Washer-Extractor

A-computer Programming and Operating Instructions

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Introduction

A-computer

The A-computer is a powerful and versatile solid state control. Up to 30 programs can be stored and executed. The computer comes standard with several pre-programmed cycles, which are discussed later in the manual (see table of contents for locations).

Note: Do not power off the machine while the mode switch is in Program position. Doing this will result in program data corruption, requiring a reprogramming of some or all of the cycles. Always move the Program switch into the Run position before powering down the equipment.

Keypad

The user interface for the A-computer control is a four pushbutton keypad with an LED (Light Emitting Diode) display. This interface is located on the front of the machine. In Run mode, the keys function as follows:

Used in cycle selection:

Pressing this key increments the cycle up by one; during a cycle, shows the temperature. Pressing with the down arrow advances the program (if enabled, see page 11).

Pressing this key increments the cycle down by one; during a cycle, shows the temperature.

Used to stop a cycle in progress

Used to start a cycle; during a cycle, displays the current cycle.

Customer Service

For technical assistance, call the following number:

In the United States
Phone: (850)-249-2222
FAX: (850) 249-2226
e-mail: techsupport@bandctech.com
Web: www.bandctech.com

In Thailand
Phone: +66 (0) 2740-5511
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e-mail: sales@accuratethai.com
Web: www.accuratethai.com

Replacement Parts

In the event that literature or replacement parts are required, contact the local distributor of the equipment, or contact B&C Technologies at the above phone numbers/internet addresses.

Key Symbols

Anyone operation or servicing this machine must follow the safety rules in this manual. Particular attention must be paid to the DANGER, WARNING, and CAUTION blocks which appear throughout the manual

The lightening flash and arrowhead within the triangle is a warning sign alerting you of the presence of dangerous

The exclamation point within the triangle is a warning sign alerting you of important instructions concerning the machine

This warning symbol alerts you to the presence of possible dangerous drive mechanisms within the machine. Guards should always be in place when the machine is in operation.

This warning symbol indicates the presence of possibly dangerous chemicals. Proper precautions should be taken when handling corrosive or caustic material.

This warning symbol indicates the presence of hot surfaces that could cause serious burns. Stainless steel and steam lines can become extremely hot and should not be touched.

This warning symbol indicates the presence of possible dangerous pinch-points. Moving mechanical parts can crush an/or sever body parts.

Before servicing any equipment, make certain it is disconnected from the electrical power source. Never allow operation of the machine when any safety device is malfunctioning. Never bypass safety devices.

Important Safety Information

SAFETY CHECK LIST

Before Initial start up of a washer – extractor perform the following safety check:

A. Make sure all electrical and plumbing connections have been made in accordance with applicable codes and regulations.

B. Make sure the machine is grounded electrically.

C. Make sure the machine has flexible water fill and drain connections of the correct size, length and type, with no kinks, and that they are securely attached and/or clamped.

D. Make sure the transport brackets have been removed (if applicable).

Before machine is placed in operation, the door safety interlock must be checked for proper operation as follows:

A. When the washer is energized electrically and in operation, the loading door must be locked in the closed position. Verify this by attempting to open the loading door when the machine is operating. If necessary, check the door safety interlock and sensors for proper operation. Consult the service manual, or call a qualified service technician if necessary.

B. When the washers loading door is open, it should not be possible to start the machine. Verify this by attempting to start the washer with the door open. Also, close the door without locking it and verify that it is not possible to start the machine with the door not locked. If necessary, check the door lock sensors for proper operation. Consult the service manual, or call a qualified service technician. If additional information is required, contact your local distributor or call the manufacturer of the machine.

Before servicing any equipment, make certain it is disconnected from the electrical power source. Never allow operation of the machine when any safety device is malfunctioning. Never bypass safety devices.

Operation

Cycle Selection

Press the up or down key until the desired cycle number is showing on the display. Press the keys just hard enough to activate them. Pressing harder will cause undue wear on the keypad. After you arrive at the desired cycle, ensure the goods are loaded, and the door is closed. Then press Start. If the door is not properly closed and locked, the display will read door until the door is properly closed and locked. After the door is closed, press start.

Cycle Execution

A cycle can be aborted at any time by pressing the stop key. The machine will enter the stop routine after which the door may be unlocked (display reads donE).

To display the temperature of the wash solution during a cycle, press the up key. To display the cycle number currently in process, press the start key.

Display Indications

The following table lists the displays the B-compter is capable of and their meanings. Familiarize yourself with these displays and their meanings.

Display	Meaning	Display	Meaning
b 01	ROM code. Example only.	FLUS	Overflow prewash selected
hoLd	Wait - machine just powered up	cF IL	Cold Fill
cY01	Cycle number (followed by 2 digits)	bF IL	Warm Fill (both hot and cold)
chEc / cYc	Test Cycle	hF IL	Hot Fill
FAr	Degrees Farenheit	LoLE	Low water level
cEL	Degrees Celcius	h ILE	High water level
PrE	Prewash segment (1st of 8 segments)	SUP 1	Supply 1
WASh	Wash segment (2nd of 8 segments)	SUP2	Supply 2
F IL 1	First rinse (3rd of 8 segments)	SUP3	Supply 3
F IL2	Second Rinse (4th of 8 segments)	SUP4	Supply 4
F IL3	Third Rinse (5th of 8 segments)	SUP5	Supply 5 (Supply 1 & 2)
F IL4	Fourth Rinse (6th of 8 segments)	SUP6	Supply 6 (Supply 2 & 3)
F IL5	Fifth Rinse (7th of 8 segments)	SUP7	Supply 7 (Supply 3 & 4)
F IL6	Sixth Rinse (8th of 8 segments)	StoP	Stop Routine
AdnO/Adn 1	Advance Function (1 is enabled)	St90	Spin coast down delay
dr In	Dilution Rinse	donE	Cycle complete, open the door
PrEU	Normal Prewash selected	door	Door not closed and locked
SP In / t InE	Reads "spin" for one second, then "time" followed by the spin time	F ILL / StoP	Programmed water level not reached after 30 minutes
tSFL	Temperature sensor failure or temperature out of range.	FULL	Water level is detected when none should be present. Can indicate a clogged drain.

Operation

Cycle Execution (continued)

Each of the 30 cycles consists of 8 segments. A typical cycle has Prewash, Wash, and Rinses (up to six are available). Upon the completion of the last rinse, a final spin occurs. Following is a description of each cycle segment.

Fill

After the start key is pressed, the drain is closed and the machine begins filling to the appropriate water level. Each wash segment begins with a fill. After the water level is reached, the cycle time begins to count down (the cycle timer is paused during fill, heat and drain steps). If a supply is programmed during the segment, the dispenser will be flushed during the fill.

If the machine is connected to an external chemical supply system, the programmed supply will begin 10 seconds into the fill. The supply remains on until the programmed water level is reached, or sixty seconds have elapsed. If the water level is not reached after 30 minutes, the display will flash StoP and FILL. The onboard beeper will also sound for 10 seconds. The machine will then enter the stop routine.

Wash

Standard Wash

As soon as the programmed water level is reached (and any programmed temperature is reached) the display begins to count down the remaining time left in the cycle.

All except three cycles use the standard agitation profile. This agitation profile is active during prewash, wash, and rinses. The standard sequence is:

- 12 seconds counterclockwise at wash speed
- 3 second pause
- 12 seconds clockwise at wash speed
- 3 second pause

Gentle Wash

Cycles 8, 16, and 24 use a gentle agitation profile. This profile is used in the prewash, wash, and rinse steps. The gentle wash agitation profile is:

- 3 seconds counterclockwise at wash speed
- 12 second pause
- 3 seconds clockwise at wash speed
- 12 second pause

Heat

If a wash segment contains a heat step, the heating elements will begin to heat the wash solution after the programmed level has been reached. If the water does not reach the desired temperature after 30 minutes, the machine will progress to the next step.

Drain

At the conclusion of a prewash, wash, or rinse segment, the drain valve opens and the wash cylinder turns clockwise at wash speed. The machine should drain in less than 30 seconds. If draining takes longer than this, a clogged drain hose is usually to blame. Contact a qualified service technician.

After the water level has fallen below the low level, there is a fifteen second delay, during which the computer monitors the water level. If water is sensed, the computer waits until both high and low level inputs show that there is no water in the wash cylinder. Assuming no water is detected, the drain sequence concludes, and the computer proceeds to the next segment.

Spin

After the drain sequence, the machine progresses to spin speed if the spin time is not zero. The displayed time will continue counting down. After the programmed spin time has elapsed, the next segment of the wash cycle begins or the stop routine begins, if the spin was the final spin of the wash cycle.

Operation

Cycle Execution (continued)
Stop Routine

When the final spin of the wash cycle is complete, the stop routine is activated. The stop routine sequence looks like this:

- All inputs are turned off
- A forty second coast down timer is activated (after a spin)
- 12 seconds clockwise at wash (if no spin)
- 3 seconds pause (if no spin)
- 12 seconds counterclockwise at wash
- 5 second pause
- The display shows donE

Once the display shows donE, the door can be opened. Once the door is opened, the display reverts to the cycle number of the cycle just completed. The machine is now ready to run another wash program.

WARNING

Never insert any part of your body or any object into the wash cylinder until it has completely stopped. Doing so could result in serious injury.

Note: if the display shows donE and the wash cylinder continues to rotate for an abnormally long time, this means that the water failed to completely drain, or the water level switch is faulty. The door will not unlock until the problem is corrected.

Check Cycle

The A-computer has a built in diagnostic check cycle which is very useful for troubleshooting. To access the check cycle, press the down arrow when the display shows cY0 1. The display will then alternate between chEc and cYc. Close and lock the door, then press the start key to begin.

1. Machine rotates wash forward and displays "F". This motion continues until the operator presses advance (up+down).

3. Machine rotates wash reverse and displays "r". This motion continues until the operator presses advance (up+down).

   3.1 If the low, med, or high water level switch is on now, the check cycle will terminate and the display will show "Err".

4. The A-computer energizes the cold fill output and fills to low level with no rotation and displays "cL". When low level is reached hold until operator presses advance (up+down). If the med or high water level switch is on before the low level switch, the check cycle will terminate and the display will show "Err".

5. The A-computer energizes the hot fill output and fills to medium level with no rotation and displays "hL". When med level is reached, the display changes to "hL2" and holds until operator presses advance (up+down). If the high water level switch is on before the medium level switch, the check cycle will terminate and the display will show "Err".

6. The A-computer energizes both fill outputs (cold & hot) and fills to high level with no rotation and displays "bL". When high level is reached, the display changes to "bL3" and holds until operator presses advance (up+down).

7. The A-computer energizes supply 1 and displays "S 1". Hold this state until operator presses advance (up+down).

8. The A-computer energizes supply 2 and displays "S2". Hold this state until operator presses advance (up+down).

9. The A-computer energizes supply 3 and displays "S3". Hold this state until operator presses advance (up+down).

Operation

10. The A-computer energizes supply 4 and displays "54". Hold this state until operator presses advance (up+down).

11. The A-computer energizes the heat output and displays "ht". Hold this state until operator presses advance (up+down).

12. The A-computer energizes the fwd output and opens the drain until all three water levels turn off. The display shows "dr in". Hold this state for 5 additional seconds

13. The A-computer energizes the spin output, displays "SP in" and hold this state until the operator presses the down arrow or advance (up+down).

14. The A-computer de-energizes the spin relay and holds for 20 sec.

15. The A-computer de-energizes the fwd relay and holds for 30 sec.

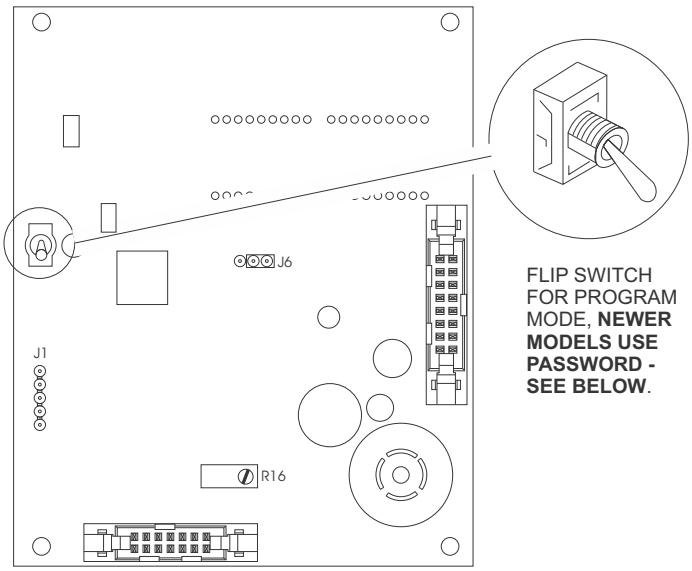
16. The A-computer energizes the door output and display "donE" as normal.

Programming

The computer board is located inside the control module. In the middle of the board is a small toggle switch used to change from Run mode to Program mode (see illustration).

WARNING!
Dangerous voltages can be present inside the control module. Only qualified service technicians with specific knowledge of test procedures and safety precautions should attempt troubleshooting and repair. Disconnect power before removing panels and covers, and before attempting service procedures.

The Run/Program switch is normally in the Run mode position. To enter program mode, flip the switch to the opposite position (Program mode). The display changes to show the current temperature in the wash cylinder, indicating that the control is in program mode. See the next section for key functions while in program mode.



Version b263 does not have the program switch but instead uses a password (1234) to access program mode. The control shows the firmware version at power on.

→Press the Up and Down keys together. The display shows 0.

→Press the Up key once. The display shows 1.

Key Functions in Program Mode

The Up key is used to increase cycle numbers and other numerical values, like time and temperature, when creating wash formulae.

The Down key is used to decrease cycle numbers and other numerical values, like time and temperature, when creating wash formulae.

The Stop key saves all data and terminates the programming procedure. If you press this key first when entering program mode, the computer will enter Setup. If the stop key is pressed again, you will exit Setup mode and return to Program mode.

The Start key is the Enter command while in Program mode. Pressing this key enters the data, and moves to the next programming function in the cycle.

→Press the Start key. The display shows 10.

→Press the up key twice. The display shows 12.

→Press the Start key. The display shows 120.

→Press the Up key three times. The display shows 123.

→Press the Start key. The display shows 1230.

→Press the Up key four times. The display shows 1234.

→Press the start key. The display will show the temperature, indicating that the control is now in program mode.

Cycle power to save the program changes after programming is complete.

Programming

Setup Mode

The setup options are programmable options that are in operation during all wash cycles. The options are:

- Temperature displayed in degrees Celsius or Fahrenheit.
- Spray Rinse and Supply 4 enabled
- Auxiliary heat and Spray Rinse enabled
- Auxiliary heat and Supply 4 enabled

Take note that these options can only be changed while in Setup mode.

Temperature Display

This setup option affects the display and programming of all temperatures. cEL selects programming/display in degrees Celsius, while FAr selects degrees Fahrenheit. The Up and Down keys toggle between the two settings. The Start key accepts the selection and moves you to the next setup option.

Spray Rinse, Supply 4, and Auxiliary Heating

This setup option allows you to select among the following options:

- Spray Rinse and Supply 4 enabled
- Auxiliary heat and Spray Rinse enabled
- Auxiliary heat and Supply 4 enabled

To enable Spray Rinse and Supply 4, use the up and down key to see Sr In. When this option is selected, Spray Rinse and Supply 4 are enabled, as well as Supply 7 (Supply 3 and Supply 4 combined). This is the default setting. When this option is selected, no further programming in Setup is possible. Press the Stop key to exit Setup.

To enable Spray Rinse and Auxiliary Heating, use the up or down key to see hEAt instead of Sr In, as above. Now press the Start key (enter). Now use the up or down key to see Sr In. Press the start key (enter). No further Setup programming is possible. Press the Stop key to exit Setup.

To enable Auxiliary Heat and Supply 4, press the Up or Down key to see hEAt. Press the start key (enter). Now press the Up or Down key to see SUP4. Press the Start key to select, and press the Stop key to save and exit Setup mode. This is the default mode for machines without Spray Rinse.

Advance Enable

This option allows you to enable or disable the advance function. When enabled, a cycle in operation can be advanced by pressing the Up and Down keys simultaneously. Adn 1 enables the advance function. Adn0 disables the function.

Cycle Count

To display the current cycle count, press the Start key after entering Program mode (the display will show the current temperature in the wash cylinder). The display will show a 2 digit number indicating how many cycles have been completed (cycles interrupted are not counted). Press the Start key again to return to program mode without resetting the count. Press the Up or Down key to reset the count to zero and return to program mode.

Cycle Programming

To edit an existing cycle, or create a new one, press the Up key while the wash cylinder temperature is displayed. The display will change to show cY0 1. Press the up or down key until the cycle number you wish to change/create is displayed. Now press the Start key to begin editing your cycle. Please note that the test cycle cannot be displayed or altered.

Cycle Segments			
Segment	Display	Segment	Display
Prewash	PrE	Fill 3	FIL3
Wash	WASh	Fill 4	FIL4
Fill 1	FIL 1	Fill 5	FIL5
Fill 2	FIL2	Fill 6	FIL6

All programmed cycles follow a certain routine,

Programming

Cycle Programming (continued)

When modifying a cycle time, a time must be entered for each segment. To skip a segment or spin, enter 00 for the time and press the Start key. The following table shows the range of time allowed for each segment and spins, as well as the allowed temperature range for machines equipped with auxiliary heat.

Time and Temperature Parameters		
Function	Minimum	Maximum
Prewash	2 minutes	30 minutes
Wash	2 minutes	20 minutes
Fill 1	2 minutes	15 minutes
Fill 2	2 minutes	15 minutes
Fill 3	2 minutes	15 minutes
Fill 4	2 minutes	15 minutes
Fill 5	2 minutes	15 minutes
Fill 6	2 minutes	15 minutes
Intermediate Spin	30 seconds	120 seconds
Final Spin	1 minute	10 minutes
Temperature	75F / 25C	200F / 93C

Note that spin times are programmed in seconds for intermediate spins following Prewash, Wash, and Fills 1 through 5. The final spin, following Fill 6 is programmed in minutes.

To begin programming, press the Up key shows the segment to be edited, then press the Start key.

For the Prewash segment, you can select either PrEU (normal Prewash) or FLUS (overflow fill Prewash). If Overflow Prewash is selected, the fill valves will remain on for the duration of the Prewash step. Press the Start key to make your selection.

If the Spray Rinse option is enable in Setup, you have the option of Spray Rinse or Dilution Rinse during Fill 1 through Fill 5. The display shows Sr In for spray rinse or dr In for dilution rinse.

Use the Up and Down keys to select the fill temperature. The following table shows the available options.

Fill Temperature Options	
Display	Fill Type
hF IL	Hot Fill
cF IL	Cold Fill
bF IL	Warm Fill

After you have selected the appropriate fill temperature, press the Start key.

Now you can select the Fill level by using the Up or Down key. Select your fill level according to the following table.

Fill Level Options	
Display	Fill Level
LoLE	Low Level
ndLE	Med Level
h ILE	High Level

Note that if you selected FLUS for the Prewash segment, this selection is skipped. After your Fill level selection, press the Start Key.

Next select the desired Supply option. See the table.

Supply Options	
Display	Supply
SUP0	No Supply
SUP 1	Supply 1
SUP2	Supply 2
SUP3	Supply 3
SUP4	Supply 4
SUP5	Supply 1 & 2
SUP6	Supply 2 & 3
SUP7	Suppply 3 &4
Supply 4 & 7 are only avaliable if is Supply 4 was enabled in Setup	

Programming

Cycle Programming (continued)

After selecting your desired supply option, press the Start key.

If your machine is equipped with Auxiliary heating, and it was enabled during Setup programming, you may use the up or down key to select the target temperature for the segment. To disable Auxiliary heat for the segment, set the value to zero.

NOTE

If the machine does not have auxiliary heating, do not program a temperature. If you program a target temperature that the machine is unable to achieve, the machine will try for 30 minutes during the segment. It is also important not to program heat during a prewash segment with a flush fill.

After you have selected the temperature, press the Start key.

Now select the spin time for the segment. If you wish to skip the spin, set the value to zero.

After you have set the spin time, press the Start key, The display will now show the name of the next program segment. See the chart on page 10 for the list of program segments and what the display indicates for each.

Cycle Segment Charts

Prewash Segment	
Display	Details
	Use Up or Down to change. Start key is enter or advance
PrE	
PrE or FLUS	Select Regular prewash or Flush
00 or 02 - 30	Segment time: 00 to skip, or any time between 0 and 30 minutes
hF IL cF IL bF IL	Fill temperature: Hot, Cold, or Warm (both fill)
SUP0 - SUP7	Select Supply 0-7 (0 for no supply during the step)
00, 75 - 200	Enter temperature: 75-200 deg F, 25-93 deg C. 00 for no heat. Select 00 if you have programmed a Flushing Prewash
00, 25 - 93	
SP In flases for 1 sec	
t IME flases for 1 sec	
00 or 30 - 120	Select time for spin: 30 - 120 seconds. 00 for no spin.
Note: Supply 4 and 7 are only availble if enabled in Setup Note: Heat is only available if enabled in Setup	

Programming

Cycle Segment Charts (continued)

Wash Segment	
Display	Details
	Use Up or Down to change. Start key is enter or advance
WASh	
00 or 02 - 30	Segment time: 00 to skip, or any time between 0 and 30 minutes
hF IL cF IL bF IL	Fill temperature: Hot, Cold, or Warm (both fill)
LoLE, ndLE or h ILE	Select Fill level, Low, Med or High
SUP0 - SUP7	Select Supply 0-7 (0 for no supply during the step)
00, 75 - 200	Enter temperature: 75-200 deg F, 25-93 deg C. 00 for no heat. Select 00 if you have programmed a Flushing Prewash
00, 25 - 93	
SP In flases for 1 sec	
t IME flases for 1 sec	
00 or 30 - 120	Select time for spin: 30 - 120 seconds. 00 for no spin.
Note: Supply 4 and 7 are only availble if enabled in Setup	
Note: Heat is only available if enabled in Setup	

Fill Segments (Fill 1 through Fill 5)	
Display	Details
	Use Up or Down to change. Start key is enter or advance
F IL 1 F IL2 F IL3 F IL4 F IL5	
dr In or Sr In	(1) Select Rinse Method: Dilution Rinse or Spray Rinse
00 or 02 - 30	(2) Segment time: 00 to skip, or any time between 0 and 30 min
hF IL cF IL bF IL	(3) Fill temperature: Hot, Cold, or Warm (both fill)
LoLE, ndLE or h ILE	(4) Select Fill level, Low, Med or High
SUP0 - SUP7	(5) Select Supply 0-7 (0 for no supply during the step)
00, 75 - 200	(6) Enter temperature: 75-200 deg F, 25-93 deg C. 00 for no heat. Select 00 if you have programmed a Flushing Prewash
00, 25 - 93	
SP In flases for 1 sec	
t IME flases for 1 sec	
00 or 30 - 120	(7) Select time for spin: 30 - 120 seconds. 00 for no spin.
Note: Supply 4 and 7 are only availble if enabled in Setup	
Note: Heat is only available if enabled in Setup	
Note: If Spray Rinse is selected for the segment, steps 3 to 6 are skipped.	

Programming

Cycle Segment Charts (continued)

Fill 6 Segment	
Display	Details
	Use Up or Down to change. Start key is enter or advance
F IL6	
00 or 02 - 30	Segment time: 00 to skip, or any time between 0 and 30 min
hF IL cF IL bF IL	Fill temperature: Hot, Cold, or Warm (both fill)
LoLE ndLE or h ILE	Select Fill level, Low Med or High
SUP0 - SUP7	Select Supply 0-7 (0 for no supply during the step)
00, 75 - 200	Enter temperature: 75-200 deg F, 25-93 deg C. 00 for no heat.
00, 25 - 93	Select 00 if you have programmed a Flushing Prewash
SP In flases for 1 sec	
t IME flases for 1 sec	
02 - 10	Select time for spin: 2 to 10 minutes
Note: Supply 4 and 7 are only availble if enabled in Setup	
Note: Heat is only available if enabled in Setup	

Programming

Blank Cycle Chart

Program Number

Segment	Detail	Segment	Detail
Prewash		Fill 3	
Prewasy/Flush		Spray/Dilution	
Time (min)		Time (min)	
Water Temp		Water Temp	
Water Level		Water Level	
Supply		Supply	
Temp		Temp	
Spin (sec)		Spin (sec)	
Wash		Fill 4	
Time (min)		Spray/Dilution	
Water Temp		Time (min)	
Water Level		Water Temp	
Supply		Water Level	
Temp		Supply	
Spin (sec)		Temp	
		Spin (sec)	
Fill 1		Fill 5	
Spray/Dilution		Spray/Dilution	
Time (min)		Time (min)	
Water Temp		Water Temp	
Water Level		Water Level	
Supply		Supply	
Temp		Temp	
Spin (sec)		Spin (sec)	
Fill 2		Fill 6	
Spray/Dilution		Spray/Dilution	
Time (min)		Time (min)	
Water Temp		Water Temp	
Water Level		Water Level	
Supply		Supply	
Temp		Temp	
Spin (sec)		Final Spin (min)	

Factory Programs

Cold Wash Normal			
Program Number:	1		
Segment	Detail	Segment	Detail
Prewash		Fill 3	
Prewasy/Flush		Spray/Dilution	
Time (min)	05	Time (min)	00
Water Temp	cF IL	Water Temp	
Water Level	h iLE	Water Level	
Supply	SUP 1	Supply	
Temp	00F	Temp	
Spin (sec)	0	Spin (sec)	
Wash		Fill 4	
Time (min)	08	Spray/Dilution	
Water Temp	cF IL	Time (min)	00
Water Level	LoLE	Water Temp	
Supply	SUP2	Water Level	
Temp	00F	Supply	
Spin (sec)	60	Temp	
		Spin (sec)	
Fill 1		Fill 5	
Spray/Dilution		Spray/Dilution	
Time (min)	02	Time (min)	00
Water Temp	cF IL	Water Temp	
Water Level	h iLE	Water Level	
Supply	SUP0	Supply	
Temp	00F	Temp	
Spin (sec)	60	Spin (sec)	
Fill 2		Fill 6	
Spray/Dilution		Spray/Dilution	
Time (min)	02	Time (min)	02
Water Temp	cF IL	Water Temp	cF IL
Water Level	h iLE	Water Level	h iLE
Supply	SUP0	Supply	SUP03
Temp	00F	Temp	00F
Spin (sec)	60	Final Spin (min)	05

Factory Programs

Warm Wash Normal			
Program Number:	2		
Segment	Detail	Segment	Detail
Prewash		Fill 3	
Prewasy/Flush		Spray/Dilution	
Time (min)	05	Time (min)	00
Water Temp	bF IL	Water Temp	
Water Level	h ILE	Water Level	
Supply	SUP 1	Supply	
Temp	00F	Temp	
Spin (sec)	0	Spin (sec)	
Wash		Fill 4	
Time (min)	08	Spray/Dilution	
Water Temp	bF IL	Time (min)	00
Water Level	LoLE	Water Temp	
Supply	SUP02	Water Level	
Temp	00F	Supply	
Spin (sec)	60	Temp	
		Spin (sec)	
Fill 1		Fill 5	
Spray/Dilution		Spray/Dilution	
Time (min)	02	Time (min)	00
Water Temp	bF IL	Water Temp	
Water Level	h ILE	Water Level	
Supply	SUP02	Supply	
Temp	00F	Temp	
Spin (sec)	60	Spin (sec)	
Fill 2		Fill 6	
Spray/Dilution		Spray/Dilution	
Time (min)	02	Time (min)	02
Water Temp	cF IL	Water Temp	cF IL
Water Level	h ILE	Water Level	h ILE
Supply	SUP0	Supply	SUP3
Temp	00F	Temp	00F
Spin (sec)	60	Final Spin (min)	05

Factory Programs

Hot Wash Normal			
Program Number:	3		
Segment	Detail	Segment	Detail
Prewash		Fill 3	
Prewasy/Flush		Spray/Dilution	
Time (min)	05	Time (min)	00
Water Temp	hF IL	Water Temp	
Water Level	h ILE	Water Level	
Supply	SUP 1	Supply	
Temp	00F	Temp	
Spin (sec)	0	Spin (sec)	
Wash		Fill 4	
Time (min)	08	Spray/Dilution	
Water Temp	hF IL	Time (min)	00
Water Level	LoLE	Water Temp	
Supply	SUP2	Water Level	
Temp	00F	Supply	
Spin (sec)	60	Temp	
		Spin (sec)	
Fill 1		Fill 5	
Spray/Dilution		Spray/Dilution	
Time (min)	02	Time (min)	00
Water Temp	bF IL	Water Temp	
Water Level	h ILE	Water Level	
Supply	SUP0	Supply	
Temp	00F	Temp	
Spin (sec)	60	Spin (sec)	
Fill 2		Fill 6	
Spray/Dilution		Spray/Dilution	
Time (min)	02	Time (min)	02
Water Temp	cF IL	Water Temp	bF IL
Water Level	h ILE	Water Level	h ILE
Supply	SUP0	Supply	SUP3
Temp	00F	Temp	00F
Spin (sec)	60	Final Spin (min)	05

Factory Programs

Rinse & Spin			
Program Number:	6		
Segment	Detail	Segment	Detail
Prewash		Fill 3	
Prewasy/Flush		Spray/Dilution	
Time (min)	00	Time (min)	00
Water Temp		Water Temp	
Water Level		Water Level	
Supply		Supply	
Temp		Temp	
Spin (sec)		Spin (sec)	
Wash		Fill 4	
Time (min)	00	Spray/Dilution	
Water Temp		Time (min)	00
Water Level		Water Temp	
Supply		Water Level	
Temp		Supply	
Spin (sec)		Temp	
		Spin (sec)	
Fill 1		Fill 5	
Spray/Dilution		Spray/Dilution	
Time (min)	00	Time (min)	00
Water Temp		Water Temp	
Water Level		Water Level	
Supply		Supply	
Temp		Temp	
Spin (sec)		Spin (sec)	
Fill 2		Fill 6	
Spray/Dilution		Spray/Dilution	
Time (min)	00	Time (min)	02
Water Temp		Water Temp	cF IL
Water Level		Water Level	rdLE
Supply		Supply	SUPO
Temp		Temp	00F
Spin (sec)		Final Spin (min)	05

Factory Programs

Reclaim			
Program Number:	7		
Segment	Detail	Segment	Detail
Prewash		Fill 3	
Prewasy/Flush		Spray/Dilution	
Time (min)	20	Time (min)	02
Water Temp	hF iL	Water Temp	bF iL
Water Level	LoLE	Water Level	h iLE
Supply	SUP4	Supply	SUP0
Temp	00F	Temp	00F
Spin (sec)	60	Spin (sec)	60
Wash		Fill 4	
Time (min)	02	Spray/Dilution	
Water Temp	hF iL	Time (min)	02
Water Level	LoLE	Water Temp	bF iL
Supply	SUP0	Water Level	h iLE
Temp	00F	Supply	SUP0
Spin (sec)	60	Temp	00F
		Spin (sec)	60
Fill 1		Fill 5	
Spray/Dilution		Spray/Dilution	
Time (min)	02	Time (min)	00
Water Temp	hF iL	Water Temp	
Water Level	LoLE	Water Level	
Supply	SUP0	Supply	
Temp	00F	Temp	
Spin (sec)	60	Spin (sec)	
Fill 2		Fill 6	
Spray/Dilution		Spray/Dilution	
Time (min)	15	Time (min)	04
Water Temp	hF iL	Water Temp	bF iL
Water Level	LoLE	Water Level	h iLE
Supply	SUP 1	Supply	SUP3
Temp	00F	Temp	00F
Spin (sec)	60	Final Spin (min)	05

Factory Programs

Turnout Gear - Firehouse Duty Machines Only

Program Number 8

Segment	Detail	Segment	Detail
Prewash		Fill 3	
Prewasy/Flush	PrEu	Spray/Dilution	
Time (min)	00	Time (min)	00
Water Temp		Water Temp	
Water Level		Water Level	
Supply		Supply	
Temp		Temp	
Spin (sec)		Spin (sec)	
Wash		Fill 4	
Time (min)	08	Spray/Dilution	
Water Temp	cF ILL	Time (min)	00
Water Level	LoLE	Water Temp	
Supply	SUP 1	Water Level	
Temp	00F	Supply	
Spin (sec)	00	Temp	
		Spin (sec)	
Fill 1		Fill 5	
Spray/Dilution		Spray/Dilution	
Time (min)	02	Time (min)	00
Water Temp	cF ILL	Water Temp	
Water Level	h ILE	Water Level	
Supply	SUP0	Supply	
Temp	00F	Temp	
Spin (sec)	00	Spin (sec)	
Fill 2		Fill 6	
Spray/Dilution		Spray/Dilution	
Time (min)	02	Time (min)	02
Water Temp	cF ILL	Water Temp	cF ILL
Water Level	h ILE	Water Level	h ILE
Supply	SUP0	Supply	SUP0
Temp	00F	Temp	00F
Spin (sec)	00	Final Spin (min)	500