Washer-Extractors

Pocket Hardmount
2-Speed and 3-Speed

UW35P2
UW35P3
UW60P2
UW60P3

Operation/Programming

MC010J

Para bajar una copia de estas instrucciones
en español, visite www.comlaundry.com.

Keep These Instructions for Future Reference.
(If this machine changes ownership, this manual must accompany machine.)

Alliance Laundry Systems

www.comlaundry.com

Part No. F232090R3
February 2007

Table of Contents

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

DANGER indicates the presence of a hazard that will cause severe personal injury, death, or substantial property damage if the danger is ignored.

WARNING

WARNING indicates the presence of a hazard that can cause severe personal injury, death, or substantial property damage if the warning is ignored.

CAUTION

CAUTION indicates the presence of a hazard that will or can cause minor personal injury or property damage if the caution is ignored.

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

1. Read all instructions before using the washer.
2. Refer to the GROUNDING INSTRUCTIONS in the INSTALLATION manual for the proper grounding of the washer.
3. Do not wash textiles that have been previously cleaned in, washed in, soaked in, or spotted with gasoline, kerosene, waxes, cooking oils, dry-cleaning solvents, or other flammable or explosive substances as they give off vapors that could ignite or explode.
4. Do not add gasoline, dry-cleaning solvents, or other flammable or explosive substances to the wash water. These substances give off vapors that could ignite or explode.
5. 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.
6. 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 is a safety rule for all appliances.
7. Before the washer is removed from service or discarded, remove the door to the washing compartment.
8. Do not reach into the washer if the wash drum is moving.

9. Do not install or store the washer where it will be exposed to water and/or weather.
10. Do not tamper with the controls.
11. 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.
12. 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.
13. Use washer only for its intended purpose, washing textiles.
14. Never wash machine parts or automotive parts in the machine. This could result in serious damage to the basket.
15. ALWAYS disconnect the washer from electrical supply before attempting any service. Disconnect the power cord by grasping the plug, not the cord.
16. Install the washer according to the INSTALLATION INSTRUCTIONS. All connections for water, drain, electrical power and grounding must comply with local codes and be made by licensed personnel when required.
17. To reduce the risk of fire, textiles which have traces of any flammable substances such as vegetable oil, cooking oil, machine oil, flammable chemicals, thinner, etc., or anything containing wax or chemicals such as in mops and cleaning cloths, must not be put into the washer. These flammable substances may cause the fabric to catch on fire by itself.
18. Do not use fabric softeners or products to eliminate static unless recommended by the manufacturer of the fabric softener or product.
19. 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.
20. Replace worn power cords and/or loose plugs.
21. 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.
22. 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.
23. 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 chemical burns, keep them out of the reach of children at all times (preferably in a locked cabinet).
24. Always follow the fabric care instructions supplied by the textile manufacturer.
25. Never operate the washer with any guards and/or panels removed.
26. DO NOT operate the washer with missing or broken parts.
27. DO NOT bypass any safety devices.
28. 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 INSTRUCTIONS 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

This machine must be installed, adjusted, and serviced by qualified electrical maintenance personnel familiar with 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 and/or equipment damage, and may void the warranty.

SW004

CAUTION

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

SW020

CAUTION

Be careful around the open door, particularly when loading from a level below the door. Impact with door edges can cause personal injury.

SW025

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

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.

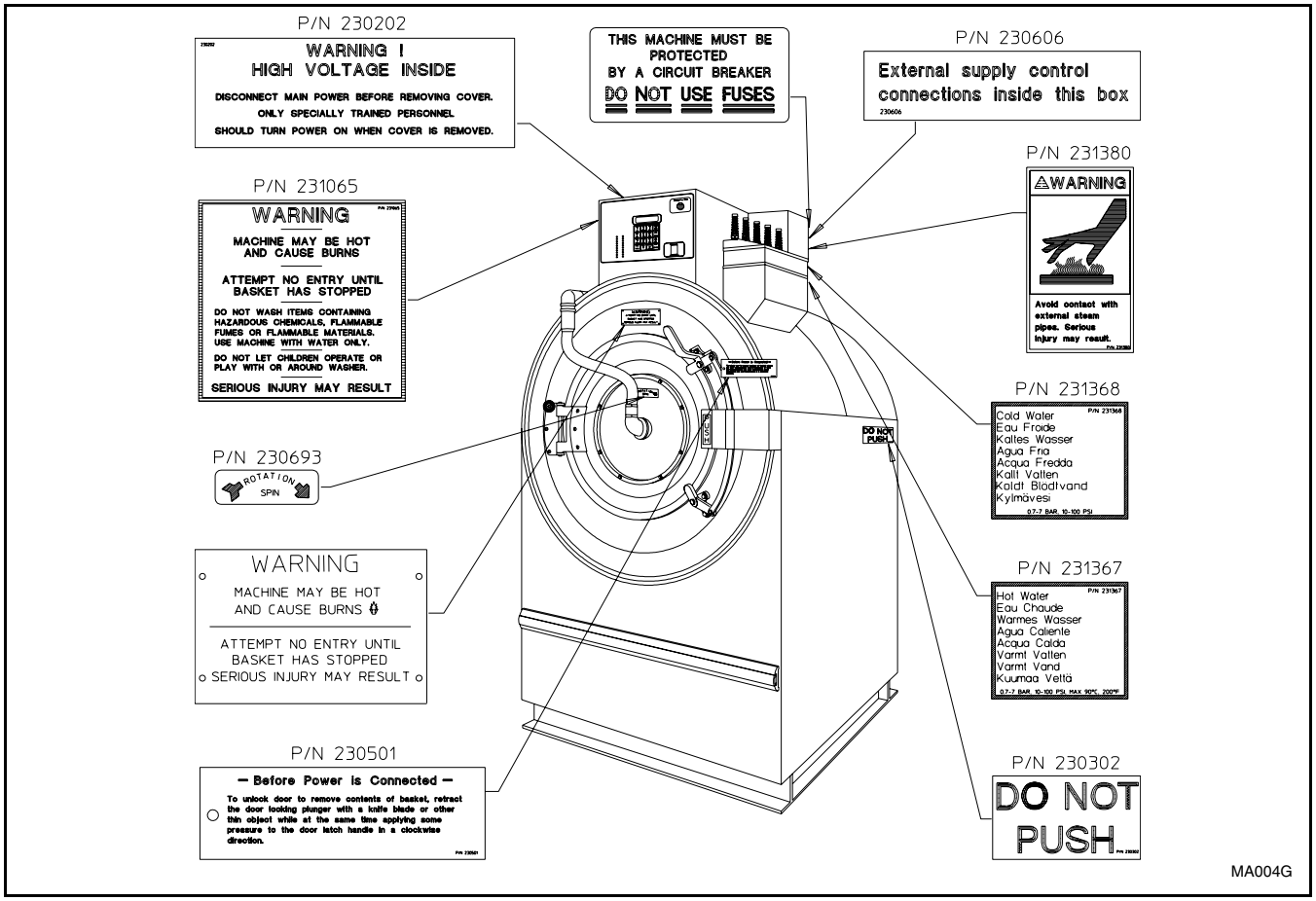


Figure 1

Key To Symbols

The lightning flash and arrowhead within the triangle is a warning sign indicating the presence of dangerous voltage.

The exclamation point within the triangle is a warning sign indicating important instructions concerning the machine and possibly dangerous conditions.

This warning symbol indicates the presence of potentially dangerous drive mechanisms within the machine. Guards should always be in place when the machine is in operation.

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

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

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

To provide personal safety and keep the machine in proper working order, follow all maintenance and safety procedures presented in this manual. If questions regarding safety arise, contact the factory immediately.

Use factory-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

To ensure the safety of machine operators, the following maintenance checks must be performed daily:

1. Prior to operating the machine, verify that all warning signs are present and legible. Missing or illegible signs must be replaced immediately. Make certain that spares are available.
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 with the door open.
   b. Close the door without locking it and attempt to start the machine. The machine should not start with the door unlocked.
   c. Close and lock the door and start a cycle. Attempt to open the door while the cycle is in progress. The door should not open.

   If the door lock and interlock are not functioning properly, 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

Never operate the machine with a bypassed or disconnected balance system. Operating the machine with severe out-of-balance loads could result in personal injury and serious equipment damage.

SW039

Safe Operating Environment

Safe operation requires an appropriate operating environment for both the operator and the machine. If questions regarding safety arise, contact the factory immediately.

Environmental Conditions

- *Ambient Temperature*. Water in the machine will freeze at temperatures of 32° F or below.

  Temperatures above 120° F (50° C) will result in more frequent motor overheating and, in some cases, malfunction or premature damage to solid state devices that are used in some models. Special cooling devices may be necessary.

  Water pressure switches are affected by increases and decreases in temperature. Every 25° F (10° C) change in temperature will have a 1% effect on the water level.
- *Humidity*. Relative humidity above 90% may cause the machine's electronics or motors to malfunction or may trip the ground fault interrupter. Corrosion problems may occur on some metal components in the machine.

  If the relative humidity is below 30%, belts and rubber hoses may eventually develop dry rot. This condition can result in hose leaks, which may cause safety hazards external to the machine in conjunction with adjacent electrical equipment.
- *Ventilation*. The need for make-up air openings for such laundry room accessories as dryers, ironers, water heaters, etc., must be evaluated periodically. Louvers, screens, or other separating devices may reduce the available air opening significantly.
- *Elevation*. If the machine is to be operated at elevations of over 3,280 feet (1,000 meters) above sea level, pay special attention to water levels and electronic settings (particularly temperature) or desired results may not be achieved.
- *Chemicals*. Keep stainless steel surfaces free of chemical residues.

WARNING

Do not place volatile or flammable fluids in any machine. Do not clean the machine with volatile or flammable fluids such as acetone, lacquer thinners, enamel reducers, carbon tetrachloride, gasoline, benzene, naptha, etc. Doing so could result in serious personal injury and/or damage to the machine.

SW002

- *Water Damage*. Do not spray the machine with water. Short circuiting and serious damage may result. Repair immediately all seepage due to worn or damaged gaskets, etc.

Machine Location

- *Foundation*. The concrete floor must be of sufficient strength and thickness to handle the floor loads generated by the high extract speeds of the machine.
- *Service/Maintenance Space*. Provide sufficient space to allow comfortable performance of service procedures and routine preventive maintenance.

  This is especially important in connection with machines equipped with an AC inverter drive.

Consult installation instructions for specific details.

CAUTION

Replace all panels that are removed to perform service and maintenance procedures. Do not operate the machine with missing guards or with broken or missing parts. Do not bypass any safety devices.

SW019

Input and Output Services

- *Water Pressure*. Best performance will be realized if water is provided at a pressure of 30–85 psi (2.0–5.7 bar). Although the machine will function properly at lower pressure, increased fill times will occur. Water pressure higher than 100 psi (6.7 bar) may result in damage to machine plumbing. Component failure(s) and personal injury could result.
- *Steam Heat (Optional) Pressure*. Best performance will be realized if steam is provided at a pressure of 30–80 psi (2.0–5.4 bar). Steam pressure higher than 125 psi (8.5 bar) may result in damage to steam components and may cause personal injury.

  For machines equipped with optional steam heat, install piping in accordance with approved commercial steam practices. Failure to install the supplied steam filter may void the warranty.
- *Compressed Air*. For machines requiring compressed air service, best performance will be realized if air is provided at a pressure of 80–100 psi (5.4–6.7 bar).
- *Drainage System*. Provide drain lines or troughs large enough to accommodate the total number of gallons that could be dumped if all machines on the site drained at the same time from the highest attainable level. If troughs are used, they should be covered to support light foot traffic.
- *Power*. For personal safety and for proper operation, the machine must be grounded in accordance with state and local codes. The ground connection must be to a proven earth ground, not to conduit or water pipes. Do not use fuses in place of the circuit breaker. An easy-access cutoff switch should also be provided.

WARNING

Dangerous voltages are present in the electrical control box(es) and at the motor terminals. Only qualified personnel familiar with electrical test procedures, test equipment, and safety precautions should attempt adjustments and troubleshooting. Disconnect power from the machine before removing the control box cover, and before attempting any service procedures.

SW005

Always disconnect power and water supplies before a service technician performs any service procedure. Where applicable, steam and/or compressed air supplies should also be disconnected before service is performed.

Misuse

Never use this machine for any purpose other than washing fabric.

- Never wash petroleum-soaked rags in the machine. This could result in an explosion.
- Never wash machine parts or automotive parts in the machine. This could result in serious damage to the basket.
- Never allow children to play on or around this machine. Death or serious injury can result if children become trapped in the machine. Do not leave children unattended while the machine door is open. These cautions apply to animals as well.

Operation

This manual is designed as a guide to operating and programming the UW35P and UW60P 2-speed and 3-speed rigid-mount washer-extractor equipped with the WE-6 microcomputer.
The UWP washer-extractor features programmable custom cycles and high
extract force.

The manuals, installation instructions, and wiring diagrams which accompany the washer-extractor have been included with the machine at no charge. Additional copies are available at a nominal charge.

NOTE: Read this manual thoroughly before attempting to operate the machine or program the microcomputer.

NOTE: Do not use this manual in conjunction with earlier model microcomputer-controlled UW washer-extractors. Do not use technical literature intended for earlier models when operating this machine.

NOTE: All information, illustrations, and specifications contained in this manual are based on the latest product information available at the time of printing. We reserve the right to make changes at any time without notice.

Delivery Inspection

Upon delivery, visually inspect crate, protective cover, and unit for any visible shipping damage. If the crate, protective cover, or unit are damaged or signs of possible damage are evident, have the carrier note the condition on the shipping papers before the shipping receipt is signed, or advise the carrier of the condition as soon as it is discovered.

Remove the crate and protective cover as soon after delivery as possible. If any damage is discovered upon removal of the crate and/or protective cover, advise the carrier and file a written claim immediately.

Customer Service

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

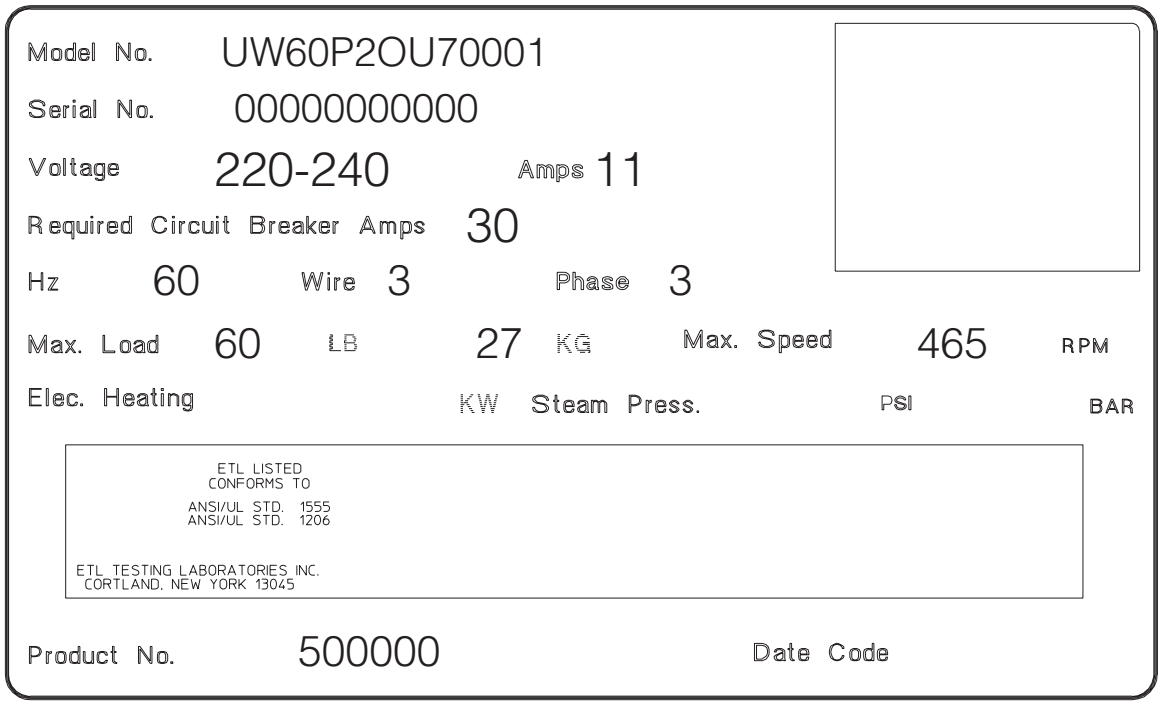
For technical assistance, call:

(920) 748-3121
Ripon, Wisconsin

Serial Plate Location

A record of each machine is on file with the manufacturer. Always provide the machine's serial number and model number when ordering parts or when seeking technical assistance.
Refer to *Figure 2*.

Model Number Familiarization Guide		
Sample Model Number: **UW60P2OU70001**		
UW	Model Number Prefix	
60	Washer-Extractor Capacity (pounds dry weight)	
P	Type of Electrical Control	P = WE-6 Computer
2	Washer-Extractor Speed Capabilities	2 = 2 Speeds; 3 = 3 Speeds
O	Electrical Characteristics	
U7	Design Series	
0001	Option Identification (varies from machine to machine)	



SAMPLE DECAL

Figure 2

Machine Familiarization Guide

The machine familiarization guide in *Figure 3* identifies major operational features of the UWP washer/extractor.

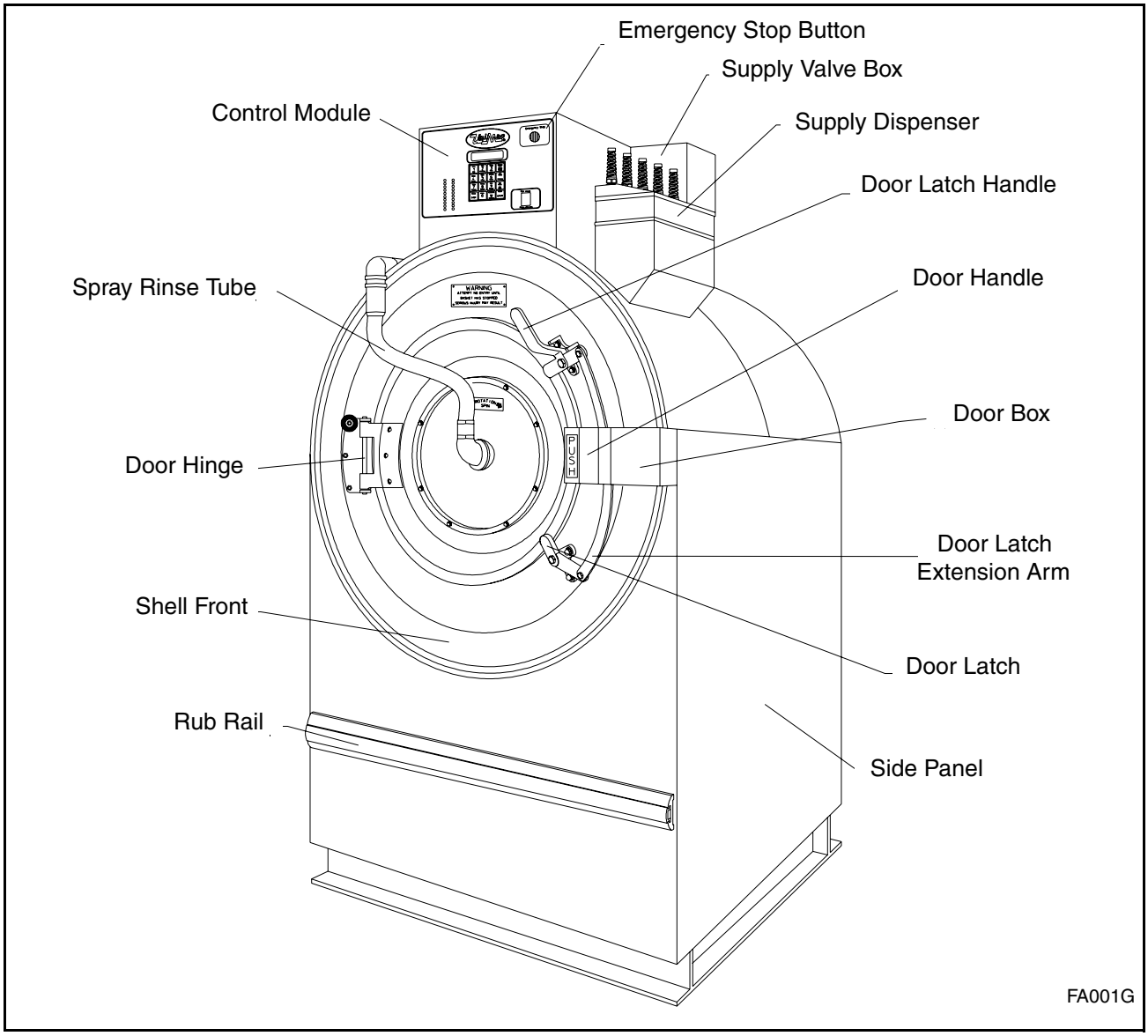


Figure 3

Theory Of Operation

The design of the washer-extractor emphasizes performance reliability and long service life. The cylinder, shell, and main body panels are fabricated of stainless steel.

Electrical controls for the washer-extractor are housed in a separate enclosure located on the top of the machine. Removing the screws from the module cover, lifting the cover, and pulling to the rear provides access to the control module. This module contains the WE-6 microcomputer, contactors, water-level switch, and other control components.

One dual-speed motor drives the cylinder via a V-belt drive in both speeds for the 2-speed models. Two motors drive the cylinder for the 3-speed models. The UW35 uses two ball bearings held in place by a single cast-iron housing that is bolted to the A-frame. The UW60 uses two flange-mounted, spherical roller bearings bolted to the A-frame.

The cylinder is constructed with lifters or ribs that lift the laundry from the bath solution when the cylinder rotates at slow speed and then allow the laundry to tumble back into the bath. This mechanical action accomplishes the washing function. The cylinder is perforated, allowing the water to drain from within during the wash and extract steps.

The spray rinse feature consists of a fiber-reinforced clear hose connected to the center of the door glass and to both a hot and cold water inlet valve. A hemispherically-shaped spray nozzle inside the door glass produces a fan-action water spray which disperses rinse water throughout the load.

The operator can select from among 39 preprogrammed cycles.

Programmable custom cycles are another feature of the UWP.

On the UW60, a balance switch is installed between the faces of the A-frame to signal the controls to slow the machine when a severely out-of-balance load occurs during extract.

Water enters the washer-extractor through electromechanical water valves controlled by the microcomputer. The microcomputer also controls the drain and the door lock. In addition, it selects the water levels according to the programmed cycle. Vacuum breakers are installed in the water-inlet plumbing to prevent backflow of water.

The standard production UWP uses a single drain valve. (Dual drains are available as an option. The dual drains open and close together under control of the WE-6 computer.) The drain valve is normally open, which means that it closes only when power is applied, thus allowing the machine to drain in the event of a power failure.

A door-lock system prevents opening of the stainless steel door when a cycle is in progress. It also prevents operation of the washer-extractor when the door is open. The doorbox contains the door-lock microswitch, door-closed magnetic switch, and the door unlock solenoid.

The UW35 shaft seal assembly includes two lip seals integrated into the cast-iron bearing housing. Each seal has two lips which make contact with a polished stainless steel bushing mounted to the shaft.

The UW60 shaft seal assembly includes a brass collar held in place on the cylinder shaft with set screws. The collar has a flange with a ceramic ring which makes contact with a spring-loaded phenolic face seal enclosed in a nylon housing mounted on the rear of the shell. The collar contains two internal O rings which maintain contact with the cylinder shaft.

The polypropylene supply dispenser is mounted on the right side of the washer-extractor, viewed from the front. The dispenser has five supply compartments, numbered 1–5, starting from the rear of the machine. The compartments hold plastic supply cups that are used for either liquid or dry supplies. A nozzle flushes supplies from the cups with water for the time programmed in the cycle.

Liquid supplies can be injected directly into the cups by a customer-supplied external chemical supply system. Five hose strain reliefs on top of the supply dispenser facilitate connection to an external supply system. A terminal strip inside a compartment attached to the left side of the control module, viewed from the rear of the washer-extractor, provides connection points for external supply signals.

Emergency Stop Button

A red emergency stop button is located on the upper right-hand corner of the control panel. Push the button in to stop the washer-extractor. Turn button to the left and pull out to reset.

WE-6 Microcomputer

The WE-6 microcomputer control is a field-programmable solid-state control capable of storing and running up to 39 preprogrammed ready-to-use cycles. A detailed description of these cycles can be found in the Programming section of this manual under Individual Cycle Charts. (If this machine's computer has been equipped with special preprogrammed cycles, a separate insert listing these cycles has been included in the resealable plastic bag which contained this manual.)

Never turn the power off while the computer mode switch is in the PROGRAM position. Such action will disorder portions of the programmed data, necessitating reprogramming of some or all of the existing cycles. Always return the mode switch to RUN position before turning the power off.Never leave the mode switch key inserted in the switch lock where it may be accessible to unauthorized personnel not familiar with programming procedures.

The computer control in this washer-extractor is continuously on the alert for problems within the machine. When the computer detects a problem, it immediately flashes a letter or number or both on the display. It may activate the signal buzzer as well.

LED Display

The WE-6 microcomputer has a six-digit LED display. References to display indications pertain to the first four digits of the display reading left to right. The last two digits on the right side of the display will indicate either the last cycle used or the current cycle in progress. See *Figure 4*.

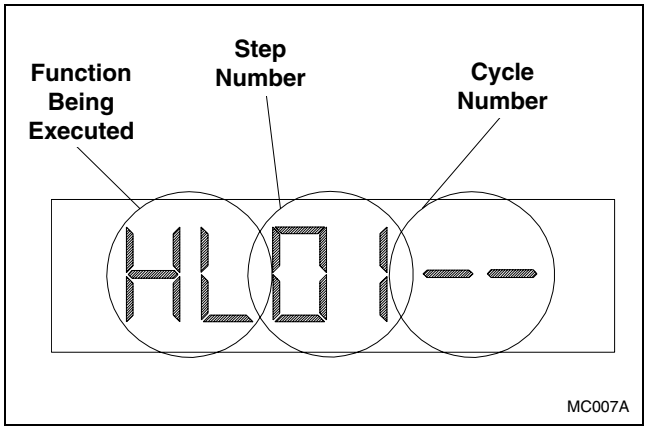


Figure 4

The table which follows, entitled "Display Interpretations," lists the various displays and what they mean.

Display Interpretations	
UWP_01	Program identification code (ROM). This is an example only.
DONE	End of cycle
DOOR	Door not locked problem
EMTY	Empty problem
FILL	Fill problem
SDLY	Spin coast delay
NEXT	Select cycle or open door or select program
NCYC	Cycle not available
STOP	Stop button pressed or cycle ended
A1	Auxiliary output #1
A2	Auxiliary output #2
A3	Signal
CF	Cold flush
CH	Cold fill to high level
CM	Cold fill to medium level
CL	Cold fill to low level
CO	Cold fill to overflow
CR	Cold rinse
CY	Cycle number
D1	Drain #1
D2	Drain #2 (This feature is operational on UWPV models only.)
F	Heat select temperature in ° Fahrenheit
C	Heat select temperature in ° Centigrade
HF	Hot flush
HH	Hot fill to high level
HM	Hot fill to medium level
HL	Hot fill to low level

Display Interpretations (Continued)	
HO	Hot fill to overflow
HR	Hot rinse
HS	High speed spin
MS	Medium speed spin
HT	Heat (steam or electric)
--M	Minutes (used when programming time)
--S	Seconds (used when programming time)
SK	Soak
S1	Supply #1 (Detergent)
S2	Supply #2 (Bleach)
S3	Supply #3 (Sour)
S4	Supply #4 (Softener)
S5	Supply #5 (Specialty)
TH	Controlled temperature fill to high level
TM	Controlled temperature fill to medium level
TL	Controlled temperature fill to low level
TO	Controlled temperature overflow
W1	Wash #1 (normal reversing)
W2	Wash #2 (gentle reversing)
W3	Wash #3 (no agitation)
W4	Wash #4 (distribution speed–forward only)
W5	Wash #5 (temp.-controlled cool-down)
WF	Warm flush
WH	Warm fill to high level
WM	Warm fill to medium level
WL	Warm fill to low level

Display Interpretations (Continued)	
WO	Warm fill to overflow level
WR	Warm rinse
•	Left dot–poor balance condition
•	Second dot from left–door lock switch
•	Third dot from left–program mode
•	Fourth dot from left–high level reached
•	Fifth dot from left–medium level reached
•	Right dot–low level reached
EXISTS	Cycle already in memory
EDIT?	Do you want to edit the cycle?
TEMP	Over-temperature-limit condition
OVERHT	Open or shorted temperature input circuit or temperature out of computer's allowable limits
WATER	Water in washer-extractor at end of cycle
°FAR	Temperature in degrees Fahrenheit
°CEN	Temperature in degrees Centigrade
MANUAL	Manual Mode enabled
NO MAN	Manual Mode disabled
1DRAIN	One drain capability selected
2Drain	Second independent drain enabled via Auxiliary 2 output. (This feature is operational on UWPV models only. and should not be confused with the "dual drain" option.)
ADV	Advance (skip steps) feature enabled
NO ADV	Advance feature disabled

Operational Keypad

The computer's control keypad includes sixteen keys. See *Figure 5*. Fourteen of these keys list functions printed in black lettering on a silver background. These functions are available to the operator and are intended to control operation of the machine. See the table below.

Operational Keypad	
Key	**Description**
Numbers **0–9**	Press to select cycle number.
Display Temp	Press and hold. Display will show and update sump temperature in degrees Fahrenheit or Centigrade.
Advance	Press to cause computer to skip to the next step in the cycle. The computer will not advance past drain step if machine is not empty. (The **Advance** key is enabled at the factory and can be disabled at the laundry site.)
Stop	Press to immediately abort the cycle and initiate the Stop Routine.
Start	Press to start selected cycle or to re-start a step following a "FILL" or "EMTY" alarm. See Error Recovery Routine in this section of the manual.
Manual	See Manual Mode Control Feature at the end of this section.

Located to the left of the computer keyboard are 20 LED indicator lights for the computer outputs. During the time that a cycle is running, one or more of these lights will be on to indicate the outputs activated for a particular step. See *Figure 5*.

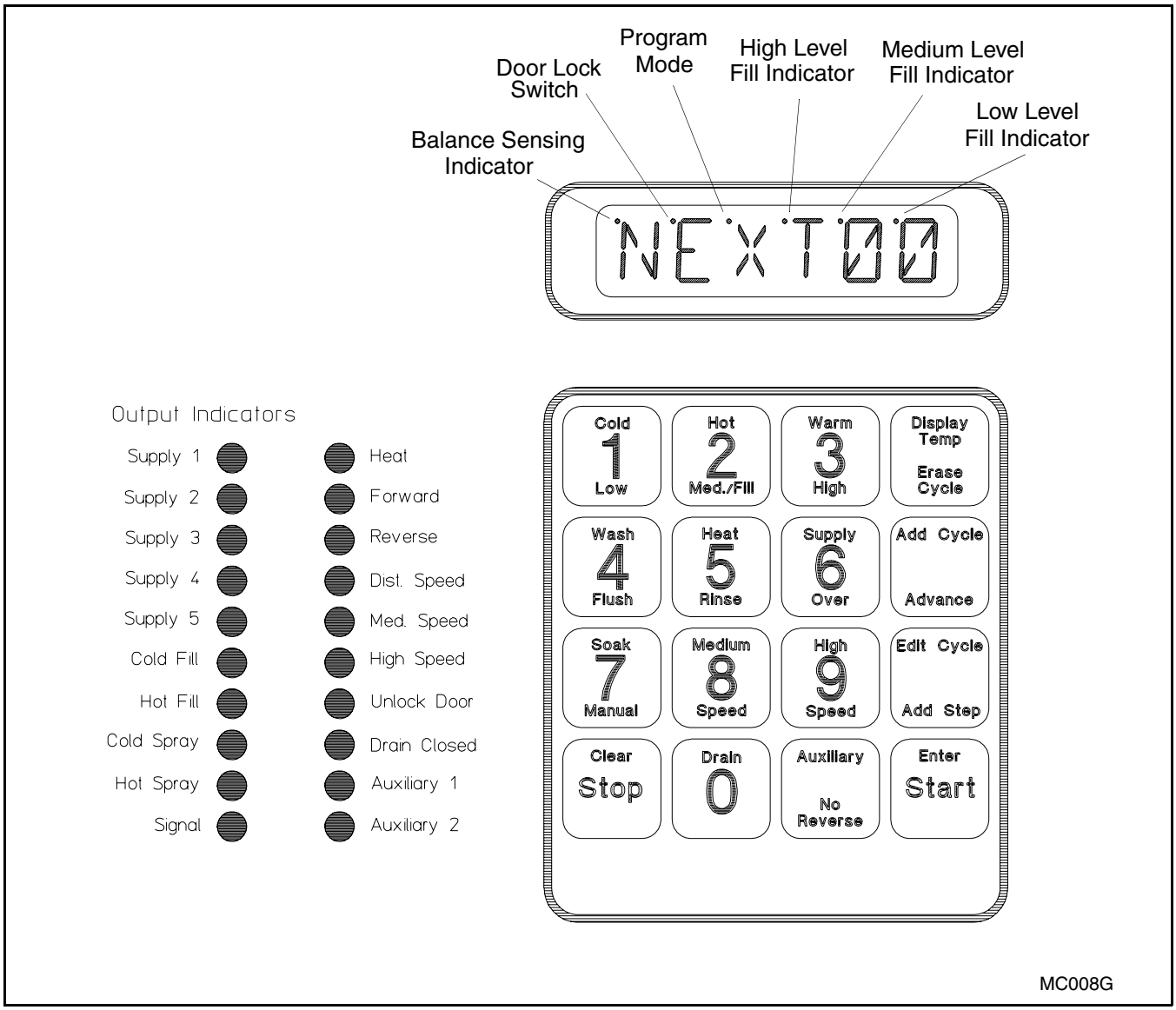


Figure 5

Start-up

Turn on the main power source (circuit breaker or cut-off switch on the wall).

When AC power is turned on, the display will show the program (ROM) identification code.

This identification code will appear for approximately five seconds. Then the computer display will flash "POWER" and "WAIT" alternately for 30 seconds.

The display will then show "NEXT00" to indicate that a cycle can be selected. This display will be shown at all times that power is on between cycles, indicating that the door-unlock solenoid will function if the door-unlock button is pressed. The washer-extractor is then ready for loading and unloading.

Opening Door

Use left hand to press and hold the door unlock button located on the lower right front of the control panel. See *Figure 6*.

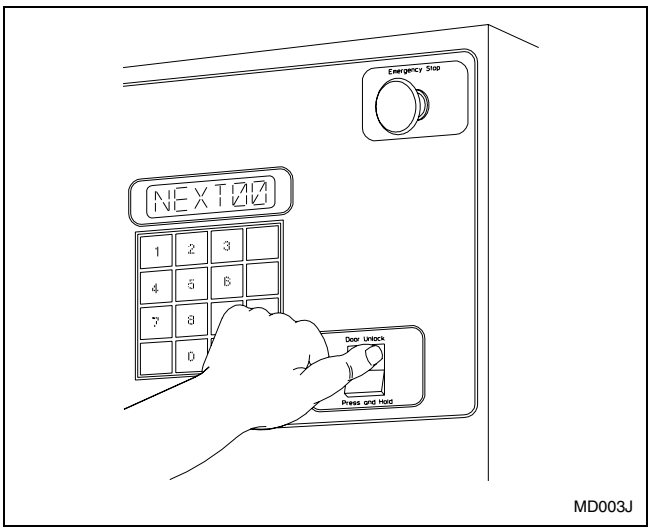


Figure 6

Use right hand to turn door handle clockwise and swing the door left to open. See *Figure 7*.

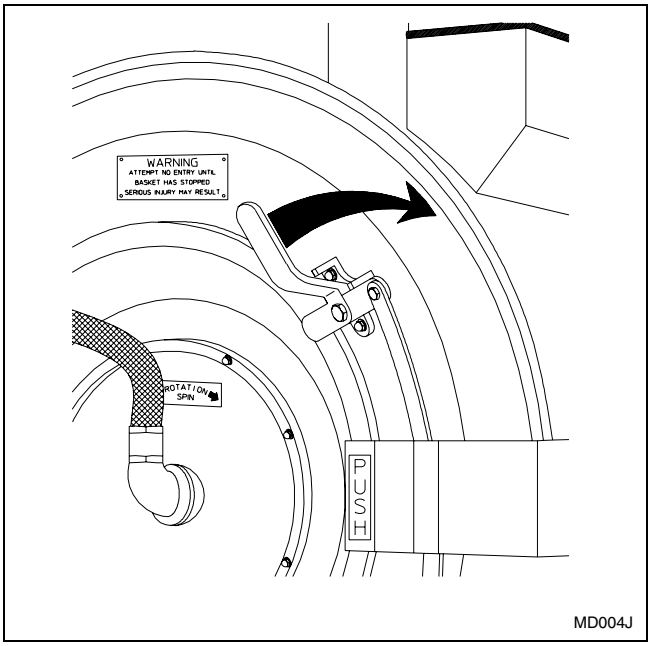


Figure 7

Loading

Load the machine to full capacity whenever possible, but do not exceed the rated dry-weight capacity of the machine if the fabric to be washed is quite dense, closely woven, and heavily soiled. Overloading can result in an inferior wash. The operator may need to experiment to determine load size based on fabric content, soil content, and level of cleanliness required.

Partial loads are a waste of energy, water, and chemicals, and cause greater machine wear than full loads. Partial loads also increase the possibility of a severe out-of-balance condition.

When loading is complete, ensure that all fabric is inside the basket. Then close and lock the door.

NOTE: When washing items which may disintegrate or fragment, such as mop heads or sponges, use laundry nets to prevent drain blockage.

Supply Dispenser

Dry supplies are placed in the supply dispenser compartment cups prior to the start of each cycle.

Liquid supplies can be injected directly into the supply dispenser by an external chemical supply system.

NOTE: Supply dispenser compartment cups must not be removed when an external chemical injection supply system is attached to the washer-extractor.

Cycle Selection

NOTE: Press keys at their centers just hard enough to activate them.

Find the cycle number of the desired wash cycle from the preprogrammed cycle charts in the Programming section of this manual. Cycle numbers must be two-digit numbers from 01 to 39.

Press the numbers desired on the keyboard and note that these numbers are displayed after “NEXT.”

When keys are pressed on the keyboard, a beep will be heard. If an error is made, press the numbers again. As numbers are entered, they move from right to left on the display.

NOTE: If the washer-extractor is equipped with both steam and electric heat, the selector switch on the right side of the control module must be in the correct position for the desired heat source, *down* for steam heat, *up* for electric heat.

Cycle Execution

To start the selected cycle, press the **Start** key. If the selected cycle number is not in the computer memory, the display will show "NCYC." If this happens, select another cycle. Otherwise, the display will now show the first step. For example, if the display reads "HL0l," "HL" represents a hot fill to low level, and "01" indicates that this is the first step of the cycle.

As the cycle proceeds, the display will show the function being executed, the step number, and the cycle number selected. Pressing the **Edit Cycle** key while the cycle is running will cause the display to show the remaining cycle time in minutes. Pressing this key again will return the display to normal.

To begin the cycle at any step other than the first step, press the **Advance** key to advance through the cycle to the desired starting point. (The **Advance** key is enabled at the factory and can be disabled at the laundry site.) Then press the **Start** key.

It is possible to skip to the next step in a cycle, with the exception of a drain step: Drain steps must be allowed time to complete.

When the display shows the step desired to begin the cycle, press the **Start** key.

If the door is not locked, the display will indicate "CLOSE" and "DOOR." If this occurs, be sure the door is closed and locked and press the **Start** key again.

If the LED indicator lights for the computer outputs indicate that one or more outputs are activated but the washer-extractor is not functioning according to the output or outputs indicated, contact a service technician.

As water fills the washer-extractor, one or more of the indicator lights located to the left of the keyboard will come on and stay on until the required water level is reached. LED dots located in the upper left corner of the last three digits on the right of the display will illuminate to indicate the water level(s) reached:

- When the indicator dot in the last digit on the right is lit, the low water level has been reached.
- When the dot in the next-to-the-last digit is lit, medium water level (optional) has been reached.
- When the dot over the third digit from the right has been lit, high level has been reached.

The cycle will continue until its completion. Then the display will read "DONE."

Test Cycle

Cycle number 01 is a test cycle used to analyze washer-extractor functions. See the Programming section of this manual.

Step 01 in cycle number 01 is a cold fill to low level. This step is designed to give not quite enough time to complete a fill, causing the display to read "FILL." Press the **Start** key to continue the fill, and the test cycle will proceed.

Step 02 in the test cycle is a drain step. Again, the time allotted is shorter than it would be in a normal cycle. The display will read "EMTY." To proceed, press the **Start** key.

The steps in the test cycle are relatively short with the exception of steps 3 and 21. These can be shortened by pressing the **Advance** key to go on to the next step.

The operator may skip to any next step in the cycle with the exception of a drain step: Drain steps must be allowed to complete. To skip forward in the test cycle, press the **Advance** key.

NOTE: The Advance feature may be disabled. See Prompting the WE-6 under System Programming in the Programming section of this manual.

Stop Routine

WARNING

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

SW012

A lengthy stop procedure ensures that the basket has adequate time to stop (from the machine's highest speed) before the computer allows the door to be opened. This is an important safety feature.

During the normal stop routine at the end of the cycle, the computer will display "STOP" and turn off all outputs.

A 30-second shakeout (Wash 1) is included as part of the stop procedure. If additional shakeout is desired, see Programming a Spin Step in the Programming section of this manual.

The remainder of the stop routine is fixed at the following:

- low speed forward for 15 seconds
- pause for 5 seconds.

The computer will display "DONE," and the door can be unlocked. The computer will continue to display "DONE" until the operator opens the door. Once the door is opened, the display will change to "NEXT."

Balance Switch Detection

The washer-extractor is equipped with a balance switch detection system whereby the switch installed between the faces of the A-frame signals the computer to slow the washer-extractor when an out-of-balance load occurs during extract.

If the balance switch is tripped, the out-of-balance LED indicator located in the upper left corner of the first digit of the display will light and will remain lighted until the end of the extract step. This indicator tells the operator that an out-of-balance condition existed during an extract step. The washer-extractor will attempt to balance three times during an extract step.

If on the third attempt the out-of-balance condition continues, the washer-extractor will advance to the next step. (If the next step is another spin step, it will be skipped also.)

NOTE: This feature applies to the UW60 only.

NOTE: The computer cannot advance through a drain step.

Temperature Display

The temperature display can be prompted to display in Fahrenheit or Centigrade. See Prompting the WE-6 in the Programming section of this manual.

To display temperature, press the **Display Temp** key. The display will read "F" or "C" and the temperature as long as the key is pressed. The computer will update the display automatically.

Error Recovery Routine

When the computer detects an error, it will stop running the current step and display a message to indicate what type of error was found:

- "FILL" indicates that the washer-extractor did not fill within the allotted time.
- "EMTY" indicates that the washer-extractor did not drain in the allotted time.
- "TEMP" indicates that the temperature sensor has recognized an over-temperature-limit condition.
- "ME" indicates that the computer has detected a problem with the cycle information. The cycle must be edited.
- "WATER" indicates that the WE-6 computer senses low water level at the end of the stop routine.

  All outputs remain off while the message displays, and the door cannot be unlocked.

NOTE: The WE-6 computer will not allow the door to be opened while there is water in the washer-extractor.

Each of these errors is considered to be recoverable. The operator has two minutes to respond to the error condition (except in the case of "WATER"). During this time, the computer will turn the signal (buzzer) relay on and off at the rate of one second on and one second off to alert the operator to the error condition. The washer-extractor may be restarted by pressing the **Enter** key. Pressing the **Enter** key will restart the cycle step for the originally programmed time period. The cycle may be aborted by pressing the **Clear** key. After aborting the cycle, the computer will go to the normal stop routine. If the operator does not respond to the error condition within the allocated two minutes, the computer will automatically abort the cycle.

NOTE: The "TEMP" alarm can be recovered only after the temperature falls below the alarm level.

Certain error conditions are considered to be non-recoverable:

- If the door opens during a cycle, the computer will display "DOOR." The operator must close the door.

  Then, after the computer has detected that the door is closed, it will automatically abort the cycle and go to the normal stop routine.
- "OVERHT" will be displayed when the computer detects an open or shorted temperature input circuit or temperatures are outside of the washer-extractor's allowable limits. Contact a service technician.

Motor Thermal Overload Indicator

A small indicator lamp on the side of the control module will light to indicate that a thermal overload switch in the motor has shut off the AC power to the computer board, thereby preventing damage to the motor caused by overheating and/or an overload condition. This feature protects and extends the life of the motor.

The thermal overload switch will automatically reset itself after the excessive heat condition has subsided.

Before attempting to restart the washer-extractor, determine the reason for the overload. The following is a partial list of possible problems:

- Machine not fully drained before spin
- Out-of-balance condition
- Low voltage
- Loss of one phase on a three-phase motor
- Bad bearings
- Air circulation blocked to motor

Contact a service technician to correct serious problems. Failure to take corrective action will ultimately result in damage to the motor.

Manual Mode Control Feature

Manual control is available only while a preprogrammed cycle is in progress, and if manual mode is prompted in the WE-6 programming. With the exception of motor speeds and the door unlock output, the WE-6 computer outputs can be operated manually from the keypad. (In order to assure proper sequencing, all motor speeds are always controlled by the computer.)

NOTE: When the manual mode control feature is activated, the operator must supply on/off commands for the controllable outputs. If an output is on, it will remain on until turned off by the operator or until the assigned time for the manual mode expires. This can be as long as 9 minutes and 99 seconds.

In normal operation, when the program mode switch is in the RUN position, only the operations printed in *black* on the keys are accessible to the operator.

During the manual mode, normal cycle timing is suspended. When the manual mode is entered, the operations printed in *red* on the keys and mentioned in the following discussion are activated.

Entering the manual mode during a fill operation is not recommended. This bypasses the water-level switch inputs, and the water *must* be turned off manually by the operator.

The following procedure must be accomplished within **three seconds** in order to enter the manual mode:

1. Press the **Manual** key.
2. Then press three number keys to assign a time in minutes and seconds to the manual mode. For example, press key **2**, key **3**, and key **0** to enter the manual mode for 2 minutes and 30 seconds.
3. Then press the **Add Step** key.

When the computer receives all these inputs within the three-second time limit, it will enter the manual mode for the time assigned. The computer display will flash between “MAN230” (reflecting the time chosen in Step 2 of the above procedure) and the current cycle step display for four seconds.

NOTE: If “NO MAN” is prompted and the normal key sequence for manual mode is entered, the computer will display only the remaining cycle time.

After four seconds, the display will flash between “MANUAL” and the current cycle step display for the remainder of the assigned time.

Manual mode operation will automatically end when the assigned time elapses. Normal program timing will then resume from the same point in the cycle where the manual mode was entered. To exit the manual mode and return to normal program timing before the assigned time elapses, press the **Start** key.

All water fill and spray rinse valves, supplies, heat (if the washer-extractor has reached low water level), and auxiliary outputs can be manually controlled. The heat output requires that only the **Heat** key be pressed. All other outputs require that two keys be pressed. For example, to turn *on* the cold fill valve, press the keys **Cold** and **Fill**. When an output is *on*, pressing the same key or keys which caused it to energize will turn it *off*. Thus, to turn *off* the cold fill valve, press the keys **Cold** and **Fill** once again.

Programming

Programming Keypad

All sixteen keys are used in the programming mode. Specific functions are printed in *red* on the keys. The programming mode is active only when the program mode switch is in the PROGRAM position. (When programming is complete, remember to return the mode switch to the RUN position and remove the key.) Keys **1**–**6** and the **Auxiliary/No Reverse** key are dual function keys in the program mode. In each instance (with the exception of the **Warm/High** key), when a key is first pressed in a programming step, the word printed at the top of the key applies. In most instances, the next time the same key is pressed–even if another key has been pressed in the interim, the word printed on the bottom of the key applies.

Programming Keypad	
Red Keys	**Description**
Cold **Low**	**Cold** is pressed when the step requires cold water. **Low** is pressed for low-level fill.
Hot **Med./Fill**	**Hot** is pressed when the step requires hot water. **Med./Fill** is pressed to select medium water level. **Fill** is pressed in the manual mode to operate fill valves.
Warm **High**	**Warm** is pressed when the step requires warm water. **High** is pressed for high-level fill.
Erase Cycle	**Erase Cycle** and a two-digit cycle code number are pressed to erase a cycle from memory.
Wash **Flush**	**Wash** is pressed when the step is a wash or dilution rinse. Then key **1**, **2**, **3**, or **4** is pressed to choose the type of agitation. **Flush** is pressed to keep the drain open when water is added to the machine. A temperature selection key (**Hot**, **Cold**, **Warm**) must be pressed before the **Flush** key. When **Flush** is programmed, water is added through the door spray nozzle only; the basket rotates in low speed forward only.
Heat **Rinse**	**Heat** is pressed when auxiliary heat is needed. This must be followed by a specific temperature selection, such as 165°F. The temperature must be entered; then a time assigned to reach that temperature must be entered. **Rinse** is pressed when a spin-spray rinse is desired. Before the **Rinse** key is pressed, a temperature key must be pressed: **Hot**, **Cold**, or **Warm**. The drain will remain open, and the basket will rotate at medium-spin speed (high speed on two-speed only machines). Water is added through the door spray nozzle only.
Supply **Over**	**Supply** is pressed when soap, bleach, or other chemicals are desired. Key **1**, **2**, **3**, **4**, or **5** must then be pressed to indicate the specific supply dispenser being used. Combinations of these supplies can be programmed. See Programming a Supply step. **Over** is pressed when an overflow of water is desired. The drain is closed and water is added, using fill valves only, without regard to level. Water flows out the overflow connection for the time assigned to the step.
Add Cycle	**Add Cycle** is pressed to begin the process of programming a new cycle into memory.
Soak	**Soak** is used when no agitation is desired. This follows a fill and/or supply step. The time must be assigned in hours and minutes. (Wash 3 also provides no agitation.)
Medium Speed	**Medium Speed** is pressed when a medium spin *only* is desired for washing delicate items not suited for high-speed spin or when an intermediate spin is desired.
High Speed	**High Speed** is pressed when a fast spin is desired.

Programming Keypad (Continued)	
Red Keys	**Description**
Edit Cycle **Add Step**	**Edit Cycle** is pressed followed by a two-digit cycle code number to display the steps of a preprogrammed cycle. The cycle may be altered during the edit cycle procedure by deleting, changing, or adding steps. **Add Step** is pressed to add a step to an existing cycle during the edit cycle procedure.
Clear (black on red background)	**Clear** is pressed when an error has been made in programming a step. Instead of pressing Enter as the step is completed, press Clear to eliminate the incorrect information. (Clear should never be pressed when displaying a cycle unless a particular step is to be eliminated or changed. See Displaying a Cycle in Memory.)
Drain	**Drain** is pressed after a wash, dilution rinse, or soak step is programmed in order to remove water from the machine. A time must be assigned that will allow the machine to reach empty. If the computer has been prompted for two drains, press key 1 or key 2 for the desired drain valve. See Prompting the WE-6.
Auxiliary **No Reverse**	**Auxiliary** is pressed to activate the buzzer or other auxiliary output. **No Reverse** is used to rotate the basket in one direction only during a step and should be pressed just before pressing the Enter key.
Enter	**Enter** is pressed to enter programming information into the computer's memory.

Programming Tutorial

The following procedure guides the programmer through a complete cycle and allows hands-on experience for programming cycles. The complete cycle is listed in the Tutorial Cycle table at the end of this section.

1. Locate the key-operated programming switch on the left side of the control module, viewed from the front. Insert the key and turn the switch to PROGRAM position. The display will read "CYC00."
2. Press the **Add Cycle** key. The display will read "ACYC00."
3. A two-digit number from 01 to 39 must be entered. Cycle number 39 is recommended because standard program versions use this short cycle for performing a chemical supply setup.
4. Press key **3**, then key **9**, then the **Enter** key. The display will read "CYC39."
   a. If the display alternately flashes "EXISTS" and "EDIT?," press the **Clear/Stop** key. The display will return to "CYC39."
   b. Erase the existing cycle: Press the **Erase Cycle** key. The display will show "ECYC39." Press key **3**, then key **9**, then the **Enter** key. The display will read "WAIT" for a few seconds and then "CYC39."
   c. Press the **Add Cycle** key. The display will read "ACYC39." Press key **3**, then key **9**, then the **Enter** key. The display will show "0139."
5. Enter the desired function for step 1. A natural choice might be hot fill to low level.
   a. Press the **Hot** key and then the **Low** key. The display will read "HL0139."
   b. Press the **Enter** key. The display will read "M---S."
   c. Now enter the desired fill time. The recommended number of minutes is four. Press key **4**. The display will read "4M-00S."
6. Now press the **Enter** key. The display will read "0239," indicating that the computer is ready for step 2 of cycle 39.
7. A natural choice for step 2 is the addition of a supply.
   a. To add supply No. 1, press the **Supply** key and then key **1**. The display will read "S10239."
   b. Press the **Enter** key. The display will read "M---S."
   c. Now enter the desired time in minutes and seconds for the supply valve to be turned on. Thirty seconds is the recommended time.

      Press key **0** for minutes. The display will read "0M-00S."

      Now press key **3** and then key **0**. The display will read "0M-30S," indicating a supply time of thirty seconds.
8. Now press the **Enter** key. The display will change to read "0339," indicating that the computer is ready for step 3.
9. If no other supply is required, the next step is to choose the type of wash desired and assign it a time. For example, one might choose a wash with standard reversing action (**Wash 1**) and a time of six minutes.
   a. Press the **Wash** key and then key **1**. The display will read "W10339."
   b. Press the **Enter** key. The display will read "M---S."
   c. Press key **6**. The display will read "6M-00S," indicating a wash step of six minutes.
10. Press the **Enter** key. The display will read "0439," indicating that the computer is ready for step 4.
11. A drain step usually comes next.
    a. Press the **Drain** key. The display will read "D10439." (Applications using drain 2 are not available on 2-speed and 3-speed models.)
    b. Then press the **Enter** key. The display will read "M---S."
    c. Enter the *maximum* time desired for the computer to allow the machine to drain to empty. The recommended time is one minute. Press key **1**, and the display will change to "1M-00S," indicating a drain step of one minute.

NOTE: The manufacturer does not recommend more than one minute for a drain step. If the machine does not drain in the amount of time programmed, the "EMTY" alarm will be displayed.

12. Press the **Enter** key. The display will now read "0539," indicating that the computer is ready for step 5.

13. A natural next step in the cycle might be a warm rinse.

    a. Press the **Warm** key and then the **Rinse** key. The display will read “WR0539.”

    b. Press the **Enter** key. The display will read “M---S.”

    c. Now enter the rinse duration in minutes and seconds. A spray rinse lasting 2 1/2 minutes is an appropriate choice.

    Press key **2**. The display will read “2M-00S.”

    Now press key **3** and key **0**. The display will read “2M-30S.”

14. Press the **Enter** key. The display will read “0639,” indicating that the computer is ready for step 6.

15. Step 6 in the cycle might be a warm fill to high level for a dilution rinse.

NOTE: The Rinse key controls a *spin-spray* rinse. However, a *dilution* rinse is executed the same as a wash step without the addition of detergents.

    a. Press the **Warm** key (key **3**) *twice* to turn on two hot and two cold water valves to reduce fill time. The display will read “W-0639.” Then press the **High** key (key **3**). The display will read “WH0639.”

    b. Press the **Enter** key. The display will read “M---S.”

    c. Enter the desired time for the computer to allow the machine to fill to high level. Five minutes is acceptable. Press key **5**. The display will read “5M-00S.”

NOTE: If the machine does not fill in the amount of time programmed, the “FILL” alarm will be displayed.

16. Press the **Enter** key. The display will read “0739.”

17. Add a sour for step 7:

    a. Press the **Supply** key and key **3**. The display will read “S30739.”

    b. Press the **Enter** key. The display will read “M---S.”

    c. Enter the length of time for the supply to be activated. In this case, thirty seconds is adequate.

    Press key **0** for minutes; press key **3** and then key **0** for seconds. The display will read “OM-30S.”

18. Press the **Enter** key as always after programming a time duration. The display will read “0839,” indicating that the computer is ready for step 8.

19. For step 8, program the agitation action for the dilution rinse.

    a. Press the **Wash** key and key **1** to program an action with normal reversing. The display will read “W10839.”

    b. Press the **Enter** key. The display will read “M---S.”

    c. Enter the time for the dilution rinse (three minutes).

    Press key **3**. The display will read “3M-00S.”

20. Press the **Enter** key. The display will read “0939,” indicating that the computer is ready for step 9.

21. The dilution rinse water must be drained.

    a. Press the **Drain** key. The display will read “D10939.”

    b. Press the **Enter** key. The display will read “M---S.”

    c. Enter the length of time the computer will allow the machine to drain (one minute).

    Press key **1**. The display reads “1M-00S,” indicating that a one-minute step has been programmed.

22. Press the **Enter** key to move to step 10 of the cycle.

23. An extract step should now be programmed.

    a. Press the **Medium Speed** key. The display will read “MS1039,” indicating a medium-speed spin.

    b. Press the **Enter** key. The display will read “M---S.”

    c. Enter the length of time for the medium-speed spin (one minute).

    Press key **1**. The display will read “1M-00S.”

24. Press the **Enter** key. The display flashes “SDLY” for one second.

    The display will then read “0M-00S,” allowing the programmer to enter the time for a slow down delay (coast).

    At some point in the future–to have the basket coast before it stops, enter the desired coast time (up to 99 seconds). However, do not enter a time now. That would cause a coast before a higher spin speed (which will be the next step).

    For no coast, press the **Enter** key.

25. The next step is to program a high-speed spin.

    a. Press the **High Speed** key once. The display will read “HS1139.”

    b. Press the **Enter** key. The display will read “M---S.”

    c. Enter a length of time for the high-speed spin (six minutes). Press key **6**. The display will read “6M-00S.”

NOTE: High-speed spin is preceded automatically by medium-speed spin for 30 seconds for nonvariable-speed UW rigid-mount models.

26. Press the **Enter** key. The display will flash “SDLY” for one second. (“SDLY” also displays during the entire actual coastdown.) The display will then read “0M-00S,” inviting the programmer to enter a time for the slow-down delay (coast). If the application requires that the basket coast before it stops, enter the desired coast time (30 seconds here) and press the **Enter** key. If no coast is desired, press the **Enter** key only. The display will read “1239.”

NOTE: A slow-down delay of 30 seconds minimum should be programmed after each high-speed spin. All the preprogrammed and optional cycles in this manual reflect this practice.

27. The previous step ends the tutorial. Cycle 39, consisting of 11 steps, has been completely programmed.

    To end the cycle, turn the program mode switch located on the left side of the control module to the RUN position and remove the key. The display will then
    read “NEXT.”

    The programmer can now select Cycle 39 and press the **Enter** key to run the cycle, if desired; or a cycle of the programmer’s own design can be programmed.

Tutorial Cycle

Step	Description	Min:sec
1	Hot Fill to Low Level	4:00
2	Supply 1	0:30
3	Wash 1	6:00
4	Drain 1	1:00
5	Warm Spray Rinse	2:30
6	Warm/Warm Fill to High Level	5:00
7	Supply 3	0:30
8	Wash 1	3:00
9	Drain 1	1:00
10	Medium Speed Spin	1:00
11	High Speed Spin SDLY Stop Routine	6:00 0:30

Programming Hints

Read the preprogrammed cycle charts (near the end of this manual) for the cycles already programmed into the computer to see how the cycle steps have been ordered.

Use a program worksheet, such as the sample on the next page, to write new cycles. After the worksheet is completed, enter the program into the computer.

The computer can do only one thing at a time, so think in terms of what the machine should do next, step by step. This will make it simpler to write the program.

When entering the timed portion of a step (such as a fill), use a time that is reasonable for the local installation. If the water pressure is low or if the water lines are smaller than desirable, increase the time allowed. Remember that the drain needs to empty the machine in less than one minute. *Drain times of more than one minute are **not** recommended.*

Except for the soak, heat, and cool-down (Wash 5) steps, which are timed in hours and minutes, the maximum time per step is 9 minutes and 99 seconds. If more time is needed, add more steps to total the complete time desired. For example, if a 15-minute wash is desired, program a wash step for 9 minutes and 00 seconds, immediately followed by another wash step for 6 minutes and 00 seconds.

When a fill or addition of supplies without agitation is desired, first program a Wash 3 step for 0 minutes and 01 seconds. Then program the fill or supply step. When the microcomputer advances to the next step, it will *remain* in the wash mode as programmed in the previous step unless it is instructed to do otherwise.

CYCLE 00		
Step	**Description**	**Min:sec**
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
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28		

Before attempting to program any particular function of the WE-6 microcomputer, read the System Programming, Cycle Programming, and Step Programming subsections below.

System Programming

Prompting the WE-6

Prompting the WE-6 allows:

- Displaying sump temperature in Centigrade or Fahrenheit.
- Recognizing and controlling one or two independent drains. (Two independent drains will apply only for special applications.)
- Enabling or disabling the **Advance** key in the RUN mode.
- Enabling or disabling the manual mode.
- Controlling the Auxiliary 1 output for use with liquid supplies.
- Reading or resetting the cycle count.

To begin prompting the computer, insert key into the program mode switch (located on the left side of the control module) and turn key to the PROGRAM position. The display will read "CYC00."

1. Press the **Auxiliary** key, key **2**, and key **9** *in that order*. The display will read either "CEN" (Centigrade) or "FAR" (Fahrenheit). To choose the alternate feature, press key **0**.
2. Press the **Enter** key. The display will read either "1DRAIN" or "2DRAIN." The normal prompt for most applications is "1DRAIN." "2DRAIN" is used only for special applications. Consult the factory for full details. To choose the alternate feature, press key **0**.
3. Press the **Enter** key. The display will read either "ADV" or "NO ADV." The prompt "NO ADV" will disable the **Advance** key in the RUN mode, thereby preventing the operator from advancing the computer through steps of the cycle before they are complete; also, it will not be possible to advance to any step before starting a cycle if "NO ADV" is selected. To choose the alternate feature, press key **0**.
4. Press the **Enter** key. The display will read either "MANUAL" or "NO MAN." If "MANUAL" is displayed, the manual mode will be *enabled* during normal operation. If "NO MAN is displayed, the manual mode will be *disabled* when a cycle is run, even if the **Manual** operation key sequence is entered. To choose the alternate feature, press key **0.**
5. Press the **Enter** key. The display will read either "D SUPP" or "L SUPP." "D SUPP" indicates that the WE-6 is prompted for *dry* supplies, in which case only the programmed supply combination energizes during a supply step. "L SUPP" indicates that the WE-6 is prompted for *liquid* supplies. In this case, the Auxiliary 1 output energizes along with the programmed supply output(s) during a supply step. *In the manual mode, "AUX 1" must be manually energized if desired with manually selected supplies.*
6. Press the **Enter** key. The display will show "USEDxx." (The "xx" here stands for the number of cycles run and will be represented by numbers in the actual display.)

   The count can be left as it appears in the display, or it can be reset to "00."

   - To leave the count unaltered, press the **Enter** key to return to the normal programming mode.
   - To reset the count, press key **0**. The display will read "USED00."

   Press the **Enter** key to return to the normal programming mode.

   The computer stores the cycle count in RAM. Thus, if power to the computer is interrupted, the count will automatically be set at "00."

   If a daily count is desired, the display should be read at the end of the day and then reset prior to running the next day's first cycle. (The display resets automatically after the cycle count reaches 99.)
7. Return the program mode switch to the RUN position and remove the key. Prompting is complete.

NOTE: Prompting will change the parameters in all cycles programmed.

Cycle Programming

Displaying a Cycle in Memory

1. Insert key into the program mode switch (located on the left side of the control module) and turn key to the PROGRAM position. The display will read “CYC00.”
2. Press the **Edit Cycle** key on the keypad. The display will read “DCYC00.”
3. Press the two-digit code to display the desired cycle number: For example, press key **2** and then key **5** to select cycle 25. The display will read “DCYC25.”
4. Press the **Enter** key. The computer will search for cycle information for this cycle number.

   If no cycle information exists, the computer will flash “NCYC25” followed by “ADD?” To add this cycle, press the **Enter** key and proceed to the add cycle programming mode. If adding this cycle is *not* desired, press the **Clear** key, and the computer will then return to the normal programming mode.
5. If cycle information *does* exist for cycle 25, the computer will display “0425,” for example, to indicate that cycle 25 has been run four times. To clear the count (reset it to zero), press key **0**. The display will then show “0025.”

   If clearing the count is not necessary or if it has just been cleared, press the **Enter** key. The computer will now display “HL0125,” indicating the first step of cycle 25.
6. Press the **Advance** key to move to the next step of the cycle. To access further information pertaining to each step (for example, temperature and/or time), press the **Enter** key. If the display shows a temperature, press the **Enter** key again to display the time. Press the **Enter** key once more to advance to the next step.
7. At the end of the cycle, the computer will display “END-25” for two seconds and return to the normal programming mode.
8. Return the program mode switch to the RUN position and remove the key.

NOTE: *Never* press the Clear key while displaying a cycle in memory except to edit or delete a step.

Displaying Individual Cycle Usage

1. Insert key into the program mode switch (located on the left side of the control module) and turn key to the PROGRAM position. The display will read “CYC00.”
2. Press the **Edit Cycle** key on the keypad. The display will read “DCYC00.”
3. Press the two-digit code to display the desired cycle number: For example, press key **2** and then key **5** to select cycle 25.
4. Press the **Enter** key. The display will show “xx25.” (The “xx” here stands for the number of times cycle 25 has been run and will be represented by numbers in the actual display.)

   The computer will remain in this step until one of the following options has been chosen:

   - Press the **Enter** key to continue displaying the cycle, OR
   - Press the **Clear** key to return to the normal program mode, OR
   - Press key **0** to reset the counter for this cycle to zero, OR
   - Take the computer out of the program mode.

Editing a Cycle

To edit a cycle in memory or to change, add, or delete a step:

1. Insert key into the program mode switch (located on the left side of the control module) and turn key to the PROGRAM position. The display will read “CYC00.”
2. Press the **Edit Cycle** key on the keypad. The display will read “DCYC00.”
3. Press the two-digit code for the cycle requiring editing: For example, press key **2** and then key **5** to select cycle 25.
4. Press the **Enter** key. The computer will search for cycle information for this cycle.

   If no cycle information exists, the computer will flash “NCYC25” followed by “ADD?” To add this cycle, press the **Enter** key and proceed to the add cycle programming mode. If adding this cycle is *not* desired, press the **Clear** key. The computer will then return to the normal programming mode.
5. If cycle information *does* exist for cycle 25, the computer will display “0425,” for example, to indicate that cycle 25 has been run four times. To clear the count (reset it to zero), press key **0**. The display will then show “0025.”

   If clearing the count is not necessary or if it has just been cleared, press the **Enter** key. The computer will now display “HL0125,” indicating the first step of cycle 25.
6. Press the **Advance** key to move to the next step of the cycle.
7. Press key **0** to back up to the previous step.
8. To access further information pertaining to each step (for example, temperature and/or time), press the **Enter** key.

   If the display shows a temperature, press the **Enter** key again to display the time.
9. Press the **Enter** key once more to advance to the next step.
10. At any time, the programmer can put the program mode switch in the RUN position, and the computer will return to normal running mode, provided all pertinent data for the last step edited is entered.
11. To change a step within the cycle, press the **Clear** key *once* while the computer is displaying the step to be edited. Enter the new step using the same procedure for adding a step to a new cycle.

NOTE: If, after the Clear key is pressed, it is decided that clearing the step is *not* desired, press the Edit Cycle key to restore the step. (This will work only if a step identification was displayed before pressing the Clear key. At other points in the step–such as a time or temperature display–this restoration effort will not work.)

12. To change the time assigned to a step, press the **Clear** key *once* while the computer is displaying the unwanted time.
13. To add a step within the cycle, press the **Add Step** key. The step will be added into the cycle after the step presently displayed.

    The computer will check to see if enough cycle memory is left in the cycle to add a step. (Each cycle may contain up to 51 steps.)

    If the cycle memory for this cycle is full, the computer will display “CYFULL” for two seconds and return to displaying the previous step. If the computer sees no problem, the new step number will be displayed and the step may be added (as when adding a step to a new cycle).

NOTE: Use the following procedure with caution. It is *not* reversible.

14. To delete a step within a cycle, press the **Clear** key while the computer is displaying the step to be deleted. Press the **Clear** key again: the display will read “WAIT” while it is deleting the step.

    The computer will then display the next step in the cycle, using the same step number as the deleted step.
15. If the **Add Cycle** key is pressed by mistake instead of the **Edit Cycle** key when the cycle number to be edited is entered, the display will flash “EXISTS” and “EDIT?” To recover, press the **Enter** key, and the computer will change to the edit mode.

Erasing a Cycle in Memory

1. Insert the key into the program mode switch (located on the left side of the control module) and turn the key to the PROGRAM position. The display will read “CYC00.”
2. Press the **Erase Cycle** key. The display will read “ECYC00.”
3. Press the two-digit code for the cycle number that is to be erased. The display will read “ECYC25” if cycle 25 is chosen.
4. Press the **Enter** key. The display will read “WAIT” while it is erasing the cycle. The display will then return to “CYC00.” If there is no such cycle number in memory, the display will read “NCYC25.” To *not* erase a cycle, press the **Clear** key *before* pressing the **Enter** key. The display will return to “CYC.”
5. Return the program mode switch to the RUN position and remove the key.

Step Programming

Programming a Fill without Spray

This process is used in temperature-controlled fill steps where it is desirable to fill without spray and add water through the sump only.

To program a fill without spray, program a cold, hot, or warm fill to level as in a normal fill step; however, instead of pressing the **Enter** key after selecting the level, press the **Auxiliary** key. The computer will display a lower case “c,” “h,” or “w,” instead of the usual upper case “C,” “H,” or “W.” Press the **Enter** key now and program the time in the usual manner.

Programming a Fill Temperature

The table on the next page lists the required procedures to produce specific results. The table shows that when HIGH water level is programmed, the display indicator is “H.” When MEDIUM level is programmed, the display indicator is “M.” When LOW level is programmed, the display indicator is “L.” When OVERFLOW is programmed, the display indicator is “O.”

When the **Warm** key is pressed, the next key pressed will be another temperature key (**Hot**, **Cold**, or **Warm**) *before* selecting the level. Exceptions to this will be when RINSE or FLUSH steps are used: they require no level commands, and water is added through the door spray nozzle *only.*

Each time the **Warm** key is pressed, one hot and one cold water valve is turned on. The machine is equipped with four water valves (two fill and two spray); thus pressing the **Warm** key twice will turn on *all four* valves and reduce fill times.

Use the following procedure to program a fill to a specific temperature:

1. The computer must be in the PROGRAM mode, and the cycle programming sequence must be ready for the next step.
2. Press the **Cold** key. The display will read “C.” (HOT or WARM may be programmed instead to control inlet valves during the first three seconds of the fill. After the first three seconds, the fill is the same regardless of the prompt.)
3. Press the key representing the desired water level (**Low**, **Medium**, **High**, or **Over**). If **High** is pressed, for example, the display will read “CH.”

4. Press the **Heat** key. The display will read either "080F" or "025C," depending on whether Fahrenheit or Centigrade is prompted.

   Enter the desired fill temperature. Three digits must be entered. If the desired temperature is less than 100 degrees, the first digit must be 0.

   The valid temperature range is 80–200 degrees Fahrenheit and 25–93 degrees Centigrade. The computer will not accept temperatures out of this range. (The fill temperatures possible are governed by the temperature of the available hot water.)

5. Press the **Enter** key. The display will read "M---S." Now assign the maximum time to be allowed for reaching the fill *level* in minutes and seconds.

6. Press the **Enter** key, and go to the next step in the cycle.

   The computer will attempt to maintain the temperature within a margin of plus or minus 5 degrees of the target fill temperature during such a step.

Fill Temperature Programming		
Keys Pressed	**Display**	**Valves Operating**
Hot + Low + Enter	"HL"	1 Hot Fill and 1 Hot Spray
Hot + Med + Enter	"HM"	1 Hot Fill and 1 Hot Spray
Hot + High + Enter	"HH"	1 Hot Fill and 1 Hot Spray
Warm + Warm + Low + Enter	"WL"	Both Hot and Both Cold
Warm + Hot + Low + Enter	"WL"	Both Hot and 1 Cold Fill
Warm + Cold + Low + Enter	"WL"	1 Hot Fill and Both Cold
Cold + Low + Enter	"CL"	1 Cold Fill and 1 Cold Spray
Cold + Med* + Enter	"CM"	1 Cold Fill and 1 Cold Spray
Cold + High + Enter	"CH"	1 Cold Fill and 1 Cold Spray
In addition to the standard fill temperatures, computer-controlled fill or overflow to a specific temperature is available.		

Programming a Supply Step

The WE-6 microcomputer is capable of controlling up to 5 separate supplies and up to 31 various combinations of the 5 supplies. (See the Supply Display Codes Table in this subsection for a listing of the energized supply compartments represented by each display code.)

1. The computer must be in the PROGRAM mode, and the cycle programming sequence must be ready for the next step.
2. Press the **Supply** key. The display will read "S." Now press the number key–**1**, **2**, **3**, **4**, or **5**–that corresponds to the desired supply valve.

   If multiple simultaneous supply injections are desired, follow this procedure:

   - After the **Supply** key has been pressed, press any combination of keys **1**–**5 (**up to 5 individual digits per step) before pressing the **Enter** key.
   - The computer will add those numbers to the supply step. All desired supplies will be turned on for the amount of time programmed.

   The display will show either a letter or number code to indicate the supply combination selected. For example, assume the computer is in the program mode and the Supply key has been pressed. The keys 1, 2, and 5 will be pressed one at a time. After the last key is pressed, the display will read "SN" as the first two digits of the display, followed by the step number, which is then followed by the cycle number being programmed. Press the Enter key. The display will read "M---S." Now assign the desired time in minutes and seconds for the supply injection to last.
3. Press the **Enter** key and go to the next step in the cycle.

SUPPLY DISPLAY CODES	
CODE	**SUPPLY NUMBER** **0 = Supply Off** **X = Supply On**
	5 4 3 2 1
1	0 0 0 0 X
2	0 0 0 X 0
A	0 0 0 X X
3	0 0 X 0 0
B	0 0 X 0 X
C	0 0 X X 0
D	0 0 X X X
4	0 X 0 0 0
E	0 X 0 0 X
F	0 X 0 X 0
H	0 X 0 X X
I	0 X X 0 0
J	0 X X 0 X
L	0 X X X 0
M	0 X X X X
5	X 0 0 0 0
6	X 0 0 0 X
7	X 0 0 X 0
N	X 0 0 X X
8	X 0 X 0 0
O	X 0 X 0 X
P	X 0 X X 0
Q	X 0 X X X
9	X X 0 0 0
R	X X 0 0 X
S	X X 0 X 0
T	X X 0 X X
U	X X X 0 0
V	X X X 0 X
W	X X X X 0
X	X X X X X

Programming Heat

1. To program auxiliary heat (either electric or steam), the computer must be in the PROGRAM mode, and the cycle programming sequence must be ready for the next step.

NOTE: Models with *both* electric and steam heat are equipped with a selector switch which allows the user to select either option. Because both options are energized by the WE-6 computer via the same output, the procedure for programming a heat step will be the same for either. The switch directs the output signal only to the selected option.

2. The machine *must* be filled with water.
3. Press the **Heat** key. The display will read "HTnncc," with "nn" representing the step number and "cc" representing the cycle number.
4. Press the **Enter** key. The display will read either "080Fnn" or "025Cnn," depending on whether Fahrenheit or Centigrade is prompted.
5. Enter the final temperature desired. Three digits must be entered for the temperature. If the desired temperature is less than 100 degrees, the first digit should be "0." The valid temperature range is 80–200 degrees Fahrenheit and 25–93 degrees Centigrade. The computer will not accept temperatures outside of this range. If 100 degrees Fahrenheit is selected, the display will read "100Fcc."
6. Press the **Enter** key. The display will read "H---M." Now assign the maximum time in hours and minutes for the water to reach the desired temperature.
7. Press the **Enter** key and go to the next step in the cycle.

Programming a Wash Step

1. The computer must be in the PROGRAM mode, and the cycle programming sequence must be ready for the next step.
2. Press the **Wash** key. The display will read "Wnncc."
3. Now press the number key (from **1** to **5**) that corresponds to the desired wash step listed in the following table:

Wash	Description
1	12 seconds forward, pause 3seconds, 12 seconds reverse, pause 3 seconds; repeat
2	3 seconds forward, pause 12 seconds, 3 seconds reverse, pause 12 seconds, repeat
3	No agitation
4	Distribution speed (forward only)
5	See Programming a Wash 5 Thermal Cool-down. Agitation is the same as Wash 1.

4. If Wash 1 is chosen, the no-reverse option may be selected. The no-reverse option must be selected at *this* point in the step programming. Press the **No Reverse** key while the display reads "W1nncc."

   When the no-reverse option is selected, the display will change, but the machine will follow the programming command.

   The no-reverse option will cause the basket to run forward only at wash speed for the time programmed. The computer will return to normal reversing action when this step is complete.

   The no-reverse option may be programmed in wash, supply, heat, and overflow steps. The **No Reverse** key must be pressed just prior to pressing the **Enter** key when programming a step.
5. Press the Enter key, and the display will read "M---S." Now assign the wash step time in minutes and seconds.
6. Press the **Enter** key and go to the next step in the cycle.
7. On machines equipped with optional auxiliary heat (steam or electric), it is possible to program a wash step with a temperature step. During such a step, the machine will perform the programmed wash at the temperature programmed, maintaining that temperature throughout the step.

   To program a wash with a specific temperature, use the following procedure:

   a. After step 3 of Programming a Wash Step, press the **Heat** key *before* pressing the **Enter** key. The display will read either "080Fcc" or "025Ccc," depending on whether Fahrenheit or Centigrade is prompted.

b. Now enter the desired temperature for the machine to maintain during the wash step.

Three digits must be entered for the temperature. If the desired temperature is less than 100 degrees, the first digit must be 0. The valid temperature range is 80–200 degrees Fahrenheit and
25–93 degrees Centigrade. The computer will not accept temperatures outside of this range. If 100 degrees Fahrenheit is selected, the display will read "100Fcc."

c. Now proceed with step 5 above.

Programming a Wash 5 Thermal Cool-down

After programming a heat step, it may be desirable to program a temperature-controlled thermal cool-down to gradually reduce the temperature of the load and prevent fiber shock from sudden cool-down.

The temperature-controlled cool-down provides a gradual cooling down from a higher temperature to a lower temperature. The WE-6 monitors the temperature of the water in the washer and attempts to maintain an approximate cool-down rate of three degrees per minute by periodically energizing the cold water fill valve.

When the programmed time for the step expires, the computer will advance to the next step regardless of whether or not the cool-down temperature has been reached. If the cool-down temperature is reached before the time expires, the computer will advance to the next step.

During the cool-down, the drain will remain closed and *water will exit through the overflow connection*. The cylinder will rotate in a normal reversing mode as during a Wash 1 step.

Assuming that the computer is in the program mode and that a heat step has been created and entered, use the following procedure to program the thermal cool-down. (Do *not* program a drain step before the Wash 5 step.)

1. Press the **Wash** key and then key **5**. The display will read "W5nncc."
2. Press the **Enter** key. The display will read either "080F" or "025C," depending on whether Centigrade or Fahrenheit is prompted.
3. Enter the desired temperature for the load to cool down to. Three digits must be used for the temperature. If the desired target temperature is less than 100 degrees, the first digit must be "0." The valid temperature range is 80–200 degrees Fahrenheit and 25–93 degrees Centigrade. The computer will not accept temperatures outside of this range. (The cool-down rate will be affected by the temperature of the cold water available.) If 100 degrees Fahrenheit is selected, the display will read "100Fcc."
4. When the desired cool-down temperature is displayed, press the **Enter** key. The display will show "H--M." Now enter the maximum time in hours and minutes for the computer to reach the target cool-down temperature.

   Experimentation may be necessary to determine the exact time required with each installation to enable the computer to reach the target cool-down temperature. Use the edit feature to revise the Wash 5 step during the experimentation process.

   When the computer performs the Wash 5 step, the temperature in the sump must be greater than the target cool-down temperature. Otherwise, the computer will advance past the Wash 5 step.
5. When the desired time is displayed, press the **Enter** key and proceed with the next step in the cycle.

Programming No Reversing

All agitation is programmed by first pressing the **Wash** key and then pressing either key **1**, **2**, **3**, **4**, or **5** for the type of agitation desired during the wash step.

If no reversing is desired (rotation continuous in one direction), use the following procedure:

a. Press the **Wash** key.

b. Then press either key **1** or key **2**.

c. Then press the **No Reverse** key.

d. Then press the **Enter** key.

The display will show either "W1nncc" or "W2nncc," depending on the kind of agitation selected. The display will not indicate that the no-reverse option was selected, but the machine will obey the instructions.

NOTE: The no-reverse option is normally used with Wash 1 steps but may be used with other appropriate functions. The no-reverse option may be programmed in wash, supply, heat, and overflow steps. The No Reverse key must be pressed just prior to pressing the Enter key when programming a step. See No. 4 under Programming a Wash Step.

Programming a Soak Step

1. The computer must be in the PROGRAM mode, and the cycle programming sequence must be ready for the next step. (The previous step should have been a fill and/or supply step.)
2. Press the **Soak** key. The display will read "SKnncc."

   With machines equipped with auxiliary heat (optional steam or electric), it is possible to program a soak-with-temperature step. During such a step, the machine will soak for the time programmed at the temperature programmed and will maintain that temperature throughout the step.

   To program a soak with temperature step use the following procedure:

   a. Press the **Heat** key after pressing the **Soak** key. The display will read either "080Fcc" or "025Ccc," depending on whether Fahrenheit or Centigrade is prompted.

   b. Enter the temperature desired for the machine to maintain during the soak step. Three digits must be entered for the temperature. If the desired temperature is less than 100 degrees, the first digit should be 0. The valid temperature range is 80–200 degrees Fahrenheit and 25–93 degrees Centigrade. The computer will not accept temperatures outside of this range. If 100 degrees Fahrenheit is selected, the display will read "100Fcc."
3. Press the **Enter** key. The display will read "H---M." Now assign the soak step the desired time in hours and minutes. During the soak step, no agitation will occur. The WE-6 microcomputer will maintain the water level during the soak cycle at whatever previous level was programmed.
4. Press the **Enter** key and go to the next step in the cycle.

Programming a Drain Step

1. The computer must be in the PROGRAM mode, and the cycle programming sequence must be ready for the next step.
2. Press the **Drain** key. The display will read "D-nncc."
3. Press key **1** for a regular drain to sewer or a floor drain. The display will read "D1nncc."
4. Press the **Enter** key. The display will read "M---S." Now assign the time which will allow the machine to drain to empty.

   This is an alarm time. The machine should drain in 30 seconds under normal conditions. The recommended drain time is one minute. Drain times of more than one minute are **not** recommended.
5. Press the **Enter** key and go to the next step in the cycle.

NOTE: When programming a drain step, it is important to select Drain 1. Drain 2 is not available on the UW60 2-speed or 3-speed washer-extractors.

Programming a Flush Step

When the **Flush** key is pressed, the drain will remain open and the basket will rotate in slow speed forward only. Water is added only through the door spray nozzle.

1. The computer must be in the PROGRAM mode, and the cycle programming sequence must be ready for the next step.
2. Press a water temperature key, either **Cold**, **Hot**, or **Warm**. If the **Cold** key is pressed, for example, the display will read "C-nncc," etc.
3. Press the **Flush** key. The display will read "CFnncc," "HFnncc," or "WFnncc," depending upon the temperature selected.
4. Press the **Enter** key. The display will read "M---S." Now assign the desired flush time in minutes and seconds.
5. Press the **Enter** key and go to the next step in the cycle.

Programming a Spin Step

1. The computer must be in the PROGRAM mode, and the cycle programming sequence must be ready for the next step.
2. Press the **Medium Speed** or **High Speed** key. The display will read "MSnncc" for medium speed or "HS" for high speed spin.

NOTE: The WE-6 microcomputer inserts an automatic 30-second medium-speed spin before going to high speed for the programmed time.

3. Press the **Enter** key. The display will read "M---S." Now assign time in minutes and seconds to the spin step.
4. Press the **Enter** key. The display will read "SDLY" for *one* second. The display will then change to "0M-00S."
5. Now assign the time for the spin delay (coast down). A *minimum* of 30 seconds is recommended to reduce belt wear.

   A spin delay is always advisable after a high speed spin.

   Also, always program a spin delay after a high speed spin if another (non-spin) step is to follow.

NOTE: Do not program a Wash 1 step for a shakeout after the spin step. If such a step is programmed, the computer will revert to the previous wash step and will fill with water accordingly. See Stop Routine. However, a Wash 1, 2, or 3 step programmed for ONE second will select stop routine agitation, *and* avoid refilling.

Programming a Rinse Step

When the **Rinse** key is pressed on the keypad, the drain will remain open and the basket will rotate in medium spin speed. Water is added through the door spray nozzle only. To program a rinse step, use the following procedure:

1. The computer must be in the PROGRAM mode, and the cycle programming sequence must be ready for the next step.
2. Press a water temperature key (**Cold**, **Hot**, or **Warm**). If the **Cold** key is pressed, for example, the display will read "C-nncc," etc. Then press the **Rinse** key. The display will read "CRnncc," "HRnncc," or "WRnncc," depending on whether cold, hot, or warm temperature was selected.
3. Press the **Enter** key. The display will read "M---S." Now assign the time in minutes and seconds desired for the duration of the rinse step.
4. Press the **Enter** key, and go to the next step in the cycle.

NOTE: If a coast-down delay ("SDLY") is desired after a rinse step, program a medium-speed spin step for one second after the rinse step. Then program the desired coast-down time.

Programming an Auxiliary Step

Auxiliary No. 1 and Auxiliary No. 2 may be used to control an external buzzer or other device (not supplied with the machine) with a maximum current draw of less than 1/2 amp.

Auxiliary No. 3 is identified on the fuse board as SG (Signal) and controls the built-in buzzer (alarm) mounted on the inside wall of the control module.

When A3 is programmed, the signal will sound continuously for the duration of time assigned. The same signal (buzzer) is used by the computer for an alarm condition, such as a "FILL" or "EMTY" alarm.

When the signal is activated by the computer to indicate an alarm condition, the tone will be pulsating rather than continuous.

1. The computer must be in the PROGRAM mode, and the cycle programming sequence must be ready for the next step.
2. Press the **Auxiliary** key. The display will read "A-nncc." Now press the number key–**1**, **2**, **3**, **4**, or **5**–that corresponds to the desired auxiliary function:

   A1–Auxiliary No. 1
   A2–Auxiliary No. 2
   A3–Signal (SG)
   A4–Fill to level, using E1 on computer output board. (E1 is a special function ONLY. Contact factory for details.)
   A5–Provides agitation, no refill.

   The display will read "A2nncc," for example, if key **2** is pressed.
3. Press the **Enter** key. The display will read "M---S." Now assign the auxiliary step the desired time in minutes and seconds.
4. Press the **Enter** key and go to the next step in the cycle.

Simulator Operation and Program Transfer

Simulator Operation

The WE-6 simulator is an optional accessory to the WE-6 microcomputer-controlled UWP washer-extractor. See *Figure 8. When the simulator is first energized, the simulator display will show the program (ROM) identification code for five seconds.*

NOTE: Cycles for UWP machines are not compatible with cycles for UWPV machines. DO NOT transfer cycles from one of these models to another.

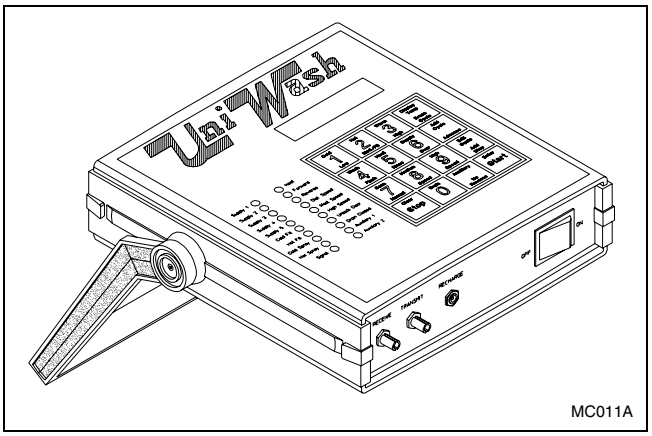

Figure 8

All programming instructions in this manual apply to the simulator as well.

The simulator is a hand-held unit which serves more than one purpose:

- The simulator's primary purpose is to preprogram cycles for transfer to the washer-extractor and to transfer program cycles between the washer-extractor and the simulator in either direction.
- As an instructional aid, the simulator can be used for teaching programming techniques to individuals unfamiliar with the UWP WE-6 microcomputer.

The keypad and LED display are mounted on the top of the simulator. The ON/OFF rocker switch is located on the front end-panel.

The handle pivots to serve as a stand when using the simulator on a table. To pivot the handles, grasp them at the point of attachment to the main housing and gradually pull the handle sides outward until the ends disengage from the splined mounting holes. Pivot the handles to the desired position and release.

The simulator is battery powered and is supplied with an AC transformer which produces 12VDC at 500mA to recharge the battery pack from a 120V wall plug.

- The transformer is plugged into the power jack marked RECHARGE on the front end-panel of the simulator. The battery pack will be charged only while the simulator is turned ***on*** and is operating from the transformer.
- A fully charged battery pack will give about 3 hours of operation before recharging is necessary. Allow about 24 hours to fully recharge the battery pack with the transformer.
- The simulator battery pack contains NiCad batteries. These batteries will develop a "memory" according to length of time used. For example, if the simulator is habitually used for only one hour before recharging the batteries, the battery pack will eventually retain this habit and will power the simulator for only one hour before charging is required.
- When replacing the battery, use an exact NiCad replacement unit. **Failure to do so will result in damage to the simulator.**

The WE-6 simulator and the WE-6 microcomputer are capable of storing and running up to 39 cycles, each limited to 51 steps.

- The computer will not accept cycle numbers higher than 39.
- If an attempt is made to add a step to a cycle that already contains 51 steps, the computer will display "CYFULL" and refuse additional steps.

The front end-panel of the simulator holds the RECEIVE and TRANSMIT ports for the optic cables used in program transfers.

- When transferring cycles from simulator to computer or computer to simulator, the colored plugs on the ends of the optic cables must match the colors of the ports on the simulator and on the washer-extractor's control module (gray to gray, blue to blue).
- If a mistake is made connecting the cables, the display will flash "CONN" and "ERROR" when the **ENTER** key is pressed during the last step of the cycle transfer process.

On the rear end-panel of the simulator are 6 toggle switches used to simulate various normal operations of the washer-extractor. These 6 switches simulate or control the PROGRAM/RUN modes, LOW LEVEL, MEDIUM LEVEL, HIGH LEVEL, DOOR OPEN/ DOOR CLOSED, and BALANCE.

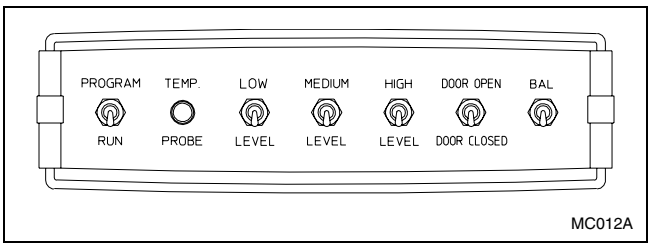

Figure 9

All the switches must be in the *down* position to simulate a machine at rest.

- If the PROGRAM/RUN switch is in the *up* position, the simulator is placed in the PROGRAM mode.
- If the LOW LEVEL switch is in the *up* position, a low level water fill is simulated and the appropriate LED on the display is illuminated. The MEDIUM LEVEL and HIGH LEVEL switches operate similarly.
- When a cycle programmed in the simulator is running, the LEVEL switches must be activated at the appropriate times in the cycle to indicate to the computer that the levels have been reached and that the machine is empty.
- If the DOOR OPEN/DOOR CLOSED switch is flipped to the *up* position (DOOR OPEN) while a cycle is running, the "DOOR" alarm will be displayed.
- If the BALANCE switch is in the *up* position during the spin step of a cycle, an out-of-balance condition is indicated to the computer. (See Balance Detection in the Operation section of this manual in regard to the drain step.)

The temperature probe (located on the rear panel of the simulator) simulates sump temperature.

Transferring All Cycles from Computer to Simulator

All keypad commands will be entered with the simulator keypad.

Use the following procedure to transfer all cycles contained in the memory of the computer to the simulator. (Transferring 39 cycles takes about 6 seconds.)

1. Connect the fiber optic cables between the simulator and the computer. Verify that the colored plugs on the ends of the optic cables match the colors of the ports on the simulator and on the washer-extractor's control module (gray to gray, blue to blue).
2. Place *both* the simulator and the computer in the PROGRAM mode. The display on both will read "CYC00."
3. Press the **0** key. The display will read "WRITE?"
4. Press the **0** key again. The display will change to "READ?"
5. Press the **ENTER** key. The display will read "ALL."
6. Press the **ENTER** key again. The simulator display will flash "RECV" and "ALL" alternately. The computer display will flash "SEND" and "ALL" alternately.

   When the two displays stop flashing, the transfer is complete.

Transferring One Cycle from Computer to Simulator

All keypad commands will be entered with the simulator keypad.

Use the following procedure to transfer one cycle contained in the memory of the computer to the simulator. (Transferring 1 cycle takes less than 1 second.)

1. Connect the fiber optic cables between the simulator and the computer. Verify that the colored plugs on the ends of the optic cables match the colors of the ports on the simulator and on the washer-extractor's control module (gray to gray, blue to blue).
2. Place *both* the simulator and the computer in the PROGRAM mode. The display on both will read "CYC00."
3. Press the **0** key. The display will read "WRITE?"
4. Press the **0** key again. The display will change to "READ?"
5. Press the **ENTER** key. The display will read "ALL."
6. Press the **0** key. The display will read "CYC."
7. Press the **ENTER** key. The display will read "RCYC00."

   Now press the 2-digit code for the desired cycle number from the computer.
8. Press the **ENTER** key. The display will read "WCYCcc."

   Now press the 2-digit code for the desired cycle number under which the cycle should be saved in the simulator.

9. Press the **ENTER** key. The simulator display will flash “RECV” and “CYC” alternately. The computer display will flash “SEND” and “CYC” alternately.

   When the two displays stop flashing, the transfer is complete.

Transferring All Cycles from Simulator to Computer

All keypad commands will be entered with the simulator keypad.

Use the following procedure to transfer all cycles contained in the memory of the simulator to the computer. (Transferring 39 cycles takes about 6 seconds.)

1. Connect the fiber optic cables between the simulator and the computer. Verify that the colored plugs on the ends of the optic cables match the colors of the ports on the simulator and on the washer-extractor’s control module (gray to gray, blue to blue).
2. Place *both* the simulator and the computer in the PROGRAM mode. The display on both will read “CYC00.”
3. Press the **0** key. The display will read “WRITE?”
4. Press the **ENTER** key. The display will read “ALL.”
5. Press the **ENTER** key again. The simulator display will flash “SEND” and “ALL” alternately. The computer display will flash “RECV” and “ALL” alternately.

   When the two displays stop flashing, the transfer is complete.

Transferring One Cycle from Simulator to Computer

All keypad commands will be entered with the simulator keypad.

Use the following procedure to transfer one cycle contained in the memory of the simulator to the computer. (Transferring 1 cycle takes less than 1 second.)

1. Connect the fiber optic cables between the simulator and the computer. Verify that the colored plugs on the ends of the optic cables match the colors of the ports on the simulator and on the washer-extractor’s control module (gray to gray, blue to blue).
2. Place *both* the simulator and the computer in the PROGRAM mode. The display on both will read “CYC00.”
3. Press the **0** key. The display will read “WRITE?”
4. Press the **ENTER** key. The display will read “ALL.”
5. Press the **0** key. The display will read “CYC00.”
6. Press the **ENTER** key. The display will read “RCYC00.”
7. Now press the 2-digit code for the desired cycle number from the simulator.
8. Press the **ENTER** key. The display will read “WCYCcc.”
9. Now press the 2-digit code for the desired cycle number under which the cycle should be saved in the computer.
10. Press the **ENTER** key. The simulator display will flash “SEND” and “CYC” alternately. The computer display will flash “RECV” and “CYC” alternately.

    When the two displays stop flashing, the transfer is complete.

Preprogrammed Cycles

This section lists the 39 preprogrammed (ready-to-use) cycles. To run a wash cycle, first make certain that the computer is in the RUN mode. Then enter the two-digit code for the desired cycle, and press the **Start** key.

Test Cycle 01 is the first of the 39 preprogrammed cycles. This cycle is used to verify proper operation of the machine.

Any of these 39 cycles may be erased and replaced by new cycles. As shown earlier in this section of the manual, the cycles may also be edited and revised to match a particular application's specific needs. Except for Cycle 39, all of the preprogrammed cycles use high speed spin for the final extract.

The following prompts are set at the factory:

- Degrees F
- One drain
- Advance enabled
- Manual mode enabled
- Dry supplies

Cycle Categories

01 Test

Hotels and Motels

02 Sheets, light soil, cotton/poly blends
03 Sheets, light soil, no bleach, cotton/poly blends
04 Towels, light soil, cotton
05 Towels, light soil, no bleach, cotton
06 Sheets, medium soil, cotton/poly blends
07 Towels, medium soil, cotton
08 Blankets, spreads, no bleach
09 Blankets, spreads, cold water
10 Towels, heavy soil, cotton
11 Rinse and Spin Only

Healthcare

12 Sheets, light soil, cotton/poly blends
13 Towels, light soil, cotton
14 Sheets, heavy soil, cotton/poly blends
15 Towels, heavy soil, cotton
16 Thermal blankets, bleach, cotton
17 Diapers, pads, heavy soil, cotton
18 Personals, bleach
19 Personals, no bleach
20 Pads, polyester

Restaurants

21 Table napery, bleach, starch, iron
22 Table napery, bleach, no iron
23 Table napery, colors, starch, iron
24 Table napery, colors, no iron
25 Visa table napery, bleach, starch, iron
26 Visa table napery, bleach, no iron
27 Visa table napery, colors, starch, iron
28 Visa table napery, colors, no iron

Shirt Laundries

29 Shirts, colors, no bleach, starch
30 Shirts, bleach, starch
31 Shirts, colored, no bleach, no starch
32 Shirts, no bleach, no starch, delicates
33 Starch, extract only

Formulas Common to All Markets

34 Uniforms, with bleach
35 Uniforms, without bleach
36 Rags/housekeeping, heavy soil
37 Rags/kitchen, mops
38 Rewash/reclaim
39 Chemical Supply Setup

Standard Supply Legend

Supplies are shown by number in the cycle charts. The following table correlates the supply number with the supply as it is represented in the cycle charts:

Standard Supply Legend	
Supply Number	**Supply Description**
1	Detergent
2	Bleach
3	Sour
4	Softener
5	Specialty

Standard Cycle Charts

For Models built after February 4, 2003

Cycle 01 Formulas Common to All Markets (Chemical Supply Setup)		
Step	**Description**	**Min:sec**
1	Warm Fill to Low Level	5:00
2	Supply 1	2:00
3	Supply 2	2:00
4	Supply 3	2:00
5	Supply 4	2:00
6	Supply 5	2:00
7	Wash 1	0:30
8	Drain 1	1:00

NOTE: The cycle shown is intended for setup of supplies with a 5 supply system. If the machine is equipped with 8 supplies, refer to *Programming a Supply Step – Models with 8 Supplies*. As extra supplies are normally controlled by bank 2, program supplies 6, 7, 8, and 9.

NOTE: The alarm will sound on steps 01 and 02 (of Test Cycle). These steps have been deliberately programmed with times that are too short. Press Start to continue when alarm sounds. The times here are actual operating times if the steps are allowed to progress to their end without pressing Advance.

For Models built before February 4, 2003

Cycle 01 (Test)		
Step	**Description**	**Min:sec**
1	Cold Fill to Low Level	0:30
2	Drain 1	0:10
3	Hot Fill to Low Level	5:00
4	Heat, 150°F (66°C)	1:00
5	Cold Fill to High Level	5:00
6	Supply 1	0:10
7	Supply 2	0:10
8	Supply 3	0:10
9	Supply 4	0:10
10	Supply 5	0:10
11	Supply 1 and 3 (Display: “SB”)	0:10
12	Wash 2	0:30
13	Wash 3	0:30
14	Wash 4	0:15
15	Wash 1, No Reverse	0:30
16	Drain 1	1:00
17	Warm Flush	0:30
18	Auxiliary 1	0:05
19	Auxiliary 2	0:05
20	Auxiliary 3	0:05
21	150°F (66°C) Fill to High Level	5:00
22	Cold Fill to Overflow	1:00
23	Soak	2:00
24	Drain 1	1:00
25	Medium Spin	0:15
26	Warm Spray Rinse	0:30
27	High Spin (SDLY 0:15)	1:00

Cycle 02 Hotels and Motels (Sheets, light soil, cotton/poly blends)		
Step	**Description**	**Min:sec**
1	Hot Fill to Low Level	5:00
2	Supply 1 and 2 (Display: “SA”)	0:45
3	Wash 1	7:00
4	Drain 1	1:00
5	Hot Fill to High Level	5:00
6	Wash 1	2:00
7	Drain 1	1:00
8	Medium Spin	0:30
9	Warm Spray Rinse	2:00
10	100°F (38°C) Fill to Low Level	5:00
11	Supply 3 and 4 (Display: “SI”)	0:30
12	Wash 1	4:00
13	Drain 1	1:00
14	High Spin (SDLY 0:45)	2:00

Cycle 03 Hotels and Motels (Sheets, light soil, no bleach, cotton/poly blends)		
Step	**Description**	**Min:sec**
1	Hot Fill to Low Level	5:00
2	Supply 1	0:45
3	Wash 1	7:00
4	Drain 1	1:00
5	Hot Fill to High Level	5:00
6	Wash 1	2:00
7	Drain 1	1:00
8	Medium Spin	0:30
9	Warm Spray Rinse	2:00
10	100°F (38°C) Fill to Low Level	5:00
11	Supply 3 and 4 (Display: “SI”)	0:30
12	Wash 1	4:00
13	Drain 1	1:00
14	High Spin (SDLY 0:45)	2:00

Cycle 04 Hotels and Motels (Towels, light soil, cotton)		
Step	**Description**	**Min:sec**
1	Hot Fill to Low Level	5:00
2	Supply 1 and 2 (Display: “SA”)	0:45
3	Wash 1	7:00
4	Drain 1	1:00
5	Hot Fill to High Level	5:00
6	Wash 1	2:00
7	Drain 1	1:00
8	Medium Spin	0:30
9	Warm Spray Rinse	2:00
10	110°F (43°C) Fill to Low Level	5:00
11	Supply 3 and 4 (Display: “SI”)	0:30
12	Wash 1	4:00
13	Drain 1	1:00
14	High Spin (SDLY 0:45)	4:00

Cycle 05 Hotels And Motels (Towels, light soil, no bleach, cotton)		
Step	**Description**	**Min:sec**
1	Hot Fill to Low Level	5:00
2	Supply 1	0:45
3	Wash 1	7:00
4	Drain 1	1:00
5	Hot Fill to High Level	5:00
6	Wash 1	2:00
7	Drain 1	1:00
8	Medium Spin	0:30
9	Warm Spray Rinse	2:00
10	110°F (43°C) Fill to Low Level	5:00
11	Supply 3 and 4 (Display: “SI”)	0:30
12	Wash 1	4:00
13	Drain 1	1:00
14	High Spin (SDLY 0:45)	4:00

Cycle 06 Hotels and Motels (Sheets, medium soil, cotton/poly blends)		
Step	**Description**	**Min:sec**
1	Hot Fill to Low Level	5:00
2	Supply 1	0:45
3	Wash 1	6:00
4	Drain 1	1:00
5	Hot Fill to Low Level	5:00
6	Supply 2	0:45
7	Wash 1	6:00
8	Drain 1	1:00
9	Hot Fill to High Level	5:00
10	Wash 1	2:00
11	Drain 1	1:00
12	Medium Spin	0:30
13	Warm Spray Rinse	2:00
14	100°F (38°C) Fill to Low Level	5:00
15	Supply 3 and 4 (Display: “SI”)	0:30
16	Wash 1	4:00
17	Drain 1	1:00
18	High Spin (SDLY 0:45)	2:00

Cycle 07 Hotels and Motels (Towels, medium soil, cotton)		
Step	**Description**	**Min:sec**
1	Hot Fill to Low Level	5:00
2	Supply 1	0:45
3	Wash 1	6:00
4	Drain 1	1:00
5	Hot Fill to Low Level	5:00
6	Supply 2	0:45
7	Wash 1	6:00
8	Drain 1	1:00
9	Hot Fill to High Level	5:00
10	Wash 1	2:00
11	Drain 1	1:00
12	Medium Spin	0:30
13	Warm Spray Rinse	2:00
14	110°F (43°C) Fill to Low Level	5:00
15	Supply 3 and 4 (Display: “SI”)	0:30
16	Wash 1	4:00
17	Drain 1	1:00
18	High Spin (SDLY 0:45)	4:00

Cycle 08 Hotels and Motels (Blankets, spreads, no bleach)		
Step	**Description**	**Min:sec**
1	Warm Fill to High Level	5:00
2	Supply 1	0:45
3	Wash 1	6:00
4	Drain 1	1:00
5	Warm Fill to High Level	5:00
6	Wash 1	2:00
7	Drain 1	1:00
8	Medium Spin	0:30
9	Warm Spray Rinse	2:00
10	Warm Fill to Low Level	5:00
11	Supply 3 and 4 (Display: “SI”)	0:30
12	Wash 1	4:00
13	Drain 1	1:00
14	High Spin (SDLY 0:45)	4:00

Cycle 09 Hotels and Motels (Blankets, spreads, cold water)		
Step	**Description**	**Min:sec**
1	Cold Fill to High Level	5:00
2	Supply 1	0:45
3	Wash 1	6:00
4	Drain 1	1:00
5	Cold Fill to High Level	5:00
6	Wash 1	2:00
7	Drain 1	1:00
8	Medium Spin	0:30
9	Cold Spray Rinse	2:00
10	Cold Fill to High Level	5:00
11	Supply 3 and 4 (Display: “SI”)	0:30
12	Wash 1	4:00
13	Drain 1	1:00
14	High Spin (SDLY 0:45)	4:00

Cycle 10 Hotels and Motels (Towels, heavy soil, cotton)		
Step	**Description**	**Min:sec**
1	Hot Fill to Low Level	5:00
2	Supply 1	1:00
3	Wash 1	7:00
4	Hot Fill to High Level	5:00
5	Supply 2	1:00
6	Wash 1	7:00
7	Drain 1	1:00
8	Medium Spin	0:30
9	Warm Spray Rinse	3:00
10	Warm Fill to High Level	5:00
11	Wash 1	2:00
12	Drain 1	1:00
13	Medium Spin	0:30
14	Warm Fill to Low Level	5:00
15	Supply 3 and 4 (Display: “SI”)	1:00
16	Wash 1	4:00
17	Drain 1	1:00
18	High Spin (SDLY 0:45)	5:00

Cycle 11 Hotels and Motels (Rinse and spin only)		
Step	**Description**	**Min:sec**
1	Warm Fill to Low Level	5:00
2	Wash 1	1:00
3	Drain 1	1:00
4	Medium Spin	0:30
5	Warm Spray Rinse	1:00
6	High Spin (SDLY 0:45)	4:00

Cycle 12 Healthcare (Sheets, light soil, cotton/poly blends)		
Step	**Description**	**Min:sec**
1	Warm Fill to High Level	5:00
2	Wash 1	2:00
3	Drain 1	1:00
4	Hot Fill to Low Level	5:00
5	Supply 1 and 2 (Display: “SA”)	0:45
6	Wash 1	8:00
7	Drain 1	1:00
8	Hot Fill to High Level	5:00
9	Wash 1	3:00
10	Drain 1	1:00
11	Medium Spin	0:30
12	Warm Spray Rinse	2:00
13	100°F (38°C) Fill to Low Level	5:00
14	Supply 3 and 4 (Display: “SI”)	0:30
15	Wash 1	4:00
16	Drain 1	1:00
17	High Spin (SDLY 0:45)	2:00

Cycle 13 Healthcare (Towels, light soil, cotton)		
Step	**Description**	**Min:sec**
1	Warm Fill to High Level	5:00
2	Wash 1	2:00
3	Drain 1	1:00
4	Hot Fill to Low Level	5:00
5	Supply 1 and 2 (Display: “SA”)	0:45
6	Wash 1	8:00
7	Drain 1	1:00
8	Hot Fill to High Level	5:00
9	Wash 1	3:00
10	Drain 1	1:00
11	Medium Spin	0:30
12	Warm Spray Rinse	2:00
13	110°F (43°C) Fill to Low Level	5:00
14	Supply 3 and 4 (Display: “SI”)	0:30
15	Wash 1	4:00
16	Drain 1	1:00
17	High Spin (SDLY 0:45)	4:00

Cycle 14 Healthcare (Sheets, heavy soil, cotton/poly blends)		
Step	**Description**	**Min:sec**
1	80°F (27°C) Fill to High Level	5:00
2	Wash 1	2:00
3	Drain 1	1:00
4	120°F (48°C) Fill to High Level	5:00
5	Wash 1	2:00
6	Drain 1	1:00
7	Hot Fill to Low Level	5:00
8	Supply 1	0:45
9	Wash 1	7:00
10	Drain 1	1:00
11	Hot Fill to Low Level	5:00
12	Supply 2	0:45
13	Wash 1	7:00
14	Drain 1	1:00
15	Hot Fill to High Level	5:00
16	Wash 1	3:00
17	Drain 1	1:00
18	Medium Spin	0:30
19	Warm Spray Rinse	2:00
20	100°F (38°C) Fill to Low Level	5:00
21	Supply 3 and 4 (Display: “SI”)	0:30
22	Wash 1	4:00
23	Drain 1	1:00
24	High Spin (SDLY 0:45)	2:00

Cycle 15 Healthcare (Towels, heavy soil, cotton)		
Step	**Description**	**Min:sec**
1	80°F (27°C) Fill to High Level	5:00
2	Wash 1	2:00
3	Drain 1	1:00
4	120°F (48°C) Fill to High Level	5:00
5	Wash 1	2:00
6	Drain 1	1:00
7	Hot Fill to Low Level	5:00
8	Supply 1	0:45
9	Wash 1	7:00
10	Drain 1	1:00
11	Hot Fill to Low Level	5:00
12	Supply 2	0:45
13	Wash 1	7:00
14	Drain 1	1:00
15	Hot Fill to High Level	5:00
16	Wash 1	3:00
17	Drain 1	1:00
18	Medium Spin	0:30
19	Warm Spray Rinse	2:00
20	110°F (43°C) Fill to Low Level	5:00
21	Supply 3 and 4 (Display: “SI”)	0:30
22	Wash 1	4:00
23	Drain 1	1:00
24	High Spin (SDLY 0:45)	4:00

Cycle 16 Healthcare (Thermal blankets, bleach, cotton)		
Step	**Description**	**Min:sec**
1	110°F (43°C) Fill to High Level	5:00
2	Wash 1	2:00
3	Drain 1	1:00
4	Hot Fill to Low Level	5:00
5	Supply 1 and 2 (Display: “SA”)	0:45
6	Wash 1	7:00
7	Drain 1	1:00
8	Hot Fill to High Level	5:00
9	Wash 1	3:00
10	Drain 1	1:00
11	Medium Spin	0:30
12	Warm Spray Rinse	2:00
13	110°F (43°C) Fill to Low Level	5:00
14	Supply 3 and 4 (Display: “SI”)	0:30
15	Wash 1	4:00
16	Drain 1	1:00
17	High Spin (SDLY 0:45)	4:00

Cycle 17 Healthcare (Diapers, pads, heavy soil, cotton)		
Step	**Description**	**Min:sec**
1	80°F (27°C) Fill to High Level	5:00
2	Wash 1	2:00
3	Drain 1	1:00
4	Hot Fill to High Level	5:00
5	Wash 1	2:00
6	Drain 1	1:00
7	Hot Fill to Low Level	5:00
8	Supply 1	0:45
9	Wash 1	7:00
10	Drain 1	1:00
11	Hot Fill to Low Level	5:00
12	Supply 1	0:30
13	Wash 1	7:00
14	Drain 1	1:00
15	Hot Fill to Low Level	5:00
16	Supply 2	0:30
17	Wash 1	7:00
18	Drain 1	1:00
19	Hot Fill to High Level	5:00
20	Wash 1	4:00
21	Drain 1	1:00
22	Medium Spin	1:00
23	Warm Spray Rinse	2:00
24	110°F (43°C) Fill to High Level	5:00
25	Wash 1	2:00
26	Drain 1	1:00
27	110°F (43°C) Fill to Low Level	5:00
28	Supply 3 and 4 (Display: “SI”)	0:30
29	Wash 1	4:00
30	Drain 1	1:00
31	Medium Spin	1:00
32	High Spin (SDLY 0:45)	4:00

Cycle 18 Healthcare (Personals, bleach)		
Step	**Description**	**Min:sec**
1	Hot Fill to Low Level	5:00
2	Supply 1 and 2 (Display: “SA”)	0:45
3	Wash 1	6:00
4	Drain 1	1:00
5	Hot Fill to High Level	5:00
6	Wash 1	2:00
7	Drain 1	1:00
8	Medium Spin	0:30
9	Warm Spray Rinse	2:00
10	110°F (43°C) Fill to Low Level	5:00
11	Supply 3 and 4 (Display: “SI”)	0:30
12	Wash 1	4:00
13	Drain 1	1:00
14	High Spin (SDLY 0:45)	3:00

Cycle 19 Healthcare (Personals, no bleach)		
Step	**Description**	**Min:sec**
1	Hot Fill to Low Level	5:00
2	Supply 1	0:45
3	Wash 1	6:00
4	Drain 1	1:00
5	110°F (43°C) Fill to High Level	5:00
6	Wash 1	2:00
7	Drain 1	1:00
8	Medium Spin	0:30
9	Warm Spray Rinse	2:00
10	110°F (43°C) Fill to Low Level	5:00
11	Supply 3 and 4 (Display: “SI”)	0:30
12	Wash 1	4:00
13	Drain 1	1:00
14	High Spin (SDLY 0:45)	3:00

Cycle 20 Healthcare (Pads, polyester)		
Step	**Description**	**Min:sec**
1	110°F (43°C) Fill to Low Level	5:00
2	Supply 1	0:45
3	Wash 1	3:00
4	130°F (54°C) Fill to High Level	5:00
5	Wash 1	2:00
6	Drain 1	1:00
7	Warm Flush	2:00
8	Hot Fill to Low Level	5:00
9	Supply 1	0:45
10	Wash 1	7:00
11	Drain 1	1:00
12	Hot Fill to Low Level	5:00
13	Supply 2	0:45
14	Wash 1	7:00
15	Drain 1	1:00
16	Medium Spin	0:30
17	110°F (43°C) Fill to High Level	5:00
18	Wash 1	2:00
19	Drain 1	1:00
20	Medium Spin	0:30
21	Warm Spray Rinse	2:00
22	110°F (43°C) Fill to Low Level	5:00
23	Supply 3	0:30
24	Wash 1	3:00
25	Drain 1	1:00
26	High Spin (SDLY 0:45)	4:00

Cycle 21 Restaurants (Table napery, bleach, starch, iron)		
Step	**Description**	**Min:sec**
1	110°F (43°C) Fill to High Level	5:00
2	Wash 1	2:00
3	Drain 1	1:00
4	Hot Fill to Low Level	5:00
5	Supply 1	0:45
6	Wash 1	7:00
7	Drain 1	1:00
8	Hot Fill to Low Level	5:00
9	Supply 2	0:45
10	Wash 1	7:00
11	Drain 1	1:00
12	Hot Fill to High Level	5:00
13	Wash 1	3:00
14	Drain 1	1:00
15	Medium Spin	0:30
16	Warm Spray Rinse	2:00
17	110°F (43°C) Fill to Low Level	5:00
18	Supply 3	0:30
19	Wash 1	2:00
20	Supply 5	0:30
21	Wash 1	5:00
22	Drain 1	1:00
23	High Spin (SDLY 0:45)	4:00

Cycle 22 Restaurants (Table napery, bleach, no iron)		
Step	**Description**	**Min:sec**
1	110°F (43°C) Fill to High Level	5:00
2	Wash 1	2:00
3	Drain 1	1:00
4	Hot Fill to Low Level	5:00
5	Supply 1	0:45
6	Wash 1	7:00
7	Drain 1	1:00
8	Hot Fill to Low Level	5:00
9	Supply 2	0:45
10	Wash 1	7:00
11	Drain 1	1:00
12	Hot Fill to High Level	5:00
13	Wash 1	3:00
14	Drain 1	1:00
15	Medium Spin	0:30
16	Warm Spray Rinse	2:00
17	110°F (43°C) Fill to Low Level	5:00
18	Supply 3 and 4 (Display: “SI”)	0:30
19	Wash 1	4:00
20	Drain 1	1:00
21	High Spin (SDLY 0:45)	4:00

Cycle 23 Restaurants (Table napery, colors, starch, iron)		
Step	**Description**	**Min:sec**
1	110°F (43°C) Fill to High Level	5:00
2	Wash 1	2:00
3	Drain 1	1:00
4	Hot Fill to Low Level	5:00
5	Supply 1	0:45
6	Wash 1	7:00
7	Drain 1	1:00
8	Hot Fill to Low Level	5:00
9	Supply 1	0:45
10	Wash 1	7:00
11	Drain 1	1:00
12	Hot Fill to High Level	5:00
13	Wash 1	3:00
14	Drain 1	1:00
15	Medium Spin	0:30
16	Warm Spray Rinse	2:00
17	110°F (43°C) Fill to Low Level	5:00
18	Supply 3	0:30
19	Wash 1	2:00
20	Supply 5	0:30
21	Wash 1	5:00
22	Drain 1	1:00
23	High Spin (SDLY 0:45)	4:00

Cycle 24 Restaurants (Table napery, colors, no iron)		
Step	**Description**	**Min:sec**
1	110°F (43°C) Fill to High Level	5:00
2	Wash 1	2:00
3	Drain 1	1:00
4	Hot Fill to Low Level	5:00
5	Supply 1	0:45
6	Wash 1	7:00
7	Drain 1	1:00
8	Hot Fill to Low Level	5:00
9	Supply 1	0:45
10	Wash 1	7:00
11	Drain 1	1:00
12	Hot Fill to High Level	5:00
13	Wash 1	3:00
14	Drain 1	1:00
15	Medium Spin	0:30
16	Warm Spray Rinse	2:00
17	110°F (43°C) Fill to Low Level	5:00
18	Supply 3 and 4 (Display: “SI”)	0:30
19	Wash 1	4:00
20	Drain 1	1:00
21	High Spin (SDLY 0:45)	4:00

Cycle 25 Restaurants (Visa table napery, bleach, starch, iron)		
Step	**Description**	**Min:sec**
1	110°F (43°C) Fill to High Level	5:00
2	Wash 1	3:00
3	Drain 1	1:00
4	Hot Fill to Low Level	5:00
5	Supply 1	0:45
6	Wash 1	7:00
7	Drain 1	1:00
8	Hot Fill to Low Level	5:00
9	Supply 2	0:45
10	Wash 1	7:00
11	Drain 1	1:00
12	Hot Fill to High Level	5:00
13	Wash 1	3:00
14	Drain 1	1:00
15	Medium Spin	0:30
16	Warm Spray Rinse	2:00
17	110°F (43°C) Fill to High Level	5:00
18	Wash 1	2:00
19	Drain 1	1:00
20	110°F (43°C) Fill to Low Level	5:00
21	Supply 3	0:30
22	Wash 1	2:00
23	Supply 5	0:30
24	Wash 1	5:00
25	Drain 1	1:00
26	High Spin (SDLY 0:45)	1:00

Cycle 26 Restaurants (Visa table napery, bleach, no iron)		
Step	**Description**	**Min:sec**
1	110°F (43°C) Fill to High Level	5:00
2	Wash 1	3:00
3	Drain 1	1:00
4	Hot Fill to Low Level	5:00
5	Supply 1	0:45
6	Wash 1	7:00
7	Drain 1	1:00
8	Hot Fill to Low Level	5:00
9	Supply 2	0:45
10	Wash 1	7:00
11	Drain 1	1:00
12	Hot Fill to High Level	5:00
13	Wash 1	3:00
14	Drain 1	1:00
15	Medium Spin	0:30
16	Warm Spray Rinse	2:00
17	110°F (43°C) Fill to High Level	5:00
18	Wash 1	2:00
19	Drain 1	1:00
20	110°F (43°C) Fill to Low Level	5:00
21	Supply 3	0:30
22	Wash 1	4:00
23	Drain 1	1:00
24	High Spin (SDLY 0:45)	1:00

Cycle 27 Restaurants (Visa table napery, colors, starch, iron)		
Step	**Description**	**Min:sec**
1	110°F (43°C) Fill to High Level	5:00
2	Wash 1	3:00
3	Drain 1	1:00
4	Hot Fill to Low Level	5:00
5	Supply 1	0:45
6	Wash 1	7:00
7	Drain 1	1:00
8	Hot Fill to Low Level	5:00
9	Supply 1	0:45
10	Wash 1	7:00
11	Drain 1	1:00
12	Hot Fill to High Level	5:00
13	Wash 1	3:00
14	Drain 1	1:00
15	Medium Spin	0:30
16	Warm Spray Rinse	2:00
17	110°F (43°C) Fill to High Level	5:00
18	Wash 1	2:00
19	Drain 1	1:00
20	110°F (43°C) Fill to Low Level	5:00
21	Supply 3	0:30
22	Wash 1	2:00
23	Supply 5	0:30
24	Wash 1	4:00
25	Drain 1	1:00
26	High Spin (SDLY 0:45)	1:00

Cycle 28 Restaurants (Visa table napery, colors, no iron)		
Step	**Description**	**Min:sec**
1	110°F (43°C) Fill to High Level	5:00
2	Wash 1	3:00
3	Drain 1	1:00
4	Hot Fill to Low Level	5:00
5	Supply 1	0:45
6	Wash 1	7:00
7	Drain 1	1:00
8	Hot Fill to Low Level	5:00
9	Supply 1	0:45
10	Wash 1	7:00
11	Drain 1	1:00
12	Hot Fill to High Level	5:00
13	Wash 1	3:00
14	Drain 1	1:00
15	Medium Spin	0:30
16	Warm Spray Rinse	2:00
17	110°F (43°C) Fill to High Level	5:00
18	Wash 1	2:00
19	Drain 1	1:00
20	110°F (43°C) Fill to Low Level	5:00
21	Supply 3	0:30
22	Wash 1	4:00
23	Drain 1	1:00
24	High Spin (SDLY 0:45)	1:00

Cycle 29 Shirt Laundries (Shirts, colors, no bleach, starch)		
Step	**Description**	**Min:sec**
1	Hot Fill to Low Level	5:00
2	Supply 1	0:45
3	Wash 1	7:00
4	Drain 1	1:00
5	Hot Fill to Low Level	5:00
6	Supply 1	0:45
7	Wash 1	5:00
8	Drain 1	1:00
9	Hot Fill to High Level	5:00
10	Wash 1	3:00
11	Drain 1	1:00
12	Medium Spin	0:30
13	Warm Spray Rinse	2:00
14	Cold Fill to High Level	5:00
15	Supply 3	0:30
16	Supply 5	0:30
17	Wash 1	4:00
18	Drain 1	1:00
19	High Spin (SDLY 0:45)	4:00

Cycle 30 Shirt Laundries (Shirts, bleach, starch)		
Step	**Description**	**Min:sec**
1	Hot Fill to Low Level	5:00
2	Supply 1	0:45
3	Wash 1	7:00
4	Drain 1	1:00
5	Hot Fill to Low Level	5:00
6	Supply 2	0:45
7	Wash 1	7:00
8	Drain 1	1:00
9	Hot Fill to High Level	5:00
10	Wash 1	3:00
11	Drain 1	1:00
12	Medium Spin	0:30
13	Warm Spray Rinse	2:00
14	Cold Fill to High Level	5:00
15	Supply 3	0:30
16	Supply 5	0:30
17	Wash 1	4:00
18	Drain 1	1:00
19	High Spin (SDLY 0:45)	4:00

Cycle 31 Shirt Laundries (Shirts, colored, no bleach, no starch)		
Step	**Description**	**Min:sec**
1	Hot Fill to Low Level	5:00
2	Supply 1	0:45
3	Wash 1	7:00
4	Drain 1	1:00
5	Hot Fill to Low Level	5:00
6	Supply 1	0:45
7	Wash 1	5:00
8	Drain 1	1:00
9	Hot Fill to High Level	5:00
10	Wash 1	3:00
11	Drain 1	1:00
12	Medium Spin	0:30
13	Warm Spray Rinse	2:00
14	Cold Fill to High Level	5:00
15	Supply 3	0:30
16	Supply 4	0:30
17	Wash 1	4:00
18	Drain 1	1:00
19	High Spin (SDLY 0:45)	4:00

CYCLE 32 Shirt Laundries (Shirts, no bleach, no starch, delicates)		
Step	**Description**	**Min:sec**
1	Warm Fill to Low Level	5:00
2	Wash 1	2:00
3	Drain 1	1:00
4	Warm Fill to Low Level	5:00
5	Supply 1	0:45
6	Wash 1	5:00
7	Drain 1	1:00
8	Warm Fill to High Level	5:00
9	Wash 1	2:00
10	Drain 1	1:00
11	Warm Fill to High Level	5:00
12	Wash 1	2:00
13	Drain 1	1:00
14	Cold Fill to High Level	5:00
15	Supply 3	0:30
16	Supply 4	0:30
17	Wash 1	3:00
18	Drain 1	1:00
19	High Spin (SDLY 0:45)	1:30

Cycle 33 Shirt Laundries (Starch, extract only)		
Step	**Description**	**Min:sec**
1	Warm Fill to Low Level	5:00
2	Supply 3	0:30
3	Supply 5	0:30
4	Wash 1	7:00
5	Drain 1	1:00
6	High Spin (SDLY 0:45)	4:00

Cycle 34 Formula Common to All Markets (Uniforms, with bleach)		
Step	**Description**	**Min:sec**
1	110°F (43°C) Fill to High Level	5:00
2	Wash 1	3:00
3	Drain 1	1:00
4	Hot Fill to Low Level	5:00
5	Supply 1	0:45
6	Wash 1	7:00
7	Drain 1	1:00
8	Hot Fill to Low Level	5:00
9	Supply 2	0:45
10	Wash 1	7:00
11	Drain 1	1:00
12	Hot Fill to High Level	5:00
13	Wash 1	3:00
14	Drain 1	1:00
15	Medium Spin	0:30
16	Warm Spray Rinse	2:00
17	110°F (43°C) Fill to High Level	5:00
18	Wash 1	2:00
19	Drain 1	1:00
20	110°F (43°C) Fill to Low Level	5:00
21	Supply 3 and 4 (Display: “SI”)	0:30
22	Wash 1	4:00
23	Drain 1	1:00
24	High Spin (SDLY 0:45)	4:00

Cycle 35 Formula Common to All Markets (Uniforms, without bleach)		
Step	**Description**	**Min:sec**
1	Hot Fill to Low Level	5:00
2	Supply 1	0:45
3	Wash 1	6:00
4	Drain 1	1:00
5	110°F (43°C) Fill to High Level	5:00
6	Wash 1	2:00
7	Drain 1	1:00
8	Medium Spin	0:30
9	Warm Spray Rinse	2:00
10	110°F (43°C) Fill to Low Level	5:00
11	Supply 3 and 4 (Display: “SI”)	0:45
12	Wash 1	4:00
13	Drain 1	1:00
14	High Spin (SDLY 0:45)	3:00

Cycle 36 Formula Common to All Markets (Rags/housekeeping, heavy soil)		
Step	**Description**	**Min:sec**
1	110°F (43°C) Fill to High Level	5:00
2	Wash 1	2:00
3	Drain 1	1:00
4	Hot Fill to Low Level	5:00
5	Supply 1	0:45
6	Wash 1	7:00
7	Drain 1	1:00
8	Hot Fill to Low Level	5:00
9	Supply 2	0:45
10	Wash 1	7:00
11	Drain 1	1:00
12	Hot Fill to High Level	5:00
13	Wash 1	2:00
14	Drain 1	1:00
15	Medium Spin	0:30
16	Warm Spray Rinse	2:00
17	110°F (43°C) Fill to Low Level	5:00
18	Supply 3	0:30
19	Wash 1	4:00
20	Drain 1	1:00
21	High Spin (SDLY 0:45)	4:00

Cycle 37 Formula Common to All Markets (Rags/kitchen, mops)		
Step	**Description**	**Min:sec**
1	110°F (43°C) Fill to High Level	5:00
2	Wash 1	2:00
3	Drain 1	1:00
4	Hot Fill to Low Level	5:00
5	Supply 1	0:45
6	Wash 1	7:00
7	Drain 1	1:00
8	Hot Fill to Low Level	5:00
9	Supply 2	0:45
10	Wash 1	7:00
11	Drain 1	1:00
12	Hot Fill to High Level	5:00
13	Wash 1	2:00
14	Drain 1	1:00
15	Medium Spin	0:30
16	Warm Spray Rinse	2:00
17	110°F (43°C) Fill to Low Level	5:00
18	Supply 3	0:30
19	Wash 1	4:00
20	Drain 1	1:00
21	High Spin (SDLY 0:45)	4:00

Cycle 38 Formula Common to All Markets (Rewash/reclaim)		
Step	**Description**	**Min:sec**
1	130°F (54°C) Fill to High Level	5:00
2	Wash 1	2:00
3	Drain 1	1:00
4	Hot Fill to Low Level	5:00
5	Supply 1 and 2 (Display: “SA”)	0:45
6	Wash 1	4:00
7	Drain 1	1:00
8	Hot Fill to Low Level	5:00
9	Supply 1 and 2 (Display: “SA”)	0:45
10	Wash 1	7:00
11	Drain 1	1:00
12	Hot Fill to High Level	5:00
13	Wash 1	4:00
14	Drain 1	1:00
15	Medium Spin	0:30
16	Warm Spray Rinse	2:00
17	110°F (43°C) Fill to High Level	5:00
18	Wash 1	2:00
19	Drain 1	1:00
20	110°F (43°C) Fill to Low Level	5:00
21	Supply 3 and 4 (Display: “SI”)	0:30
22	Wash 1	4:00
23	Drain 1	1:00
24	High Spin (SDLY 0:45)	4:00

For Models built after February 4, 2003

Cycle 39 (Test)		
Step	**Description**	**Min:sec**
1	Cold Fill to Low Level	0:30
2	Drain 1	0:10
3	Hot Fill to Low Level	5:00
4	Heat, 150°F (66°C)	1:00
5	Cold Fill to High Level	5:00
6	Supply 1	0:10
7	Supply 2	0:10
8	Supply 3	0:10
9	Supply 4	0:10
10	Supply 5	0:10
11	Supply 1 and 3 (Display: “SB”)	0:10
12	Wash 2	1:00
13	Wash 3	0:30
14	Wash 4	0:15
15	Wash 1, No Reverse	0:30
16	Drain 1	1:00
17	Warm Flush	0:30
18	Auxiliary 1	0:05
19	Auxiliary 2	0:05
20	Auxiliary 3	0:05
21	150°F (66°C) Fill to High Level	5:00
22	Cold Fill to Overflow	1:00
23	Soak	2:00
24	Drain 1	1:00
25	Medium Spin	0:15
26	Warm Spray Rinse	0:30
27	High Spin (SDLY 0:15)	1:00

For Models built before February 4, 2003

Cycle 39 Formula Common to All Markets (Chemical Supply Setup)		
Step	**Description**	**Min:sec**
1	Warm Fill to Low Level	5:00
2	Supply 1	2:00
3	Supply 2	2:00
4	Supply 3	2:00
5	Supply 4	2:00
6	Supply 5	2:00
7	Wash 1	0:30
8	Drain 1	1:00