Operation/Programming

Washer-Extractor

Pocket Hardmount

Instructions for Operating and Programming the WE-6 Microcomputer

UW50P-4



R077R



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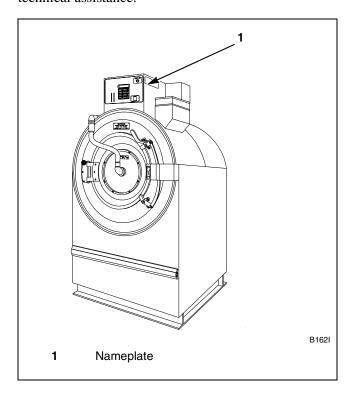
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Notes

Introduction

Nameplate Location

The nameplate is located at the top of the machine. Always provide the machine's serial number and model number when ordering parts or when seeking technical assistance.



Replacement Parts

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

Customer Service

For technical assistance, call any of the following numbers:

(850) 718-1025 (850) 718-1026 Marianna, Florida U.S.A. (920) 748-3121 Ripon, Wisconsin U.S.A.

Notes

Safety Information

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:

W023E

- 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, 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.

Safety Information

- 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. ALWAYS disconnect the washer from electrical supply before attempting any service. Disconnect the power cord by grasping the plug, not the cord.
- 15. 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.
- 16. 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, 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.
- 17. Do not use fabric softeners or products to eliminate static unless recommended by the manufacturer of the fabric softener or product.
- 18. 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.

- 19. Replace worn power cords and/or loose plugs.
- 20. 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.
- 21. 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.
- 22. 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).
- 23. Always follow the fabric care instructions supplied by the textile manufacturer.
- 24. Never operate the washer with any guards and/or panels removed.
- 25. DO NOT operate the washer with missing or broken parts.
- 26. DO NOT bypass any safety devices.
- 27. 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.

Operation

Theory of Operation

The machine utilizes two 2 speed motors to drive the cylinder via V-belt drive in all speeds. The cylinder is supported with two self-aligning double row spherical roller bearings installed in separate housings mounted on a special design gamma A-frame.

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

Water is injected into the machine through electromechanical water valves controlled by the microcomputer. The microcomputer also controls the drain and door lock, and selects the water levels according to the programmed cycle. Vacuum (siphon) breakers are installed in the water inlet plumbing to prevent backflow of water.

A normally open motorized drain valve is used to retain the water in the machine during the wash, soak and rinse steps. The drain valve is normally open and closes when power is applied. When power is removed, the valve opens automatically. The normally open drain valve permits the machine to drain in the event of a power failure.

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

Electrical controls for the machine along with the computer boards are installed in a stainless steel control module mounted on top of the machine. Access to the controls is possible by removing the screws from the module cover, lifting the cover and pulling to the rear. Access to all controls for service is from the top and front except for the balance switch, water valves and motor connections.

A stainless steel door is provided for loading and unloading. A door lock system prevents opening of the door when water is in the machine and prevents operation when the door is open.

The stainless steel supply dispenser consists of four compartments which contain plastic supply cups that hold either liquid or dry supplies. Supplies are placed in the cups prior to the start of each cycle. A nozzle is provided to flush the supplies from the cups with water at the proper time in the cycle. The cups should not be removed when attaching a central supply system.

General Information

UW50 washer-extractor front, side, and cage wrap panels as well as the control module and shell are constructed of Type 304 corrosion resistant stainless steel. The machine is mounted on a welded base frame which supports the bearings, cylinder, and shell. The frame is built of I-beam, channel and angle iron for rigidity.

Both front and rear main bearings are self-aligning double row spherical roller bearings installed in heavy cast housings. The front and rear bearings are filled with an oil-saturated solid lubricant pack which fills virtually all of the bearing cavity. The bearings are lubricated for life and need no further lubrication.

The stainless steel cylinder is attached to a high tensile strength AISI-C-1042 polished steel shaft and is supported by the two bearings and held in place by the bearing set screws.

The shell is securely attached to the gamma frame and is bolted to the front of the frame. The shell has a drain sump to which the drain valve is connected.

The door is attached to the shell by means of a hinge. The door has a latching mechanism that mates with a door interlock system mounted in the two door boxes.

All electrical control components are housed in a separate control module mounted on top of the shell. The controls are accessible by removing the top cover from the control module.

Four inlet valves are mounted behind the control module and consist of two hot and two cold valves.

Operation

Component Function

Keypad

The keypad consists of pressure sensitive switches enclosed within the control module front decal. All commands and programming instructions to the computer are accomplished with the keypad.

Main Computer Board

The computer board is mounted on the inside front of the control module and supports the LED display and indicators plus providing mounting and printed circuitry for the ROM, RAM battery and beeper.

Display/Fuse Board

Provides mounting for the output fuses, transformer, and R.C. networks for the computer. Can be located mounted on an incline inside the control module.

Door

The door has an automatic door locking mechanism which remains locked throughout the complete wash cycle.

Automatic Supply Dispenser

The automatic supply dispenser and lid are mounted on the right side of the shell and are used to add chemical supplies to the wash solution at the appropriate time. The supply dispenser consists of four compartments, each containing a water injection nozzle and a plastic supply cup. Each nozzle is connected to a water supply valve.

Cylinder

Made of perforated stainless steel and supported by the bearings mounted on the frame. Includes four perforated lifting ribs with a 1/2 inch stainless tie rod through each lifter. Has a 1/2 inch thick steel back plate which adds strength and contributes to the flywheel effect during extract.

Shell

Made of Type 304 stainless steel and supported by the gamma A-frame and the front of the frame. Provides mounting for the control module and retains the wash solution.

Bearings

Two permanently lubricated sealed double row spherical roller bearings mounted in cast iron housings.

Wash and Spin Motors

A 2 speed .6 HP motor provides reversing wash speed, and a 2 speed 3.5 HP motor provides the high speed extract.

V-Belt Drive(s)

The V-belts are adjusted by sliding the motor(s) along the motor mounting plate(s). The drive configuration is such that the wash motor is mechanically connected by means of a V-belt drive to the extract motor, through which power is transmitted to the cylinder pulley.

Water Valves

Two hot and two cold 1/2 inch solenoid operated water valves are provided to fill the machine and for the spray rinse. The valves are controlled by the computer and water level control.

Drain Valve

A motorized 2-1/2 inch I.D. drain valve is provided. It is controlled by the computer.

Control Module

All electrical controls (computer boards, contactors, buzzer, water level switches, and door unlock switch) are provided in a stainless steel enclosure mounted on top of the shell. it is provided with conduit connections for safe and reliable connection to the drive motors. The electrical power source is connected to the J-box on the back of the control module.

Through-the-Door Spray Rinse

Consists of a fiber reinforced clear hose and fittings connected to the center of the door glass and to both a hot and cold water inlet valve. Includes a hemispherical shaped spray nozzle inside the door glass which produces a fan action water spray to coat the inside surface of the cylinder.

Seal

Consists of a brass collar assembled on the cylinder shaft and held in place with set screws. The collar provides a flange for mounting 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 brass collar contains two internal o-rings which maintain contact with the cylinder shaft.

Door Boxes

The left door box encloses the door hinge switch which makes contact with the door hinge cam when the door is not closed. The right door box houses the door lock switch which makes contact with the door latch extension arm when the door is fully closed. The right door box also contains the door unlock solenoid which unlocks the door when the machine has stopped.

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. Refer to *Figure 1*.

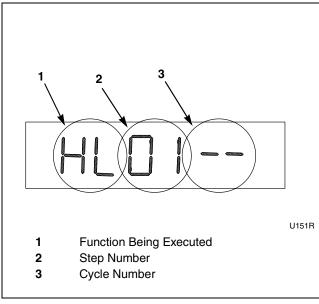


Figure 1

When the display shows letters and/or numbers with or without the beeper, refer to *Table 1*. The computer control in this machine is continuously on the alert for problems both within the machine and with the total installation. As the computer sees a problem, it immediately flashes a letter or number or both on the display and it may activate the signal/buzzer as well. *Table 1* shows the various displays and what they mean. The operator should become familiar with these computer displays.

If the display should indicate "WATER" following a spin step (or at any time), the keypad will refuse any entry and the door will not unlock. This indicates a faulty drain that did not allow machine to empty or a faulty low water level switch. The condition must be corrected before the computer will allow access.

Operation

	Display Interpretations			
Display	Meaning	Display	Meaning	
DONE	End of cycle	HS	High Speed Spin	
DOOR	Door not locked problem	НТ	Heat (steam or electric)	
EMTY	Empty problem	-M-	Minutes (used when programming time)	
FILL	Fill problem	S	Seconds (used when programming time)	
SDLY	Spin coast delay	MS	Medium Speed Spin	
NEXT	Select cycle or open door or select program	SK	Soak	
NCYC	Cycle not available	S1	Supply #1 (Soap/Break)	
STOP	Stop key has been pressed or end of cycle	S2	Supply #2 (Bleach)	
A1	Auxiliary output #1	S3	Supply #3 (Softener/Sour)	
A2	Auxiliary output #2	S4	Supply #4 (as needed)	
A3	Signal	S5	Supply #5 (as needed)	
CF	Cold flush	TH	Controlled Temperature Fill to High Level	
СН	Cold Fill to High Level	TM	Controlled Temperature Fill to Medium Level	
CM	Cold Fill to Medium Level	TL	Controlled Temperature Fill to Low Level	
CL	Cold Fill to Low Level	TO	Controlled Temperature Overflow	
СО	Cold Fill to Overflow	W1	Wash #1 (Regular Reversing)	
CR	Cold Rinse	W2	Wash #2 (Gentle Reversing)	
CY	Cycle Number	W3	Wash #3 (No Agitation)	
D1	Drain #1	W4	Wash #4 (Distribution Speed – Forward Only)	
D2	Drain #2	WF	Warm Flush	
F	Heat select temperature (F) in degrees Fahrenheit	WH	Warm Fill to High Level	
С	Heat select temperature (C) in degrees Celsius	WM	Warm Fill to Medium Level	
HF	Hot Flush	WL	Warm Fill to Low Level	
НН	Hot Fill to High Level	WO	Warm Fill to Overflow	
HM	High Fill to Medium Level	WR	Warm Rinse	
HL	Hot Fill to Low Level	•	Left dot – Balance Switch	
НО	Hot Fill to Overflow	•	2nd dot from left – Door Lock Switch	
HR	Hot Rinse	•	3rd dot from left – Program Mode	
OVERHT	Open or shorted temperature input circuit	•	4th dot from left – High Level Reached	
TEMP	Over temperature limit condition	•	5th dot from left – Medium Level Reached	
EXISTS	Cycle already in memory	•	6th dot from left – Low Level Reached	
EDIT?	Do you want to edit the cycle?	WATER	Indicates water remaining in the machine after spin or defective water level switch.	

Table 1

Operational Keypad

There are 16 keys on the control keypad. Fourteen of these keys can be used for operation of the machine. The 14 key functions the operator can use are printed in **BLACK**.

Operational Keypad			
Key	Description		
Numbers 1 – 0	Used to select cycle number.		
Display Temp	As long as pressed and held, display will show sump temperature in degrees Fahrenheit or Celsius and will continuously update display as temperature changes.		
Advance	When pressed, will cause computer to skip to the next step in the cycle. Cannot advance past drain if machine is not empty. (May be disabled – see <i>Prompting Procedure</i> in the programming manual.)		
Stop	Serves as Emergency Stop and immediately aborts the cycle and initiates the stop routine. (Refer to <i>Stop Routine</i> in this section.)		
Start	Starts machine in the cycle entered. Restarts a step following a "FILL" or "EMTY" alarm. (Refer to <i>Error Recovery Routine</i> in this section.)		
Manual	When pressed, will cause computer to enter the Manual Mode. (Refer to <i>Manual Control</i> in this section.)		

Table 2

LED Output Indicator Lights

Located to the left of the keypad 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 indicating the outputs activated for a particular step. Refer to *Figure 2*.

When using the Manual Mode procedure, one or more of these lights will be on to indicate the outputs selected for the Manual Mode operation.

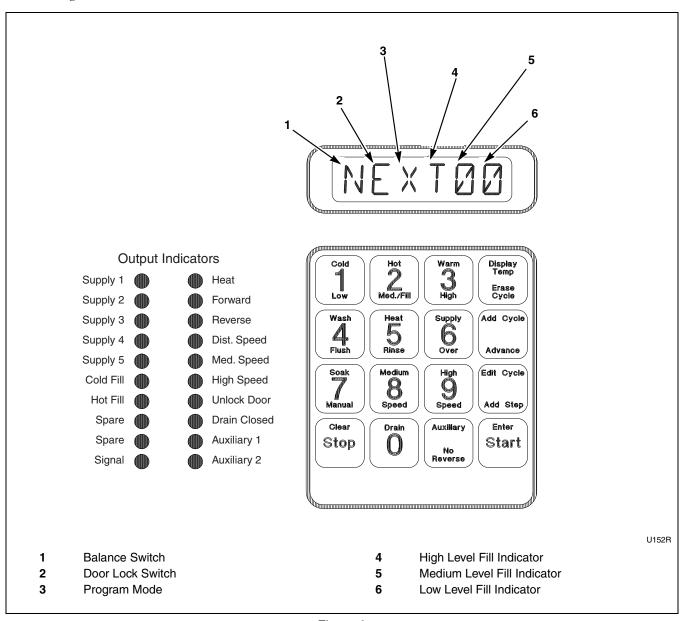


Figure 2

Start-Up

Turn on the main power source (breaker panel or cutoff switch on the wall). The front panel display should light up and flash "POWER" then "WAIT" for 30 seconds (six seconds on Simulator) followed by "NEXT 00" which means Select Cycle. This display will be on at all times that power is on indicating the machine is ready for loading and unloading.

NOTE: When display indications are referred to throughout this manual, these indications will 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.

Loading

To load the washer, use left hand to press the Door Unlock button located on the lower right front of the control panel. Use right hand to turn door handle to the right. The door can then be opened.

Load linen until the machine is full. Partial loads are a waste of energy, water and chemicals and cause greater machine wear than full loads. If you do not have enough to fill the basket, wait until a full load is available. Partial loads, if necessary, should only occur at the end of the day. Even then, they can usually be held until the next day when more linen is received.



Figure 3

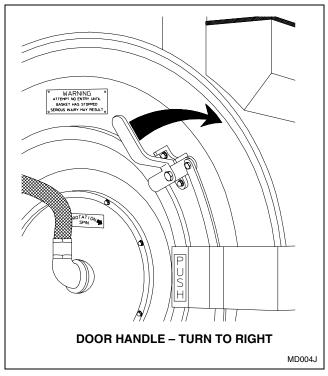


Figure 4

NOTE: If stringy items such as mop heads are to be washed, laundry nets should be used in order to prevent fouling of seals and drains. When using nets, do not wash partial loads. Load the machine to capacity to prevent severe out-of-balance loads.

Once loading is complete (you cannot overload the machine as far as harm to the machine is concerned; however, overloading can cause improper mechanical action and an inferior quality wash), close and lock the door making sure that all fabric is inside the basket. Push the door closed enough to compress the door gasket, then rotate the door handle counterclockwise (to the left) as far as it will go. To start or run machine, door must be closed and locked.

Cycle Selection

Find the cycle number (cycle numbers must be two-digit numbers from 01 to 39) of the desired wash cycle from the cycle code list provided. Press (do not punch) with your finger the numbers desired on the keypad and note that this number is displayed after "NEXT". When keys are pressed on the keypad, a beep will be heard. If an error is made, simply press the numbers again. As numbers are entered, they move from right to left on the display. Display will show "NEXT 12" if cycle 12 is pressed.

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 "HL01", "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. By pressing the Edit Cycle key while the cycle is running, the display will alternate between showing the normal step display and the remaining cycle time in minutes.

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 before pressing the Start key. When the display shows the desired step at which you wish to start 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 again press the Start key. If the computer starts but the machine does nothing, this indicates that the door hinge microswitch cam may need adjusting. The door hinge microswitch interlocks all 120 volt power to the controls with the exception of the computer itself.

In addition, as water is being turned on to fill the machine, one or more of the indicator lights located to the left of the keypad will come on and stay on until the required water level is reached. Indicator 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 illuminated, the low water level has been reached. Likewise, when the dot in the next to the last digit is illuminated, medium water level (optional) has been reached. When the dot over the third digit from the right has been illuminated, high level has been reached. The cycle will continue until its completion and, at this time, the display will show "DONE".

Test Cycle

Cycle number 01 is a Test Cycle to check out all machine functions. Refer to *Standard Cycle Charts* section.

The first step is a cold fill to low level and is designed to not give quite enough time to complete a fill and cause the display to read "FILL". When the Start key is pressed again, the machine should continue to fill and proceed with the Test Cycle. Step 02 is a drain step and again, the time is too short. The display will read "EMTY". To proceed again press the Start key. The steps in the Test Cycle are relatively short with the exception of step 03, step 15 and step 17. These can be shortened by pressing the Advance key to go on to the next step.

NOTE: The Advance key may be disabled. Refer to *Table 2*.

Pressing the Start key again will give another time period for the step during which the Start key is pressed (for whatever time was originally programmed for the step).

End of Cycle

When the cycle is completed, the display will show "DONE" plus the cycle number just run. To unload the machine, press the Door Unlock button and again open the door to remove contents and place them in the dryer. The display will show "NEXT" plus the cycle number just run.



WARNING

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

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Temperature Display

To display temperature, press the Display Temp key. Display will read "---F" as long as the key is pressed and will update the display automatically.

Advance Cycle

It is possible to skip to the next step in the cycle except a drain step. To do so, press the Advance key. Drain procedures must be allowed to complete.

NOTE: The Advance key may be disabled. Refer to *Table 2*.

Error Recovery Routine

The computer, upon detecting an error, will stop running a step and display a message to indicate what type of error was encountered. It will display "FILL--" to indicate the machine did not fill within the allotted time, "EMTY--" to indicate the washer did not drain within the allotted time.

Each of these errors is considered to be recoverable. The operator has two minutes to respond to the error condition. During this time, the computer will turn on and off the signal (buzzer) relay at the rate of one second on and one second off to alert the operator to the error condition. The washer may be restarted by pressing the Enter key or the cycle may be aborted by pressing the Clear/Stop 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.

Certain error conditions are considered to be nonrecoverable. These conditions include door opening during a cycle prompting the computer to display "DOOR--". The operator must close the door and after the computer has detected the door being 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.

Motor Thermal Overload Indicator

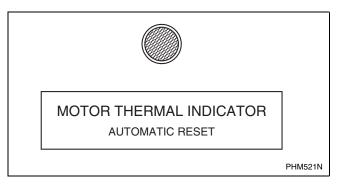


Figure 5

Located on the side of the control module is a small indicator lamp with the decal pictured in *Figure 5*.

When this lamp is lit, it indicates that there is an open thermal overload switch on the motor(s) which shuts off the A.C. power to the computer board thereby preventing damage to the motor(s) caused by overheating and/or an overload condition.

This feature is provided to protect the motor and extend the life of the motor. The thermal overload switch will automatically reset itself after the excessive heat condition has subsided; however, before attempting to restart the machine, always check to find out the reason for the overload (e.g., machine not fully drained before spin, defective motor, continual out of balance condition, low voltage, loss of one phase on three phase motor, failed bearings, air circulation blocked to motor fan). The thermal overload switch should not open under normal operating conditions. Failure to take corrective action when the indicator lamp is lit will ultimately result in damage to the motor(s).



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.

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If you have difficulty in locating the problem, do not hesitate to call the factory.

Manual Mode Control Feature

Some of the outputs of the WE-6 computer can be operated manually from the keypad. In order to assure proper sequencing, all motor speeds are always controlled by the computer. Therefore, manual control is available only while a preprogrammed cycle is in progress. Manual Mode may not be entered during a spin step or a drain step. The door unlock output is controlled only by the computer and cannot be accessed by the Manual Mode.

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 a normal operation, when the Program Mode switch is in the Run position, only the words and numbers printed in BLACK on the keys are meaningful to the operator. When the Manual Mode is entered, some, but not all, of the words printed in RED become active. Refer to the *Programming* section for more information.

To enter the Manual Mode, press the Manual key. Now you must press three number keys to assign a time in minutes and seconds for the Manual Mode (Example: Press 2 and 3 and the 0 to enter the Manual Mode for 2 minutes and 30 seconds. Then press the Add Step key. This entire procedure must be accomplished within three seconds. When the computer receives all these inputs within the three second time limit, it will enter the Manual Mode for the time assigned. The display will flash between "MAN---" and the current cycle step display for four seconds. (During this last period, the last three digits will represent the time assigned.) After four seconds, the display will flash between "MANUAL" and the current cycle step display for the remainder of the assigned time. During the Manual Mode, normal cycle timing is suspended.

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 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 machine has reached low water level), drain valves and auxiliary outputs can be manually controlled. To do so, press two keys to turn the output ON (Heat and Drain require one key). When an output is ON, pressing the same two keys will turn it OFF. For example, to turn ON the cold fill valve, press the Cold and Fill keys. To turn the valve OFF, again press the Cold and Fill keys.

NOTE: It is not recommended that Manual Mode be entered during a fill operation. This will bypass the water level switch inputs and the water must be turned off manually by the operator.

Notes

Programming

Preprogrammed Cycles

The microcomputer contains 39 preprogrammed "ready-to-use" cycles. To use any of the 39, simply enter the two-digit code for the cycle desired and press the Start key.

Standard Cycle Chart contains Test Cycle 01 as one of the 39 preprogrammed cycles. This cycle is intended as a means of proving the operation of the machine.

Any of these 39 may be erased and replaced by new cycles. Any of the 39 may also be edited and revised to match your specific needs. Consult the section of the programming manual pertaining to Editing. The programming manual contains detailed information about each step of the preprogrammed cycles.

Stop Routine

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

A 30 second shake-out (WASH 1) is included as part of the stop procedure. This shake-out may be bypassed by pressing the Advance key if Advance has been prompted.

The remainder of the stop routine is fixed at: low speed forward for 15 seconds, then pause for five seconds. After this time, the computer will display "DONE--" and the door may be unlocked. The computer will continue to display "DONE--" until the operator opens the door. At that time, the display will change to "NEXT--".



WARNING

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

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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

Programming

Standard Cycle Charts

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	0:30	
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 (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	Temp. Fill/High Level 150°F	5:00	
22	Cold 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 Speed Spin (SDLY 0:15)	1:00	
28	Stop Routine		

NOTE: The alarm will sound on steps 1 and 2. These steps have been deliberately programmed with times that are too short. Press the Start key to continue when alarm sounds. The times here are actual operating times if the steps are allowed to progress to their end without pressing the Advance key.