator AB, SE-341 80 Ljungby, Sweden
Phone +46(0)372-661 00, Telex 52116, Telefax +46(0)372-133 90

TRYCKT AV RÅD & RESULTAT I LJUNGBY AB PÅ KLORFRITT OCH MILJÖVÄNLIGT PAPPER