Washer-Extractor

Cabinet Hardmount Quantum Touch Vend Control Refer to Page 13 for Model Identification



Original Instructions Keep These Instructions for Future Reference. CAUTION: Read the instructions before using the machine. (If this machine changes ownership, this manual must accompany machine.)



www.alliancelaundry.com

Part No. F8669401ENR4 September 2019



WARNING

Machine installations must comply with minimum specifications and requirements stated in the applicable Installation Manual, any applicable municipal building codes, water supply requirements, electrical wiring regulations and any other relevant statutory regulations. Due to varied requirements and applicable local codes, this machine must be installed, adjusted, and serviced by qualified maintenance personnel familiar with applicable local codes and the construction and operation of this type of machinery. They must also be familiar with the potential hazards involved. Failure to observe this warning may result in personal injury, property damage, and/or equipment damage, and will void the warranty.

W820

NOTE: The WARNINGS and IMPORTANT SAFETY IN-STRUCTIONS appearing in this manual are not meant to cover all possible conditions and situations that may occur. Common sense, caution, and care must be exercised when installing, maintaining, or operating the machine.

Any problems or conditions not understood should be reported to the dealer, distributor, service agent or the manufacturer.

Regulatory Statements

PRODUCT COMPLIANCE

Users of this product are cautioned not to make modifications or changes that are not approved by Alliance Laundry Systems, LLC. Doing so may void the compliance of this product with applicable laws and regulatory requirements and may result in the loss of the user's authority to operate the equipment.

UNITED STATES

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions; (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the radio or television receiving antenna.
- Increase the separation between the computer equipment or receiver.
- Connect the equipment into an outlet on a circuit different from that to which the radio or television receiver is connected.
- Consult the dealer or experienced radio television technician for help.



CAUTION

To comply with the limits of the Class B device, pursuant to Part 15 of the FCC Rules, this device is to comply with Class B limits. All peripherals must be shielded and grounded. Operation with non-certified peripherals or non-shielded cables is likely to result in interference and reception of the device.

W1004

Radiation Exposure Statement: This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. The radio installed in this equipment and is intended to operate with minimum distance 20cm between the radiator and your body.

Limited Channels Fixed For Use In USA: IEEE 802.11b or 802.11g or 802.11n(HT20) operation of this product in the U.S. is firmware-limited to Channel 1 through 11.

CANADA - CAN ICES-3(B)/NMB-3(B)

This device contains license-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's license-exempt RSS(s) standards. Operation is subject to the following two conditions:

- This device may not cause interference.
- This device must accept any interference, including interference that may cause undesired operation of the device.

Radiation Exposure Statement: This equipment complies with Innovation, Science and Economic Development Canada's radiation exposure limits set forth for in RSS-102. The radio installed in this equipment is installed and is intended to operate with minimum distance 20cm between the radiator and your body.

EUROPE

Products bearing the CE mark comply with the following EU directives:

- EMC Directive 2014/30/EU
- Low Voltage Directive 2014/35/EU
- Ecodesign Directive 2009/125/EC
- RoHS Directive 2011/65/EU

If the product has telecommunications functionality, it also complies with the requirements of the following EU directive:

• Radio Equipment Directive 2014/53/EU

Compliance with these Directives implies conformity to harmonized European standards that are noted in the EU Declaration of Conformity which is available upon request.

Alliance Laundry Systems products comply with the requirement of Article 10(2) as it can be operated in at least one Member State as examined and the product is compliant with Article 10(10) as it has no restrictions on putting into service in all EU member states.

This device contains a 2.4GHz transceiver, intended for indoor use only in all EU member states, EFTA states, and Switzerland. Attention has been given to allowed operational frequencies. For detailed information concerning installations in France, the user should contact the national spectrum authority in France (http:// www.arcep.fr/)

Be aware that outdoor installations require special attention and will only be handled by trained and qualified installation personnel. No one from the general-public is permitted to install wireless products outdoors when external antennas, power and grounding must be installed for use.

AUSTRALIA/NEW ZEALAND

The radio in this equipment complies with and is certified to the Australian and New Zealand regulatory requirements.

BRAZIL ANATEL

This equipment operates in secondary status, that is, it is not entitled to protection against harmful interference, even for type stations, and cannout cause interference to systems operating in primary status.

CHINA SRRC

The radio device has recieved certification of conformance in accordance with the People's Republic of China State Radio Regulation Committee (SRRC) certification scheme. Integrations of this radio into a final product does not require additional radio certification provided installation instructions are followed. No changes are authorized to the radio or the antenna of the approved device.

JAPAN

This product is equipped with a certified wireless device pursuant to Article 2-1-19 of the Certification Ordinance. No changes are authorized to the radio or the antenna of the approved device.

MEXICO IFETEL

"The operation of this equipment is subject to the following two conditions: (1) it is possible that this equipment or device does not cause harmful interference and (2) this equipment or device must accept any interference, including that which may cause its unwanted operation."

SOUTH KOREA (KC)

The radio device has received certification of conformance in accordance with the Radio Waves Act. Integration of this radio into a final product does not require additional radio certification provided installation instructions are followed. No changes are authorized to the radio or the antenna of the approved device.

TAIWAN

The information in this section applies to products bearing the Taiwan National Communications Commission mark:

This telecom equipment has complied with NCC regulations.

According to "Administrative Regulations of Low Power Radio Waves Radiated Devices:

Article 12 The low-power radio-frequency devices must not be altered by changing the frequency, enhancing emission power, adding external antenna, and modification of original design characteristic as well as function.

Article 14 The operation of the low-power radio-frequency devices is subject to the conditions that no harmful interference is caused. The user must stop operating the device immediately should harmful interference is caused and shall not resume until the condition causing the harmful interference has been corrected.

Moreover, the interference must be accepted that may be caused by the operation of an authorized communications, or ISM equipment. (1) Precautions (marked in the product manual and on outer packaging)

THAILAND

The information in this section applies to products approved by the Thailand National Communications Commission:

These telecommunication and device are compliance with the requirements of National Broadcasting and Telecommunication Commission.



Figure 1

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Safety Information

Explanation of Safety Messages

Precautionary statements ("DANGER," "WARNING," and "CAUTION"), followed by specific instructions, are found in this manual and on machine decals. These precautions are intended for the personal safety of the operator, user, servicer, and those maintaining the machine.



DANGER

Indicates an imminently hazardous situation that, if not avoided, will cause severe personal injury or death.



WARNING

Indicates a hazardous situation that, if not avoided, could cause severe personal injury or death.



CAUTION

Indicates a hazardous situation that, if not avoided, may cause minor or moderate personal injury or property damage.

Additional precautionary statements ("IMPORTANT" and "NOTE") are followed by specific instructions.

IMPORTANT: The word "IMPORTANT" is used to inform the reader of specific procedures where minor machine damage will occur if the procedure is not followed.

NOTE: The word "NOTE" is used to communicate installation, operation, maintenance or servicing information that is important but not hazard related.

Important Safety Instructions



WARNING

To reduce the risk of fire, electric shock, serious injury or death to persons when using your washer, follow these basic precautions:

W023

- Read all instructions before using the washer.
- Install the washer according the INSTALLATION instructions. Refer to the EARTH/GROUND instructions in the IN-

STALLATION manual for the proper earth/ground connection of the washer. All connections for water, drain, electrical power and earth/ground must comply with local codes and be made by licensed personnel when required. It is recommended that the machine be installed by qualified technicians.

- Do not install or store the washer where it will be exposed to water and/or weather.
- To prevent fire and explosion, keep the area around machine free from flammable and combustible products. Do not add the following substances or textiles containing traces of the following substances to the wash water: gasoline, kerosene, waxes, cooking oils, vegetable oils, machine oils, dry-cleaning solvents, flammable chemicals, thinners, or other flammable or explosive substances. These substances give off vapors that could ignite, explode or cause the fabric to catch fire by itself.
- Under certain conditions, hydrogen gas may be produced in a hot water system that has not been used for two weeks or more. HYDROGEN GAS IS EXPLOSIVE. If the hot water system has not been used for such a period, before using a washing machine or combination washer-dryer, turn on all hot water faucets and let the water flow from each for several minutes. This will release any accumulated hydrogen gas. The gas is flammable, do not smoke or use an open flame during this time.
- To reduce the risk of an electric shock or fire, DO NOT use an extension cord or an adapter to connect the washer to the electrical power source.
- Do not allow children to play on or in the washer. Close supervision of children is necessary when the washer is used near children. This appliance is not intended for use by young children or infirm persons without supervision. Young children should be supervised to ensure that they do not play with the appliance. This is a safety rule for all appliances.
- DO NOT reach and/or climb into the tub or onto the washer, ESPECIALLY if the wash drum is moving. This is an imminently hazardous situation that, if not avoided, will cause severe personal injury or death.
- Never operate the washer with any guards, panels and/or parts removed or broken. DO NOT bypass any safety devices or tamper with the controls.
- Use washer only for its intended purpose, washing textiles. Never wash machine parts or automotive parts in the machine. This could result in serious damage to the basket or tub.
- Use only low-sudsing, no-foaming types of commercial detergent. Be aware that hazardous chemicals may be present. Wear hand and eye protection when adding detergents and chemicals. Always read and follow manufacturer's instructions on packages of laundry and cleaning aids. Heed all warnings or precautions. To reduce the risk of poisoning or

Safety Information

chemical burns, keep them out of the reach of children at all times [preferably in a locked cabinet].

- Do not use fabric softeners or products to eliminate static unless recommended by the manufacturer of the fabric softener or product.
- Always follow the fabric care instructions supplied by the textile manufacturer.
- Loading door MUST BE CLOSED any time the washer is to fill, tumble or spin. DO NOT bypass the loading door switch by permitting the washer to operate with the loading door open. Do not attempt to open the door until the washer has drained and all moving parts have stopped.
- Be aware that hot water is used to flush the supply dispenser. Avoid opening the dispenser lid while the machine is running.
- Do not attach anything to the supply dispenser's nozzles, if applicable. The air gap must be maintained.
- Do not operate the machine without the water reuse plug or water reuse system in place, if applicable.
- Be sure water connections have a shut-off valve and that fill hose connections are tight. CLOSE the shut-off valves at the end of each wash day.
- Keep washer in good condition. Bumping or dropping the washer can damage safety features. If this occurs, have washer checked by a qualified service person.
- DANGER: Before inspecting or servicing machine, power supply must be turned OFF. The servicer needs to wait for at least 5 minutes after turning the power OFF and needs to check for residual voltage with a voltage meter. The inverter capacitor or EMC filter remains charged with high voltage for some time after powering OFF. This is an imminently hazardous situation that, if not avoided, will cause severe personal injury or death.
- Do not repair or replace any part of the washer, or attempt any servicing unless specifically recommended in the user-maintenance instructions or in published user-repair instructions that the user understands and has the skills to carry out. ALWAYS disconnect the washer from electrical, power and water supplies before attempting any service.
- Disconnect the power by turning off the circuit breaker or by unplugging the machine. Replace worn power cords.
- Before the washer is removed from service or discarded, remove the door to the washing compartment.
- Failure to install, maintain, and/or operate this washer according to the manufacturer's instructions may result in conditions which can produce bodily injury and/or property damage.

NOTE: The WARNINGS and IMPORTANT SAFETY IN-STRUCTIONS appearing in this manual are not meant to cover all possible conditions and situations that may occur. Common sense, caution and care must be exercised when installing, maintaining, or operating the washer.

Any problems or conditions not understood should be reported to the dealer, distributor, service agent or the manufacturer.



WARNING

Machine installations must comply with minimum specifications and requirements stated in the applicable Installation Manual, any applicable municipal building codes, water supply requirements, electrical wiring regulations and any other relevant statutory regulations. Due to varied requirements and applicable local codes, this machine must be installed, adjusted, and serviced by qualified maintenance personnel familiar with applicable local codes and the construction and operation of this type of machinery. They must also be familiar with the potential hazards involved. Failure to observe this warning may result in personal injury, property damage, and/or equipment damage, and will void the warranty.

W820

IMPORTANT: Ensure that the machine is installed on a level floor of sufficient strength. Ensure that the recommended clearances for inspection and maintenance are provided. Never allow the inspection and maintenance space to be blocked.



WARNING

Never touch internal or external steam pipes, connections, or components. These surfaces can be extremely hot and will cause severe burns. The steam must be turned off and the pipe, connections, and components allowed to cool before the pipe can be touched.

SW014

NOTE: All appliances are produced according the EMCdirective (Electro-Magnetic-Compatibility). They can be used in restricted surroundings only (comply minimally with class A requirements). For safety reasons there must be kept the necessary precaution distances with sensitive electrical or electronic device(s). These machines are not intended for domestic use by private consumers in the home environment.

Safety Decals

Safety decals appear at crucial locations on the machine. Failure to maintain legible safety decals could result in injury to the operator or service technician.

Use manufacturer-authorized spare parts to avoid safety hazards.

Operator Safety



WARNING

NEVER insert hands or objects into basket until it has completely stopped. Doing so could result in serious injury.

SW012

Machines referred to by model in this manual are intended to be used by the general public in applications such as:

- staff areas in shops, offices, kitchens and other working environments
- by clients in hotels, motels and other residential type environments
- areas for communal use in blocks of flats or in launderettes
- any other similar applications

Installation of these machines must fully conform to the instructions contained in this manual.

The following maintenance checks must be performed daily:

- 1. Verify that all warning labels are present and legible, replace as necessary.
- 2. Check door interlock before starting operation of the machine:
 - a. Attempt to start the machine with the door open. The machine should not start.
 - b. Close the door without locking it and start the machine. The machine should not start.
 - c. Attempt to open the door while a cycle is in progress. The door should not open.

If the door lock and interlock are not functioning properly, disconnect power and call a service technician.

- 3. Do not attempt to operate the machine if any of the following conditions are present:
 - a. The door does not remain securely locked during the entire cycle.
 - b. Excessively high water level is evident.
 - c. Machine is not connected to a properly grounded circuit.

Do not bypass any safety devices in the machine.



WARNING

Operating the machine with severe out-of-balance loads could result in personal injury and serious equipment damage.

W728

Introduction

Model Identification

Information in this manual is applicable to these models:

20 Models						
SCA020VC	SCD020VH	SCE020VV	SCH020VD	SCK020VH	SCL020VV	SCU020VD
SCA020VD	SCD020VL	SCE020VX	SCH020VE	SCK020VL	SCL020VX	SCU020VE
SCA020VE	SCD020VT	SCE020VY	SCH020VF	SCK020VQ	SCL020VY	SCU020VF
SCA020VF	SCD020VQ	SCG020VC	SCH020VH	SCK020VT	SCT020VC	SCU020VH
SCA020VH	SCD020VV	SCG020VD	SCH020VL	SCK020VV	SCT020VD	SCU020VL
SCA020VL	SCD020VX	SCG020VE	SCH020VQ	SCK020VX	SCT020VE	SCU020VT
SCA020VT	SCD020VY	SCG020VF	SCH020VT	SCK020VY	SCT020VF	SCU020VQ
SCA020VQ	SCE020VC	SCG020VH	SCH020VV	SCL020VC	SCT020VH	SCU020VV
SCA020VV	SCE020VD	SCG020VL	SCH020VX	SCL020VD	SCT020VL	SCU020VX
SCA020VX	SCE020VE	SCG020VT	SCH020VY	SCL020VE	SCT020VT	SCU020VY
SCA020VY	SCE020VF	SCG020VQ	SCJ020VV	SCL020VF	SCT020VQ	
SCD020VC	SCE020VH	SCG020VV	SCK020VC	SCL020VH	SCT020VV	
SCD020VD	SCE020VL	SCG020VX	SCK020VD	SCL020VL	SCT020VX	
SCD020VE	SCE020VT	SCG020VY	SCK020VE	SCL020VQ	SCT020VY	
SCD020VF	SCE020VQ	SCH020VC	SCK020VF	SCL020VT	SCU020VC	

30 Models						
SCA030VC SCA030VD SCA030VE SCA030VF SCA030VH SCA030VL SCA030VT SCA030VQ	SCD030VH SCD030VL SCD030VT SCD030VQ SCD030VV SCD030VV SCD030VY SCE030VC	SCE030VV SCE030VX SCE030VY SCG030VC SCG030VD SCG030VE SCG030VF SCG030VH	SCH030VD SCH030VE SCH030VF SCH030VH SCH030VL SCH030VQ SCH030VT SCH030VV	SCK030VF SCK030VH SCK030VL SCK030VQ SCK030VT SCK030VV SCK030VX SCK030VY	SCL030VT SCL030VV SCL030VX SCL030VY SCT030VC SCT030VD SCT030VE SCT030VF	SCU030VC SCU030VD SCU030VE SCU030VF SCU030VH SCU030VL SCU030VT SCU030VQ
SCA030VV SCA030VX SCA030VY SCD030VC SCD030VD SCD030VE SCD030VF	SCE030VD SCE030VE SCE030VF SCE030VH SCE030VL SCE030VT SCE030VQ	SCG030VL SCG030VT SCG030VQ SCG030VV SCG030VX SCG030VY SCH030VC	SCH030VX SCH030VY SCJ030VD SCJ030VV SCK030VC SCK030VD SCK030VE	SCL030VC SCL030VD SCL030VE SCL030VF SCL030VH SCL030VL SCL030VQ	SCT030VH SCT030VL SCT030VT SCT030VQ SCT030VV SCT030VX SCT030VY	SCU030VV SCU030VX SCU030VY

Introduction

40 Models						
SCA040VC	SCE040VE	SCG040VH	SCH040VQ	SCK040VT	SCL040VX	SCU040VC
SCA040VD	SCE040VF	SCG040VL	SCH040VT	SCK040VV	SCL040VY	SCU040VD
SCA040VE	SCE040VH	SCG040VT	SCH040VV	SCK040VX	SCT040VC	SCU040VE
SCA040VF	SCE040VL	SCG040VQ	SCH040VX	SCK040VY	SCT040VD	SCU040VF
SCA040VH	SCE040VT	SCG040VV	SCH040VY	SCL040VC	SCT040VE	SCU040VH
SCA040VL	SCE040VQ	SCG040VX	SCJ040VV	SCL040VD	SCT040VF	SCU040VL
SCA040VT	SCE040VV	SCG040VY	SCK040VC	SCL040VE	SCT040VH	SCU040VT
SCA040VQ	SCE040VX	SCH040VC	SCK040VD	SCL040VF	SCT040VL	SCU040VQ
SCA040VV	SCE040VY	SCH040VD	SCK040VE	SCL040VH	SCT040VT	SCU040VV
SCA040VX	SCG040VC	SCH040VE	SCK040VF	SCL040VL	SCT040VQ	SCU040VX
SCA040VY	SCG040VD	SCH040VF	SCK040VH	SCL040VQ	SCT040VV	SCU040VY
SCE040VC	SCG040VE	SCH040VH	SCK040VL	SCL040VT	SCT040VX	
SCE040VD	SCG040VF	SCH040VL	SCK040VQ	SCL040VV	SCT040VY	

60 Models						
SCA060VC	SCE060VE	SCG060VF	SCH060VL	SCK060VQ	SCL060VV	SCT060VY
SCA060VD	SCE060VF	SCG060VH	SCH060VV	SCK060VT	SCL060VX	SCU060VC
SCA060VE	SCE060VH	SCG060VL	SCH060VQ	SCK060VV	SCL060VY	SCU060VD
SCA060VF	SCE060VL	SCG060VT	SCH060VT	SCK060VX	SCT060VC	SCU060VE
SCA060VH	SCE060VT	SCG060VQ	SCH060VX	SCK060VY	SCT060VD	SCU060VF
SCA060VL	SCE060VQ	SCG060VV	SCH060VY	SCL060VC	SCT060VE	SCU060VH
SCA060VT	SCE060VV	SCG060VX	SCJ060VV	SCL060VD	SCT060VF	SCU060VL
SCA060VQ	SCE060VX	SCG060VY	SCK060VC	SCL060VE	SCT060VH	SCU060VT
SCA060VV	SCE060VY	SCH060VC	SCK060VD	SCL060VF	SCT060VL	SCU060VQ
SCA060VX	SCG060VC	SCH060VD	SCK060VE	SCL060VH	SCT060VT	SCU060VV
SCA060VY	SCG060VX	SCH060VE	SCK060VF	SCL060VL	SCT060VQ	SCU060VX
SCE060VC	SCG060VD	SCH060VF	SCK060VH	SCL060VQ	SCT060VV	SCU060VY
SCE060VD	SCG060VE	SCH060VH	SCK060VL	SCL060VT	SCT060VX	

Introduction

80 Models						
SCA080VC	SCA080VY	SCG080VX	SCH080VV	SCK080VQ	SCT080VL	SCU080VH
SCA080VD	SCG080VH	SCG080VY	SCH080VX	SCK080VT	SCT080VT	SCU080VL
SCA080VE	SCG080VL	SCH080VC	SCH080VY	SCK080VV	SCT080VQ	SCU080VT
SCA080VF	SCG080VT	SCH080VD	SCJ080VV	SCK080VX	SCT080VV	SCU080VQ
SCA080VH	SCG080VQ	SCH080VE	SCK080VC	SCK080VY	SCT080VX	SCU080VV
SCA080VL	SCG080VC	SCH080VF	SCK080VD	SCT080VC	SCT080VY	SCU080VX
SCA080VQ	SCG080VD	SCH080VH	SCK080VE	SCT080VD	SCU080VC	SCU080VY
SCA080VT	SCG080VE	SCH080VL	SCK080VF	SCT080VE	SCU080VD	
SCA080VV	SCG080VF	SCH080VQ	SCK080VH	SCT080VF	SCU080VE	
SCA080VX	SCG080VV	SCH080VT	SCK080VL	SCT080VH	SCU080VF	

S50 (23/23 Kg) Stacked Washer-Ex	tractor/Tumble Dryer
SSG050L	SST050L
SSG050N	SST050N

Serial Plate Location

SCA100VV SCA100VX

SSG030E

SSG030L

SSG030N

- 1. From the System Menu, select DIAGNOSTICS to enter the Diagnostics Menu.
- 2. From the Diagnostics Menu, select MACHINE ID. The MA-CHINE ID display includes the machine's model and serial number.

100 Models						
SCA100VC	SCA100VY	SCG100VX	SCH100VV	SCK100VQ	SCT100VL	SCU100VH
SCA100VD	SCG100VC	SCG100VY	SCH100VX	SCK100VT	SCT100VT	SCU100VL
SCA100VE	SCG100VD	SCH100VC	SCH100VY	SCK100VV	SCT100VQ	SCU100VT
SCA100VF	SCG100VE	SCH100VD	SCJ100VV	SCK100VX	SCT100VV	SCU100VQ
SCA100VH	SCG100VF	SCH100VE	SCK100VC	SCK100VY	SCT100VX	SCU100VV
SCA100VL	SCG100VH	SCH100VF	SCK100VD	SCT100VC	SCT100VY	SCU100VX
SCA100VT	SCG100VL	SCH100VH	SCK100VE	SCT100VD	SCU100VC	SCU100VY
SCA100VQ	SCG100VT	SCH100VL	SCK100VF	SCT100VE	SCU100VD	
SCA100VV	SCG100VQ	SCH100VQ	SCK100VH	SCT100VF	SCU100VE	

SCK100VL

SCT100VH

SCU100VF

S30	(13/13 Kg)	Stacked Washer-Extractor/Tumble Dr	yer
-----	------------	------------------------------------	-----

SCH100VT

SCG100VV

S50 (23/23 Kg) Stacked Washer-Extractor/Tumble Dryer		
SSG050L	SST050L	
SSG050N	SST050N	

SST030E

SST030L

SST030N

AX EXIT Machine ID <

mach			
Alarn	าร		>
Input	s / Outputs		>
Facto	ory Test		Start
Indivi	dual Tests		>
			TMB1880R_SVG
		Figure 2	

Always provide the machine's serial number and model number when ordering parts or when seeking technical assistance. Refer to Figure 3 or Figure 4.



2. Serial Plate on Door Frame

Figure 3



Figure 4

Replacement Parts

If literature or replacement parts are required, contact the source from which the machine was purchased or contact Alliance Laundry Systems at +1 (920) 748-3950 for the name and address of the nearest authorized parts distributor.

Customer Service

For technical assistance, contact your local distributor or contact:

Alliance Laundry Systems Shepard Street P.O. Box 990 Ripon, WI 54971-0990 U.S.A. www.alliancelaundry.com Phone: +1 (920) 748-3121 Ripon, Wisconsin

Preliminary Information

About the Control

The control on the machine is an advanced, graphical, programmable computer that lets the owner control most machine features by interacting with the control.

This control allows the owner to program custom cycles, run diagnostic tests and retrieve audit and error information. Limited programmable options can be programmed manually via the *Settings Menu*. Full programmable options can be programmed via *IR Communications* and *Wi-Fi Communications*.

Machines shipped from the factory have default cycles and wash temperature settings built in. The owner can change the default cycles or any cycle.

IMPORTANT: It is extremely important that the machine has a positive ground and that all mechanical and electrical connections are made before applying power to or operating the machine.

IR Communications

The control has the ability to communicate with a PC with an Ir-DA device running the control software. Devices such as PCs that are IrDA capable (able to transmit information to machine) that have been tested and approved for use with the control software can be used as a tool for managing the machine.

IR Communications Menu



Figure 5

The IR Communications Menu displays while the control is communicating with a PC. The control will return to the previous page when the communication is complete.

Wi-Fi Communications

The control has the ability to connect with the ALS Wi-Fi Network via an internet connection using the network gateway interface device. Connection with the ALS Wi-Fi Network allows the user to program, collect data, and run diagnostics remotely.

Audit Information

The control collects and stores audit information which can be accessed through the touch display, IR communication or Wi-Fi communication. Refer to the *Audit Data Menu* for a list of available audit information.

Using IR communication or Wi-Fi communication, the user can receive audit and program data from the control and send programming data and diagnostic commands to the control.

Special Features

Break-In Alarm

The Break-In Alarm allows the owner to program the machine to set a *Break-In Alarm Error* if the Service Door or Coin Vault is opened without first disabling the alarm.

Cycle Time Display

The *Run Menu* shows the time remaining in the currently running cycle for user convenience.

Cycle Completed Timer

If enabled in programming, a timer begins counting up in the *Cycle Complete Menu* since the cycle ended.

Passcode Security

If enabled in programming, this option allows the owner to require a passcode to gain access to *Rapid Advance Activation*, *Diagnostics Menu*, *Drop Off Mode*, *Lockout Mode*, *Settings Menu*, *Audit Data Menu*, *Reset Menu* and various sub-menus.

To disable passcode protection to the *System Menu*, programming through PC communication is required.

Language Selection

The control contains 34 languages. Once a language is selected, all menus and displays will be shown in the chosen language.

Lucky Cycle

The Lucky Cycle option allows the owner to program the machine to provide a free or reduced vend cycle to users after a programmed number of machine cycles have occurred or on certain dates and times. Refer to *Lucky Cycle Mode* for more information.

Speed Cycle

Speed Cycle allows the owner to program special cycles with a shorter total wash time to save the user time. The owner can program the Speed Cycle with distinct vend prices and functions. Refer to *Speed Cycle* for more information.

Special Vend

The Special Vend option allows the owner to set a special vend price or free vend between specific times of day, days of week, dates, months and years. The owner can program the control for up to eight (8) Special Vends periods. The owner can manually program Special Vend 1 and can only enable or disable Special Vends 2-8. Full programming of all Special Vends requires the use of a PC. Refer to the *System Menu* for manual programming.

Increased Water Levels

Increased water levels is a modifier option that can be enabled/ disabled for the Cycle Modifier 1 and 2 options. Refer to *Globals Menu*. If enabled, a cycle containing Prewash, Wash, or Rinse Fill or Reuse Fill steps would ignore that programmed water level and instead use the Increased Water Level for Prewash, Wash, or Rinse steps.

Increased Spin Speed

Increased Spin Speed is a modifier option that can be enabled/ disabled for the Cycle Modifier 1 and 2 options. Refer to *System Menu*. If enabled, a cycle containing extract steps with the spin step label would ignore the cycle programmed spin speed and instead attempt the Increased Spin Speed parameter's globally programmed value.

Dispense Soap

This option can be programmed for machines that are equipped with supply injection.

When the Supply Injection prompt parameter is enabled, refer to *Settings Menu*, the user will be prompted to accept and pay for external supplies with the start of a cycle. A cycle programmed with external supply signals that would normally trigger during cycle operation would be restricted from activating if the prompt is enabled, unless the feature was accepted and paid for during the prompt at the beginning of the cycle. Cycle execution should halt during this prompt since it is dependent upon water to flush the paid-for chemical into the basket.

Control Identification

Operational Touch Display

The control includes a capacitive touch display with text and icons that are available for the operator to control and manage the machine's operation. The primary icons used for general navigation that are available on most menus and displays are shown in *Table 1*. Additional icons and descriptions are described throughout this manual as needed. Sections of certain menu displays can be swiped to scroll through options.



Figure 6

lcon*		Description
Translate	A	Touch to open the Language Select Panel showing the list of available languages. The default language is at the top of the list. Selecting a different language changes all displays to that language.
Back	↓	Touch to navigate to the previously-displayed menu.

Table 1 continues...

lcon*		Description	
Help	?	Touch to display the <i>Help Menu</i> showing (if programmed in the <i>Settings Menu</i>) staff contact phone number, machine operating instructions, soap dispenser icon key and common questions.	
Wi-Fi Signal Strength	<u>ې</u>	Shows the connectivity status and signal strength of the Wi-Fi connection. This icon is only shown in the <i>System Menu</i> . Touch to access Wi-Fi Settings.	
Directional Arrow	▼	Indicates there is more information than what is visible on the screen.	
*Not all icons are shown on every menu or display.			

Table 1

Operation Modes

In each mode of operation, the user may touch the screen or communicate with the control to change the displayed menu.

Ready Mode

The control is ready for operation in Ready Mode. The control displays the *Approach Page*, if enabled. If there is no user input for 4.25 minutes, the display dims.

Lockout Mode



Figure 7

This feature prevents the machine from being used except by a particular user who has reserved the machine in advance. If a user pays or reserves a machine from a kiosk or central pay system, the machine enters Lockout Mode and the user is given a pass-code to unlock the reserved machine. This guarantees that the user does not need to wait for an available machine or risk that the selected machine is taken after vend is added.

To access the reserved machine, touch EXIT and enter the passcode. If the passcode is entered correctly, the control displays the *Cycle Preset Page*.

If programmed, the machine enters Lockout Mode when the current time falls within the time period set in the Lockout parameters and the machine has either not received any vend or is configured for free vend. If the lockout time occurs during a cycle, the machine waits until the cycle ends, then enters Lockout Mode if the time is still within the programmed time period. The control automatically exits Lockout Mode when the Lockout Duration time has elapsed.

To exit Lockout, send a command via PC connection, program the Lockout Duration to 0, or enter the Lockout Unlock Passcode.

The control limits access to certain features while in Lockout Mode. Audit counters (refer to *Audit Data Menu*), manual programming (refer to *Settings Menu*) and communication via an external device (IR, network, payment system, etc) are available. The control will also display errors as usual. The *Diagnostics Menu* and *Rapid Advance Activation* are not available during Lockout Mode.

Drop Off Mode



Figure 8

This feature allows the owner to limit machine use to an attendant without requiring vend. The attendant accesses the machine by entering the programmed Drop Off Passcode.

To access the machine in Drop Off Mode, touch EXIT and enter the passcode. If the passcode is entered correctly, the control displays the *Cycle Preset*. The machine enters Drop Off Mode when enabled in programming. To exit, disable Drop Off Mode in programming.

The *Diagnostics Menu* and *Rapid Advance Activation* are not available during Drop Off Mode.

Auto-Flush Mode



Figure 9

This feature is used to periodically clean out the basket and dispenser compartments. This option is programmable through a PC connection.

The control enters Auto-Flush Mode on the programmed day and time after the programmed number of cycles have occurred. The door must be closed with no cycle running or vend added. During Auto-Flush Mode, the control locks the door, turns of the pump or opens the gravity drain, turns on the hot water to flush each compartment and ignores all user inputs.

When Auto-Flush is complete, the control unlocks the door and returns to the previous display.

Overflow Mode



Figure 10

The control enters this mode when the control detects the water level is too high. If enabled in programming, the display shows

"Overflow". If disabled, the control does not display the overflow condition.

If overflow occurs during a cycle, the cycle time pauses, water valves and heater outputs turn off and the machine drains until the water level is below the highest programmable water level. If the water level drops below the overflow level within five (5) minutes of first detection and the door is locked, the cycle continues as normal. If the control continues to see an overflow level after five (5) minutes with the door locked, the control enters *Machine Error Mode* with an *Overflow Error (Fatal)*.

If not in a cycle, the machine drains until empty. If the door is open or is unable to lock and the water level does not drop below the overflow level after one (1) minute, the control enters *Machine Error Mode* with an *Overflow Error (Fatal)*.

All vending inputs are ignored during this mode.

Machine Error Mode



Figure 11

The control enters this mode when an error is set. The control displays the error and error information. The owner can enable and disable certain errors and error displays as well as access to clear errors in programming.

A notch appears in the header bar when a non-fatal error is set.

Internal Control Failure

If the control detects an error in its software or hardware, all outputs are turned off and the control displays the failure. If this condition persists after an attempt to restart, then the control must be replaced.

Coast Down Mode



Figure 13

The machine enters Coast Down Mode when an error or power failure occurs during an extract cycle step. This mode allows for adequate time to stop any spinning motion of the basket.

The control shows the Coast Down display with a coast down timer for five (5) minutes. If the control enters Coast Down Mode upon power-up, the length of the power fail is subtracted from the timer. Multiple power cycles will not reset the timer. The control exits Coast Down Mode before the timer expires once the basket stops spinning.

While in Coast Down Mode, the *Settings Menu*, *Language Selection Panel* and *Help Menu* are accessible.

If the control enters Coast Down Mode because of a power failure, the control returns to *Approach Screen* (if enabled) or the *Cycle Preset*. If Coast Down Mode occurred from an error, the control enters *Out of Order Mode*.

Shutdown Mode





The shutdown option allows the owner to program the machine to enter Shutdown Mode for a certain time and date range. The control displays "Unavailable" and ignores all screen touches and vend additions. The *Language Selection Panel*, *Settings Menu* and *Help Menu* are accessible while in Shutdown Mode.

The control enters Shutdown Mode at the start date and time set in programming and takes priority over other modes of operation. The control remains in Shutdown Mode until the end date and time set in programming.

The control cannot enter Shutdown Mode if running a cycle, in *Lockout Mode* or if vend has been added. The control will enter Shutdown Mode once those conditions are cleared.

Out of Order Mode



Figure 15

The owner can activate and deactivate Out of Order Mode through the *Settings Menu* from the *Approach Page* and the *Cycle Preset Page*.

The display shows "Out of Order" and "We apologize for the inconvenience" to show the the machine is unavailable. The machine will accept coins, but the vend does not count toward a cycle. The control does not allow cycles to run in this mode. While in Out of Order Mode, the *Settings Menu*, *Language Selection Panel* and *Help Menu* are accessible.

Menu Navigation

Refer to the following charts for maps of the display menus.

System Menu Navigation

NOTE: Refer to a specific menu section for sub-menus and additional information.



Menu Navigation

Cycle Menus Navigation (Vend Mode)



Opening the Service Door

The service door, or top cover, must be opened to manually program the control. Opening the top cover 3 inches and closing it trips a switch which allows access to various programming options.

NOTE: If the *Break-In Alarm* is enabled in programming, it must be disabled before opening the top cover. For more information on using the *Break-In Alarm*, refer to the instructions included with the external device.

The top cover is located on the top of the machine.

1. Unlock the top cover.

- 2. Slide the top cover forward slightly to move the notches away from the pegs on the front of the cabinet.
- 3. Lift the top cover up. Refer to Figure 16.

After opening and closing the top cover, the operator has 4 minutes and 15 seconds to begin programming. If the correct passcode is not entered in that time, the control will not accept operator programming. Should this happen, open and close the top cover again to trip the switch and allows access to the programming options.





Stacked Washer-Extractor/Tumble Dryer

Open service door and disconnect bullet connector located between the "white/black" and "red/blue" wires for one second, then reconnect.

Opening the Service Door



Figure 17

Machine Cycle Definition and Operation

The control comes programmed with 15 machine cycles. The owner can modify machine cycles or set them to "Unavailable" by manually editing them in the *Settings Menu*, or through PC connection by downloading a modified machine cycle into the control. Machine cycles can be deleted or made "Unavailable" so that they are not visible from the *Cycle Preset* or *Speed Cycle*. New machine cycles can be added and existing cycles can be copied or edited.

Refer to page 27 for an overview of menus.

Machine Cycle Operation

The control runs a cycle step by step in a sequence. If the step is programmed to "On", it is executed and the next step follows until the cycle is complete. Any steps programmed to "Off" are skipped.

At the start of a cycle, the control displays a Cycle Time Countdown. This is the total time of the cycle and and modifiers. The Cycle Time Countdown begins when the cycle starts.

Approach Screen



Figure 18

After power-up, the control automatically enters the Approach Screen (if enabled). If programmed, this menu includes options to access the *Cycle Preset*. Selecting "I'm Ready to Wash" accesses default cycles and default cycle modifiers, selecting "Rinse the Machine" (if availible) accesses the *Pre-Clean (If Available)* cycle and selecting "Speed Cycle" accesses the *Speed Cycle*. Access

to the *Help Menu* (?) and *Language Selection Panel* (

Cycle Preset



Figure 19

The Cycle Preset allows the user to select a preset wash cycle by touching the icon in the preset ribbon. Machine cycles that are programmed to "Unavailable" are not displayed in the Preset Ribbon.

The user can change the programmed water temperature setting for any cycle by touching \bigcirc and \bigcirc on the Temperature Control.

Speed Cycle





Like the *Cycle Preset*, the Speed Cycle modifier allows the user to select a preset wash cycle by touching the icon in the preset ribbon. Speed Cycles are cycles programmed with a shorter total wash time.

The user can change the programmed water temperature setting

for any cycle by touching \bigcirc and \bigcirc on the Temperature Control.

Pre-Clean (If Available)



Figure 21

Pre-Clean allows the user to select a rinse-only cycle to remove any residue from the wash basket before adding laundry. Machine Cycle Definition and Operation

Help Menu



Figure 22

The Help Menu displays over the top of the current menu. If programmed, this menu includes staff contact phone number, machine operating instructions, soap dispenser icon key and common questions.

To access, touch ? in the menu header of any end-user screen.

Touch \times or the masked area to close the menu.

Language Selection Panel





The Language Selection Panel displays over the top of the current menu. This menu allows the user to select a language that will translate all displays, including displays within the System Menu. 34 languages are available. All languages are available from the System Menu. Only languages programmed in the Settings Menu are available when not in System Menu.

To access, touch $\Delta \overline{\mathbf{x}}$ in the menu header of any menu display.

Touch \times or the masked area to close the menu.

Start a Cycle

1. From the Approach Screen, select I'm Ready to Wash, Rinse the Machine or Speed Cycle (refer to Figure 24).



Figure 24

previous menu.

NOTE: Touch 🔄 to make additional changes on a

2. Select a cycle from the cycle options menu Cycle Preset . Select the desired temperature, then touch NEXT (refer to Figure 25).



Figure 25

3. If programmed, select desired options from the Additional Options Menu. The vend price and cycle time changes accordingly. When finished adding options, touch PAY (refer to Figure 26). Additional options are not available on Pre-Clean.



Figure 26

4. The Payment Menu shows the cycle selection summary and vend price total (refer to *Figure 27*). Once the total vend price is entered, the vend price total changes to show START.





NOTE: If the door is open, the *Close Door Menu* shows until the door is closed.

- 5. Touch START to begin the cycle.
- 6. The control displays the *Run Menu* until the cycle is complete.

Close Door Menu



Figure 28

The control displays the Close Door Menu when the loading door is open when starting a cycle or while in a hold step. Close the door to start or resume the cycle.

Run Menu

The Run Menu displays the cycle name, status, temperature, cycle step list and remaining cycle time while the cycle is in process. Refer to *Figure 29*.



Touch и to Rapid Advance.

Touch and hold the Status Ring to pause a cycle. The display changes to the *Cycle Pause Menu*.

The display shows the *Cycle Complete Menu* when the cycle is complete.
Cycle Pause Menu



Figure 30

The Cycle Pause Menu displays when a running cycle is paused in a hold step or by the user. If enabled, the user can pause a cycle by touching the middle of the Cycle Status Ring for five (5) seconds during the first three (3) minutes of a running cycle before the first Fill Step is complete (Rapid Advance Activation must not be active). A cycle can also be paused via PC connection.

Touch "Resume" to resume the current cycle. The display returns to the Run Menu.

AX ? Cycle Open Door Complete Please Remove Your Laundry Completed CHM2095R_SVG

Figure 31

The Cycle Complete Menu displays when the machine reaches the end of a cycle.

The Cycle Complete Menu shows "Cycle Complete" when a cycle completes. If enabled in programming, the display also shows the time since the cycle completion.

The control returns to Approach Page when the user opens the loading door.

Lucky Cycle Mode



Figure 32

When the control rewards a Lucky Cycle, the current Approach

Page menu displays "Lucky Cycle" and/or the 😳 icon. The winning user can select a cycle, add options and add vend (if the cycle is not programmed to free) as usual.

The control triggers a Lucky Cycle and resets the counter once the control runs the programmed number of cycles on a programmed date and time. The control will not reward the winning cycle until either 4.25 minutes have passed since the end of the last cycle or the control displays the winning cycle on the initial vend attempt, depending on programming.

The Lucky Cycle takes priority over Special Vends and Standard Vend pricing. If the user selects a different cycle within the allotted time for a cycle change, the control runs the newly selected cycle. If equipped with a serial payment system, it is up to the payment system to honor or ignore the Lucky Cycle.

Cycle Complete Menu

Manual Programming

Refer to page 26 for an overview of menus.

System Menu



Figure 33

The System Menu allows the user to access RAPID ADVANCE (*Rapid Advance Activation*), CANCEL CYCLE (*Cancel Cycle*), ERROR PRESENT (*Clear Active Error*), PARTIAL VEND PRESENT (*Clear Partial Vend*), ADVANCED INFO (*Advanced Info Menu*), SETTINGS (*Settings Menu*), AUDIT DATA (*Audit Data Menu*), DIAGNOSTICS (*Diagnostics Menu*), SERVICE SCHEDULE (*Service Schedule Menu*) and RESET (*Reset Menu*).

To access the System Menu, press and hold for 3 seconds on the center of the menu header from the display with the service door open and, for coin models, the coin vault closed .

 \checkmark indicates there is more content than fits on the screen. Swipe up or down to see all content.

Touch EXIT to return to the previous screen.

NOTE: When selecting RAPID ADVANCE, DIAGNOS-TICS, RESET or SETTINGS, the *Passcode Menu* will appear first, if programmed to be passcode protected.

Passcode Menu



Figure 34

The owner can program the control to require users to enter a passcode to access sections of the *System Menu*. The control displays the Passcode Menu when entering RAPID ADVANCE (*Rapid Advance Activation*), SETTINGS (*Settings Menu*), DI-AGNOSTICS (*Diagnostics Menu*) or RESET (*Reset Menu*) submenus from the *System Menu*.

- 1. Enter the four (4) digit passcode by touching the numbers on the display.
- 2. Touch SUBMIT on the touchscreen to access the selected *System Menu* sub-menu.

Manual Programming

Save Changes Menu





After modifications are complete, touch EXIT to access the Save Changes Menu.

- Touch SAVE AND EXIT to save changes and exit the current menu.
- Touch EXIT WITHOUT SAVING to discard changes and exit the current menu.
- Touch × to return to the current menu and continue making changes.

Rapid Advance Activation

SYSTEM MENU		A	EXIT
SPECIAL CONTROLS			
Rapid Advance			Activate
Cancel Cycle			Cancel
OTHER OPTIONS			
Advanced Info			>
Settings			>
Audit Data	×		> CHM2097R_SVG
			<u>20071</u> 070



- 1. To access, touch and hold the center of the menu header on the display with the service door open and, for coin models, the coin vault closed. The control enters the *System Menu*.
- 2. Touch Activate next to RAPID ADVANCE.
- 3. If the option is passcode protected in programming, enter the passcode in the *Passcode Menu*. Activate changes to "Active" to indicate the Rapid Advance option is active.
- 4. When finished activating Rapid Advance, touch EXIT to exit the *System Menu*.
- 5. ADVANCE → shows in the lower right corner of the *Run Menu*. Touch → to advance to the next cycle step.





Cancel Cycle

SYSTEM MENU	Ş	A	EXIT
SPECIAL CONTROLS			
Rapid Advance			Activate
Cancel Cycle			Cancel
OTHER OPTIONS			
Advanced Info			>
Settings			>
Audit Data			> CHM2097R_SVG

Figure 38

- 1. To access, touch and hold the center of the menu header on the display with the service door open and, for coin models, the coin vault closed. The control enters the *System Menu*.
- 2. Touch CANCEL next to CANCEL CYCLE to end the cycle and hide the option.
- 3. When finished, touch EXIT to exit the System Menu.

Manual Programming

Clear Active Error

SYSTEM MENU	🗢 🖉 exit
SPECIAL CONTROLS	
Rapid Advance	Activate
Error Present	Frame Balance Switch Error Clear
OTHER OPTIONS	
Settings	>
Audit Data	>
Diagnostics	CHM2103R_SVC



- 1. To access, touch and hold the center of the menu header on the display with the service door open and, for coin models, the coin vault closed. The control enters the *System Menu*.
- 2. Touch Clear next to ERROR PRESENT to clear the error. This option only shows if errors are present.
- 3. When finished clearing the error, touch EXIT to exit the *System Menu*.

Clear Partial Vend

SYSTEM MENU		A	EXIT
SPECIAL CONTROLS			
Rapid Advance			Activate
Partial Vend Present			Clear
OTHER OPTIONS			
Settings			>
Audit Data			>
Diagnostics	~		
			CHIVIZ 104R_SVG



- 1. To access, touch and hold the center of the menu header on the display with the service door open and, for coin models, the coin vault closed. The control enters the *System Menu*.
- 2. Touch Clear next to PARTIAL VEND PRESENT to clear the entered vend and hide the option.

NOTE: Any cleared vend will be added to the *Audit Data Menu*.

3. When finished clearing the vend, touch EXIT to exit the *System Menu*.

Change Vend Price





- 1. To access, touch and hold the center of the menu header on the display with the service door open and, for coin models, the coin vault closed. The control enters the *System Menu*.
- 2. Touch SETTINGS, then VEND SETTINGS and navigate to Vend Prices.
- 3. Touch the vend price next to the desired cycle to change.
- 4. Touch "C" to clear the current vend price.
- 5. Enter the new vend price using the keypad. Touch SUBMIT.
- 6. When finished changing the cycle price, touch EXIT to exit the *System Menu*.
- 7. Touch SAVE AND EXIT.

Settings Menu

< SETTINGS	ş	AX	EXIT
Vend Settings			>
Basic Settings			>
Machine Settings			>
Cycle Settings			>
			CHM2107R SV

Figure 42

The Settings Menu allows the owner to adjust the global settings of the control. Refer to *Table 2*, *Table 3*, *Table 4* and *Table 5* for setting options in each sub-menu.

- 1. To access, touch and hold the center of the menu header on the display with the service door open and, for coin models, the coin vault closed. The control enters the *System Menu*.
- 2. Touch SETTINGS from the display to enter the Settings Menu.
- 3. When finished making changes, touch SETTINGS to return to the *System Menu* or EXIT to exit the *System Menu*.

Vend Settings

Default values marked as * are customized at the factory according to the machine's specific market and model.

VEND SETTINGS				
Display	Description	Default		
Currency	Set the monetary configuration on the display.			
Monetary Unit 1				
Symbol				
Select One	No Symbol	*		
	\$ Dollar			
	£ Pound			
	¥ Yen			
	₩ Won			
	€ Euro			
	£ Turkish Lira			
	Ruble			
	Ft Forint			
	Kč Koruna			
	Kr Krona			
	Kn Kuna			
	R Rand			
	R\$ Real			
	Tk Token			
	Zł Złoty			
Symbol Placement	Before/After	*		
Vend Price Separator	00000	*		
	0000.0			
	000.00			
	00.000			
	0000,0			
	000,00			
	00,000			
Preview	Preview the currency configuration.	-		

VEND SETTINGS						
	Display			Description	Default	
Payment	Payment Settings			Set the payment method.		
	Enable	Types				
	Coin			Enable/Disable	*	
		Coin Options		Single/Dual/Electronic	*	
		Coin Values			-	
		Coin 1 Value		1 - 65535	*	
		Coin 2 Value		1 - 65535	*	
		Electronic Dro	op(s) Display Configuration			
	Displayed Values - Cur- rency 1			If set to 1-4, coins show as currency. If set to 5, 1-5 show as tokens.		
			Number of Coins	1-5	*	
			Coin 1-5	Blank/Token, 1-65535	*	
	Card Re	ader		Enable/Disable	*	
	Kiosk			Enable/Disable, 0-255	*	
	Mobile			Enable/Disable	*	
	Bill			Enable/Disable	*	
	Serial /	Pulse Interface	2			
	Serial Payment System			Enable/Disable	*	
	Start Pulse Mode			Disabled/Single Pulse/Multiple Pulses	*	
	Start Pu	lse Value		1-65535	*	
Vend Pri	ice Displa	y Override		Enable/Disable	Disable	
Vend Pri	ices			Set the vend price for each cycle.		

VEND SETTINGS					
Display	Description	Default			
Cycles					
Normal	0-65535	200			
Synthetics	0-65535	200			
Delicates	0-65535	200			
Colors	0-65535	200			
Whites	0-65535	200			
Mix	0-65535	200			
Woolens	0-65535	200			
Delicates	0-65535	200			
Bedding	0-65535	200			
Hot Wash	0-65535	200			
Warm Wash	0-65535	200			
Cotton	0-65535	200			
High Speed Spin	0-65535	200			
Pre-Clean (if availible)	0-65535	200			
Custom Cycle	0-65535	200			
Vend Price Modifiers	Set the vend price for each modifier.				
Bundles	•				
Medium Soil	0-65535	50			
Deluxe Wash					
Custom Bundle 1					
Heavy Soil	0-65535	50			
Ultra Wash					
Custom Bundle 2					

	VEND SETTINGS					
	Display	Description	Default			
INDIVI	IDUALS					
Dispens	e Soap	0-65535	50			
Ozone		0-65535	50			
Modifie	r 1	0-65535	50			
Modifie	r 2	0-65535	50			
Water L	evel	0-65535	50			
Extra Ti	me	0-65535	50			
Warm R	inse	0-65535	50			
Spin Sp	eed	0-65535	50			
Speed C	Cycle	0-65535	50			
Temper	ature Adjustments		•			
Warm *		0-65535	50			
Hot **		0-65535	50			
59F [15	C]	0-65535	50			
86F [30	C]	0-65535	50			
104F [4	0C]	0-65535	50			
122F [5	0C]	0-65535	50			
140F [6	0C]	0-65535	50			
194F [9	0C]	0-65535	50			
Cycle Modifier S	ettings	Set cycle overrides for each modifier.				
Modifie	r Bundle Names					
	Select One	Medium Soil, Heavy Soil				
		Deluxe Wash, Ultra Wash				
		Custom Bundle 1, Custom Bundle 2				
Default	Included Modifiers		•			

VEND SETTINGS					
	Displa	у	Description	Default	
Inc	clude Bundle	2	None OR Medium Soil OR Heavy Soil	-	
			None OR Deluxe Wash OR Ultra Wash		
			None OR Custom Bundle 1 OR Custom Bundle 2		
In	dividuals				
Di	ispense Soap		Enable/Disable	Enable	
Oz	zone		Enable/Disable	Enable	
M	odifier 1 *		Enable/Disable	Enable	
M	odifier 2 **		Enable/Disable	Enable	
Wa	ater Level		Enable/Disable	Enable	
Ex	xtra Time		Enable/Disable	Enable	
Wa	arm Rinse		Enable/Disable	Enable	
Sp	oin Speed		Enable/Disable	Enable	
Sp	beed Cycle		Enable/Disable	Enable	
Bundles					
Medium S	oil Options		Enable/Disable	-	
Deluxe Wa	ash Options				
Custom Bu	undle 1 Optio	ons			
Di	isplay Name		Keypad (20 characters)	"Custom 2"	
De	escription		Keypad (20 characters)	"Custom 2"	
In	cluded Mod	ifiers		_	
M	odifier 1 *		Enable/Disable	Disable	
M	odifier 2 **		Enable/Disable	Disable	
Wa	ater Level		Enable/Disable	Disable	
Ex	xtra Time		Enable/Disable	Disable	
		Extra Wash Time	0-15	2	
		Extra Rinse Time	0-15	2	
Wa	arm Rinse		Enable/Disable	Disable	
Sp	oin Speed		Enable/Disable	Disable	

VEND SETTINGS					
	Displa	у	Description	Default	
Heavy S	Heavy Soil Options		Enable/Disable	-	
Ultra Wa	ash Options				
Custom	Bundle 2 Opti	ons			
]	Display Name		Keypad (20 characters)	"Custom 2"	
]	Description		Keypad (20 characters)	"Custom 2"	
	Included Mod	lifiers			
	Modifier 1 *		Enable/Disable	Disable	
	Modifier 2 **		Enable/Disable	Disable	
[Water Level		Enable/Disable	Disable	
	Extra Time		Enable/Disable	Disable	
		Extra Wash Time	0-15	4	
		Extra Rinse Time	0-15	4	
, ,	Warm Rinse		Enable/Disable	Disable	
	Spin Speed		Enable/Disable	Disable	
Individua	als				
Dispense	Soap		Enable/Disable	-	
Ozone			Enable/Disable	-	
Modifier	1 *		Enable/Disable	-	
Modifier 2	2 **		Enable/Disable	-	
Water Lev	vel		Enable/Disable	-	
Extra Tim	ne		Enable/Disable	-	
]	Extra Wash Ti	me	0-15	-	
]	Extra Rinse Ti	me	0-15	-	
Warm Rin	ise		Enable/Disable	-	
Spin Spee	ed		Enable/Disable	-	
Speed Cyc	Speed Cycle		Enable/Disable	-	
Modifier	Settings				
Water Lev	vel				
	Prewash / Was	h	1-30/Low/Medium/High	-	
	Rinse		1-30/Low/Medium/High	-	

VEND SETTINGS					
Display	Description	Default			
Spin Speed	Very Low/Low/Medium/High/Very High/Ultra High/Custom RPM or g-force	-			
Lucky Cycle	Set lucky cycle parameters.				
Days Enabled	Sunday-Saturday	None			
Number of Cycles Between	1-255	50			
Display Option	After Input/After Delay	After Input			
Active Dates					
Start Time	0:00-23:59	0:00			
Length	1-24 hours	24			
Active Dates					
Limited Dates	Enable/Disable	Disable			
Start Month	1-12/Disable	Disable			
Start Date	1-31/Disable	Disable			
End Month	1-12/Disable	Disable			
End Date	1-31/Disable	Disable			
Limited Annually	Enable/Disable	Disable			
Start Year	'00-'99/Disable	Disable			
End Year	'00-'99/Disable	Disable			
Special Vend	Set parameters for special vend time slots.				
Special Vend 1	Enable/Disable	Disable			

VEND SETTINGS						
Display			Description	Default		
	Days Enabled		Sunday-Saturday	None		
	Active Times		•	•		
	Start Time		0:00-23:59	0:00		
	Length		1-24 hours	1		
	Active Dates		•	•		
	Limited Dates	5	Enable/Disable	Disable		
	Start Month		January-December/Disable	Disable		
	Start Date		0-31	0		
	End Month		January-December/Disable	Disable		
	End Date		0-31	0		
	Repeat Annua	ılly	Enable/Disable	Disable		
	Start Year		0-99	0		
	End Year		0-99	0		
	Settings					
	Special Vend	1 Prices				
		Cycles				
		Normal	0-65535	0		
		Synthetics	0-65535	0		
		Delicates	0-65535	0		
		Colors	0-65535	0		
		Whites	0-65535	0		
		Mix	0-65535	0		
		Woolens	0-65535	0		
		Delicates	0-65535	0		
		Bedding	0-65535	0		
		Hot Wash	0-65535	0		
		Warm Wash	0-65535	0		
		Cotton	0-65535	0		
		High Speed Spin	0-65535	0		
		Pre-Clean (if availible)	0-65535	0		
		Custom Cycle	0-65535	0		

VEND SETTINGS			
Displa	ay	Description	Default
Special Vend	1 Price Modifiers		
	Bundles		
	Medium Soil	0-65535	0
	Deluxe Wash		
	Custom Bundle 1		
	Heavy Soil	0-65535	0
	Ultra Wash		
	Custom Bundle 2		
	Individuals		
	Dispense Soap	0-65535	0
	Ozone	0-65535	0
	Modifier 1 *	0-65535	0
	Modifier 2 **	0-65535	0
	Water Level	0-65535	0
	Extra Time	0-65535	0
	Warm Rinse	0-65535	0
	Spin Speed	0-65535	0
	Speed Cycle	0-65535	0
	Temperature Adjustments	8	
	Warm	0-65535	0
	Hot	0-65535	0
	59°F [15°C]	0-65535	0
	86°F [30°C]	0-65535	0
	104°F [40°C]	0-65535	0
	122°F [50°C]	0-65535	0
	140°F [60°C]	0-65535	0
	194°F [90°C]	0-65535	0
Special Vend	1 Modifier Settings		
Special Vend 1 Default Included Modifiers			

VEND SETTINGS				
Display			Description	Default
		Include Bundle	Medium Soil and Heavy Soil	-
			Deluxe Wash and Ultra Wash	
			Custom Bundle 1 and Custom Bundle 2	
		Individuals		
	Ī	Dispense Soap	Enable/Disable	-
	Ī	Ozone	Enable/Disable	-
		Modifier 1 *	Enable/Disable	-
		Modifier 2 **	Enable/Disable	-
		Water Level	Enable/Disable	-
		Extra Time	Enable/Disable	-
		Warm Rinse	Enable/Disable	-
		Spin Speed	Enable/Disable	-
		Speed Cycle	Enable/Disable	-
	Medium	n Soil Options		-
	Deluxe	Wash Options		
	Custom	Bundle 1 Options		
		Included Modifie	rs	-
		Modifier 1 *	Enable/Disable	-
		Modifier 2 **	Enable/Disable	-
		Water Level	Enable/Disable	-
		Extra Time	Enable/Disable	-
		Warm Rinse	Enable/Disable	-
		Spin Speed	Enable/Disable	-
	Heavy S	Soil Options		-
	Ultra W	ash Options		
	Custom	Bundle 2 Options		

VEND SETTINGS						
	Display				Description	Default
				Included Modifie	ers	
				Modifier 1 *	Enable/Disable	-
				Modifier 2 **	Enable/Disable	-
				Water Level	Enable/Disable	-
				Extra Time	Enable/Disable	-
				Warm Rinse	Enable/Disable	-
				Spin Speed	Enable/Disable	-
			Individu	ials	•	-
			Dispense	e Soap	Enable/Disable	-
			Ozone		Enable/Disable	-
			Modifier	1 *	Enable/Disable	-
			Modifier	2 **	Enable/Disable	-
			Water Le	evel	Enable/Disable	-
			Extra Tii	me	Enable/Disable	-
			Warm Ri	inse	Enable/Disable	-
			Spin Spe	eed	Enable/Disable	-
			Speed C	ycle	Enable/Disable	-
		Added Wash	Time		0-10 minutes	
		Subtracted Wa	ash Time		0-10 minutes	
		Extract Speed	l Limit		Very Low/Low/Medium/High/Very High/Ultra High/Custom RPM or g-force	
	Special	Vend 2			Enable/Disable	Disable
	Special	Vend 3			Enable/Disable	Disable
	Special	Vend 4			Enable/Disable	Disable
	Special	Vend 5			Enable/Disable	Disable
	Special	Vend 6			Enable/Disable	Disable
	Special	Vend 7			Enable/Disable	Disable
	Special	Vend 8			Enable/Disable	Disable
Pre-Clea	an Cycle I	nterval (if avail	lible)		No limit/1-127	2
* Drow	ach hy da	fault				

* Prewash by default.

** Extra Rinse by default.

Basic Settings

BASIC SETTINGS					
Display Description Default					
Language Settings	Language Settings				
Default Language Set the language that appears on all displays by default.					

BASIC SETTINGS				
Display	Description	Default		
Select One	English	English		
	Español (España)			
	Español (Colombia)			
	Français			
	简体中文			
	繁體中文			
	Русский			
	Deutsch			
	日本語			
	Italiano			
	Portuguêse (Portugal)			
	Portuguêse (Brasil)			
	한국어			
	Nederlands			
	Čeština			
	Suomi			
	Dansk			
	Svenska			
	Norsk			
	Polsk			
	Slovenščina			
	Română			
	Hrvatski			
	Magyar			
	Latviešu			
	Lietuvių kalba			
	Slovenčina			
	ελληνικά			
	български			
	Türkçe			
	Bahasa Indonesia			
	Bahasa Melayu			
	ภาษาไทย			
	Tiếng Việt			

BASIC SETTINGS					
Display	Display Description Default				
Available Languages	Languages set to "Enable" show in the Language Selection Panel.				
English	Enable/Disable	Enable			
Español (España)	Enable/Disable	Enable			
Español (Colombia)	Enable/Disable	Enable			
Français	Enable/Disable	Enable			
简体中文	Enable/Disable	Enable			
繁體中文	Enable/Disable	Enable			
Русский	Enable/Disable	Enable			
Deutsch	Enable/Disable	Enable			
日本語	Enable/Disable	Enable			
Italiano	Enable/Disable	Enable			
Portuguêse (Portugal)	Enable/Disable	Enable			
Portuguêse (Brasil)	Enable/Disable	Enable			
한국어	Enable/Disable	Enable			
Nederlands	Enable/Disable	Enable			
Čeština	Enable/Disable	Enable			
Suomi	Enable/Disable	Enable			
Dansk	Enable/Disable	Enable			
Svenska	Enable/Disable	Enable			
Norsk	Enable/Disable	Enable			
Polsk	Enable/Disable	Enable			
Slovenščina	Enable/Disable	Enable			
Română	Enable/Disable	Enable			
Hrvatski	Enable/Disable	Enable			
Magyar	Enable/Disable	Enable			
Latviešu	Enable/Disable	Enable			
Lietuvių kalba	Enable/Disable	Enable			
Slovenčina	Enable/Disable	Enable			
ελληνικά	Enable/Disable	Enable			

BASIC SETTINGS				
	Display	Description	Default	
бъл	гарски	Enable/Disable	Enable	
Türl	kçe	Enable/Disable	Enable	
Bah	asa Indonesia	Enable/Disable	Enable	
Bah	asa Melayu	Enable/Disable	Enable	
ภาษ	ิ่⊦าไทย	Enable/Disable	Enable	
Tiếr	ng Việt	Enable/Disable	Enable	
Time and Dat	e	Set the current time, format and daylight saving options.		
Cur	rrent	•		
Clo	ck Time	00:01-23:59	*	
Мог	nth	Jan-Dec	*	
Date	e	1-31	Varies by month	
Yea	r	2000-2099	*	
Sett	tings		•	
Sep	arator Type	(.),(-),(/)	/	
Date	e Format	MMDDYYYY	MMDDYYYY	
		DDMMYYYY		
		YYYYMMDD		
Day	light Saving	Enabled / Disabled	Enable	
•	Start	· ·		
	Start Month	Jan-Dec	3	
	Start Week of Month	1-4	2	
	Start Day of Week	Sunday-Saturday	Sunday	
	Start Hour	0-23	2	
	End	•	•	
	End Month	Jan-Dec	11	
	End Week of Month	1-4	1	
	End Day of Week	Sunday-Saturday	1	
	End Hour	0-23	2	
Temperature	Units	°C/°F	°F	
Speed Units		G-force/RPM	RPM	

BASIC SETTINGS				
Display	Description	Default		
Display Settings	Set display backlight options.			
Screen Saver	Enable/Disable	Disable		
Display Power Save	Enable/Disable	Enable		
Backlight Brightness				
During User Interaction	0-255	230		
While Running	0-255	190		
While Idle	0-255	128		
Audio Signal	Set instances when the machine sounds a tone.			
Button Pressed	Enable/Disable	Enable		
Start Mode / Mimic Quantum	Enable/Disable	Enable		
Serial Vend / Network Vend	Enable/Disable	Enable		
Coin Vend / Card Vend / Start Pulse Vend	Enable/Disable	Enable		
End of Cycle	Enable/Disable	Disable		
Time Display	Set whether the display shows the cycle time.			
Selected Cycle Time	Enable/Disable			
Modifier Times	Enable/Disable			
Running Cycle Remaining Time	Enable/Disable			
Cycle Complete Timer	Enable/Disable	Enable		

Table 3

Machine Settings

Default values marked as * are customized at the factory according to the machine's specific market and model.

MACHINE SETTINGS					
	Displa	ау	Description	Default	
Machine	e Configuration		View the configuration parameters of the ma- chine.		
	Supply Voltage		120VAC/240VAC	*	
	Electric Heat		Enable/Disable	*	
	Steam Heat		Enable/Disable	*	
	Extra Fill Inlet		Enable/Disable	*	
	Auxiliary Fill Valve		Enable/Disable	*	
	Auxiliary Board		Enable/Disable	*	
Approa	ch Screen		Enable/Disable	Enable	
Custom	Approach Message		"EDIT", Keypad	"Washer Ready"	
Errors			Set errors to appear or be hidden on the display.		
	Coin Error		Enable/Disable	Enable	
		Penalty	Enable/Disable	Disable	
		Vend Header Present Error	Enable/Disable	Enable	
	Fill Error		Enable/Disable	Enable	
		Time	2 - 59 minutes	30	
	No Water Flow Error	•	Enable/Disable	Enable	
		Time	1 - 59 minutes	5	
	Too Hot to Drain Error	•	Enable/Disable	Enable	
	Drain Error		Enable/Disable	Enable	
		Time	1 - 59 minutes	15	
	Water Leak Detection E	rror	Enable/Disable	Enable	
		Days Enabled	Sunday - Saturday	All	
		Number of Cycles Be- tween	0-127	10	
		Display Sequence	Enable/Disable	Enable	
	Slow Drain Detection E	rror	Enable/Disable	Disable	
Adjustment		Adjustment	0 - 255 minutes	0	

MACHINE SETTINGS					
	Displa	ау	Description	Default	
	Open Thermistor Error	Display	Enable/Disable	Enable	
	Shorted Thermistor Err	or Display	Enable/Disable	Enable	
	Slow to Heat Error Ala	rm Time	Disable, 1 - 255 minutes	Disable	
	Heater Error		Enable/Disable	Enable	
		Time	1 - 255 minutes	15	
	Non-Fatal Unbalance E	rror	Enable/Disable	Disable	
	Suds Lock Error Displa	ly	Enable/Disable	Disable	
	Overflow Mode Display	у	Enable/Disable	Enable	
	Allow Error Clearing		Enable/Disable	Enable	
Suds Re	moval Routine				
	Display		Enable/Disable	Disable	
	Routines Allowed Per G	Cycle	0 - 10	1	
	Extra Time		Enable/Disable	Enable	
Pocket I	ndicator		Disable, Upper, Lower	Disable	
Heating	Indicator		Enable/Disable	Disable	
Tempera	ature Display		Enable/Disable	Disable	
Target T	emperature Valve Limits				
	Cold Valve(s) Only Ten	nperature Maximum	35°F - 194°F [2°C - 90°C]	35°F [2°C]	
	Hot Valve(s) Only Tem	perature Minimum	35°F - 194°F [2° C - 90°C]	140°F [60°C]	
Connec	tion Settings			·	
IR Acce	SS		Enable/Disable	Enable	
Wi-Fi Se	ettings				
	System Connectivity St	atus		·	
	Hardware				
	MAC Address		XX:XX:XX:XX:XX	-	
IPv4 Addressing			Current source setting.		
		IP Address Source	DHCP/Off/Static	DHCP	
		IP Address	XXX.XXX.XXX.XXX	-	
		Subnet Mask	XXX.XXX.XXX.XXX	-	
		Default Gateway	XXX.XXX.XXX.XXX	-	
DNS Server			XXX.XXX.XXX.XXX	-	

MACHINE SETTINGS					
Display			Description	Default	
	IPv6 Addressing		Current source setting.		
	•	IP Address Source	SLAAC/Off/Static	SLAAC	
		IP Address	0000:0000:0000:0000:0000:0000:0000	-	
		Subnet Prefix Length	0-128	-	
		Default Gateway	0000:0000:0000:0000:0000:0000:0000	-	
		DNS Server	0000:0000:0000:0000:0000:0000:0000	-	
	Security/Connection	·	•		
	SSID		1-32 characters	NULL	
	Security Key		8-63 characters	NULL	
	Maintain Connected Ne	etwork	"Disconnect"		
	Signal Status				
	Signal Level		-XXXdBm		
	Signal Level Ratio		XXX/XXX		
	Signal Noise Level		-XXX		
	RF Channel		XXX	-	
Network	Node Number		1-250		
Modes					
Low Pov	wer / Auto Shutdown				
	Settings				
	Low Power / Auto Shut	down 1	Enable/Disable		
	Low Power / Auto Shut	down 2	Enable/Disable		
	Low Power / Auto Shut	down 3	Enable/Disable		
	Low Power / Auto Shut	down 4	Enable/Disable		
Power F	ail Reset		Enable/Disable	Enable	
Outage Duration Before Reset			0 - 120 minutes	0	
Drop Off Mode			Enable/Disable	Disable	
Out of Order			Enable/Disable	Disable	
Manual	Rapid Advance		Enable/Disable	Enable	
Manual	Diagnostics		Enable/Disable		
Factory	Test Cycle		Enable/Disable		
Output Signals			Set when each output is turned on.		

MACHINE SETTINGS							
	Display Description Default						
Programmable Ou	Programmable Output 1 - 3						
	Select One	Available	-				
		Available with Start					
		Available with End of Cycle					
		Available with Start and End of Cycle					
		Vend is not Satisfied					
		Vend is not Satisfied with End of Cycle					
		Available with Vend					
		Available with Vend and End of Cycle					
		In Use					
		Cycle is Complete					
		Lucky Cycle is Triggered					
		Break-in Alarm is Triggered					
		End of Cycle is Entered					
		Motor is On					

Table 4

Cycle Settings

	CYCLE SETTINGS				
		Displa	y	Description	Default
Default	Cycle			Set the default wash cycle.	
	Select O	ne		Normal	Normal
				Synthetics	
				Delicates	
				Colors	
				Whites	
				Mix	
				Woolens	
				Delicates	
				Bedding	
				Hot Wash	
				Warm Wash	
				Cotton	
				High Speed Spin	
				Pre-Clean (if availible)	
				Custom Cycle	
Cycle Po	ositions			Position 1-15 (select cycles to reposition)	-
Cycle Pr	rogrammiı	ıg		Edit default cycles and create custom cycles by duplicating and editing existing cycles.	
	<selecte< td=""><td>d Cycle></td><td></td><td>Enable/Disable</td><td>-</td></selecte<>	d Cycle>		Enable/Disable	-
				Сору	
				Paste	
		Name (custom	a cycle only)	Edit, Keypad	-
		Description (c	ustom cycle only)	Edit, Keypad	-
		Settings			•
Programmable Cycle Time		e Cycle Time			
			Enabled / Disabled	Enable/Disable	
			Time	1-65535 minutes	-
		User Tempera	ture Override	Set selectable options for users to change water temperatures.	

CYCLE SETTINGS			
Displa	у	Description	Default
	Default Temperature	Select One	-
		Cold	
		Warm	
		Hot	
		No Heat	
		59F [15C]	
		86F [30C]	
		104F [40C]	
		122F [50C]	
		140F [60C]	
		194F [90C]	
	Available Temperatures	Cold	-
		Warm	
		Hot	
		No Heat	
		59F [15C]	
		86F [30C]	
		104F [40C]	
		122F [50C]	
		140F [60C]	
		194F [90C]	
Steps		Edit existing steps within a cycle and create cus- tom steps by duplicating and editing existing steps.	
Step Number		Edit	-
Step Name		Сору	
Step Active S	State	Paste	
Step Label		Insert	
		Delete	

Settings Menu

CYCLE SETTINGS			
Display	Description	Default	
Label	SELECT ONE	-	
	Prewash 1		
	Wash 1		
	Rinse 1		
	Rinse 2		
	Rinse 3		
	Rinse 4		
	Spin		
Туре	SELECT ONE	-	
	Reuse Fill		
	Fill		
	Supply		
	Agitate		
	Soak		
	Cool Down		
	Drain		
	Extract Drain		
	Hold		
	Audio		
State	SELECT ONE	-	
	Always Enabled		
	Enabled for Modifier 1		
	Enabled for Modifier 2		
	Disabled for Speed Cycle		
	Enabled for Ozone		
	Disabled for Ozone		
	Disabled		
Reuse Fill	Set parameters for a reuse fill step.		

CYCLE SETTINGS				
	Displa	ay	Description	Default
		Settings		
		Duration	0:01-255:59	1:00
		Water Level	Global Low, Global Medium, Global High, Over- flow, Custom (1-30)	Global Low
		Valves Allowed	Cold/Cold, Hot/Hot	Cold
		Flush Out	Enable/Disable	Disable
		Basket Rotation	Set basket rotation parameters.	
		Speed	No Rotation, Low Agitate, Normal Agitate, Cus- tom	Normal Agitate
		Rotate Time	3-255 seconds	18
		Pause Time	3-255 seconds	4
		Reversing	Enable/Disable	Enable
		Valve Sets	Set which fill valves are used.	
		Reuse Fill A	Enable/Disable	
		Reuse Fill B	Enable/Disable	
		Fill Valves	Enable/Disable	Enable
		Fill Tub Valves	Enable/Disable	Enable
		Extra Fill Inlet	Enable/Disable	Disable
		Auxiliary Fill	Enable/Disable	Disable
		Other Outputs	Set outputs to turn on external entities (models with auxiliary board).	
		Auxiliary Output I	Enable/Disable	Disable
		Auxiliary Output J	Enable/Disable	Disable
		Auxiliary Output K	Enable/Disable	Disable
		Auxiliary Output L	Enable/Disable	Disable
		Auxiliary Output M	Enable/Disable	Disable
		Auxiliary Output N	Enable/Disable	Disable
	Fill		Set parameters for a fill step.	

CYCLE SETTINGS				
	Displa	ау	Description	Default
		Settings		
		Duration	0:01-255:59	1:00
		Water Level	Global Low, Global Medium, Global High, Over- flow, Custom (1-30)	Global Low
		Allow User Temperature Override	Enable/Disable	Disable
			Global Cold, Global Warm, Global Hot, Custom (35°F - 194°F [2°C - 90°C])	
		Valves Allowed	Cold or Cold, Hot or Hot	Cold
		Flush Out	Enable/Disable	Disable
		Basket Rotation	Set basket rotation parameters.	
		Speed	No Rotation, Low Agitate, Normal Agitate, Cus- tom	Normal Agitate
		Rotate Time	3-255 seconds	18
		Pause Time	3-255 seconds	4
		Reversing	Enable/Disable	
		Valve Sets	Set which fill valves are used.	
		Fill Valves	Enable/Disable	Enable
		Fill Tub Valves	Enable/Disable	Enable
		Extra Fill Inlet	Enable/Disable	Disable
		Auxiliary Fill	Enable/Disable	Disable
		Other Outputs	Set outputs to turn on external entities (models with auxiliary board).	
		Auxiliary Output I	Enable/Disable	Disable
		Auxiliary Output J	Enable/Disable	Disable
		Auxiliary Output K	Enable/Disable	Disable
		Auxiliary Output L	Enable/Disable	Disable
		Auxiliary Output M	Enable/Disable	Disable
		Auxiliary Output N	Enable/Disable	Disable
	Supply		Set parameters for a supply step.	

CYCLE SETTINGS			
Displa	у	Description	Default
	Settings		
	Duration	0:01-255:59	0:30
	Valves Allowed	Cold or Cold, Hot or Hot	Cold
	Delayed Time	0-255 seconds	0
	External Supply Shutoff	Select One	
		After Time	
		Level Reached	
		Load Absorption Algorithm	
	Valve Sets	Set which fill valves are used.	
	Fill Valves	Enable/Disable	Enable
	Fill Tub Valves	Enable/Disable	Enable
	Extra Fill Inlet	Enable/Disable	Disable
	Auxiliary Fill	Enable/Disable	Disable
	Compartments	Set which supply compartments are used.	
	Compartment 1	Enable/Disable	Enable
	Compartment 2	Enable/Disable	Enable
	Compartment 3	Enable/Disable	Enable
	Compartment 4 (NOT available on Stacked Washer-Extractor/Tumble Dryers)	Enable/Disable	Enable
	Supplies	Set outputs to turn on external supply signals.	
	Supply 1	Enable/Disable	Disable
	Supply 2	Enable/Disable	Disable
	Supply 3	Enable/Disable	Disable
	Supply 4	Enable/Disable	Disable
	Supply 5	Enable/Disable	Disable
	Supply 6	Enable/Disable	Disable
	Supply 7	Enable/Disable	Disable
	Supply 8	Enable/Disable	Disable

CYCLE SETTINGS					
Disp	lay	Description	Default		
	Other Outputs	Set outputs to turn on external entities (models with auxiliary board).			
	Auxiliary Output I	Enable/Disable	Disable		
	Auxiliary Output J	Enable/Disable	Disable		
	Auxiliary Output K	Enable/Disable	Disable		
	Auxiliary Output L	Enable/Disable	Disable		
	Auxiliary Output M	Enable/Disable	Disable		
Auxiliary Output N		Enable/Disable	Disable		
Agitate		Set parameters for an agitate step.			

CYCLE SETTINGS			
Displa	у	Description	Default
	Settings	-	
	Duration	0:01-255:59	1:00
	Heat Option	No, To Target, Maintain	No
	Heat Rate	0 (No Rate Restriction), 0.5 – 6.0 (°F/Minutes), (0.3-3.3 °C/Minute)	0
	Refill Option	Enable/Disable	Enable
	Basket Rotation	Set basket rotation parameters.	
	Speed	No Rotation, Low Agitate, Normal Agitate, Cus- tom	Normal Agitate
	Rotate Time	3-255 seconds	18
	Pause Time	3-255 seconds	4
	Reversing	Enable/Disable	Enable
	Drain Settings	Set standards drains and/or reuse system drains.	
	Drain 1	Hold or Evacuate	Hold
	Drain 2	Hold or Evacuate	Hold
	Reuse Drain A	Enable/Disable	Disable
	Reuse Drain B	Enable/Disable	Disable
	External Drain	Enable/Disable	Disable
	Supplies	Set outputs to turn on external supply signals.	
	Supply 1	Enable/Disable	Disable
	Supply 2	Enable/Disable	Disable
	Supply 3	Enable/Disable	Disable
	Supply 4	Enable/Disable	Disable
	Supply 5	Enable/Disable	Disable
	Supply 6	Enable/Disable	Disable
	Supply 7	Enable/Disable	Disable
	Supply 8	Enable/Disable	Disable

CYCLE SETTINGS					
Displa	ау	Description	Default		
	Other Outputs	Set outputs to turn on external entities (models with auxiliary board).			
	Auxiliary Output I	Enable/Disable	Disable		
	Auxiliary Output J	Enable/Disable	Disable		
	Auxiliary Output K	Enable/Disable	Disable		
	Auxiliary Output L	Enable/Disable	Disable		
	Auxiliary Output M	Enable/Disable	Disable		
	Auxiliary Output N	Enable/Disable	Disable		
Soak		Set parameters for a soak step.			

CYCLE SETTINGS			
Displa	у	Description	Default
	Settings	-	
	Duration	0:01-255:59	0:01
	Heat Option	No, To Target, Maintain	No
	Heat Rate	0 (No Rate Restriction), 0.5 – 6.0 (°F/Minutes), (0.3-3.3 °C/Minute)	0
	Refill Option	Enable/Disable	Enable
	Basket Rotation	Set basket rotation parameters.	
	Speed	No Rotation, Low Agitate, Normal Agitate, Cus- tom	Normal Agitate
	Rotate Time	3-255 seconds	18
	Pause Time	3-255 seconds	4
	Reversing	Enable/Disable	Enable
	Drain Settings	Set standards drains and/or reuse system drains.	
	Drain 1	Hold or Evacuate	Hold
	Drain 2	Hold or Evacuate	Hold
	Reuse Drain A	Enable/Disable	Disable
	Reuse Drain B	Enable/Disable	Disable
	External Drain	Enable/Disable	Disable
	Supplies	Set outputs to turn on external supply signals.	
	Supply 1	Enable/Disable	Disable
	Supply 2	Enable/Disable	Disable
	Supply 3	Enable/Disable	Disable
	Supply 4	Enable/Disable	Disable
	Supply 5	Enable/Disable	Disable
	Supply 6	Enable/Disable	Disable
	Supply 7	Enable/Disable	Disable
	Supply 8	Enable/Disable	Disable

CYCLE SETTINGS					
Displ	ay	Description	Default		
	Other Outputs	Set outputs to turn on external entities (models with auxiliary board).			
	Auxiliary Output I	Enable/Disable	Disable		
	Auxiliary Output J	Enable/Disable	Disable		
	Auxiliary Output K	Enable/Disable	Disable		
	Auxiliary Output L	Enable/Disable	Disable		
	Auxiliary Output M	Enable/Disable	Disable		
	Auxiliary Output N	Enable/Disable	Disable		
Cool Down		Set parameters for a cool down step.			
CYCLE SETTINGS Display Description Default Settings Global Cool Down, Custom, 35°F - 194°F [2°C -Global Cool Water Temperature 90°C] Down 0 (No Rate Restriction), 0.5 - 12.5 (°F/Minutes), 0 **Cooling Rate** (0.3-6.9 °C/Minute) Plumbing Code Restric-Enable/Disable Enable tion Valves Allowed Cold or Cold, Hot or Hot Set basket rotation parameters. **Basket Rotation** Speed No Rotation, Low Agitate, Normal Agitate, Cus-Normal Agitate tom Rotate Time 3-255 Seconds 3 Pause Time 3-255 Seconds 27 Enable/Disable Reversing Enable Valve Sets Set which fill valves are used. Reuse Fill A Enable/Disable Reuse Fill B Enable/Disable Fill Valves Enable/Disable Fill Tub Valves Enable/Disable Extra Fill Inlet Enable/Disable Auxiliary Fill Enable/Disable **Supplies** Set outputs to turn on external supply signals. Enable/Disable Disable Supply 1 Enable/Disable Supply 2 Disable Supply 3 Enable/Disable Disable Disable Supply 4 Enable/Disable Supply 5 Enable/Disable Disable Enable/Disable Disable Supply 6 Supply 7 Enable/Disable Disable Supply 8 Enable/Disable Disable

CYCLE SETTINGS					
Display			Description	Default	
		Other Outputs	Set outputs to turn on external entities (models with auxiliary board).		
		Auxiliary Output I	Enable/Disable	Disable	
		Auxiliary Output J	Enable/Disable	Disable	
		Auxiliary Output K	Enable/Disable	Disable	
		Auxiliary Output L	Enable/Disable	Disable	
		Auxiliary Output M	Enable/Disable	Disable	
Auxiliary Output N		Auxiliary Output N	Enable/Disable	Disable	
Drain			Set standards drains and/or reuse system drains.		

CYCLE SETTINGS					
Display			Description	Default	
		Drain Settings			
		Drain 1	Hold or Evacuate	Evacuate	
		Drain 2	Hold or Evacuate	Evacuate	
		Reuse Drain A	Enable/Disable	Disable	
		Reuse Drain B	Enable/Disable	Disable	
		External Drain	Enable/Disable	Disable	
		Basket Rotation	Set basket rotation parameters.		
		Speed	No Rotation, Low Agitate, Normal Agitate, Cus- tom	Normal Agitate	
		Rotate Time	3-255 Seconds	18	
		Pause Time	3-255 Seconds	4	
		Reversing	Enable/Disable	Enable	
Rotation Delay		Rotation Delay	Enable/Disable		
		Supplies	Set outputs to turn on external supply signals.		
		Supply 1	Enable/Disable	Disable	
		Supply 2	Enable/Disable	Disable	
		Supply 3	Enable/Disable	Disable	
		Supply 4	Enable/Disable	Disable	
		Supply 5	Enable/Disable	Disable	
		Supply 6	Enable/Disable	Disable	
		Supply 7	Enable/Disable	Disable	
		Supply 8	Enable/Disable	Disable	
		Other Outputs	Set outputs to turn on external entities (models with auxiliary board).		
		Auxiliary Output I	Enable/Disable	Disable	
		Auxiliary Output J	Enable/Disable	Disable	
		Auxiliary Output K	Enable/Disable	Disable	
		Auxiliary Output L	Enable/Disable	Disable	
		Auxiliary Output M	Enable/Disable	Disable	
		Auxiliary Output N	Enable/Disable	Disable	
	Extract Drain		Set parameters for an extract drain step.		

CYCLE SETTINGS				
Display		Description	Default	
	Settings			
	Duration	0:01-9:59	0:30	
	Speed	Very Low, Low, Medium, High, Very High, Ultra High, Custom RPM or g-force	Low	
	Drain Settings	Set standards drains and/or reuse system drains.		
	Drain 1	Hold or Evacuate	Evacuate	
	Drain 2	Hold or Evacuate	Evacuate	
	Reuse Drain A	Enable/Disable	Disable	
	Reuse Drain B	Enable/Disable	Disable	
	External Drain	Enable/Disable	Disable	
	Supplies	Set outputs to turn on external supply signals.		
	Supply 1	Enable/Disable	Disable	
	Supply 2	Enable/Disable	Disable	
	Supply 3	Enable/Disable	Disable	
	Supply 4	Enable/Disable	Disable	
	Supply 5	Enable/Disable	Disable	
	Supply 6	Enable/Disable	Disable	
	Supply 7	Enable/Disable	Disable	
	Supply 8	Enable/Disable	Disable	
	OTher Inputs	Set outputs to turn on external entities (models with auxiliary board).		
	Auxiliary Output I	Enable/Disable	Disable	
	Auxiliary Output J	Enable/Disable	Disable	
	Auxiliary Output K	Enable/Disable	Disable	
	Auxiliary Output L	Enable/Disable	Disable	
	Auxiliary Output M	Enable/Disable	Disable	
	Auxiliary Output N	Enable/Disable	Disable	
Hold		Set parameters for a hold step.	Disable	
	Settings			
	Audio Duration	0:01-2:59	0:10	

Table 5 continues...

CYCLE SETTINGS				
Displa	iy	Description	Default	
	Pattern	Select One	Solid High	
		No Tone		
		Solid High		
		Solid Medium		
		Solid Low		
		Beep High		
		Beep Medium		
		Beep Low		
		Double Beep High		
		Double Beep Medium		
		Double Beep Low		
		SOS Beep High		
		SOS Beep Medium		
		SOS Beep Low		
		Gradual Tone		
		Wave Tone		
		Melody 1		
		Melody 2		
		Melody 3		
		Melody 4		
		Melody 5		
		Melody 6		
	Message	Select One	Load	
		Load		
		Chemical		
		Soap		
		Bleach		
		Softener		
		Sour		
		Starch		
		Custom 1		
		Custom 2		

CYCLE SETTINGS				
Display		Description	Default	
	Door Lock State	Lock or Unlock	Unlock	
	Auto Resume Time	0-255 minutes	0	
	Pulse Valves	Enable/Disable		
	Supplies	Set outputs to turn on external supply signals.		
	Supply 1	Enable/Disable	Disable	
	Supply 2	Enable/Disable	Disable	
	Supply 3	Enable/Disable	Disable	
	Supply 4	Enable/Disable	Disable	
	Supply 5	Enable/Disable	Disable	
	Supply 6	Enable/Disable	Disable	
	Supply 7	Enable/Disable	Disable	
	Supply 8	Enable/Disable	Disable	
	Other Inputs	Set outputs to turn on external entities (models with auxiliary board).		
	Auxiliary Output I	Enable/Disable	Disable	
	Auxiliary Output J	Enable/Disable	Disable	
	Auxiliary Output K	Enable/Disable	Disable	
	Auxiliary Output L	Enable/Disable	Disable	
	Auxiliary Output M	Enable/Disable	Disable	
	Auxiliary Output N	Enable/Disable	Disable	
Audio		Set an audio signal step.		
Settings				
	Duration	0:01-2:59	0:05	

CYCLE SETTINGS			
Display	Description	Default	
Pattern	Select One	Solid High	
	No Tone		
	Solid High		
	Solid Medium		
	Solid Low		
	Beep High		
	Beep Medium		
	Beep Low		
	Double Beep High		
	Double Beep Medium		
	Double Beep Low		
	SOS Beep High		
	SOS Beep Medium		
	SOS Beep Low		
	Gradual Tone		
	Wave Tone		
	Melody 1		
	Melody 2		
	Melody 3		
	Melody 4		
	Melody 5		
	Melody 6		

CYCLE SETTINGS				
Displa	ау	Description	Default	
	Supplies	Set outputs to turn on external supply signals.		
	Supply 1	Enable/Disable	Disable	
	Supply 2	Enable/Disable	Disable	
	Supply 3	Enable/Disable	Disable	
	Supply 4	Enable/Disable	Disable	
	Supply 5	Enable/Disable	Disable	
	Supply 6	Enable/Disable	Disable	
	Supply 7	Enable/Disable	Disable	
	Supply 8	Enable/Disable	Disable	
	Other Outputs	Set outputs to turn on external entities (models with auxiliary board).		
	Auxiliary Output I	Enable/Disable	Disable	
	Auxiliary Output J	Enable/Disable	Disable	
	Auxiliary Output K	Enable/Disable	Disable	
	Auxiliary Output L	Enable/Disable	Disable	
	Auxiliary Output M	Enable/Disable	Disable	
	Auxiliary Output N	Enable/Disable	Disable	
Cycle Options				
Cycle Pause Resume		Enable/Disable	Disable	
Display Programmable Cycle Tir	ne	Enable/Disable		
Global Water Temperatures				
Cold		35°F - 194°F [2°C - 90°C]	35°F [2°C]	
Warm		35°F - 194°F [2°C - 90°C]	104°F [40°C]	
Hot		35°F - 194°F [2°C - 90°C]	140°F [60°C]	
Cool Down		35°F - 194°F [2°C - 90°C]	140°F [60°C]	
Global Water Levels				
Low		1 - 30	15	
Medium		1 - 30	20	
High		1 - 30	25	
Hold Step Custom Messages				
Custom 1		Keypad	Custom #1	

CYCLE SETTINGS				
Display	Display Description			
Custom 2	Keypad	Custom #2		
Other Settings				
Tub Fill Delay	0 - 60 seconds	0		
Refill Top-Off Time Limit	0 - 255	255		
Balance Attempt Limit 1 - 7		1		
Flush Out Settings		·		
Flush Out Time for Fills	0 - 255 seconds	25		
Flush Out Drain Pump(s) for Fill Steps	Drain Pump 1, Drain Pump 2, or Both	Drain Pump 1		
Auxiliary Inputs		·		
Auxiliary Input A-D	SELECT ONE Empty Dispenser Bin External Dispenser Pause	Disable		
	Disabled			
Cycle Temperature OverridesSet water temperature presets. These presets are selectable options for users to change prewash and wash water temperatures.				
Prewash Overrides				

	CYCLE SETTINGS						
Display	Display Description Default						
User Selected Temperature	User Selected Temperature						
Cold	Global Cold, Global Warm, Global Hot, Custom, 35°F - 194°F [2°C - 90°C]	Global Cold					
Warm	Global Cold, Global Warm, Global Hot, Custom, 35°F - 194°F [2°C - 90°C]	Global Warm					
Hot	Global Cold, Global Warm, Global Hot, Custom, 35°F - 194°F [2°C - 90°C]	Global Hot					
No Heat	Global Cold, Global Warm, Global Hot, Custom, 35°F - 194°F [2°C - 90°C]	35°F [2°C]					
59°F [15°C]	Global Cold, Global Warm, Global Hot, Custom, 35°F - 194°F [2°C - 90°C]	59°F [15°C]					
86°F [30°C]	Global Cold, Global Warm, Global Hot, Custom, 35°F - 194°F [2°C - 90°C]	86°F [30°C]					
104°F [40°C]	Global Cold, Global Warm, Global Hot, Custom, 35°F - 194°F [2°C - 90°C]	104°F [40°C]					
122°F [50°C]	Global Cold, Global Warm, Global Hot, Custom, 35°F - 194°F [2°C - 90°C]	122°F [50°C]					
140°F [60°C]	Global Cold, Global Warm, Global Hot, Custom, 35°F - 194°F [2°C - 90°C]	140°F [60°C]					
194°F [90°C]	Global Cold, Global Warm, Global Hot, Custom, 35°F - 194°F [2°C - 90°C]	194°F [90°C]					
Vash Overrides							

CYCLE SETTINGS						
Display Description Default						
User Selected Temperature						
Cold	Global Cold, Global Warm, Global Hot, Custom, 35°F - 194°F [2°C - 90°C]	Global Cold				
Warm	Global Cold, Global Warm, Global Hot, Custom, 35°F - 194°F [2°C - 90°C]	Global Warn				
Hot	Global Cold, Global Warm, Global Hot, Custom, 35°F - 194°F [2°C - 90°C]	Global Hot				
No Heat	Global Cold, Global Warm, Global Hot, Custom, 35°F - 194°F [2°C - 90°C]	35°F [2°C]				
59°F [15°C]	Global Cold, Global Warm, Global Hot, Custom, 35°F - 194°F [2°C - 90°C]	59°F [15°C]				
86°F [30°C]	Global Cold, Global Warm, Global Hot, Custom, 35°F - 194°F [2°C - 90°C]	86°F [30°C]				
104°F [40°C]	Global Cold, Global Warm, Global Hot, Custom, 35°F - 194°F [2°C - 90°C]	104°F [40°C				
122°F [50°C]	Global Cold, Global Warm, Global Hot, Custom, 35°F - 194°F [2°C - 90°C]	122°F [50°C				
140°F [60°C]	Global Cold, Global Warm, Global Hot, Custom, 35°F - 194°F [2°C - 90°C]	140°F [60°C				
194°F [90°C]	Global Cold, Global Warm, Global Hot, Custom, 35°F - 194°F [2°C - 90°C]	194°F [90°C				

Table 5

Audit Data Menu

< AUDIT DATA		ş	AX	EXIT
MACHINE TOTALS				
Total Machine Cycle Count				0
Total Vend Count				\$0.00
Total Number of Coin 1				0
Total Number of Coin 2				0
Total Number of Start Pulses				0
Total Number of Rapid Advance Cycles	~			0 CHM2108R_SVG

Figure 43

The Audit Menu allows the user to read audit data via the touch display rather than connecting to a PC.

The display will show the following audit parameters:

- Machine Totals
 - Total number of machine cycles
 - Total vend count
 - Total number of Coins#1
 - Total number of Coins#2
 - Total number of start pulses
 - Total number of rapid advance cycles
 - Total number of run hours
- Resettable Counters
- Other Metrics
- Individual Cycle Counts
- 1. To access, touch and hold the center of the menu header on the display with the service door open and, for coin models, the coin vault closed. The control enters the *System Menu*.
- 2. Touch AUDIT DATA from the display to enter the Audit Menu.
- 3. Swipe to view the information.
- 4. When finished viewing or running diagnostics, touch AUDIT DATA to return to the *System Menu* or EXIT to exit the *System Menu*.

Diagnostics Menu

	Ş	Ay	EXIT
Machine ID			>
Alarms			>
Inputs / Outputs			>
Factory Test			Start
Individual Tests			>
			CHM2109R_SV

Figure 44

The Diagnostics Menu includes MACHINE ID (*Machine ID* Menu), ALARMS (*Alarms Menu*), INPUTS/OUTPUTS (*Inputs/* Outputs Menu), FACTORY TEST (*Factory Test Menu*) and IN-DIVIDUAL TESTS (*Individual Tests Menu*).

- 1. To access, touch and hold the center of the menu header on the display with the service door open and, for coin models, the coin vault closed. The control enters the *System Menu*.
- 2. Touch DIAGNOSTICS from the display to enter the Diagnostics Menu.
- 3. When finished viewing or running diagnostics, touch DIAG-NOSTICS to return to the *System Menu* or EXIT to exit the *System Menu*.

Machine ID Menu

The Machine ID Menu displays the following information.

- Model
- Serial Number
- Install Date
- Machine Type
- Control Serial Number
- Network Node
- Water Level Parameters
- Front-end Control Software Version
- Display Software Version
- Auxiliary Board Software Version
- I/O Board Software Version
- Drive Board Software Version
- Drive Type
- Drive Parameters
- 1. To access, touch MACHINE ID from the Diagnostics Menu.
- 2. Swipe to scroll through the Machine ID Menu.
- 3. When finished viewing machine information, touch MA-CHINE ID to return to the *Diagnostics Menu* or EXIT to exit the *System Menu*.

Diagnostics Menu

Alarms Menu

< ,	ALARMS			≎ • [⊠] ⊻	EXIT
Ind	ividual Alarm Counts				>
ALA	ARM HISTORY QUEUE				
#	Date	Cycle	Step	Error Type	
1	05/07/2019 12:09	Normal	1	Frame Balance Sw	itch Error
2	05/06/2019 14:42	Normal	1	SCI Comm Error	
3	05/06/2019 14:40	Normal	1	SCI Comm Error	
4	05/06/2019 14:31	Normal	1	SCI Comm Error	
5	05/06/2019 11:59	Normal	1	SCI Comm Error	
6	05/06/2019 11:57	Normal	1	SCI Comm Error	
7	05/02/2019 12:41	Normal	1	SCI Comm Error	
n	05/00/2010 12:20	Namaal		501 Comm E	CHM2110R_SVG



The Alarms Menu allows the owner to view total alarm occurrences, access the Individual Alarm Counts sub-menu, and view the alarm history queue which includes the cycle, step, error type, time and date details for the last 25 alarms.

- 1. To access, touch ALARMS from the *Diagnostics Menu*.
- 2. Swipe to scroll through the Alarms Menu.
- 3. When finished viewing or running diagnostics, touch ALARMS to return to the *Diagnostics Menu* or EXIT to exit the *System Menu*.

Inputs/Outputs Menu



Figure 47

The Inputs/Outputs Menu gives a user the ability to manipulate machine outputs for component testing and monitor the current state of all control inputs.

Selected outputs appear in a white field box. Actived inputs and outputs appear in a dark blue filled box.

- 1. To access, touch INPUTS/OUTPUTS from the *Diagnostics Menu*.
- 2. Touch desired outputs to include in the test.

NOTE: Touch CLEAR ALL to deselect all outputs.

- 3. Touch RUN to begin the outputs test. The test results show in the footer of the display.
- 4. Touch CANCEL to end the test.
- 5. When finished viewing or running diagnostics, touch IN-PUTS/OUTPUTS to return to the *System Menu* or EXIT to exit the *System Menu*.

Factory Test Menu



If enabled in programming, the Factory Test Menu allows the user to run a diagnostic test cycle.

At the start of the factory test cycle, the control enters Factory Test Mode. The command message at the bottom of the Factory Test Menu display will show the remaining step time or prompt the user for input throughout the test cycle. Refer to *Table 6* for test sequence.

- 1. To access, touch FACTORY TEST from the *Diagnostics Menu*.
- 2. Touch START to begin the factory test cycle.
- 3. Touch EXIT to terminate the factory test cycle.
- 4. Touch < and > to navigate between factory test steps.
- 5. The display returns to *System Menu* once the last test step is complete.

Figure 48

Factory Tests				
Test Name	Display	Description		
Machine Type	Washer Extractor	Washer-extractor.		
Control Software Version	XXX.XX.XXX	XXX is the control software version number.		
Display Software Version	XXX.XX.XXX	XXX is the display cargo version number.		
I/O Board Software Version	XXX	XXX is the control software version number.		
Auxiliary Board Software Version	Auxiliary Board Software Version: XXX	XXX is the auxiliary board software version number.		
Control Level	1	Speed Queen Quantum Touch		
Capacity	CXXX	XXX is the capacity in pounds.		
Drain Configuration	"Gravity Drain" or "Pump Drain"	Displays which drain configuration is present.		
Door Switch Test	"Open" or " Closed"	Displays the state of the door switch.		
Door Lock Test	"Locked" or " Unlocked"	The door will lock.		
Touch Screen Test	Touch START to begin	The display instructs the operator to touch various display locations.		
Display Test	This test will display a sequence of pat- terns.	Touch display to advance through display test patterns.		
Frame Balance Switch Test	"Open" or " Closed"	Displays the state of the frame balance switch.		
Service Door Switch Test	"Open" or " Closed"	Displays the state of the frame balance switch.		

Diagnostics Menu

Factory Tests				
Test Name	Display	Description		
Coin Vault Switch Test	"Open" or " Closed"	Displays the state of the service door switch.		
Coin Drop Test	Coin 1: XXX Coin 2: YYY	X and Y are the number of pulses received for drop #1 and drop #2.		
Drive Software Version	XXX	XXX is the drive software version number.		
Drive Parameter Version	XXX	XXX is the drive parameter version num- ber.		
Drive Type	"1HP 120V", "2HP 240V", "2HP 480V", "3HP 240V", "5HP 240V", "5HP 480V", "7HP 240V", "7HP 480V", "10HP 280V", "10HP 480V"	Displays the drive type of the machine.		
Hot Tub Fill	Water Level: XXX	Equipped models only. XXX is the level. The control turns on the valve. The ma- chine fills to the low water level or over- flow water level (if the control has already verified the high water level).		
Cold Tub Fill	Water Level: XXX	Equipped models only. XXX is the level. The control turns on the valve. The ma- chine fills to the low water level or over- flow water level (if the control has already verified the high water level).		
Hot Water Fill	Water Level: XXX	Equipped models only. XXX is the level. The control turns on the valve. The ma- chine fills to the low water level or over- flow water level (if the control has already verified the high water level).		
Cold Water Fill	Water Level: XXX	Equipped models only. XXX is the level. The control turns on the valve. The ma- chine fills to the low water level or over- flow water level (if the control has already verified the high water level).		
Compartment 1 Fill	Water Level: XXX	Equipped models only. Water enters the machine through the supply dispenser's compartment 1. The display indicates the water level, which is represented with an XXX.		
Compartment 2 Fill	Water Level: XXX	Equipped models only. Water enters the machine through the supply dispenser's compartment 2. The display indicates the water level, which is represented with an XXX.		

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Factory Tests				
Test Name	Display	Description		
Compartment 3 Fill	Water Level: XXX	Equipped models only. Water enters the machine through the supply dispenser's compartment 3. The display indicates the water level, which is represented with an XXX.		
Compartment 4 Fill	Water Level: XXX	Equipped models only. Water enters the machine through the supply dispenser's compartment 4. The display indicates the water level, which is represented with an XXX.		
Cold Hard Fill	Water Level: XXX	Equipped models only. XXX is the level. The control turns on the valve. The ma- chine fills to the low water level or over- flow water level (if the control has already verified the high water level).		
Auxiliary Fill	Water Level: XXX	Equipped models only. XXX is the level. The control turns on the valve. The ma- chine fills to the low water level or over- flow water level (if the control has already verified the high water level).		
Chemical Flush	Water Level: XXX	Equipped models only. XXX is the level. The control turns on the valve. The ma- chine fills to the low water level or over- flow water level (if the control has already verified the high water level).		
All Fill to High Level	Water Level: XXX	Equipped models only. Water enters the machine through all of the supply dispens- er's compartments until the high water lev- el is reached. The display indicates the wa- ter level, which is represented with an XXX.		
Electric/Steam Heater Test	"Electric Heat" or "Steam Heat" Temperature: XXY	Heat models only. XX is the temperature and Y is the units (Celsius or Fahrenheit).		
Low Agitate	RPM: XX	XX is the current basket speed.		
Regular Agitate	RPM: XX	XX is the current basket speed.		
Drain/Pump	RPM: XX	XX is the current basket speed. The con- trol turns on the Electric Pump or the opens the Gravity Drain.		
Purge	RPM: XXX	XXX is the current basket speed. The con- trol opens all valves so compressed air can be used to purge the valves of water.		

Table 6 continues...

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Diagnostics Menu

Factory Tests				
Test Name	Display	Description		
Balance	RPM: XXX	XXX is the current basket speed.		
Very Low Spin	RPM: XXX	XXX is the current basket speed. The con- trol will advance after 80 seconds.		
Low Spin	RPM: XXX	XXX is the current basket speed. The con- trol will advance after 80 seconds.		
Medium Spin	RPM: XXX	XXX is the current basket speed. The con- trol will advance after 80 seconds.		
High Spin	RPM: XXX	XXX is the current basket speed. The con- trol will advance after 80 seconds.		
Very High Spin	RPM: XXX	XXX is the current basket speed. The con- trol will advance after 80 seconds.		
Ultra High Spin	RPM: XXX	XXX is the current basket speed. The con- trol will advance after 80 seconds.		
Coast Down	"Do not power down the machine "	Coast down is in process.		

Table 6

Individual Tests Menu

< INDIVIDUAL TESTS		Ş	A	EXIT
Show Fill Time Test Seconds				0
Show Drain Time Test Seconds				0
12.5 VDC Voltage Test Volts				12.47
24 VDC Voltage Test				>
Purge Test				>
Leak Detection Test				>
	\mathbf{v}			CHM2112R_SVG
	Figure 49			

The Individual Tests Menu allows the user to preform individual manual diagnostic tests on machine components. Refer to *Table* 7.

- 1. To access, touch INDIVIDUAL TESTS from the *Diagnostics Menu*.
- 2. Swipe to scroll through the list of individual tests.
- 3. Touch the desired individual test.
- 4. Touch START to begin each individual test.

NOTE: The time remaining in the test step displays while the step is in process. The control indicates the test results when the test step is complete.

- 5. Touch STOP to terminate the individual test.
- 6. Touch another test step name from the list to navigates between test steps.
- 7. When finished running the individual tests, touch INDIVIDU-AL TESTS to return to the *System Menu* or EXIT to exit the *System Menu*.

Individual Diagnostic Tests				
Test Name	Display	Description		
Show Fill Time Test	XXXXXs	XXXXX is the average Wash Fill time in seconds. "s" is seconds. The average fill time is calculated by taking the average of the last ten (10) fill times from start of the fill until the desired water level is reached.		
Show Drain Time Test	XXXXXs	XXXXX is the average drain time in sec- onds. "s" is seconds. The average drain time is calculated by taking the average of the last ten (10) drain times from start of the drain until the empty water level is reached.		
12.5VDC Voltage Test	XX.XXV	XX.XX is the value of the 12.5VDC supply. "V" is volts.		
24VDC Voltage Test	XX.XXV	XX.XX is the value of the 24VDC supply. "V" is volts.		
Purge Test	"Ready" or "Running"	The door locks and all water valves and supply outputs turn on. The drain valves open or the pump engages. If STOP is touched, the test ends and the door unlocks after there is no water in the system.		

Individual Diagnostic Tests			
Test Name	Display	Description	
Leak Detection Test	"Filling", "Checking", then "Pass", "Drain Leak", " Valve Leak"	The door locks. The drain valve closes or the pump remains disengaged.	
		The Cold Water Valve Compartment 1 Valve and Compartment 2 valve turn on. The Cold Water Valve turns off once the fill reaches low water level. After a 10 second delay, the control records the cur- rent water level and continues to monitor the water level for two minutes. The dis- play will show "Pass", " Drain Leak" or "Valve Leak". The drain valve opens or the pump en- gages and the door unlocks.	
DC Bus Voltage Test	XXX	XXX is the current DC Bus Voltage. The door locks at the start of the test and unlocks an the end of the test.	
AC Mains Voltage Test	XXX	XXX is the current AC Mains Voltage.	

Table 7

Machine Errors



Figure 50

The control displays and logs errors as they occur. When the control senses the error condition, the audit counter for that error increases by one (1). The control saves the time and date of the last 25 errors which have occurred.

Clear errors manually (if enabled in programming) by touching CLEAR ERROR (when shown), send the clear fatal error command using a PC or cycle power to the machine.

Certain errors trigger a 15 second Machine Error Tone. Touch the display to silence the tone.

Auxilary Communication Error (Fatal)

This error occurs if a loss of communication occurs between the auxiliary output board and the input/output board.

The control attempts to clear the error a three (3) times. The control attempts to unlock the door, then sets the error and displays "Auxiliary Comm Error".

Break-In Alarm Error

If enabled in programming, the user has (30) seconds to enter the bypass passcode after opening the Service Door and/or Coin Vault. If thirty (30) seconds expire or an incorrect passcode is entered, the control triggers the a Break-In Alarm.

The control signals a network alarm, cause a machine alarm or shut down the machine. The date and time of the break-in is recorded.

The owner can program an alarm to sound (if the passcode is not correctly entered) upon Coin Vault Opening, Service Door Opening or both. The error is non-fatal will clear by itself after 15 seconds.

The owner can also program the machine to shut down (if the passcode is not correctly entered) upon Coin Vault Opening, Service Door Opening or both. The error is fatal and the control will shut down the machine at the end of a cycle, if one is in process.

The hour, date and error code of the event are saved in audit. The error display takes priority over any other error that is already set.

To avoid the alarm during coin collections, the alarm must be turned off or temporarily disabled

Board ID Error (Fatal)

This error occurs when an incorrect board is connected for the machine type and configuration.

The control checks that the connected drive or output board is the correct board. The control also checks that the correct drive and auxiliary output board is connected. The control sets the Board ID Error if the wrong drive motor or auxiliary board is connected for the machine configuration. The display shows "Output Board ID Error", "Drive Board ID Error " or "Auxiliary Board ID Error", according to the error.

Broken Belt Error (Fatal)

This error occurs if the control detects that the drive belt has fallen off or broken. This error is a fatal error and the control turns off all outputs. The display shows "Broken Belt Error".

Brownout/Voltage Configuration Error

This error occurs if the control senses input voltage that does not match the machine configuration. The display shows "Voltage Configuration Error". To clear the error, correct the the input voltage or the voltage configuration parameter (refer to *Settings Menu*), then cycle power to the machine power.

Coin Drop Error

If enabled in programming, a Coin Drop Error occurs if a coin input pulse is too short, if the input is too long or if the input is too close to the previous input. The control displays "Coin Error" and turn on the Machine Error Tone for five (5) seconds, after which the error terminates. The coin error #1 or #2 audit counters will be incremented. Any valid coins are accepted normally and will terminate the error condition.

If the coin error penalty parameter is enabled and the coin error is enabled in programming, when a coin error occurs all vend progress is lost and the control returns to the *Approach Page*.

Door Lock Error (Fatal)

This error occurs if the door unlocks durring a cycle. The control terminates the cycle, turns off all outputs, sounds the Machine Error Tone and records the error in *Audit Data Menu*.

Door Lock Error (Non-Fatal)

This error occurs if the door fails to lock after an attempt. The control displays "Door Lock Error". The output board attempts to lock the door for an additional one (1) minute. The control continues to display "Door Lock Error" for an additional 10 seconds after ceasing attempts to lock the door.

Door Open Error (Fatal)

This error occurs if the control senses the door open during a running cycle. The control terminates the cycle and displays "".

Door Unlock Error

This error occurs when the door fails to unlock. The error sets on the first failed attempt to unlock the door. The control displays . The output board attempts to unlock the door two (2) more times. If the door still fails to unlock, the control prompts the user to restart the cycle. If the cycle is restarted, the error clears and the attempts will be restarted.

Drain Error (Fatal)

This error occurs when the machine failed to drain properly.

If enabled in programming, the Drain Error is set when the water height is not below the empty level after attempting to drain for the programmed time. The control turns off all outputs and displays.

If disabled, the control continues draining the machine with the total remaining cycle time paused and no error display.

In the event of a fatal error, the drive will power down, allowing the door to unlock.

Drive Communication Error (Fatal)

This error occurs when a loss of communication between the drive board and I/O board is detected. The control unlocks the door and displays "Drive Comm Error". If the error is set while the basket is rotating at a dangerous speed, the control will coast down the basket to a stop before unlocking the door.

Drive Board Errors

This error occurs if the control receives error code from the Drive Board. The control turns off all outputs, sounds the Machine Error Tone for 15 seconds, and displays "Drive Error (XXX)" where "XXX" is the specific error code (refer to *Table 8* and *Table 9*). When a Drive Error occurs, the specific error is counted in *Audit Data Menu*. Fatal Drive Errors are added to the last 25 errors queue. The non-fatal errors are not.

ALS Drive Errors		
"XX"	Description	
21	Over Voltage DC Bus	
22	Over Motor Temperature	
23	Fatal IPM Over Current Shunt	
24	Fatal I2T Hardware Over Cur- rent	
25	IPM Over Temperature	
29	Motor Not Connected Error	
31	Overload Current Detection	
32	Back EMF	
33	Fatal Startup	
34	Locked Rotor	
51	Inrush Pin HW On/Off Fail	
63	Fatal IPM Temperature Short Error	
64	Fatal IPM Temperature Open Error	
65	Inverter Hardware Acquisition Failure	
66	Voltage Bus Acquisition Fail- ure	
70	Unbalance Switch Error	

Table 8

Powerflex Drive Errors		
"XX"	Description	
2	Auxiliary Input	
3	Power Loss	
4	Under Voltage	
5	Over Voltage	
6	Motor Stalled	
7	Motor Overload	
8	Heatsink Over Temperature	
9	Control Module Over Temper- ature	
12	HW Overcurrent (300%)	
13	Ground Fault	
15	Load Loss	
21	Output Phase Loss	
29	Analog Input Loss	
33	Auto Restart Tries	
38	Phase U to Ground Short	
39	Phase V to Ground Short	
40	Phase W to Ground Short	
41	Phase UV Short	
42	Phase UW Short	
43	Phase VW Short	
48	Parmeters Defaulted	
59	Safety Open	
63	Software Overcurrent	
64	Drive Overload	
70	Power Unit Fail	
71	DSI Network Loss	
72	Option Card Network Loss	
73	Embedded Ethernet/IP Adapt- er Network Loss	
80	Auto Tune Fail	
81	DSI Communication Loss	

Powerflex Drive Errors		
"XX"	Description	
82	Option Card Communication Loss	
83	Embedded Ethernet/IP Adapt- er Communication Loss	
91	Encoder Loss	
94	Function Loss	
100	Parmeter Checksum Error	
101	External Storage	
105	Control Module Connect Error	
106	Incompatible Control-Power Module	
107	Unrecognizable Control-Pow- er Module	
109	Mismatched Control-Power Module	
110	Keypad Membrane	
111	Safety Hardware	
114	Microprocessor Failure	
122	I/O Board Fail	
125	Flash Update Required	
126	Non Recoverable Error	
127	DSI Flash Update Required	

Table 9

Drive/Output Board Not Ready Error (Fatal)

This error occurs when the Drive Board or Output Board is not set up. This error indicates the control never received a status from the Output Board indicating the Output Board is ready. When the error is set, the control displays "Board Not Ready Error".

Drive/Output Board Shorted Error (Fatal)

This error occurs if the Output Board or drive enable relay fails to change state. If the control is able to communicate to the Output Board with the Drive/Output Board relay enable output programmed to 'disabled', this indicates that the Drive or Output Board is powered when it should not be. If this is detected, the control terminates the cycle, sets the error and displays "Board Shorted Error".

Fill Error (Fatal)

If enabled in programming, this error occurs if the machine fails to fill to the desired water level within the programmed time after starting the fill. In addition to the error being programmable, the wait time before setting the error can be programmed.

When the error is set, the machine drains for 90 seconds, unlocks the door, and turns off all outputs. The display shows " Fill Error".

If the error is disabled, the machine continues filling with the total remaining cycle time paused.

Frame Balance Switch Error (Fatal)

This error occurs if the frame balance switch become unsatisfied while the control is running a cycle. The control stops the cycle, turns off all outputs and displays "Frame Balance Switch Error".

Heater Error (Heat Models)

If the error is enabled in programming, this error occurs if the desired water temperature is not reached. If the heater is enabled in programming and the water temperature has not reached the desired temperature within the programmed time, the control sets the error. The control shuts off heater output and the cycle will continue. At the end of the cycle, the control displays "Heater Error".

If the error is disabled, the control does not display "Heater Error" at the end of the cycle or log the error, but turns off the heater output and does not attempt to heat for the remainder of the cycle.

IR Communications Error

This error occurs if there is a problem with communication between the control and an IR device. The control displays "IR Comm Error (XXX)" where "XXX" indicates the error code value. Refer to *Table 10*.

Error Code	Description
01	Error detected when sending data
02	Time-Out Error
03	Invalid Command Code
05	Invalid or Out of Range Data
09	CRC-16 Error
0A	Framing Error
0C	Time-Out Exceeding While Getting Packet
0E	Encryption Error
0F	IR Disabled in Control Pro- gramming

Table 10

Leak Detection (Drain) Error

This error occurs if the water level lowers more than an acceptable amount. The error sets when a Water Leak Diagnostic Test is run during a cycle and the water level lowers more than an acceptable amount during a drain cycle step. When the cycle is complete, the display shows "Leak Detection (Drain) Error".

Leak Detection (Fill) Error

This error occurs if the water level rises more than an acceptable amount. The error sets when a Water Leak Diagnostic Test is run during a cycle and the water level rises more than an acceptable amount during a fill cycle step. When the cycle is complete, the display shows " Leak Detection (Fill) Error".

Low Level Pressure Sensor Error (Heat Models) (Fatal)

Factory error detecting incorrect low level pressure sensor switch status. This error will only trigger during a factory test cycle. The error sets after the door lock step, before fill steps and when the Low Level Pressure switch has been satisfied OR when the High Water Level is verified and the control senses that the Low Level Pressure Switch is unsatisfied. The control displays "Low Level Pressure Switch Error".

Machine ID Chip Error

This error occurs if the control detects either a communication error with the machine ID chip or a control configuration error. The control displays "Machine ID Chip Error (XXX)". "XXX" indicates an error code value. Refer to *Table 11*.

Error Code	Description	Туре
05	Read Error	Notification
06	Write Error	Notification
31	Product byte 1 mis- match	Power Up
32	Product byte 2 mis- match	Power Up
33	Product byte 3 mis- match	Power Up
39	CRC error with un- configured control	Power Up
FF	No ID chip con- nected and no con- figuration in control	Power Up

Table 11

Notification errors occur when communication between the control and ID chip has failed. When the error is set, the hour, date and error code of the event are saved in *Audit Information*.

Power Up errors occur when the control is not configured and cannot get configuration data from the Machine ID chip. The error clears once the control is successfully configured.

Max Temperature Exceeded Error (Heat Models) (Fatal)

This error occurs if the maximum water temperature was exceeded. If the water temperature exceeds the maximum allowed temperature of 194°F [95°C] for 10 seconds, the control displays "Max Temperature Exceeded Error".

Network Communications Error

This error occurs if communication fail between the control and the ALS Wi-Fi board. When the error sets, the control displays "Network Error". The error code is not shown, but it is recorded in audit data. Refer to *Table 12*.

Error Code	Description
02	Time-Out Error
03	Invalid Command Code
05	Invalid or Out of Range Data
06	Invalid Data Code
09	CRC-16 Error
19	No Communication

Table 12

No Water Flow Error (Fatal)

If enabled in programming, this error occurs if the machine fails to fill to the minimum water level on time. If the control does not reach a water level of four (4) inches within the first programmed time of starting the fill, the control displays "No Water Flow Error".

This error may mean the hose to the pressure sensor has a leak or no water is flowing into the machine.

Open Thermistor Error (Heat Models)

If enabled in programming, this error occurs if the control senses an unrealisticly low temperature. The error sets if the control detects a temperature less than or equal to 32°F [0°C] while trying to regulate the fill temperature by cycling water valves or heating. The display shows "Open Thermistor Error" at the end of the cycle.

If this error occurs while the control is regulating the fill temperature by cycling valves, the control will revert to non-regulated fill temperature. If this error occurs while the machine is heating, the control will turn off the heater output and not attempt to heat. The cycle will complete normally.

If the machine is in life test, the error is fatal.

Output Board Errors

This error occurs if the control receives error code from the Output Board. The control turns off all outputs, sounds the Machine Error Tone for 15 seconds, and displays "Output Board Error (XXX)" where "XXX" is the specific error code (refer to *Table 13*). When an Output Error occurs, the specific error is counted in *Audit Data Menu*.

Output Board Errors											
"XX"	Description										
1	Setup Error										
2	Voltage Select										
3	Under Voltage AC-Main Input										
4	Over Voltage AC-Main Input										
5	Power Fail Dangerous										
6	Power Fail No Danger										
7	Under Voltage DC Bus Error										

Table 13

Overflow Error (Fatal)

This error occurs if the machine fills beyond the overflow limit. If the error continues after five (5) minutes with the door locked or after one (1) minute with the door open or unable to lock, the error will be set. The control displays "Overflow Error" and will continuously sound the Machine Error Tone at the highest volume one second on, one second off. The machine continues to pump or the gravity drain remains open.

Payment System Communications Error

These errors may occur during communication with the Serial Payment System. The display shows " No Payment System initialization performed", "Loss of communication" or "No initialization and no communication ", according to the error. Once communications are restored, the control returns to the previous state. The hour, date and error code of the event are saved.

Pressure Sensor Error (Fatal)

This error occurs if the control fails to detect a valid water level. The error sets if the control does not detect a valid water level for 30 seconds or if the Max (Overflow) Fill Level in the control is set to zero (0) while running a cycle or a factory test. The control displays "Pressure Sensor Error", *Machine Error Mode* the machine drains for 30 seconds, unlocks the door, then turns off all outputs.

SCI Communication Error (Fatal)

This error occurs if communication fails between the control and the drive or output board. SCI Communications Errors can also be caused by drive or output board detecting a *System Integrity Error*. The control displays "SCI Comm Error".

Shorted Thermistor Sensor Error (Heat Models)

If enabled in programming, this error occurs if the control senses an unrealisticly high temperature. The error sets if the control detects a temperature greater than 212°F [100°C] while trying to regulate the fill temperature by cycling water valves or heating. The display shows "Shorted Thermistor Error" at the end of the cycle.

If this error occurs while the control is regulating the fill temperature by cycling valves, the control will revert to non-regulated fill temperature. If this error occurs while the machine is heating, the control will turn off the heater output and not attempt to heat. The cycle will complete normally.

If the machine is in life test, the error is fatal.

Slow Drain Detection Error

If enabled in programming, this error occurs when the control detects poor drain conditions. Poor drain conditions will cause a longer than normal time for the water level to drop. There may be several causes:

- a drain valve/pump malfunction
- a foreign object jammed in the drain valve/pump
- a poor drain connection between the machine drain and the building sewer system.
- An over-suds condition may also affect the drain and lead to a slow drain condition.

During a drain cycle step, the control tracks the time required for the water to drop from the Global Water Level value (1) to below the empty level. If the control senses a drain time greater than the amount specified, the error sets and the display shows "Slow Drain Error".

The default slow drain time is 105 seconds for a pump and 18 seconds for a gravity drain. This value can be adjusted by programming the Slow Drain Adjust Value, extending the slow drain time for less than ideal drain plumbing situations.

Slow to Heat Error (Heat Models)

If enabled, this error occurs if the water temperature has not risen for a programmed period of time. The time it takes for this error to set from the start of heating is defined in programming. If the time is programmed to zero (0) then the error is disabled. The control displays "Slow To Heat Error" if the water temperature does not rise by from the start of heating within the programmed time.

If the machine is in life test, the error is fatal.

Suds Lock Error

If enabled in programming, this error occurs if the control detects suds in the machine. The control checks for suds when in a spin cycle step. If the control detects suds in the machine based on the conditions noted in the Suds Removal Routine after preforming the maximum number of programmed Suds Removal Routines, the error is set.

After setting the error, the control limits the basket spin to a distribution speed for the rest of the cycle. When the cycle is complete, the control displays "Suds Lock Error".

System Integrity Error

This error occurs if a *SCI Communication Error (Fatal)* happens on the drive or output board. When the error sets, drive or output board stops communication with the control. The output board displays the error by flashing LEDs on and off. The machine must be powered down to clear the error.

Error Description	Number of LED Flashes
CPU Error	1
SFR Error	2
ROM Error	3
RAM Error	4
Stack Error	5
RAM Buffer and Empty Error	6
Software Watchdog Error	7
Slow Monitoring Error	8

Too Hot to Drain Error

If enabled in programming, this error occurs if the water temperature is too high to safely drain the machine. The error sets when the drive or output board indicates the water temperature is too hot to safely drain while the machine is in a drain or extract step. The display shows "Too Hot To Drain" when the cycle has complete.

This error could indicate a problem with the heater or that the programmed agitation time is too short to effectively cool down the water before trying to spin and drain.

Unbalance Limit Error

This error occurs if the extract speed is not reached because the control detects an unbalanced load. The error sets when the maximum number of balance tries is reached and the balance result does not allow for extract at the programmed speed. If enabled in programming, the display shows "Unbalance Limit Error" when the cycle is complete.

Service Schedule Menu



Figure 51

The Service Schedule Menu allows the user to view instructions for daily, monthly, and yearly machine maintenance.

- 1. To access, touch and hold the center of the menu header on the display with the service door open and, for coin models, the coin vault closed. The control enters the *System Menu*.
- 2. Touch SERVICE SCHEDULE from the display to enter the Service Schedule Menu.
- 3. Touch Daily, Monthly or Yearly to view maintenance instructions.
- 4. Swipe to scroll through the service instructions.
- 5. When finished viewing instructions, touch SERVICE SCHEDULE to return to the *System Menu* or EXIT to exit the *System Menu*.

Reset Menu



Figure 52

If enabled (refer to *System Menu*), the Reset Menu allows the user to reset the control's global and cycle programming data to the factory default setting.

- 1. To access, touch and hold the center of the menu header on the display with the service door open and, for coin models, the coin vault closed. The control enters the *System Menu*.
- 2. Touch RESET from the display to enter the Reset Menu.
- 3. Swipe to scroll through the list of reset options.
- 4. Touch RESET next to the item to be reset. The display shows the Reset Confirmation Menu. Refer to *Figure 53*.



Figure 53

- 5. Touch RESET to reset the list item to the factory default setting or touch CANCEL to return to the Reset Menu.
- 6. When finished making changes, touch EXIT to return to the *System Menu*.

Default Cycles

	Cycle Chart Legend												
*	En	Always Enabled	‡	LA	Low Agitate								
	Ds	Always Disabled	1	RA	Regular Agitate								
	PW	Prewash]	D	Distribution								
	W	Wash	1	VL	Very Low Extract								
	R1	Rinse 1	1	L	Low Extract								
	R2	Rinse 2	1	М	Medium Extract								
	R3	Rinse 3]	Н	High Extract								
	R4	Rinse 4]	VH	Very High Extract								
	В	Bleach	1	UH	Ultra High Extract								
	S	Final Spin	†	L/H/S	Level/Heat/Supply								
^		Washer-Extractor	^^		Stacked Washer-Extractor/ Tumble Dryer								

Default Cycles

	Step Information*					Time	Water	Options	;†	Motor‡				Step Type
Description	Step #	Active	Status	Type	Min	Sec	S/H/J	Temp/Misc	Drain	Speed	Reversing	On Time	Off Time	Misc
				Normal -	Hot, Wa	arm (de	fault), Cold (t	otal time	e 22 mir	n., 0 sec	:.)			
Pre- wash (Mod1)	1	M1	PW	Fill	1	0	Low Level	Warm	Hold	RA	Yes	18	4	No Flush Out, Al- low Temp Override
	2	M1	PW	Supply	0	30	C1	10s Delay	Hold	-	-	-	-	ES1, Time ex- pires
	3	M1	PW	Agitate	2	0	Maintain Heat	Refill	Hold	RA	Yes	18	4	
	4	M1	PW	Cool- down	-	-	PC Global	Cold	Evac	LA	Yes	4	27	
	5	M1	PW	Drain	0	30	-		Evac	RA	Yes	18	4	
	6	Ds	PW	Extract	0	30	-		Evac	VL	-	-	-	

Description

Wash

Step#

7

8

9

11 En

12 !M3

13 En

14 En

15 Ds

16

17

18

19 Ds

!M3

!M3

!M3

Rinse

1

W

R1

R1

R1

R1

Extract

Agitate

Drain

Extract

Fill

0

1

2

0

0

30

0

0

30

30

_

-

_

Low Level

M4

M4

!M4

10 !M4

Step	Informa	tion*	Step Time		Water	Water Options†			Motor‡				
Active	Status	Type	Min	Sec	L/H/S	Temp/Misc	Drain	Speed	Reversing	On Time	Off Time	Misc	
		Normal -	Hot, W	arm (de	fault), Cold (t	otal tim	e 22 mi	n., 0 seo	c.)				
М4	W	Fill	1	0	Low Level	Warm	Hold	RA	Yes	18	4	No Flush Out Ex- tra Inlet, Allow Temp Override	
M4	W	Supply	0	30	C1,C2,C3^ C1,C2^^	10s Delay	Hold	-	-	-	-	ES1, ES2, Time ex- pires	
M4	W	Fill	1	0	Low Level	Warm	Hold	RA	Yes	18	4	No Flush Out	
M4	W	Supply	0	30	C1,C2,C3^ C1,C2^^	10s Delay	Hold	-	-	-	-	ES1, ES2, Time ex- pires	
En	W	Agitate	3	0	Maintain Heat	Refill	Hold	RA	Yes	18	4		
M3	W	Agitate	3	0	Maintain Heat	Refill	Hold	RA	Yes	18	4		
En	W	Cool- down	-	-	PC Global	Cold	Evac	LA	Yes	4	27		
En	W	Drain	0	30	-		Evac	RA	Yes	18	4		

Evac

Hold

Hold

Evac

Evac

Cold

Refill

VL

RA

RA

RA

VL

_

Yes

Yes

Yes

_

_

18

18

18

_

_

4

4

4

_

Table continues...

Flush

Out

Default Cycles

		Step I	nforma	tion*	Step	Time	Water	Options	•†	Motor‡				Step Type
Description	Step#	Active	Status	Type	Min	Sec	S/H/S	Temp/Misc	Drain	Speed	Reversing	On Time	Off Time	Misc
				Normal -	Hot, W	arm (de	fault), Cold (t	otal tim	e 22 mii	n., 0 sec	:.)			
Rinse 2	20	M2	R2	Fill	1	0	Low Level	Cold	Hold	RA	Yes	18	4	Flush Out
(Mod2)	21	M2	R2	Agitate	2	0	-	Refill	Hold	RA	Yes	18	4	
	22	M2	R2	Drain	0	30			Evac	RA	Yes	18	4	
	23	Ds	R2	Extract	0	30		Warm	Evac	VL	-	-	-	
Rinse 3	24	Ds	R3	Fill	1	0	Low Level	Cold	Hold	RA	Yes	18	4	Flush Out
	25	Ds	R3	Agitate	2	0	-	Refill	Hold	RA	Yes	18	4	
	26	Ds	R3	Drain	0	30			Evac	RA	Yes	18	4	
	27	Ds	R3	Extract	0	30	-		Evac	VL	-	-	-	
Rinse 4	28	En	R4	Supply	0	30	C4^ C3^^	0s De- lay	Hold	-	-	-	-	Hot
	29	En	R4	Fill	1	0	Low Level	Cold	Hold	RA	Yes	18	4	No Flush Out
	30	En	R4	Supply	0	30	C4^ C3^^	10s Delay	Hold	-	Yes	18	4	ES3, ES4, Time ex- pires
	31	En	R4	Agitate	4	0	-	Refill	Hold	RA	-	-	-	
Final Ex- tract	32	En	S	Extract	5	0	-		Evac	UH	-	-	-	
Shake- out	33	En	S	Agitate	0	30	-	No Refill	Evac	RA	Yes	7	6	

		Step I	nformat	tion*	Step Time		Water Options†			Motor‡				Step Type
Description	Step #	Active	Status	Type	Min	Sec	S/H/J	Temp/Misc	Drain	Speed	Reversing	On Time	Off Time	Misc
			S	ynthetics	s - Hot, \	Narm (d	lefault), Cold	(total tii	me 20 m	nin., 0 so	ec.)			
Pre- wash (Mod1)	1	M1	PW	Fill	1	0	Low Level	Warm	Hold	RA	Yes	18	4	No Flush Out, Al- low Temp Override
	2	M1	PW	Supply	0	30	C1	10s Delay	Hold	-	-	-	-	ES1, Time ex- pires
	3	M1	PW	Agitate	2	0	Maintain Heat	Refill	Hold	RA	Yes	18	4	
	4	M1	PW	Cool- down	-	-	PC Global	Cold	Evac	LA	Yes	4	27	
	5	M1	PW	Drain	0	30	-		Evac	RA	Yes	18	4	
	6	Ds	PW	Extract	0	30	-		Evac	VL	-	-	-	

		Step I	nformat	tion*	Step	Time	Water	Options	;†		Moto	r‡		Step Type
Description	Step#	Active	Status	Type	Min	Sec	S/H/S	Temp/Misc	Drain	Speed	Reversing	On Time	Off Time	Misc
			S	synthetics	s - Hot, \	Narm (d	lefault), Cold	(total ti	me 20 m	nin., 0 s	ec.)			
Wash	7	M4	W	Fill	1	0	Low Level	Warm	Hold	RA	Yes	18	4	No Flush Out Ex- tra Inlet, Allow Temp Override
	8	M4	W	Supply	0	30	C1,C2,C3^ C1,C2^^	10s Delay	Hold	-	-	-	-	ES1, ES2, Time ex- pires
	9	!M4	W	Fill	1	0	Low Level	Warm	Hold	RA	Yes	18	4	No Flush Out
	10	!M4	W	Supply	0	30	C1,C2,C3 [^] C1,C2 ^{^^}	10s Delay	Hold	-	-	-	-	ES1, ES2, Time ex- pires
	11	En	W	Agitate	2	30	Maintain Heat	Refill	Hold	RA	Yes	18	4	
	12	!M3	W	Agitate	2	30	Maintain Heat	Refill	Hold	RA	Yes	18	4	
	13	En	W	Cool- down	-	-	PC Global	Cold	Evac	LA	Yes	4	27	
	14	En	W	Drain	0	30	-		Evac	RA	Yes	18	4	
	15	Ds	W	Extract	0	30	-		Evac	VL	-	-	-	
Rinse 1	16	!M3	R1	Fill	1	0	Low Level	Cold	Hold	RA	Yes	18	4	Flush Out
	17	!M3	R1	Agitate	2	0	-	Refill	Hold	RA	Yes	18	4	
	18	!M3	R1	Drain	0	30			Evac	RA	Yes	18	4	
	19	Ds	R1	Extract	0	30	-		Evac	VL	-	-	-	

		Step I	nformat	tion*	Step	Time	Water	Options	•†	Motor‡				Step Type
Description	Step #	Active	Status	Type	Min	Sec	S/H/S	Temp/Misc	Drain	Speed	Reversing	On Time	Off Time	Misc
			S	synthetics	s - Hot, \	Narm (d	lefault), Cold	(total ti	me 20 n	nin., O so	ec.)			
Rinse 2	20	M2	R2	Fill	1	0	Low Level	Cold	Hold	RA	Yes	18	4	Flush Out
(Mod2)	21	M2	R2	Agitate	2	0	-	Refill	Hold	RA	Yes	18	4	
	22	M2	R2	Drain	0	30			Evac	RA	Yes	18	4	
	23	Ds	R2	Extract	0	30			Evac	VL	-	-	-	
Rinse 3	24	Ds	R3	Fill	1	0	Low Level	Cold	Hold	RA	Yes	18	4	Flush Out
	25	Ds	R3	Agitate	2	0	-	Refill	Hold	RA	Yes	18	4	
	26	Ds	R3	Drain	0	30			Evac	RA	Yes	18	4	
	27	Ds	R3	Extract	0	30	-		Evac	VL	-	-	-	
Rinse 4	28	En	R4	Supply	0	30	C4^ C3^^	0s De- lay	Hold	-	-	-	-	Hot
	29	En	R4	Fill	1	0	Low Level	Cold	Hold	RA	Yes	18	4	No Flush Out
	30	En	R4	Supply	0	30	C4^ C3^^	10s Delay	Hold	-	-	-	-	ES3, ES4, Time ex- pires
	31	En	R4	Agitate	4	0	-	Refill	Hold	RA	Yes	18	4	
Final Ex- tract	32	En	S	Extract	4	0	-		Evac	UH	-	-	-	
Shake- out	33	En	S	Agitate	0	30	-	No Refill	Evac	RA	Yes	7	6	

Default Cycles

	Step Information*					Time	Water	Options	•†	Motor‡				Step Type
Description	Step #	Active	Status	Type	Min	Sec	S/H/J	Temp/Misc	Drain	Speed	Reversing	On Time	Off Time	Misc
			I	Delicates	- Hot, V	Varm (de	efault), Cold (total tin	ne 19 m	in., 0 se	c.)			
Pre- wash (Mod1)	1	M1	PW	Fill	1	0	Low Level	Warm	Hold	RA	Yes	4	12	No Flush Out, Al- low Temp Override
	2	M1	PW	Supply	0	30	C1	10s Delay	Hold	-	-	-	-	ES1, Time ex- pires
	3	M1	PW	Agitate	2	0	Maintain Heat	Refill	Hold	RA	Yes	4	12	
	4	M1	PW	Cool- down	-	-	PC Global	Cold	Evac	LA	Yes	4	27	
	5	M1	PW	Drain	0	30	-		Evac	RA	Yes	4	12	
	6	Ds	PW	Extract	0	30	-		Evac	VL	-	-	-	
		Step I	nforma	tion*	Step	Time	Water	Options	Ƞ		Moto	or‡		Step Type
-------------	--------	--------	--------	---------------	----------	---------	----------------------	--------------	---------	-----------	-----------	---------	----------	--
Description	Step #	Active	Status	Type	Min	Sec	L/H/S	Temp/Misc	Drain	Speed	Reversing	On Time	Off Time	Misc
				Delicates	- Hot, V	Varm (d	efault), Cold (total tin	ne 19 m	in., 0 se	ec.)			
Wash	7	M4	W	Fill	1	0	Low Level	Warm	Hold	LA	Yes	4	12	No Flush Out Ex- tra Inlet, Allow Temp Override
	8	M4	W	Supply	0	30	C1,C2,C3^ C1,C2^^	10s Delay	Hold	-	-	-	-	ES1, ES2, Time ex- pires
	9	!M4	W	Fill	1	0	Low Level	Warm	Hold	LA	Yes	4	12	No Flush Out
	10	!M4	W	Supply	0	30	C1,C2,C3^ C1,C2^^	10s Delay	Hold	-	-	-	-	ES1, ES2, Time ex- pires
	11	En	W	Agitate	2	30	Maintain Heat	Refill	Hold	LA	Yes	4	12	
	12	!M3	W	Agitate	2	30	Maintain Heat	Refill	Hold	LA	Yes	4	12	
	13	En	W	Cool- down	-	-	PC Global	Cold	Evac	LA	Yes	4	27	
	14	En	W	Drain	0	30	-		Evac	LA	Yes	4	12	
	15	Ds	W	Extract	0	30	-		Evac	VL	-	-	-	
Rinse 1	16	!M3	R1	Fill	1	0	Medium Level	Cold	Hold	LA	Yes	4	12	Flush Out
	17	!M3	R1	Agitate	2	0	-	Refill	Hold	LA	Yes	4	12	
	18	!M3	R1	Drain	0	30			Evac	LA	Yes	4	12	
	19	Ds	R1	Extract	0	30	-		Evac	VL	-	-	-	

		Step I	nformat	tion*	Step	Time	Water	Options	•†		Moto	r‡		Step Type
Description	Step #	Active	Status	Type	Min	Sec	S/H/J	Temp/Misc	Drain	Speed	Reversing	On Time	Off Time	Misc
			l	Delicates	- Hot, V	Varm (de	efault), Cold (total tin	ne 19 m	in., 0 se	ec.)			
Rinse 2	20	M2	R2	Fill	1	0	Medium Level	Cold	Hold	LA	Yes	4	12	Flush Out
(Mod2)	21	M2	R2	Agitate	2	0	-	Refill	Hold	LA	Yes	4	12	
Í	22	M2	R2	Drain	0	30			Evac	LA	Yes	4	12	
	23	Ds	R2	Extract	0	30			Evac	VL	-	-	-	
Rinse 3 (Dis-	24	Ds	R3	Fill	1	0	Medium Level	Cold	Hold	LA	Yes	4	12	Flush Out
abled)	25	Ds	R3	Agitate	2	0	-	Refill	Hold	LA	Yes	4	12	
	26	Ds	R3	Drain	0	30			Evac	LA	Yes	4	12	
	27	Ds	R3	Extract	0	30	-		Evac	VL	-	-	-	
Rinse 4	28	En	R4	Supply	0	15	C1	0s De- lay	Hold	-	-	-	-	Cold
	29	En	R4	Supply	0	15	C4^ C3^^	0s De- lay	Hold	-	-	-	-	Hot
	30	En	R4	Fill	1	0	Medium Level	Cold	Hold	LA	Yes	4	12	No Flush Out
	31	En	R4	Supply	0	30	C4^ C3^^	10s Delay	Hold	-	-	-	-	ES3, ES4, Time ex- pires
	32	En	R4	Agitate	4	0	-	Refill	Hold	LA	Yes	4	12	
Final Ex- tract	33	En	S	Extract	3	0	-		Evac	М	-	-	-	
Shake- out	34	En	S	Agitate	0	30	-	No Refill	Evac	LA	Yes	7	6	

		Step I	nformat	tion*	Step	Time	Water	Options	\$†		Moto	r‡		Step Type
Description	Step #	Active	Status	Type	Min	Sec	S/H/S	Temp/Misc	Drain	Speed	Reversing	On Time	Off Time	Misc
				Pı	e-Clear	ı (if avai	ilible) (total ti	me 1 mi	in., 0 se	c.)				
Rinse 1	1	En	R1	Fill	0	30	Low Level	Cold	Hold	RA	Yes	18	4	No Flush Out
	2	En	R1	Agitate	20	20	-	No Refill	Hold	RA	Yes	18	4	
	3	En	R1	Agitate	10	10		No Refill	Evac	RA	Yes	18	4	

		Step I	nformat	tion*	Step	Time	Water	Options	*		Moto	r‡		Step Type
Description	Step #	Active	Status	Type	Min	Sec	S/H/S	Temp/Misc	Drain	Speed	Reversing	On Time	Off Time	Misc
		-	Co	lors - 40C	(defaul	lt), 30C,	15C, No Heat	t (total t	ime 29 r	min., 30	sec.)		-	
Pre- wash (Mod1)	1	M1	PW	Fill	1	0	Medium Level	Cold	Hold	RA	Yes	18	4	No Flush Out, Al- low Temp Override
	2	M1	PW	Supply	0	30	C1	10s Delay	Hold	-	-	-	-	ES1, Time ex- pires
	3	M1	PW	Agitate	4	0	Maintain Heat	Refill	Hold	RA	Yes	18	4	
	4	M1	PW	Cool- down	-	-	PC Global	Cold	Evac	RA	Yes	4	27	
	5	M1	PW	Extract	1	0	-		Evac	VL	-	-	-	
Wash	6	M4	W	Fill	1	0	Medium Level	40C	Hold	RA	Yes	18	4	No Flush Out Ex- tra Inlet, Allow Temp Override
	7	M4	W	Supply	0	30	C1,C2,C3^ C1,C2^^	10s Delay	Hold	-	-	-	-	ES1, Time ex- pires
	8	!M4	W	Fill	1	0	Medium Level	40C	Hold	RA	Yes	18	4	No Flush Out
	9	!M4	W	Supply	0	30	C1,C2,C3^ C1,C2^^	10s Delay	Hold	-	-	-	-	ES1, Time ex- pires
	10	En	W	Agitate	6	30	Maintain Heat	Refill	Hold	RA	Yes	18	4	
	11	!M3	W	Agitate	6	30	Maintain Heat	Refill	Hold	RA	Yes	18	4	
	12	En	W	Cool- down	-	-	PC Global	Cold	Evac	RA	Yes	4	27	
	13	En	W	Drain	0	30	-		Evac	RA	Yes	18	4	

		Step I	nformat	tion*	Step	Time	Water	Options	•†		Moto	r‡		Step Type
Description	Step #	Active	Status	Type	Min	Sec	S/H/J	Temp/Misc	Drain	Speed	Reversing	On Time	Off Time	Misc
			Co	lors - 40C	(defau	lt), 30C,	15C, No Hea	t (total t	ime 29 i	min., 30	sec.)			
Rinse 1	14	!M3	R1	Fill	1	0	Low Level	Cold	Hold	RA	Yes	18	4	Flush Out
	15	!M3	R1	Agitate	3	0	-	Refill	Hold	RA	Yes	18	4	
	16	!M3	R1	Extract	1	0	-		Evac	VL	-	-	-	
Rinse 2	17	M2	R2	Fill	1	0	Medium Level	Cold	Hold	RA	Yes	18	4	Flush Out
(Mod2)	18	M2	R2	Agitate	3	0	-	Refill	Hold	RA	Yes	18	4	
ĺ	19	M2	R2	Extract	1	0			Evac	VL	-	-	-	
Rinse 3	20	Ds	R3	Fill	1	0	Medium Level	Cold	Hold	RA	Yes	18	4	Flush Out
	21	Ds	R3	Agitate	3	0	-	Refill	Hold	RA	Yes	18	4	
	22	Ds	R3	Extract	1	0	-		Evac	VL	-	-	-	
Rinse 4	23	En	R4	Supply	0	30	C4^ C3^^	0s De- lay	Hold	-	-	-	-	Hot
	24	En	R4	Fill	1	0	Low Level	Cold	Hold	RA	Yes	18	4	No Flush Out
	25	En	R4	Supply	0	30	C4^ C3^^	10s Delay	Hold	-	-	-	-	ES3, ES4, Time ex- pires
	26	En	R4	Agitate	3	0	-	Refill	Hold	RA	Yes	18	4	
Final Ex- tract	27	En	S	Extract	5	0	-		Evac	UH	-	-	-	
Shake- out	28	En	S	Agitate	0	30	-	No Refill	Evac	RA	Yes	7	6	

	Step Information*			Step	Time	Water	Options	\$†		Moto	r‡		Step Type	
Description	Step #	Active	Status	Type	Min	Sec	C/H/S	Temp/Misc	Drain	Speed	Reversing	On Time	Off Time	Misc
		١	Whites -	60C (defa	ault), 50	C, 40C,	30C, 15C, No) Heat (t	otal tim	e 30 mi	n., 30 se	ec.)		
Pre- wash (Mod1)	1	M1	PW	Fill	1	0	Medium Level	Cold	Hold	RA	Yes	18	4	No Flush Out, Al- low Temp Override
	2	M1	PW	Supply	0	30	C1	10s Delay	Hold	-	-	-	-	ES1, Time ex- pires
	3	M1	PW	Agitate	4	0	Maintain Heat	Refill	Hold	RA	Yes	18	4	
	4	M1	PW	Cool- down	-	-	PC Global	Cold	Evac	RA	Yes	4	27	
	5	M1	PW	Extract	1	0	-		Evac	VL	-	-	-	

		Step	Informa	tion*	Step	Time	Water	Options	s†		Moto	r‡		Step Type
Description	Step #	Active	Status	Type	Min	Sec	L/H/S	Temp/Misc	Drain	Speed	Reversing	On Time	Off Time	Misc
	1		Whites ·	- 60C (def	ault), 50)C, 40C,	30C, 15C, No	Heat (t	total tim	e 30 mi	n., 30 s	ec.)	1	
Wash	6	M4	W	Fill	1	0	Medium Level	60C	Hold	RA	Yes	18	4	No Flush Out Ex- tra Inlet, Allow Temp Override
	7	M4	W	Supply	0	30	C1,C2,C3^ C1,C2^^	10s Delay	Hold	-	-	-	-	ES1, ES2, Time ex- pires
	8	!M4	W	Fill	1	0	Medium Level	60C	Hold	RA	Yes	18	4	No Flush Out
	9	!M4	W	Supply	0	30	C1,C2,C3^ C1,C2^^	10s Delay	Hold	-	-	-	-	ES1, ES2, Time ex- pires
	10	En	W	Agitate	7	0	Maintain Heat	Refill	Hold	RA	Yes	18	4	
	11	!M3	W	Agitate	7	0	Maintain Heat	Refill	Hold	RA	Yes	18	4	
	12	En	W	Cool- down	-	-	PC Global	Cold	Evac	RA	Yes	4	27	
	13	En	W	Drain	0	30	-		Evac	RA	Yes	18	4	
Rinse 1	14	!M3	R1	Fill	1	0	Low Level	Cold	Hold	RA	Yes	18	4	Flush Out
	15	!M3	R1	Agitate	3	0	-	Refill	Hold	RA	Yes	18	4	
	16	!M3	R1	Extract	1	0	-	1	Evac	VL	-	-	-	
Rinse 2	17	M2	R2	Fill	1	0	Medium Level	Cold	Hold	RA	Yes	18	4	Flush Out
(Mod2)	18	M2	R2	Agitate	3	0	-	Refill	Hold	RA	Yes	18	4	
,	19	M2	R2	Extract	1	0			Evac	VL	-	-	-	

Default Cycles

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		Step	Informa	tion*	Step	Time	Water	Options	\$†		Moto	r‡		Step Type
Description	Step #	Active	Status	Type	Min	Sec	C/H/S	Temp/Misc	Drain	Speed	Reversing	On Time	Off Time	Misc
			Whites -	60C (def	ault), 50	C, 40C,	30C, 15C, N	o Heat (t	otal tim	e 30 mi	n., 30 se	ec.)		
Rinse 3	20	Ds	R3	Fill	1	0	Medium Level	Cold	Hold	RA	Yes	18	4	Flush Out
	21	Ds	R3	Agitate	3	0	-	Refill	Hold	RA	Yes	18	4	
	22	Ds	R3	Extract	1	0	-		Evac	VL	-	-	-	
Rinse 4	23	En	R4	Supply	0	30	C4^ C3^^	0s De- lay	Hold	-	-	-	-	Hot
	24	En	R4	Fill	1	0	Low Level	Cold	Hold	RA	Yes	18	4	No Flush Out
	25	En	R4	Supply	0	30	C4^ C3^^	10s Delay	Hold	-	-	-	-	ES3, ES4, Time ex- pires
	26	En	R4	Agitate	3	0	-	Refill	Hold	RA	Yes	18	4	
Final Ex- tract	27	En	S	Extract	5	0	-		Evac	UH	-	-	-	
Shake- out	28	En	S	Agitate	0	30	-	No Refill	Evac	RA	Yes	7	6	

		Step I	nformat	tion*	Step	Time	Water	Options	s†		Moto	r‡		Step Type
Description	Step #	Active	Status	Type	Min	Sec	S/H/S	Temp/Misc	Drain	Speed	Reversing	On Time	Off Time	Misc
	-		•	Mix - 300	C (defau	ılt), 15C	, No Heat (tot	al time	29 min.,	, 30 sec	.)	-		
Pre- wash (Mod1)	1	M1	PW	Fill	1	0	Medium Level	Cold	Hold	RA	Yes	10	20	No Flush Out, Al- low Temp Override
	2	M1	PW	Supply	0	30	C1	10s Delay	Hold	-	-	-	-	ES1, Time ex- pires
	3	M1	PW	Agitate	4	0	Maintain Heat	Refill	Hold	RA	Yes	10	20	
	4	M1	PW	Cool- down	-	-	PC Global	Cold	Evac	RA	Yes	4	27	
	5	M1	PW	Extract	1	0	-		Evac	VL	-	-	-	
Wash	6	M4	W	Fill	1	0	Medium Level	30C	Hold	RA	Yes	10	20	No Flush Out Ex- tra Inlet, Allow Temp Override
	7	M4	W	Supply	0	30	C1,C2,C3^ C1,C2^^	10s Delay	Hold	-	-	-	-	ES1, Time ex- pires
	8	!M4	W	Fill	1	0	Medium Level	30C	Hold	RA	Yes	10	20	No Flush Out
	9	!M4	W	Supply	0	30	C1,C2,C3^ C1,C2^^	10s Delay	Hold	-	-	-	-	ES1, Time ex- pires
	10	En	W	Agitate	6	30	Maintain Heat	Refill	Hold	RA	Yes	10	20	
	11	!M3	W	Agitate	6	30	Maintain Heat	Refill	Hold	RA	Yes	10	20	
	12	En	W	Cool- down	-	-	PC Global	Cold	Evac	RA	Yes	4	27	
	13	En	W	Drain	0	30	-		Evac	RA	Yes	10	20	

		Step I	nforma	tion*	Step	Time	Water	Options	\$†		Moto	r‡		Step Type
Description	Step #	Active	Status	Type	Min	Sec	L/H/S	Temp/Misc	Drain	Speed	Reversing	On Time	Off Time	Misc
				Mix - 30	C (defai	ult), 15C	, No Heat (to	tal time	29 min.	, 30 sec	.)			
Rinse 1	14	!M3	R1	Fill	1	0	Low Level	Cold	Hold	RA	Yes	10	20	Flush Out
	15	!M3	R1	Agitate	3	0	-	Refill	Hold	RA	Yes	10	20	
	16	!M3	R1	Extract	1	0	-		Evac	VL	-	-	-	
Rinse 2	17	M2	R2	Fill	1	0	Medium Level	Cold	Hold	RA	Yes	10	20	Flush Out
(Mod2)	18	M2	R2	Agitate	3	0	-	Refill	Hold	RA	Yes	10	20	
,	19	M2	R2	Extract	1	0			Evac	VL	-	-	-	
Rinse 3	20	Ds	R3	Fill	1	0	Medium Level	Cold	Hold	RA	Yes	10	20	Flush Out
	21	Ds	R3	Agitate	3	0	-	Refill	Hold	RA	Yes	10	20	
	22	Ds	R3	Extract	1	0	-		Evac	VL	-	-	-	
Rinse 4	23	En	R4	Supply	0	30	C4^ C3^^	0s De- lay	Hold	-	-	-	-	Hot
	24	En	R4	Fill	1	0	Low Level	Cold	Hold	RA	Yes	10	20	No Flush Out
	25	En	R4	Supply	0	30	C4^ C3^^	10s Delay	Hold	-	-	-	-	ES3, ES4, Time ex- pires
	26	En	R4	Agitate	3	0	-	Refill	Hold	RA	Yes	10	20	
Final Ex- tract	27	En	S	Extract	5	0	-		Evac	VH	-	-	-	
Shake- out	28	En	S	Agitate	0	30	-	No Refill	Evac	RA	Yes	7	6	

		Step I	nformat	tion*	Step	Time	Water	Options	;†		Moto	r‡		Step Type
Description	Step #	Active	Status	Type	Min	Sec	S/H/J	Temp/Misc	Drain	Speed	Reversing	On Time	Off Time	Misc
				Woolens	s - 15C (default)	, No Heat (to	tal time	17 min.	, 30 sec	.)		_	
Pre- wash (Mod1)	1	M1	PW	Fill	1	0	Medium Level	Cold	Hold	LA	Yes	4	12	No Flush Out, Al- low Temp Override
	2	M1	PW	Supply	0	30	C1	10s Delay	Hold	-	-	-	-	ES1, Time ex- pires
	3	M1	PW	Agitate	2	0	Maintain Heat	Refill	Hold	LA	Yes	4	12	
	4	M1	PW	Cool- down	-	-	PC Global	Cold	Evac	LA	Yes	4	27	
	5	M1	PW	Drain	0	30			Evac	LA	Yes	4	12	
	6	Ds	PW	Extract	0	30	-		Evac	VL	-	-	-	

		Step I	nformat	tion*	Step	Time	Water	Options	*†		Moto	r‡		Step Type
Description	Step #	Active	Status	Type	Min	Sec	S/H/S	Temp/Misc	Drain	Speed	Reversing	On Time	Off Time	Misc
				Woolens	s - 15C (default)	, No Heat (to	al time	17 min.,	, 30 sec	.)			
Wash	7	M4	W	Fill	1	0	Medium Level	15C	Hold	LA	Yes	4	12	No Flush Out Ex- tra Inlet, Allow Temp Override
	8	M4	W	Supply	0	30	C1,C2,C3^ C1,C2^^	10s Delay	Hold	-	-	-	-	ES1, Time ex- pires
	9	!M4	W	Fill	1	0	Medium Level	15C	Hold	LA	Yes	4	12	No Flush Out
	10	!M4	W	Supply	0	30	C1,C2,C3^ C1,C2^^	10s Delay	Hold	-	-	-	-	ES1, Time ex- pires
	11	En	W	Agitate	2	30	Maintain Heat	Refill	Hold	LA	Yes	4	12	
	12	!M3	W	Agitate	2	30	Maintain Heat	Refill	Hold	LA	Yes	4	12	
	13	En	W	Cool- down	-	-	PC Global	Cold	Evac	LA	Yes	4	27	
	14	En	W	Drain	0	30			Evac	LA	Yes	4	12	
	15	Ds	W	Extract	0	30	-		Evac	VL	-	-	-	
Rinse 1	16	!M3	R1	Fill	1	0	Medium Level	Cold	Hold	LA	Yes	4	12	Flush Out
	17	!M3	R1	Agitate	2	0	-	Refill	Hold	LA	Yes	4	12	
	18	!M3	R1	Drain	0	30			Evac	LA	Yes	4	12	
	19	Ds	R1	Extract	1	30	-		Evac	VL	-	-	-	
Rinse 2	20	M2	R2	Fill	1	0	Medium Level	Cold	Hold	LA	Yes	4	12	Flush Out
(Mod2)	21	M2	R2	Agitate	2	0	-	Refill	Hold	LA	Yes	4	12	
Í	22	M2	R2	Drain	0	30			Evac	LA	Yes	4	12	
	23	Ds	R2	Extract	1	30			Evac	VL	-	-	-	

		Step I	nformat	tion*	Step	Time	Water	Options	•†		Moto	r‡		Step Type
Description	Step #	Active	Status	Type	Min	Sec	S/H/S	Temp/Misc	Drain	Speed	Reversing	On Time	Off Time	Misc
				Woolens	s - 15C (default)	, No Heat (tot	al time	17 min.	, 30 sec	.)			
Rinse 3	24	Ds	R3	Fill	1	0	Medium Level	Cold	Hold	RA	Yes	4	12	Flush Out
	25	Ds	R3	Agitate	2	0	-	Refill	Hold	RA	Yes	4	12	
	26	Ds	R3	Drain	0	30			Evac	RA	Yes	4	12	
	27	Ds	R3	Extract	0	30	-		Evac	VL	-	-	-	
Rinse 4	28	En	R4	Supply	0	15	C1	0s De- lay	Hold	-	-	-	-	Cold
	29	En	R4	Supply	0	15	C4^ C3^^	0s De- lay	Hold	-	-	-	-	Hot
	30	En	R4	Fill	1	0	Medium Level	Cold	Hold	RA	Yes	4	12	No Flush Out
	31	En	R4	Supply	0	30	C4^ C3^^	10s Delay	Hold	-	-	-	-	ES3, ES4, Time ex- pires
	32	En	R4	Agitate	3	0	-	Refill	Hold	RA	Yes	4	12	
Final Ex- tract	33	En	S	Extract	2	30	-		Evac	UH	-	-	-	
Shake- out	34	En	S	Agitate	0	30	-	No Refill	Evac	RA	Yes	7	6	

		Step I	nformat	tion*	Step	Time	Water	Options	•†		Moto	r‡		Step Type
Description	Step #	Active	Status	Type	Min	Sec	S/H/J	Temp/Misc	Drain	Speed	Reversing	On Time	Off Time	Misc
			D	elicates -	30C (de	fault), 1	5C, No Heat	(total tir	ne 18 m	in., 30 s	sec.)			
Pre- wash (Mod1)	1	M1	PW	Fill	1	0	Medium Level	Cold	Hold	LA	Yes	4	12	No Flush Out, Al- low Temp Override
	2	M1	PW	Supply	0	30	C1	10s Delay	Hold	-	-	-	-	ES1, Time ex- pires
	3	M1	PW	Agitate	2	0	Maintain Heat	Refill	Hold	LA	Yes	4	12	
	4	M1	PW	Cool- down	-	-	PC Global	Cold	Evac	LA	Yes	4	27	
	5	M1	PW	Drain	0	30			Evac	LA	Yes	4	12	
	6	Ds	PW	Extract	0	30	-		Evac	VL	-	-	-	

		Step I	nforma	tion*	Step	Time	Water	Options	\$†		Moto	r‡		Step Type
Description	Step #	Active	Status	Type	Min	Sec	S/H/S	Temp/Misc	Drain	Speed	Reversing	On Time	Off Time	Misc
	-		D	elicates -	30C (de	efault), 1	5C, No Heat	(total tir	me 18 m	in., 30 s	sec.)			
Wash	7	M4	W	Fill	1	0	High Level	30C	Hold	LA	Yes	4	12	No Flush Out Ex- tra Inlet, Allow Temp Override
	8	M4	W	Supply	0	30	C1,C2,C3^ C1,C2^^	10s Delay	Hold	-	-	-	-	ES1, Time ex- pires
	9	!M4	W	Fill	1	0	High Level	30C	Hold	LA	Yes	4	12	No Flush Out
	10	!M4	W	Supply	0	30	C1,C2,C3^ C1,C2^^	10s Delay	Hold	-	-	-	-	ES1, Time ex- pires
	11	En	W	Agitate	2	30	Maintain Heat	Refill	Hold	LA	Yes	4	12	
	12	!M3	W	Agitate	2	30	Maintain Heat	Refill	Hold	LA	Yes	4	12	
	13	En	W	Cool- down	-	-	PC Global	Cold	Evac	LA	Yes	4	27	
	14	En	W	Drain	0	30			Evac	LA	Yes	4	12	
	15	Ds	W	Extract	0	30	-		Evac	VL	-	-	-	
Rinse 1	16	!M3	R1	Fill	1	0	Medium Level	Cold	Hold	LA	Yes	4	12	Flush Out
	17	!M3	R1	Agitate	2	0	-	Refill	Hold	LA	Yes	4	12	
	18	!M3	R1	Drain	0	30			Evac	LA	Yes	4	12	
	19	Ds	R1	Extract	1	30	-		Evac	VL	-	-	-	
Rinse 2	20	M2	R2	Fill	1	0	Medium Level	Cold	Hold	LA	Yes	4	12	Flush Out
$\binom{\text{(Mod2)}}{\text{(Mod2)}}$	21	M2	R2	Agitate	2	0	-	Refill	Hold	LA	Yes	4	12	
ĺ	22	M2	R2	Drain	0	30			Evac	LA	Yes	4	12	
	23	Ds	R2	Extract	1	30			Evac	VL	-	-	-	

		Step I	nforma	tion*	Step	Time	Water	Options	•†		Moto	r‡		Step Type
Description	Step #	Active	Status	Type	Min	Sec	C/H/S	Temp/Misc	Drain	Speed	Reversing	On Time	Off Time	Misc
			D	elicates -	30C (de	efault), 1	5C, No Heat	(total tir	ne 18 m	in., 30 s	sec.)			
Rinse 3	24	Ds	R3	Fill	1	0	Medium Level	Cold	Hold	RA	Yes	4	12	Flush Out
	25	Ds	R3	Agitate	2	0	-	Refill	Hold	RA	Yes	4	12	
	26	Ds	R3	Drain	0	30			Evac	RA	Yes	4	12	
	27	Ds	R3	Extract	0	30	-		Evac	VL	-	-	-	
Rinse 4	28	En	R4	Supply	0	15	C1	0s De- lay	Hold	-	-	-	-	Cold
	29	En	R4	Supply	0	15	C4^ C3^^	0s De- lay	Hold	-	-	-	-	Hot
	30	En	R4	Fill	1	0	Medium Level	Cold	Hold	LA	Yes	4	12	No Flush Out
	31	En	R4	Supply	0	30	C4^ C3^^	10s Delay	Hold	-	-	-	-	ES3, ES4, Time ex- pires
	32	En	R4	Agitate	4	0	-	Refill	Hold	LA	Yes	4	12	
Final Ex- tract	33	En	S	Extract	2	30	-		Evac	М	-	-	-	
Shake- out	34	En	S	Agitate	0	30	-	No Refill	Evac	LA	Yes	7	6	

Pre- wash (Mod1)		Step I	nformat	tion*	Step	Time	Water	Options	s†		Moto	r‡		Step Type
Description	Step#	Active	Status	Type	Min	Sec	S/H/J	Temp/Misc	Drain	Speed	Reversing	On Time	Off Time	Misc
		E	Bedding	- 60C (de	fault), 5	0C, 40C	C, 30C, 15C, N	lo Heat	(total tii	me 35 m	nin., 0 se	ec.)		
Pre- wash (Mod1)	1	M1	PW	Fill	1	0	Medium Level	Cold	Hold	RA	Yes	18	4	No Flush Out, Al- low Temp Override
	2	M1	PW	Supply	0	30	C1	10s Delay	Hold	-	-	-	-	ES1, Time ex- pires
	3	M1	PW	Agitate	4	0	Maintain Heat	Refill	Hold	RA	Yes	18	4	
	4	M1	PW	Cool- down	-	-	PC Global	Cold	Evac	RA	Yes	4	27	
	5	M1	PW	Extract	1	0	-		Evac	VL	-	-	-	

		Step I	nformat	tion*	Step	Time	Water	Options	; †		Moto	r‡		Step Type
Description	Step #	Active	Status	Type	Min	Sec	S/H/J	Temp/Misc	Drain	Speed	Reversing	On Time	Off Time	Misc
		E	Bedding	- 60C (de	efault), 5	50C, 40C	C, 30C, 15C, N	lo Heat	(total tir	ne 35 m	nin., 0 se	ec.)		
Wash	6	M4	W	Fill	1	0	Medium Level	60C	Hold	RA	Yes	18	4	No Flush Out Ex- tra Inlet, Allow Temp Override
	7	M4	W	Supply	0	30	C1,C2,C3^ C1,C2^^	10s Delay	Hold	-	-	-	-	ES1, ES2, Time ex- pires
	8	!M4	W	Fill	1	0	Medium Level	60C	Hold	RA	Yes	18	4	No Flush Out
	9	!M4	W	Supply	0	30	C1,C2,C3^ C1,C2^^	10s Delay	Hold	-	-	-	-	ES1, ES2, Time ex- pires
	10	En	W	Agitate	6	30	Maintain Heat	Refill	Hold	RA	Yes	18	4	
	11	!M3	W	Agitate	6	30	Maintain Heat	Refill	Hold	RA	Yes	18	4	
	12	En	W	Cool- down	-	-	PC Global	Cold	Evac	RA	Yes	4	27	
	13	En	W	Extract	1	0	-		Evac	VL	-	-	-	
Rinse 1	14	!M3	R1	Fill	1	0	Medium Level	Cold	Hold	RA	Yes	18	4	Flush Out
	15	!M3	R1	Agitate	3	0	-	Refill	Hold	RA	Yes	18	4	
	16	!M3	R1	Extract	1	0	-		Evac	VL	-	-	-	
Rinse 2	17	M2	R2	Fill	1	0	Medium Level	Cold	Hold	RA	Yes	18	4	Flush Out
(Mod2)	18	M2	R2	Agitate	3	0	-	Refill	Hold	RA	Yes	18	4	
	19	M2	R2	Extract	1	0			Evac	VL	-	-	-	

		Step I	nformat	tion*	Step	Time	Water	Options	s†		Moto	r‡		Step Type
Description	Step #	Active	Status	Type	Min	Sec	S/H/S	Temp/Misc	Drain	Speed	Reversing	On Time	Off Time	Misc
	-	E	Bedding	- 60C (de	efault), 5	50C, 40C	C, 30C, 15C, N	lo Heat	(total tii	me 35 m	nin., 0 se	ec.)		
Rinse 3	20	En	R3	Fill	1	0	Medium Level	Cold	Hold	RA	Yes	18	4	Flush Out
	21	En	R3	Agitate	3	0	-	Refill	Hold	RA	Yes	18	4	
	22	En	R3	Extract	1	0	-		Evac	VL	-	-	-	
Rinse 4	23	En	R4	Supply	0	30	C4^ C3^^	0s De- lay	Hold	-	-	-	-	Hot
	24	En	R4	Fill	1	0	Medium Level	Cold	Hold	RA	Yes	18	4	No Flush Out
	25	En	R4	Supply	0	30	C4^ C3^^	10s Delay	Hold	-	-	-	-	ES3, ES4, Time ex- pires
	26	En	R4	Agitate	3	0	-	Refill	Hold	RA	Yes	18	4	
Final Ex- tract	27	En	S	Extract	5	0	-		Evac	UH	-	-	-	
Shake- out	28	En	S	Agitate	0	30	-	No Refill	Evac	RA	Yes	7	6	

		Step I	nformat	tion*	Step	Time	Water	Options	*		Moto	r‡		Step Type
Description	Step #	Active	Status	Type	Min	Sec	C/H/S	Temp/Misc	Drain	Speed	Reversing	On Time	Off Time	Misc
	-	-	-		Hot Wa	sh - 900	C (total time 2	9 min.,	30 sec.))				
Pre- wash (Mod1)	1	M1	PW	Fill	1	0	Medium Level	Cold	Hold	RA	Yes	18	4	No Flush Out, Al- low Temp Override
	2	M1	PW	Supply	0	30	C1	10s Delay	Hold	-	-	-	-	ES1, Time ex- pires
	3	M1	PW	Agitate	4	0	Maintain Heat	Refill	Hold	RA	Yes	18	4	
	4	M1	PW	Cool- down	-	-	PC Global	Cold	Evac	RA	Yes	4	27	
	5	M1	PW	Extract	1	0	-		Evac	VL	-	-	-	

		Step I	Information	tion*	Step	Time	Water	Options	st		Moto	r‡		Step Type
Description	Step #	Active	Status	Type	Min	Sec	S/H/S	Temp/Misc	Drain	Speed	Reversing	On Time	Off Time	Misc
	-		-		Hot Wa	sh - 900	C (total time 2	9 min.,	30 sec.))		-		
Wash	6	M4	W	Fill	1	0	Medium Level	90C	Hold	RA	Yes	18	4	No Flush Out Ex- tra Inlet, Allow Temp Override
	7	M4	W	Supply	0	30	C1,C2,C3^ C1,C2^^	10s Delay	Hold	-	-	-	-	ES1, ES2, Time ex- pires
	8	!M4	W	Fill	1	0	Medium Level	90C	Hold	RA	Yes	18	4	No Flush Out
	9	!M4	W	Supply	0	30	C1,C2,C3^ C1,C2^^	10s Delay	Hold	-	-	-	-	ES1, ES2, Time ex- pires
	10	En	W	Agitate	6	30	Maintain Heat	Refill	Hold	RA	Yes	18	4	
	11	!M3	W	Agitate	6	30	Maintain Heat	Refill	Hold	RA	Yes	18	4	
	12	En	W	Cool- down	-	-	PC Global	Cold	Evac	RA	Yes	4	27	
	13	En	W	Drain	0	30	-		Evac	VL	-	-	-	
Rinse 1	14	!M3	R1	Fill	1	0	Low Level	Cold	Hold	RA	Yes	18	4	Flush Out
	15	!M3	R1	Agitate	3	0	-	Refill	Hold	RA	Yes	18	4	
	16	!M3	R1	Extract	1	0	-		Evac	VL	-	-	-	
Rinse 2	17	M2	R2	Fill	1	0	Medium Level	Cold	Hold	RA	Yes	18	4	Flush Out
(Mod2)	18	M2	R2	Agitate	3	0	-	Refill	Hold	RA	Yes	18	4	
	19	M2	R2	Extract	1	0			Evac	VL	-	-	-	

		Step I	Informa	tion*	Step	Time	Water	Options	\$†		Moto	r‡		Step Type
Description	Step #	Active	Status	Type	Min	Sec	C/H/S	Temp/Misc	Drain	Speed	Reversing	On Time	Off Time	Misc
	-				Hot Wa	sh - 900	C (total time 2	29 min.,	30 sec.)					
Rinse 3	20	Ds	R3	Fill	1	0	Medium Level	Cold	Hold	RA	Yes	18	4	Flush Out
	21	Ds	R3	Agitate	3	0	-	Refill	Hold	RA	Yes	18	4	
	22	Ds	R3	Extract	1	0	-		Evac	VL	-	-	-	
Rinse 4	23	En	R4	Supply	0	30	C4^ C3^^	0s De- lay	Hold	-	-	-	-	Hot
	24	En	R4	Fill	1	0	Low Level	Cold	Hold	RA	Yes	18	4	No Flush Out
	25	En	R4	Supply	0	30	C4^ C3^^	10s Delay	Hold	-	-	-	-	ES3, ES4, Time ex- pires
	26	En	R4	Agitate	3	0	-	Refill	Hold	RA	Yes	18	4	
Final Ex- tract	27	En	S	Extract	5	0	-		Evac	UH	-	-	-	
Shake- out	28	En	S	Agitate	0	30	-	No Refill	Evac	RA	Yes	7	6	

		Step I	nformat	tion*	Step	Time	Water	Options	s†		Moto	r‡		Step Type
Description	Step #	Active	Status	Type	Min	Sec	S/H/J	Temp/Misc	Drain	Speed	Reversing	On Time	Off Time	Misc
				v	Varm W	ash - 60	C (total time	29 min.	, 30 sec	.)				
Pre- wash (Mod1)	1	M1	PW	Fill	1	0	Medium Level	Cold	Hold	RA	Yes	18	4	No Flush Out, Al- low Temp Override
	2	M1	PW	Supply	0	30	C1	10s Delay	Hold	-	-	-	-	ES1, Time ex- pires
	3	M1	PW	Agitate	4	0	Maintain Heat	Refill	Hold	RA	Yes	18	4	
	4	M1	PW	Cool- down	-	-	PC Global	Cold	Evac	RA	Yes	4	27	
	5	M1	PW	Extract	1	0	-		Evac	VL	-	-	-	

		Step I	nformat	tion*	Step	Time	Water	Options	\$†		Moto	r‡		Step Type
Description	Step #	Active	Status	Type	Min	Sec	S/H/S	Temp/Misc	Drain	Speed	Reversing	On Time	Off Time	Misc
	•			v	Varm W	ash - 60	C (total time	29 min.	, 30 sec	.)				
Wash	6	M4	W	Fill	1	0	Medium Level	60C	Hold	RA	Yes	18	4	No Flush Out Ex- tra Inlet, Allow Temp Override
	7	M4	W	Supply	0	30	C1,C2,C3^ C1,C2^^	10s Delay	Hold	-	-	-	-	ES1, ES2, Time ex- pires
	8	!M4	W	Fill	1	0	Medium Level	60C	Hold	RA	Yes	18	4	No Flush Out
	9	!M4	W	Supply	0	30	C1,C2,C3^ C1,C2^^	10s Delay	Hold	-	-	-	-	ES1, ES2, Time ex- pires
	10	En	W	Agitate	6	30	Maintain Heat	Refill	Hold	RA	Yes	18	4	
	11	!M3	W	Agitate	6	30	Maintain Heat	Refill	Hold	RA	Yes	18	4	
	12	En	W	Cool- down	-	-	PC Global	Cold	Evac	RA	Yes	4	27	
	13	En	W	Drain	0	30	-		Evac	RA	Yes	18	4	
Rinse 1	14	!M3	R1	Fill	1	0	Low Level	Cold	Hold	RA	Yes	18	4	Flush Out
	15	!M3	R1	Agitate	3	0	-	Refill	Hold	RA	Yes	18	4	
	16	!M3	R1	Extract	1	0	-		Evac	VL	-	-	-	
Rinse 2	17	M2	R2	Fill	1	0	Medium Level	Cold	Hold	RA	Yes	18	4	Flush Out
(Mod2)	18	M2	R2	Agitate	3	0	-	Refill	Hold	RA	Yes	18	4	
	19	M2	R2	Extract	1	0			Evac	VL	-	-	-	

		Step I	nforma	tion*	Step Time		Water Options†			Motor‡				Step Type
Description	Step #	Active	Status	Type	Min	Sec	C/H/S	Temp/Misc	Drain	Speed	Reversing	On Time	Off Time	Misc
Warm Wash - 60C (total time 29 min., 30 sec.)														
Rinse 3	20	Ds	R3	Fill	1	0	Medium Level	Cold	Hold	RA	Yes	18	4	Flush Out
	21	Ds	R3	Agitate	3	0	-	Refill	Hold	RA	Yes	18	4	
	22	Ds	R3	Extract	1	0	-		Evac	VL	-	-	-	
Rinse 4	23	En	R4	Supply	0	30	C4^ C3^^	0s De- lay	Hold	-	-	-	-	Hot
	24	En	R4	Fill	1	0	Low Level	Cold	Hold	RA	Yes	18	4	No Flush Out
	25	En	R4	Supply	0	30	C4^ C3^^	10s Delay	Hold	-	-	-	-	ES3, ES4, Time ex- pires
	26	En	R4	Agitate	3	0	-	Refill	Hold	RA	Yes	18	4	
Final Ex- tract	27	En	S	Extract	5	0	-		Evac	UH	-	-	-	
Shake- out	28	En	S	Agitate	0	30	-	No Refill	Evac	RA	Yes	7	6	

	Step Information*					Time	Water Options†			Motor‡				Step Type
Description	Step #	Active	Status	Type	Min	Sec	S/H/S	Temp/Misc	Drain	Speed	Reversing	On Time	Off Time	Misc
Cotton - 60C (default), 50C, 40C, 30C, 15C, No Heat (total time 30 min., 30 sec.)														
Pre- wash (Mod1)	1	M1	PW	Fill	1	0	Medium Level	Cold	Hold	RA	Yes	18	4	No Flush Out, Al- low Temp Override
	2	M1	PW	Supply	0	30	C1	10s Delay	Hold	-	-	-	-	ES1, Time ex- pires
	3	M1	PW	Agitate	4	0	Maintain Heat	Refill	Hold	RA	Yes	18	4	
	4	M1	PW	Cool- down	-	-	PC Global	Cold	Evac	RA	Yes	4	27	
	5	M1	PW	Extract	1	0	-		Evac	VL	-	-	-	
Wash	6	M4	W	Fill	1	0	Medium Level	60C	Hold	RA	Yes	18	4	No Flush Out Ex- tra Inlet, Allow Temp Override
	7	M4	W	Supply	0	30	C1,C2,C3^ C1,C2^^	10s Delay	Hold	-	-	-	-	ES1, Time ex- pires
	8	!M4	W	Fill	1	0	Medium Level	60C	Hold	RA	Yes	18	4	No Flush Out
	9	!M4	W	Supply	0	30	C1,C2,C3^ C1,C2^^	10s Delay	Hold	-	-	-	-	ES1, Time ex- pires
	10	En	W	Agitate	7	0	Maintain Heat	Refill	Hold	RA	Yes	18	4	
	11	!M3	W	Agitate	7	0	Maintain Heat	Refill	Hold	RA	Yes	18	4	
	12	En	W	Cool- down	-	-	PC Global	Cold	Evac	RA	Yes	4	27	
	13	En	W	Drain	0	30	-		Evac	RA	Yes	18	4	

		Step I	nformat	tion*	Step Time		Water Options†			Motor‡				Step Type
Description	Step #	Active	Status	Type	Min	Sec	S/H/J	Temp/Misc	Drain	Speed	Reversing	On Time	Off Time	Misc
Cotton - 60C (default), 50C, 40C, 30C, 15C, No Heat (total time 30 min., 30 sec.)														
Rinse 1	14	!M3	R1	Fill	1	0	Low Level	Cold	Hold	RA	Yes	18	4	Flush Out
	15	!M3	R1	Agitate	3	0	-	Refill	Hold	RA	Yes	18	4	
	16	!M3	R1	Extract	1	0	-		Evac	VL	-	-	-	
Rinse 2	17	M2	R2	Fill	1	0	Medium Level	Cold	Hold	RA	Yes	18	4	Flush Out
(Mod2)	18	M2	R2	Agitate	3	0	-	Refill	Hold	RA	Yes	18	4	
ĺ	19	M2	R2	Extract	1	0			Evac	VL	-	-	-	
Rinse 3	20	Ds	R3	Fill	1	0	Medium Level	Cold	Hold	RA	Yes	18	4	Flush Out
	21	Ds	R3	Agitate	3	0	-	Refill	Hold	RA	Yes	18	4	
	22	Ds	R3	Extract	1	0	-		Evac	VL	-	-	-	
Rinse 4	23	En	R4	Supply	0	30	C4^ C3^^	0s De- lay	Hold	-	-	-	-	Hot
	24	En	R4	Fill	1	0	Low Level	Cold	Hold	RA	Yes	18	4	No Flush Out
	25	En	R4	Supply	0	30	C4^ C3^^	10s Delay	Hold	-	-	-	-	ES3, ES4, Time ex- pires
	26	En	R4	Agitate	3	0	-	Refill	Hold	RA	Yes	18	4	
Final Ex- tract	27	En	S	Extract	5	0	-		Evac	UH	-	-	-	
Shake- out	28	En	S	Agitate	0	30	-	No Refill	Evac	RA	Yes	7	6	

	Step Information*			Step Time		Water Options†			Motor‡				Step Type	
Description	Step #	Active	Status	Type	Min	Sec	S/H/S	Temp/Misc	Drain	Speed	Reversing	On Time	Off Time	Misc
	High Speed Spin (total time 15 min., 30 sec.)													
Rinse 1	1	En	R1	Fill	1	0	High Level	Cold	Hold	RA	Yes	18	4	Flush Out
	2	En	R1	Agitate	2	0	-	Refill	Hold	RA	Yes	18	4	
Final Ex- tract	3	En	S	Extract	12	0	-		Evac	UH	-	-	-	
Shake- out	4	En	S	Agitate	0	30	-	No Refill	Evac	RA	Yes	7	6	