![UniMac logo]

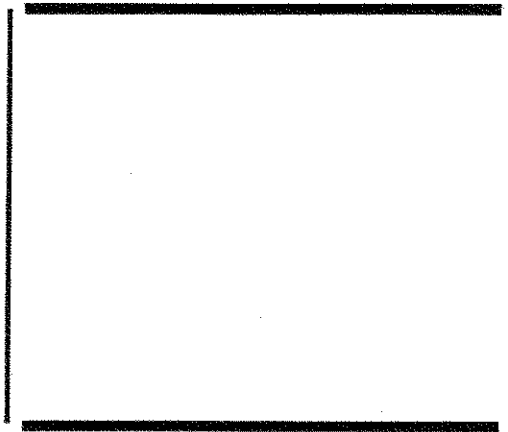# UniWash WE-4 & -5 Microcomputer
Programming Manual

Third Edition

P/N 230437

PROGRAMMING ▪ OPERATION ▪ TROUBLESHOOTING ▪ SERVICE

UniMac

PROGRAMMABLE MICROCOMPUTER CONTROL
WE-4 & WE-5 PROGRAMMING MANUAL
THIRD EDITION

This manual is designed as a guide to programming the UniWash WE-4 and WE-5 microcomputer controlled washer-extractor. It contains, along with the programming instructions, a test procedure to "proof-test" the functions of the microcomputer plus special instructions for replacement of key parts.

The twelve pre-programmed ready-to-use cycles are located in the back of the manual, identified by cycle number. Cycle #01 is included as a means of proving the operation of the machine.

Read and be sure you understand this manual and the service manual included with your machine before attempting to start the machine.

Keep this manual along with the service manual and the wiring diagrams, which accompany the machine, in a safe place for ready reference. The first is included with your machine. Additional copies are available at a nominal charge.

Do not attempt to use this manual in conjunction with earlier model microcomputer controlled UniWash machines nor should you attempt to apply literature intended for earlier models when addressing the WE-4 and WE-5.

The WE-4 and WE-5 microcomputer has a six digit LED display. At various points through this manual are located bits of information regarding the display read-out pertaining to a specific function. This display read-out may be expressed as "F---" for instance. The blank spaces refer to either unlit digits pertaining to this particular function or to information unimportant to the particular instruction and omitted for clarity.

Read and understand all literature furnished with your machine. Be a safe and efficient operator.

☞ KNOW YOUR MACHINE

WARNING

THIS MACHINE SHOULD BE INSTALLED, ADJUSTED AND SERVICED BY QUALIFIED ELECTRICAL MAINTENANCE PERSONNEL FAMILIAR WITH THE CONSTRUCTION AND OPERATION OF THIS TYPE OF MACHINERY. THEY SHOULD ALSO BE FAMILIAR WITH THE POTENTIAL HAZARDS INVOLVED. IF THIS WARNING IS NOT OB-SERVED, PERSONAL INJURY OR EQUIPMENT DAMAGE RESULTING IN VOIDING THE WARRANTY MAY RESULT.

WARNING

BE ABSOLUTELY CERTAIN THAT A GROUND WIRE FROM A PROPER EARTH GROUND IS CONNECTED TO THE GREEN CHASSIS GROUND LEAD PROVIDED IN THE J-BOX. WITHOUT PROPER GROUNDING, PERSONAL INJURY FROM SHOCK MAY OCCUR AND MACHINE MALFUNCTIONS MAY BE EVIDENT. NOTE: COMPUTER MODELS MUST HAVE A PROPER GROUND TO PREVENT COMPUTER MALFUNCTIONS.

WARNING

IF A DELTA SUPPLY SYSTEM IS USED, THE HIGH LEG SHOULD BE CONNECTED TO THE RED WIRE IN THE TER-MINAL BOX. IF THREE PHASE SERVICE IS NOT AVAIL-ABLE AND A ROTO PHASE OR OTHER PHASE ADDER IS USED, THE ARTIFICIAL LEG MUST BE CONNECTED TO THE RED LEAD. IF THIS WARNING IS NOT OBSERVED, EQUIPMENT DAMAGE RESULTING IN VOIDING THE WARRANTY WILL RESULT.

ELECTRICAL **SAFETY** NOTES

UniMac

YOU SHOULD BE CAREFUL WORKING WITH
MACHINERY EVERY DAY, AND SHOULD BE EVEN
MORE CAREFUL AROUND ELECTRICAL COMPONENTS.
A FEW HELPFUL SAFETY RULES CAN SAVE YOU
AND YOUR PERSONNEL FROM SERIOUS ELECTRICAL
INJURIES.

UNLESS THE INSTRUCTIONS STATE THAT
ADJUSTMENTS ARE TO BE MADE, OR TROUBLE
SHOOTING PERFORMED WITH MACHINERY IN OPERA-
TION, **LOCK OUT THE MOTORS AT THE MAIN POWER
PANEL AND LOCK OUT THE POWER SUPPLY TO CON-
TROL BOXES**.

WARNING:

DANGEROUS VOLTAGES ARE PRESENT IN
CONTROL ENCLOSURES AND AT MOTOR TERM-
INALS. ONLY PERSONNEL FAMILIAR WITH
ELECTRICAL TEST PROCEDURES, TEST EQUIP-
MENT, AND SAFETY PRECAUTIONS SHOULD
ATTEMPT ADJUSTMENTS AND DO TROUBLE
SHOOTING.

UniMac *Efficiency-Through Advanced Engineering*

☑ **BEFORE INITIAL START UP** of a UniWash washer-extractor — perform the following safety checks:

> Make sure the machine is properly bolted to the floor as shown in installation instructions and specifications.

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

> Make sure the machine is properly grounded electrically.

> Make sure the machine has proper flexible water fill and drain connections of the proper size and length with no kinks which are securely attached and/or clamped.

☑ **BEFORE MACHINE IS PLACED IN OPERATION,** door safety interlock must be checked for proper operation as follows:

> When washer is energized electrically and in operation, the loading door is locked in th closed position and cannot be opened. Verify this by attempting to open the loading door when machine is operating. If necessary, check door safety interlock and microswitches for proper operation, or consult the service manual, or call a qualified service engineer.

> When washer loading door is open, it is not possible to start the machine. Verify this by attempting to start washer with door open. Also, close door without locking it and it should not be possible to start washer with the door not locked. If necessary, check door microswitch and door lock microswitch for proper operation, consult the service manual. If additional information is required, contact your local distributor or call the UniMac Company.

☑ **IMPORTANT:** Door safety interlock must be checked daily in accordance with above procedure.

☑ **WARNING:** Before servicing any UniMac machinery or equipment, make certain it is disconnected from the electrical power source.

> **NEVER ALLOW OPERATION OF MACHINE WHEN ANY SAFETY DEVICE IS MALFUNCTIONING.**

> **NEVER BYPASS SAFETY DEVICES:**

BE A SAFE OPERATOR
BY THINKING — BEFORE ACTING
AND
BY READING YOUR OPERATORS MANUAL

WE-4 AND WE-5 PROGRAMMING MANUAL

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WARNING

Never turn power off while the computer mode switch is
in the "PROGRAM" position. Such action will disarray
portions of the programmed data, which may necessitate
re-programming of all or some of the cycles. Always re-
turn the mode switch to "RUN" position before turning
power off.

Never turn mode switch from "PROGRAM" to "RUN" position
without completing all pertinent data required for the
last step programmed. If the switch is turned from
"PROGRAM" to "RUN" without entering the amount of time
required for the last entry, the keyboard will lock up
and will refuse any entry.

Never leave the mode switch key inserted in the switch
lock where it may be accessible to unauthorized personnel
not familiar with programming procedures.

When programming a warm fill to level, if the "WARM" key
is pressed once, the hot and cold fill valves are turned
on. If the "WARM" key is pressed twice, all four water
valves are turned on, thereby decreasing fill time. See
the section on "FILL TEMPERATURE SELECTIONS".

When utilizing the "DISPLAY/EDIT" feature, the "ADVANCE"
key will display one full step at a time. The "ENTER"
key will display the pertinent data related to each step
(i.e. time, etc.). See the section on "DISPLAY/EDIT" for
more information.

When it is desired to fill or add supplies without agita-
tion, first program a "WASH 3" step for one second, then
program the fill or supply step.

When utilizing the previous cycle ran, it is not necessary
to re-enter the two digits of the cycle number. The com-
puter holds the previous cycle in memory and it is neces-
sary to press only the "ENTER" key to start the cycle.

HOT SPRAY VALVE ON

COLD SPRAY VALVE ON

HOT FILL VALVE ON

COLD FILL VALVE ON

LOW LEVEL
FILL INDICATOR

HIGH LEVEL
FILL INDICATOR

```
NEXT 00
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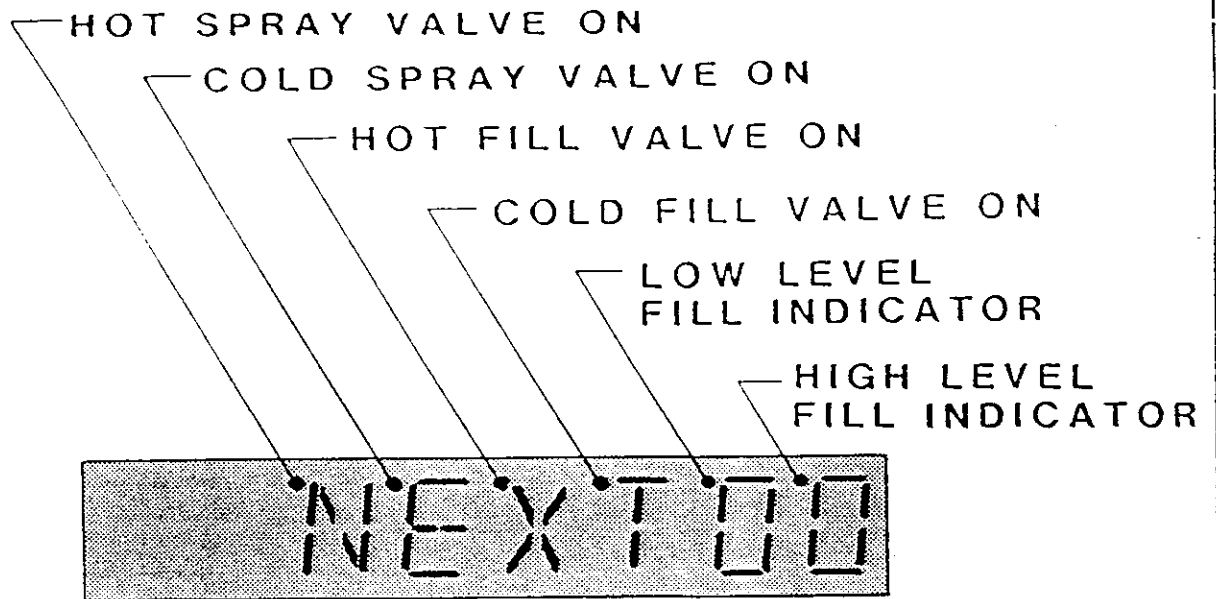
COLD / **1** LOW	HOT / **2** HIGH	WARM / **3** OVER	DISPLAY TEMP. / CYCLE
WASH / **4** FLUSH	HEAT / **5** RINSE	SUPPLY **6**	ADD CYCLE NUMBER / ADVANCE
SOAK **7** PAUSE	MEDIUM **8** SPEED	HIGH **9** SPEED	ERASE CYCLE NUMBER
CLEAR **STOP**	DRAIN **0**	BUZZER – NO REVERSE	ENTER **START**

SAMPLE KEYBOARD

☞ NOTE: WHEN POWER HAS BEEN TURNED OFF FROM THE
MACHINE AND THEN REAPPLIED, THE DISPLAY
WILL READ "WAIT" FOR APPROXIMATELY 30
SECONDS BEFORE THE DISPLAY CHANGES TO
"NEXT 00".

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OPERATING INSTRUCTIONS
WE-4 AND WE-5 PROGRAMMABLE MICROCOMPUTER CONTROL
MODELS UW30-P, UW50-P, UW50-P3, UW50-P4, UW65-P, UW85-P, UW125-P

TURN ON

Turn on the main power source (breaker panel or cut-off switch on the wall). The front panel display should light up and show "WAIT 00" for 30 seconds 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: Throughout this manual, when display indications
         are referred to, 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 process.

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 you do. 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.

IMPORTANT: If stringy items such as mop heads, etc. are
              to be washed, laundry nets should be used in
              order to prevent fouling of seals and drains.

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. The machine should not start or run if the door is not both closed and locked.

SELECT CYCLE

Find the cycle number (cycle numbers must be two digit numbers) of the desired wash cycle from the cycle code list provided. Press (do not punch) with your finger the numbers desired on the keyboard and note that this number is displayed instead of "NEXT". When keys are pressed on the keyboard, a beep will be heard. If an error is made, simply press "CLEAR" and then press the numbers again. As numbers are entered, they move from right to left on the display. Display will show "CY12" if cycle 12 is pressed.

> NOTE: In order to "CLEAR" or "ENTER" data, the display must be filled - i.e. no blank spaces.

START CYCLE

To start the cycle that has been selected, simply press the "START" key. If the cycle number selected is not in computer memory, the display will show "NOGO". If this happens, select another cycle. Otherwise, the display will now show the first step. (Example: "HL01"). This number indicates the step # in the cycle as listed in the Selection List. As the cycle proceeds, the display will show the step being run and the cycle number selected.

If the door is not locked, the display will indicate "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 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.

As the cycle progresses, the display will show the step in the cycle that is being run as well as the cycle number. In addition, as water is being turned on to fill the machine, one or more of the four indicator lights above the first four digits (left to right) in the display will come on and stay on until the required water level is reached. Indicator lights above the last two digits on the right will indicate the water level(s) reached. When the indicator light in the next to last digit is illuminated, the low water level has been reached. Likewise, when the light in the last digit to the right illuminates, high water level has been reached. The cycle will continue until its completion and, at this time, the display will show "NEXT".

TEST CYCLE

Cycle number 01 is a Test Cycle to check out all machine functions.
The program for the cycle is shown following the copy of the Program
Worksheet.

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 "START" is pressed again, it should continue to
fill and proceed with the test cycle.

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
"ADVANCE" to go on to the next step.

END OF CYCLE

When the cycle is completed, the display will show "NEXT" 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.

> ⚠ **WARNING: ATTEMPT NO ENTRY UNTIL BASKET HAS STOPPED.
> SERIOUS INJURY MAY RESULT.**

To display temperature, press "DISPLAY TEMP". Display will read
"---F" as long as the key is pressed and will update display auto-
matically.

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

DISPLAY INDICATIONS

When display shows letters and/or numbers with or without the beeper,
read instructions under "Display Identifications". The computer con-
trol in this machine is continuously on the alert for problems both
within the machine and with the total installation. As a computer
sees a problem, it immediately flashes a letter or number or both on
the display and may activate the beeper as well. The following
chart shows the various displays and what they mean. It is advisable
that the operator familiarize himself with these indications.

WE-4 AND WE-5 DISPLAY IDENTIFICATION

UNIWASH MODELS 30-P, 50-P, 50-P3, 50-P4, 65-P, 85-P, 85-P4, 125-P

DISPLAY	MEANS
DOOR	Door not locked problem
EMTY	Empty problem
FILL	Fill problem
SDLY	Spin Coast Delay
NEXT	Select cycle or open door or program
NOGO	Cycle not available
STOP	Stop button has been pressed or end of cycle
01/4	One quarter hour (soak intervals)
A1	Buzzer or Auxiliary Output
CF	Cold Flush
CH	Cold Fill to High Level
CL	Cold Fill to Low Level
CO	Cold Fill to Overflow
CR	Cold Rinse
CY	Cycle #
DR	Drain
F	Heat select temperature (F--) in degrees F
OH	Auxiliary heat in minutes (no hours)
HF	Hot Flush
HH	Hot Fill to High Level
HL	Hot Fill to Low Level
HO	Hot Fill to Overflow
HR	Hot Rinse
HS	High Speed Spin
HT	Heat (steam or electric)
M	Minutes (used when programming time)
MS	Medium Speed Spin
SK	Soak
S1	Supply #1 (Soap/Break)
S2	Supply #2 (Bleach)
S3	Supply #3 (Softener/Sour)
S4	Supply #4 (As Needed)
S5	Supply #5 (As Needed)
TH	Controlled Temperature Fill to High Level
TL	Controlled Temperature Fill to Low Level
TO	Controlled Temperature Overflow
NO FILL	Indicates machine cannot add heat due to low level fill not being reached

WE-4 AND WE-5 DISPLAY IDENTIFICATION (Cont.)

DISPLAY   MEANS

W1   Wash #1 (Regular Reversing)
W2   Wash #2 (Gentle Reversing)
W3   Wash #3 (No Agitation)
WF   Warm Flush
WH   Warm Fill to High Level
WL   Warm Fill to Low Level
WO   Warm Fill to Overflow
WR   Warm Rinse
. .   .   .   Dots indicate water valves turned on
.   Left dot - hot spray valve
   .   2nd dot from left - cold spray valve
      .   3rd dot from left - hot fill valve
         .   4th dot from left - cold fill valve
            .   5th dot from left - low level fill reached
               .   6th dot from left - high level fill reached
PAUSE   Paused during Cycle (see explanation in this manual)

NOTE: For further explanation of problem indication displays, con-
        sult Test Procedure section of this manual.

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TEST PROCEDURE
WE-4 AND WE-5 PROGRAMMABLE COMPUTER
UNIWASH UW30, 50, 65, 85, & 125 P

> **WARNING:**   Serious shock may occur, open primary disconnect switch before attempting any repairs.

1.   The WE-4 and WE-5 Programmable Computer, with its display/fuse board should be easier to maintain than other type controls. The following procedure should help to eliminate problems and determine if components are defective.

2.   Test equipment required:

a.   20K OHM/Volt AC-DC voltmeter
b.   Programmable computer diagram, WE-4 page 43, WE-5 page 44
c.   Display board diagram, drawing #2091

3.   Power Up

a.   When AC power is turned on, after 30 seconds the computer should read "NEXT".
b.   Door unlock solenoid should work if door unlock button is depressed.
c.   If these are correct, go to step number 5.

4.   If computer does not read "NEXT or does not light:

a.   Examine display board; the door light (DR) should be on and all others off.
b.   If not, check 2 AMP fuse on side of module.
c.   Check for 115 volts AC between AC HOT (ACH) and AC NEUTRAL (ACN) at top center of display board. (Ref. Drawing #2091)
d.   Be certain that all plugs are correctly installed on the computer board.
e.   If all above check OK, remove the 6-pin plug (J-1) just above the transformer on the computer board. Carefully check for 115 volt AC between pins 1 and 6; if correct voltage is there, replace computer board.

5.   If computer reads "NEXT":

a.   Test the keyboard, first with the keyed mode switch in the "RUN" position. A beep tone should sound as each key is pressed.

> NOTE: Keys should be pressed at their centers and
>   only hard enough to activate them. With the
>   computer showing NEXT, press each of the 15
>   keys not including the "START" key and listen
>   for each beep. After pressing all 15 keys
>   (except "START"), press "0" twice then press
>   "START". Display should read "NOGO00".

b.   When "DISPLAY TEMP." is pressed, the computer display
     should change to show the temperature inside the sump.
     When key is released, the display should return to pre-
     vious read-out.
c.   Turn the keyed mode switch to "PROGRAM" and press "Dis-
     play/Cycle". Read-out should show "CY--". Then press
     "0" twice.
d.   Press "Clear/Stop". Display should return to "NEXT".
e.   Return Mode switch to "RUN" position.

6.   If keyboard does not function as above:

a.   Check the plug at bottom center of computer board for pro-
     per installation. (P-1)
b.   If the plug is correct, proceed to "Replacing Keyboard"
     section.

7.   Test Cycle

a.   Cycle 01 is a pre-programmed test cycle. If it has not
     been erased, it may be used to check all functions of
     the machine.
b.   Start this cycle by pressing "0", then "1", then "START".
c.   Display should show "CL01" with two dots indicating water
     valves turned on. (Ref. Display Identification page)
d.   On the display/fuse board inside the control module,.
     these lights should be lit; Cold Fill (CF) - Cold Spray
     (CS) - Drain (DN) - plus Forward (FW) and Reverse (RV)
     should alternate on and off. (Ref. Drawing No. 2091)
e.   Printed program will indicate which lights to expect for
     each step. (Ref. Cycle 01 as shown in this manual)

8.   If read-out is OK but no lights lit display/fuse board:

a.   Check 2 AMP fuse and door hinge microswitch.
b.   Check thermal overload indicator light on side of control
     module. If lit, thermal overload circuit is open.

9.   <u>If only one light on display/fuse board not lit:</u>

   a. Check the fuse on the fuse board associated with that
      light.
   b. If fuse is OK, check jumpers between computer and dis-
      play board, J4 and J5, making sure J4 on display board
      is connected to J4 plug on computer board, etc.
   c. If the fuse is blown, check the related valve or relay
      for shorted condition before replacing the fuse with
      one of the same size.
   d. Use similar procedure for any individual function which
      does not work.

10.   <u>"Door" Alarm</u>

   a. Computer has not been told that door is locked.
   b. Check switch activator tab on extension arm.
   c. Check door lock switch.
   d. Check input plug, J3, on computer board.

11.   <u>"FILL" Alarm</u>

   a. Computer has not been told that water level was reached
      in the allotted time.
   b. Check for leaks in air system between level switches and
      water level air chamber.
   c. Check for obstruction in water level air chamber or tubing.
   d. Check for obstructions or low pressure in water supply
      system.
   e. Check for failed drain solenoid.

12.   <u>"EMTY" Empty Alarm</u>

   a. Computer has not been told that level reached empty in the
      allotted time.
   b. Check for obstructions in air system to level switches.
   c. Check for slow drain.

> NOTE: Sufficient time for filling and draining must be
>   allowed when a program is written into the computer.
>   If a "FILL" or "EMPTY" alarm occurs only in one pro-
>   gram, edit that program and re-enter it into the
>   computer making sure enough time has been allowed
>   for fill and/or drain.

13. No Spin, Rest of Program Okay:

a. When a spin is called for (medium or high speed) the computer looks for an out of balance condition and an empty condition.

NOTE: Computer will look for "Out of Balance" three (3) times. If balance condition is not corrected, computer will advance to next step without completing spin cycle.

b. Check input plug, J3, on computer.
c. Check balance switch inside "A" Frame, except on UW30.
d. Check water level and drain line.

14. "NO FILL" Alarm

a. The computer has not received a low level fill signal prior to an auxiliary "HEAT" step.
b. Check as for "FILL" Alarm as in Step 11.

15. Spins too soon after "SOAK" step:

a. Check for leaks in pressure system to water level switches.

16. Temperature indication inconsistent:

a. Temperature probe is short circuited.
b. If reading is 53° F and does not change, temperature probe circuit is open.
c. Check input plug, J3, on computer.
d. Replace temperature probe in sump.

17. If the above procedures and trouble-shooting have failed to determine the problem, call the factory.

SPECIAL INSTRUCTIONS

REPLACING KEYBOARD WE-4 AND WE-5

The keyboard is a part of the front decal on the control module. To replace it, first unplug the keyboard from the computer board (Plug P-1).

The decal is self-adhesive. Carefully peel it from the module. Next, scrape the module front clean of any residual adhesive. The surface should be clean and smooth before applying the new keyboard.

To apply the new keyboard, remove the backing paper, insert the flat cable and plug into the slot and be certain all holes are lined up before pressing the decal into place.

After the door unlock switch is secured, plug the flat cable onto the computer board (P-1). Make sure the plug is not off center and that each pin enters its hole in the plug. There should not be a twist in the flat cable.

PROGRAMMING INSTRUCTIONS
WE-4 AND WE-5 PROGRAMMABLE MICROCOMPUTER CONTROL
MODELS UW30-P, UW50-P, UW50-P3, UW50-P4, UW65-P, UW85P, UW125-P

1. Locate the programming switch attached to the left side of the control module. This switch is operated by a key. Turn the switch to the "PROGRAM" position. The display should read "NEXT"--.

2. Press "ADD CYCLE" on the keyboard. The display should read "CY --".

3. Enter a two digit number to identify the cycle that you want to enter into computer memory. (Example - 25) then press "ENTER". The computer will quickly look to see if this number is already in memory. If the number is already in memory, the display will read "NOGO". If so, select another number. If computer sees no complication, the display will read "--0125". This means it is ready for step 01 in cycle 25. (Note: Cycle 25 is shown in its printed form in this manual following the pre-programmed cycles. Cycle 25 is not pre-programmed.)

4. Enter the procedure that you wish to use for step 01 such as, hot fill to low level. Press "HOT" and then press "LOW" - display will now read "HL0125". Press "ENTER". The display will read "-M--25".

5. Now enter the time in minutes and seconds that you want the computer to allow the machine to fill (a good time might be 4 minutes). For example, press 4, the display will now read "4M--25". Now press "0" and "0". The display will read "4M0025".

6. Now press "ENTER". The display will now change to "--0225". This means ready to program step 02.

7. The next step would probably be to add Supply #1. If so, press "SUPPLY" and the "1", then press "ENTER". The display will now read "S10225". Press "ENTER" a second time and display reads "-M--25".

8. Now enter the amount of time, in minutes and seconds, that you want the supply valve to be turned on. A good example would be 30 seconds. Press "0" minutes. The display will read "OM--25". Now press "3" and "0". The display will read "OM3025".

9. Now press "ENTER". The display will now change to "--0325". This means ready to program step 03.

10. If no other supplies are needed, the next step would be the type and time of wash desired. An example would be wash with standard reversing action for 6 minutes.

11. Press "WASH" then "1". The display will read "W10325". Then press "ENTER" and display will read "-M--25".

12. Now press "6". The display will change to "6M--25". Press "0" twice for no seconds to complete the time information. This provides a wash step of 6 minutes.

13. Press "ENTER". The display will now read "--0425", meaning ready for step 04.

14. A natural next step would be to drain, so press "DRAIN". The display will read "DR0425". Then press "ENTER" and the display will read "-M--25".

15. This time you must enter the maximum time that you want the computer to allow the drain to reach empty. A good time would be 1 minute. Now press "1" and the display will change to "1M--25". Now press "0" and "0" for seconds.

NOTE: **UNIMAC DOES NOT RECOMMEND MORE THAN 1½ MINUTES FOR DRAIN!**

16. Press "ENTER". The display will now read "--0525" (ready for step 05).

17. The next step in the cycle may now need to be a warm spray rinse. If so, now press "WARM" and then "RINSE". The display should read "WR0525". Again, press "ENTER" and again the display will read "-M--25".

18. Now you need to designate the length of the spray rinse in minutes and seconds. If you want a two and a half minute spray rinse, press "2". The display changes to read "2M--25". Now press "3" then "0". The display reads now "2M3025".

19. Now press "ENTER". The display now reads "--0625".

20. Perhaps the next step in the cycle is a warm fill to high level for a dilution rinse. Press "WARM" <u>twice</u>, then press "HIGH". The display will now read "WH0625". Then press "ENTER" and display reads "-M--25".

21. Now enter the time that you wish the computer to allow the machine to reach high level fill. Press "5" and the display will show "5M--25". Press "0" and "0" to make the display read "5M0025".

22. Press "ENTER". The display will read "--0725".

23. You may want to add a softener or sour at the seventh step so press "SUPPLY" and "3", then press "ENTER". The display shows "S30725". Then press "ENTER" a second time and display will read "-M--25".

24. As before, you must now enter the amount of time that you want the supply valve to be turned on. Press "0" minutes, the "3" then "0" seconds and the display reads "OM3025".

25. Press "ENTER" as we always do after assigning a time. The display will read "--0825".

26. (The key labeled "RINSE" means spin spray rinse. A dilution rinse is really the same as a wash without detergents, etc.) With this in mind, you should now press "WASH" and "1" to indicate a wash with normal reversing. The display will show "W10825". Press "ENTER" and display again reads "-M--25".

27. You are ready to enter the length of time for the rinse cycle. For example, enter "3" minutes. The display reads "3M--25". Enter "0" and "0" seconds. The display reads "3M0025". Press "ENTER" and you are ready for step 09.

28. After every fill and wash must come a drain. So, press "DRAIN" and the display will read "DR0925". Again press "ENTER" and display reads "-M--25".

29. Again, you must enter the amount of time the computer will allow the machine to drain empty. As before, enter "1" and then "0" and "0". The display will read "1M0025". Press "ENTER" and the computer is ready for step 10.

> NOTE: High speed spin will automatically be preceded by medium spin for 30 seconds. Medium spin is included here to demonstrate how medium spin only may be programmed on all machines having 2 spin speeds.

30. Since this is a simple cycle, let's now extract our load. First, press "MEDIUM SPEED". The display will show "MS1025". Press "ENTER".

31. Now enter the length of time desired for the medium speed. For example, 1 minute 00 seconds. Now press "1". Then press "0" and "0". This display will show "1M0025".

32. Press "ENTER" and you are ready for step 11.

33. High speed spin is next so press "HIGH SPEED". The display will read "HS1125". Now press "ENTER" and the display will show "-M--25".

34. The time you want the machine to spin is next. Press "6" and then "0" and "0". The display shows "6M0025".

35. Press "ENTER" and the display reads "SLDY25" meaning enter slow down relay (coast). Press "ENTER" and display reads "-M--25". Unless you want the basket to coast down, press "0" and "0" followed by "ENTER". If you want basket to coast, enter the time desired for coast instead, then press "ENTER".

36. If you wish to end this cycle after the spin, turn the Program Mode Switch to "RUN" position and this is all that is necessary to end the program. The display will then show "NEXT25".

> NOTE: A slow down delay (SLDY) of a minimum 30 seconds should be programmed after each high speed spin. Longer motor life and less belt wear are direct benefits of this practice. All the pre-programmed cycles and optional cycles in this manual reflect this practice.

PROCEDURE TO DISPLAY A CYCLE IN MEMORY

It is possible to display a cycle that is in computer memory step-by-step using the following procedure:

1.   Turn the Program Mode Switch, located on the left side of the Control Module, to "PROGRAM" position just as you would to program a cycle. Press "DISPLAY CYCLE" and the display will read "CY--".

2.   Enter the cycle number (such as 25). The display will show "CY25". (Ref. Cycle 25 shown later in this manual.)

3.   Now press "ENTER" and the display may show "WAIT" while searching then will show step 01. ("HL0125")

        CAUTION: NEVER press "CLEAR" while displaying a cycle in memory unless you wish to edit or omit a step. Editing to be explained elsewhere in this manual.

4.   To display the various steps, simply press "ADVANCE" and they will be displayed in order until the end of the cycle when "NEXT" will appear. Then turn the Program Mode Switch to "RUN" position.

5.   To display the time and/or temperature programmed for each step, press "ENTER" instead of "ADVANCE".

OPERATIONAL KEYBOARD

There are 16 keys on the control keyboard. 14 keys can be used for operation of the machine. The 14 functions the operator can use are printed in BLACK. These keys are as follows:

            NUMBERS 1 THRU 0   Used to select cycle number.

            DISPLAY TEMP.   As long as pressed will show temperature in degrees Fahrenheit and will continuously update display as temperature changes.

            ADVANCE   When pressed will cause computer to skip to the next step in the cycle being run. Cannot advance past drain if machine is full. Cannot advance past heat step if machine is empty.

STOP   Serves as Emergency Stop and imme-
                            diately slows basket and then shuts
                            down machine.

PAUSE   Causes program timing to pause; machine
                            will continue performing the same step
                            for up to 5 additional minutes.

START   Starts machine in the cycle entered.
                            Re-starts a cycle following a "FILL"
                            or "EMTY" alarm.

PROGRAMMING KEYBOARD

All 16 keys are used in the Programming Mode. These functions are
printed in RED on the keys. The Programming Mode is only active
when the key switch for Program Mode is in "PROGRAM" position. Be
sure that this switch is in "RUN" position when programming is
complete. Keys 1 through 5 and the "Buzzer/No Reverse" key are
dual function keys in the program mode. In each case, when a key
is pressed first in programming a step, the word printed on top
applies. If the same key is pressed again, after another key has
been pressed in the same step, the word printed on the bottom of
the key applies. The RED keys are as follows:

COLD/LOW   COLD is pressed when step requires
                            cold water.
                            LOW for low water level.

HOT/HIGH   HOT is pressed when the step requires
                            hot water.
                            HIGH is pressed when high water level
                            is wanted.

WARM/OVER   WARM is pressed when step requires
                            warm water.
                            OVER is pressed when an overflow of
                            water is desired.

DISPLAY CYCLE   DISPLAY CYCLE is pressed to display a
                            cycle in computer memory step-by-step.

WASH/FLUSH   WASH is pressed when step is a wash or
                            dilution rinse along with a number (1,
                            2 or 3) which describes the type of
                            agitation.

FLUSH is pressed when the drain is
desired to remain open when water is
added to the machine. FLUSH must be
preceded by a temperature selection
(Hot, Cold, Warm).

NOTE: When FLUSH is programmed, water
will be added through the door
spray nozzle only.

HEAT/RINSE   Heat is pressed when auxiliary heat
is needed. This must be followed by
a temperature selection (i.e. F165).
This must be ENTERED, then a time (in
minutes) to reach that temperature
must be entered.
RINSE is pressed when Spin Spray rinse
step is desired and must be preceded
by a temperature selection.

SUPPLY   SUPPLY is pressed when soap, bleach
or other chemicals are desired. This
is followed by the number (1, 2, 3, 4,
5) indicating the supply being used.
Additional combinations are possible
as described elsewhere in this manual.

ADD CYCLE NUMBER   This is pressed to begin the process
of programming a cycle into memory.

SOAK   SOAK is pressed when no agitation is
desired. This follows a fill and/or
supply step. The time will be selected
in 1/4 hours (no minutes) 01 through 99.

MEDIUM SPEED   MEDIUM SPEED is pressed when a medium
spin only is desired. (No high speed
extract.)

HIGH SPEED   HIGH SPEED is pressed when a fast spin
step is desired. It is always preceded
by a MEDIUM SPEED step for 30 seconds
automatically.

ERASE CYCLE NUMBER   This is pressed and followed by a num-
ber indicating the cycle to be erased
from memory.

CLEAR   CLEAR is pressed down when an error has
                               been made in programming a step.
                               CLEAR should be pressed instead of
                               ENTER as the step is being completed.

                          ┌───┐
                          │ NOTE: CLEAR must never be pressed   │
                          │   when displaying a cycle un-   │
                          │   less a particular step is to   │
                          │   be omitted (or changed).   │
                          └───┘

DRAIN   DRAIN is pressed after a wash, dilu-
                               tion rinse or soak step is completed
                               to remove the water from the machine.
                               This must be followed by a time that
                               will allow the machine to reach empty.

BUZZER/NO REVERSE   BUZZER (Auxiliary) is pressed to acti-
                               vate an external buzzer (not supplied
                               with machine) or other auxiliary device.
                               NO REVERSE is used to turn the basket
                               one direction only during a step.

ENTER   ENTER is pressed to enter programming
                               information into memory.

SPECIAL INSTRUCTIONS FOR PROGRAMMING NO REVERSING

All agitation is programmed by first pressing "WASH", then pressing
either "1" or "2" depending upon the type of agitation desired. If
no reversing is desired (rotation continuous in one direction),
simply press first the above instructions and then press "NO REVERSE"
before entering the time. The display will show either "W1--" or
"W2--" depending on which number you pressed but the machine will
obey your instructions and not reverse; however, "NO REVERSE" should
normally be used only with WASH 1 steps.

NO REVERSE may also be used during fill and supply operations and
should be used during "HEAT" steps. To accomplish no reversing dur-
ing these procedures, press "NO REVERSE" instead of "ENTER" when
adding the step into memory.

INSTRUCTIONS FOR ERASING A CYCLE IN MEMORY

To erase a cycle from computer memory, the following steps are necessary:

    1.   Insert program key and turn to "PROGRAM".

    2.   Press "ERASE CYCLE".

    3.   Press cycle number to be erased.

    4.   Press "ENTER".

Display will say "WAIT", plus the display will indicate the number of the previous cycle used. Then display will show "NEXT" when it is finished. If there is no such cycle number in memory, the display will show "NOGO" plus the number of the previous cycle.

SPECIAL INSTRUCTIONS FOR PROGRAMMING HEAT

To program auxiliary heat (either electric or steam):

    1.   Press "HEAT". Display should read "F---".

    2.   Now press the final temperature desired (for example: 175°). The display will read "F175--".

    3.   Press "ENTER" and display will read "HT--".

    4.   Press "NO REVERSE" and display will read "OH--". Now we must supply the computer with the maximum time to be allowed in reaching the temperature. For example, use 10 minutes. (Hours may _not_ be used, therefore, the "OH10".

    5.   Press "1" and "0" and the display reads "OH10".

    6.   Then press "ENTER" and go to the next step.

PROGRAMMING A FILL TO TEMPERATURE

1. Press "HEAT". Display will read "F---".

2. Press temperature desired, such as 123°, and the display reads "F123--".

3. Press "ENTER", display reads "HT--".

4. Now press "ENTER" again, display shows "OH--", plus cycle number.

5. Press "0" twice and "ENTER".

6. Display will read "-LVL", plus cycle number.

7. Enter level "LOW", "HIGH", or "OVER" for fill.

8. Press "ENTER".

9. Enter time allowed to fill.

TO PROGRAM HIGH SPEED SPIN

1. Press "HIGH SPEED".

2. Press "ENTER".

3. Enter spin time.

4. Press "ENTER". Display will read "SDLY", plus cycle number.

5. Press "ENTER" again. Display will read "-M----".

6. Enter time to coast desired after spin. If no delay is wanted, enter all "0's", however, a minimum of 30 seconds is recommended.

7. Press "ENTER" to complete the step.

| NOTE: | If the machine is a two speed extract machine, the "HIGH SPEED" instruction will automatically include "MEDIUM SPEED" before starting "HIGH SPEED", This medium spin will be 30 seconds and will be additional to "HIGH SPEED" time programmed. |

TO DISPLAY/EDIT A CYCLE

1. Turn key to "PROGRAM" mode.

2. Press "DISPLAY CYCLE".

3. Enter the cycle number of the existing cycle that you wish to read or change. This display will say "WAIT--" while searching.

4. Display will first show "--01", plus cycle number.

5. To advance the steps, one full step at a time, press "ADVANCE".

6. When utilizing the "DISPLAY/EDIT" feature, the "ADVANCE" key will display one <u>full</u> step at a time. The "ENTER" key will display the pertinent data related to each step (i.e., time etc.).

7. Press "CLEAR" to <u>change</u> steps or time displayed. Then enter new data as you would for "ADD CYCLE". (Do not press "ADD CYCLE".)

> NOTE: If a complete step is removed (cleared) from memory, nothing may be added back in the same place. That step is removed and any steps that follow in the same program will have their step numbers reduced by one, in sequence.

8. To <u>erase</u> complete steps, press "CLEAR" two (2) times. Display will say "WAIT--".

9. After corrections are complete, advance through to end of cycle and display will read "NEXT--".

FILL TEMPERATURE SELECTIONS

In programming a fill, the following procedures will produce the indicated results:

If the Following Keys are Pressed:	The Display Will Read:	With the Following Valves Turned On:
HOT + LOW + ENTER	HL	1 HOT FILL + 1 HOT SPRAY
HOT + HIGH + ENTER	HH	1 HOT FILL + 1 HOT SPRAY
WARM + WARM + LOW + ENTER	WL	BOTH HOT + BOTH COLD
WARM + HOT + LOW + ENTER	WL	BOTH HOT + 1 COLD
WARM + COLD + LOW + ENTER	WL	1 HOT + BOTH COLD
COLD + LOW + ENTER	CL	1 COLD FILL + 1 COLD SPRAY
COLD + HIGH + ENTER	CH	1 COLD FILL + 1 COLD SPRAY

When high level is called for, the display indicator is "-H--".

When low level is called for, the display indicator is "-L--".

When overflow is called for, the display indicator is "-O--".

NOTE: In addition to these standard fill temperatures, microcomputer controlled temperature Fill/Overflow is possible as explained elsewhere in this manual.

When the "WARM" key is pressed, the next key pressed will be another temperature key (i.e., "HOT", "COLD", "WARM") before selecting the level. Exceptions to this will be when "RINSE" or "FLUSH" steps are utilized which require no level commands and water is added through the door spray nozzle only. Each time "WARM" is pressed, one hot and one cold water valve is turned on.

INSTRUCTIONS FOR UTILIZING BUZZER (AUXILIARY) FEATURE

1.   Press "BUZZER". Display will read "A1--".

2.   Press "ENTER" and the display reads "-M--".

3.   Now enter the time desired for the buzzer or auxiliary output
      activation. For this example, use 30 seconds. Press "0",
      then "3" then "0". The display will show "0M30".

4.   Press "ENTER" to complete the step and proceed to the next
      step.

The auxiliary or buzzer circuit may be used to control an external
buzzer or other device (not supplied with machine) with a maximum
current draw of less than 1 AMP. The relay on the computer board
and the fuse on the display board are identified as "A1".

NOTE: The built-in beeper on the computer board is
       controlled only by the microcomputer and can-
       not be programmed.

WASH CYCLE EXPLANATIONS

WASH 1 - 12 seconds forward, then pause 3 seconds,
           followed by 12 seconds reverse and pause
           3 seconds; then repeat.

WASH 2 - 3 seconds forward, then pause 12 seconds,
           followed by 3 seconds reverse and pause
           12 seconds; then repeat.

WASH 3 - No Agitation.

SPECIAL
INSTRUCTIONS FOR PROGRAMMING SUPPLIES

The WE-4 and WE-5 microcomputer is capable of controlling up to 5 separate supplies and up to 31 various combinations of the 5 supplies. (Note: The UW30, UW50, UW65 & UW85 have 4 supply valves each; the UW125 has 5 separate supply valves.)

When the computer is in the program mode and the "SUPPLY" key has been pressed, pressing any combination of numbers 1 through 5, before pressing "ENTER", will add those supply numbers to the step (up to 5 individual digits per step).

When "ENTER" is pressed, the display will show the combination selected with either a letter-number or letter-letter code as shown on the next page.

Example: The "SUPPLY" key has been pressed and the computer
           is in the program mode. Then keys #1, #2 & #5 are
           pressed one at a time. Now press "ENTER". The
           display will show "SM" as the first two digits of
           the display then the step number followed by the
           cycle number being programmed. (For instance:
           "SM0277") Ref. Display Code on next page.

To complete the step, press "ENTER" again and assign a time that the supply valves should be on and proceed to the next step.

Display Explanation:

(S) (M) (02) (77)

————Cycle Number

————Step Number

————Supply "M" (i.e. No.'s 1, 2 & 5)
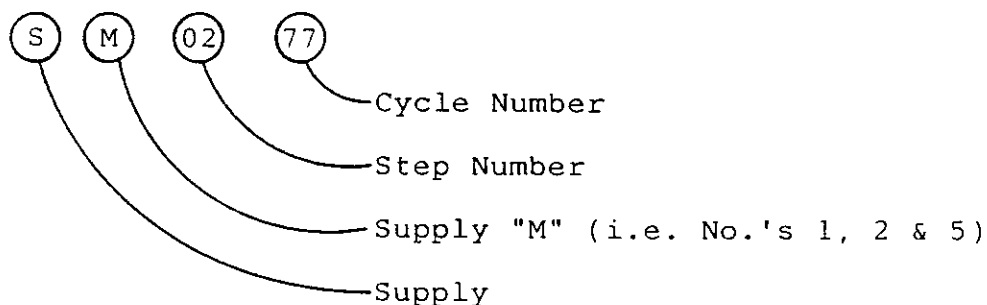
————Supply

SUPPLY DISPLAY DECODE TABLE

NOTE: 0 - DENOTES SUPPLY RELAY OFF
       1 - DENOTES SUPPLY RELAY ON

SUPPLY NUMBER	DISPLAY CODE
5 4 3 2 1	
0 0 0 0 1	1
0 0 0 1 0	2
0 0 0 1 1	A
0 0 1 0 0	3
0 0 1 0 1	B
0 0 1 1 0	C
0 0 1 1 1	D
0 1 0 0 0	4
0 1 0 0 1	E
0 1 0 1 0	F
0 1 0 1 1	G
0 1 1 0 0	H
0 1 1 0 1	I
0 1 1 1 0	J
0 1 1 1 1	L
1 0 0 0 0	5
1 0 0 0 1	6
1 0 0 1 0	7
1 0 0 1 1	M Example
1 0 1 0 0	8
1 0 1 0 1	N
1 0 1 1 0	O
1 0 1 1 1	P
1 1 0 0 0	9
1 1 0 0 1	Q
1 1 0 1 0	R
1 1 0 1 1	S
1 1 1 0 0	T
1 1 1 0 1	U
1 1 1 1 0	V
1 1 1 1 1	W

NOTE: The UW30, UW50, UW65 & UW85 have 4 valves and may utilize
       combinations that require supplies no. 1 through 4.

       The UW125 has 5 supply valves and may utilize any of the
       combinations on this page.

INSTRUCTIONS FOR UTILIZING PAUSE FEATURE

On models so equipped, the pause feature may be used to add time to a step while the cycle is actually running. On present models, the #7 or "SOAK" key is employed to apply the pause feature. On later models, this same key will be used with the addition of the word "PAUSE" on the key.

To utilize the pause feature, press the #7 key to begin pause and the same key again to end the pause. During the pause period, the display will read "PAUSE 5".

When the pause is utilized, up to 5 minutes is added to the programmed time for whatever step during which the feature is used. It may be manually turned off by pressing the #7 (Pause) key again. However, whatever time is remaining of the programmed time will continue to run.

If the pause feature is applied during a fill step, when the water level is reached, the pause circuit will be overrode. The pause may be used in conjunction with the manual override option to obtain special effects during particular cycles.

The pause feature is applicable on all WE-4 microcomputer machines equipped with the WE-4.06 type. (This feature pertains to all WE-5 machines.) This pertains to the following machines or any machines retrofitted with the .06 type:

30-P2	Serial #31591-on	65-P4	Serial #65179-on
50-P2	Serial #12135-on	85-P3	Serial #21147-on
50-P3	Serial #12140-on	85-P4	Serial #21148-on
50-P4	Serial #12132-on	125-P4	Serial #125229-on

HELPFUL HINTS

1. Use a program work sheet, such as the sample on the next page. After the work sheet is filled out, then enter the program into the computer.

2. Read the program work sheets prepared for the cycles already programmed into the computer to see how we have done them.

3. Remember that the computer will help you by not accepting improper programming.

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

5. When you are entering the timed portion of a step (such as a fill or a drain), use a time that is reasonable for the local installation. If the water pressure is low or the water lines are smaller than desirable, increase the time allowed. The same thing applies to small or slow drains. The machine capability for drain is less than 30 seconds to drain. The drain needs to be able to at least drain in less than one minute.

6. Except for soak step, which is timed in 1/4 hours (up to 99), and heat, which is timed in minutes, the maximum time per step is 9 minutes 99 seconds, so if you need more time just add more steps to add up to the total time desired. For example, if you want to wash for 15 minutes, program a wash for 9 minutes 00 seconds and another wash for 6 minutes 00 seconds.

7. If you want a "shake-out" at the end of the cycle to loosen the load after extract, enter a short "WASH 1" step. This step can have a time of 30 seconds or 1 minute or whatever time you think will loosen the load. Then end of cycle procedure will follow.

8. When it is desired to fill or add supplies without agitation, first program a "WASH 3" step for 0M01 (1 second) then program the fill or supply step.

9. When the microcomputer advances to the next step, it will revert to normal agitation (WASH 1) unless you instruct it otherwise.

> NOTE: Two water level switches are optional on the UW30. Unless so equipped, high level will be the same as low level when shown in the programs.

PROGRAM WORKSHEET FOR PROGRAMMING MICROCOMPUTER CONTROL

CYCLE NO. _____

STEP NO.	PROCEDURE		STEP NO.	PROCEDURE
01 TIME			16 TIME	
02 TIME			17 TIME	
03 TIME			18 TIME	
04 TIME			19 TIME	
05 TIME			20 TIME	
06 TIME			21 TIME	
07 TIME			22 TIME	
08 TIME			23 TIME	
09 TIME			24 TIME	
10 TIME			25 TIME	
11 TIME			26 TIME	
12 TIME			27 TIME	
13 TIME			28 TIME	
14 TIME			29 TIME	
15 TIME			30 TIME	

CYCLE 01 - TEST

STEP NO.	PROCEDURE	STEP NO.	PROCEDURE
01	COLD FILL TO LOW LEVEL.	16	WARM FLUSH.
TIME	0 MIN. 30 SECONDS.	TIME	0 MIN. 30 SECONDS.
02	DRAIN.	17	AUX. 1
TIME	0 MIN. 10 SECONDS.	TIME	0 MIN. 05 SECONDS.
03	HOT FILL TO LOW LEVEL.	18	120 DEGREES FILL TO HIGH LEVEL.
TIME	4 MIN. 00 SECONDS.	TIME	5 MIN. 00 SECONDS.
04	HEAT (F) 175 DEGREES.	19	COLD OVERFLOW.
TIME	0 HR. 01 MINUTES.	TIME	1 MIN. 00 SECONDS.
05	SUPPLY 1.	20	SOAK.
TIME	0 MIN. 10 SECONDS.	TIME	1/4 HR. 01.
06	SUPPLY 2.	21	DRAIN.
TIME	0 MIN. 10 SECONDS.	TIME	1 MIN. 00 SECONDS.
07	SUPPLY 3.	22	MEDIUM SPIN.
TIME	0 MIN. 10 SECONDS.	TIME	0 MIN. 30 SECONDS.
08	SUPPLY 4.	23	WARM RINSE.
TIME	0 MIN. 10 SECONDS.	TIME	0 MIN. 30 SECONDS.
09	SUPPLY 5.	24	HIGH SPEED.
TIME	0 MIN. 10 SECONDS.	TIME	1 MIN. 00 SECONDS. SDLY 10 SECONDS.
10	SUPPLY 1 & 3.	25	WASH 1 NO REVERSE.
TIME	0 MIN. 10 SECONDS.	TIME	0 MIN. 15 SECONDS. END
11	WASH 1.		
TIME	1 MIN. 00 SECONDS.		
12	WASH 2.		
TIME	1 MIN. 00 SECONDS.		
13	WASH 3.		
TIME	0 MIN. 30 SECONDS.		
14	WASH 1 NO REVERSING.		
TIME	0 MIN. 30 SECONDS.		
15	DRAIN.		
TIME	1 MIN. 00 SECONDS.		

NOTE: TWO WATER LEVEL SWITCHES ARE
OPTIONAL ON THE UW30. UNLESS
SO EQUIPPED, HIGH LEVEL WILL
BE THE SAME AS LOW LEVEL WHEN
SHOWN IN THE PROGRAMS.

CYCLE 02 - TERRY & COTTON (NURSING HOME & HOSPITAL

STEP NO.	PROCEDURE	STEP NO.	PROCEDURE
01	COLD FILL TO HIGH LEVEL.	16	WASH 1.
TIME	7 MIN. 00 SECONDS.	TIME	1 MIN. 00 SECONDS.
02	WASH 1	17	DRAIN.
TIME	1 MIN. 00 SECONDS.	TIME	1 MIN. 00 SECONDS.
03	DRAIN.	18	MEDIUM SPIN.
TIME	1 MIN. 00 SECONDS.	TIME	1 MIN. 00 SECONDS.
04	WARM WARM FILL TO HIGH LEVEL.	19	WARM RINSE.
TIME	5 MIN. 00 SECONDS.	TIME	1 MIN. 00 SECONDS.
05	WASH 1.	20	WARM WARM FILL TO HIGH LEVEL.
TIME	1 MIN. 00 SECONDS.	TIME	5 MIN. 00 SECONDS.
06	DRAIN.	21	SUPPLY 4.
TIME	1 MIN. 00 SECONDS.	TIME	0 MIN. 30 SECONDS.
07	HOT FILL TO LOW LEVEL.	22	WASH 1.
TIME	4 MIN. 00 SECONDS.	TIME	3 MIN. 00 SECONDS.
08	SUPPLY 1.	23	DRAIN.
TIME	0 MIN. 30 SECONDS.	TIME	1 MIN. 00 SECONDS.
09	WASH 1.	24	HIGH SPEED.
TIME	6 MIN. 00 SECONDS.	TIME	5 MIN. 00 SECONDS.
			SDLY 0 MIN. 30 SECONDS.
10	DRAIN.		
TIME	1 MIN. 00 SECONDS.	25	WASH 1.
		TIME	0 MIN. 30 SECONDS.
11	HOT FILL TO LOW LEVEL.		END.
TIME	5 MIN. 00 SECONDS.		
12	SUPPLY 2.		
TIME	0 MIN. 30 SECONDS.		
13	WASH 1.		
TIME	6 MIN. 00 SECONDS.		
14	DRAIN.		
TIME	1 MIN. 00 SECONDS.		
15	HOT FILL TO HIGH LEVEL.		
TIME	7 MIN. 00 SECONDS.		

NOTE TWO WATER LEVEL SWITCHES ARE
OPTIONAL ON THE UW30. UNLESS
SO EQUIPPED, HIGH LEVEL WILL
BE THE SAME AS LOW LEVEL WHEN
SHOWN IN THE PROGRAMS.

CYCLE 03 - MOTEL NO IRON SHEETS & PILLOW CASES

STEP NO.	PROCEDURE	STEP NO.	PROCEDURE
01	HOT FILL TO LOW LEVEL.	11	WARM WARM FILL TO HIGH LEVEL.
TIME	5 MIN. 00 SECONDS.	TIME	5 MIN. 00 SECONDS.
02	SUPPLY 1.	12	SUPPLY 3.
TIME	0 MIN. 30 SECONDS.	TIME	0 MIN. 30 SECONDS.
03	SUPPLY 2.	13	WASH 1.
TIME	0 MIN. 30 SECONDS.	TIME	3 MIN. 00 SECONDS.
04	WASH 1.	14	DRAIN.
TIME	5 MIN. 00 SECONDS.	TIME	1 MIN. 00 SECONDS.
05	DRAIN.	15	HIGH SPEED.
TIME	1 MIN. 00 SECONDS.	TIME	2 MIN. 00 SECONDS.
			SDLY 0 MIN. 30 SECONDS.
06	HOT FILL TO HIGH LEVEL.	16	WASH 1.
TIME	7 MIN. 00 SECONDS.	TIME	0 MIN. 30 SECONDS.
07	WASH 1.		END.
TIME	1 MIN. 00 SECONDS.		
08	DRAIN.		
TIME	1 MIN. 00 SECONDS.		
09	MEDIUM SPEED.		
TIME	0 MIN. 30 SECONDS.		
10	WARM RINSE.		
TIME	1 MIN. 00 SECONDS.		

NOTE TWO WATER LEVEL SWITCHES ARE
OPTIONAL ON THE UW30. UNLESS
SO EQUIPPED. HIGH LEVEL WILL
BE THE SAME AS LOW LEVEL WHEN
SHOWN IN THE PROGRAMS.

CYCLE 04 - MOTEL TERRY, BATH MATS, ETC.

STEP NO.	PROCEDURE	STEP NO.	PROCEDURE
01	HOT FILL TO LOW LEVEL.	16	WARM WARM FILL TO HIGH LEVEL
TIME	5 MIN. 00 SECONDS.	TIME	5 MIN. 00 SECONDS.
02	SUPPLY 1.	17	SUPPLY 3.
TIME	0 MIN. 30 SECONDS.	TIME	0 MIN. 30 SECONDS.
03	WASH 1.	18	WASH 1.
TIME	5 MIN. 00 SECONDS.	TIME	3 MIN. 00 SECONDS.
04	DRAIN.	19	DRAIN.
TIME	1 MIN. 00 SECONDS.	TIME	1 MIN. 00 SECONDS.
05	HOT FILL TO LOW LEVEL.	20	HIGH SPEED.
TIME	5 MIN. 00 SECONDS.	TIME	4 MIN. 00 SECONDS.
			SDLY 0 MIN. 30 SECONDS.
06	SUPPLY 2.	21	WASH 1.
TIME	0 MIN. 30 SECONDS.	TIME	0 MIN. 30 SECONDS.
07	WASH 1.		END.
TIME	5 MIN. 00 SECONDS.		
08	DRAIN.		
TIME	1 MIN. 00 SECONDS.		
09	HOT FILL TO HIGH LEVEL.		
TIME	7 MIN. 00 SECONDS.		
10	WASH 1.		
TIME	1 MIN. 00 SECONDS.		
11	DRAIN.		
TIME	1 MIN. 00 SECONDS.		
12	HIGH SPEED.		
TIME	0 MIN. 30 SECONDS.		
	SDLY 0 MIN. 30 SECONDS.		
13	WARM WARM FILL TO HIGH LEVEL.		
TIME	5 MIN. 00 SECONDS.		
14	WASH 1.		
TIME	1 MIN. 00 SECONDS.		
15	DRAIN.		
TIME	1 MIN. 00 SECONDS.		

NOTE TWO WATER LEVEL SWITCHES ARE
OPTIONAL ON THE UW30. UNLESS
SO EQUIPPED, HIGH LEVEL WILL
BE THE SAME AS LOW LEVEL WHEN
SHOWN IN THE PROGRAMS.

CYCLE 05 - BLANKETS (WOOL OR SYNTHETIC)

STEP NO.	PROCEDURE	STEP NO.	PROCEDURE
01	WARM WARM FILL TO HIGH LEVEL.	10	WARM WARM FILL TO HIGH LEVEL
TIME	5 MIN. 00 SECONDS.	TIME	5 MIN. 00 SECONDS.
02	SUPPLY 1.	11	SUPPLY 3.
TIME	0 MIN. 30 SECONDS.	TIME	0 MIN. 30 SECONDS.
03	WASH 1.	12	WASH 1.
TIME	5 MIN. 00 SECONDS.	TIME	3 MIN. 00 SECONDS.
04	DRAIN.	13	DRAIN.
TIME	1 MIN. 00 SECONDS.	TIME	1 MIN. 00 SECONDS.
05	WARM WARM FILL TO HIGH LEVEL.	14	HIGH SPEED.
TIME	5 MIN. 00 SECONDS.	TIME	2 MIN. 30 SECONDS.
			SDLY 0 MIN. 30 SECONDS
06	WASH 1.		
TIME	1 MIN. 00 SECONDS.	15	WASH 1.
		TIME	0 MIN. 30 SECONDS.
07	DRAIN.		END.
TIME	1 MIN. 00 SECONDS.		
08	MEDIUM SPEED.		
TIME	0 MIN. 30 SECONDS.		
09	WARM RINSE.		
TIME	1 MIN. 00 SECONDS.		

NOTE   TWO WATER LEVEL SWITCHES ARE
OPTIONAL ON THE UW30. UNLESS
SO EQUIPPED, HIGH LEVEL WILL
BE THE SAME AS LOW LEVEL WHEN
SHOWN IN THE PROGRAMS.

CYCLE 06 - MOTEL NO IRON WASHOVERS

STEP NO.	PROCEDURE	STEP NO.	PROCEDURE
01	HOT FILL TO HIGH LEVEL.	11	WASH 1.
TIME	7 MIN. 00 SECONDS.	TIME	1 MIN. 00 SECONDS.
02	SUPPLY 1.	12	DRAIN
TIME	0 MIN. 30 SECONDS.	TIME	1 MIN. 00 SECONDS.
03	SUPPLY 2.	13	MEDIUM SPEED.
TIME	0 MIN. 30 SECONDS.	TIME	0 MIN. 30 SECONDS.
04	WASH 1.	14	WARM RINSE.
TIME	9 MIN. 60 SECONDS.	TIME	1 MIN. 00 SECONDS.
05	WASH 1.	15	WARM WARM FILL TO HIGH LEVEL
TIME	5 MIN. 00 SECONDS.	TIME	5 MIN. 00 SECONDS.
06	DRAIN.	16	SUPPLY 3
TIME	1 MIN. 00 SECONDS.	TIME	0 MIN. 30 SECONDS.
07	HOT FILL TO HIGH LEVEL.	17	WASH 1.
TIME	7 MIN. 00 SECONDS.	TIME	3 MIN. 00 SECONDS.
08	WASH 1.	18	DRAIN.
TIME	1 MIN. 00 SECONDS.	TIME	1 MIN. 00 SECONDS.
09	DRAIN.	19	HIGH SPEED.
TIME	1 MIN. 00 SECONDS.	TIME	2 MIN. 00 SECONDS. SDLY 0 MIN. 30 SECONDS.
10	WARM WARM FILL TO HIGH LEVEL.	20	WASH 1.
TIME	5 MIN. 00 SECONDS.	TIME	0 MIN. 30 SECONDS. END.

NOTE   TWO WATER LEVEL SWITCHES ARE
       OPTIONAL ON THE UW30. UNLESS
       SO EQUIPPED, HIGH LEVEL WILL
       BE THE SAME AS LOW LEVEL WHEN
       SHOWN IN THE PROGRAMS.

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CYCLE 07 - RESTAURANT NO-IRON

STEP NO.	PROCEDURE	STEP. NO.	PROCEDURE
01	WARM WARM FILL TO HIGH LEVEL.	14	WASH 1.
TIME	5 MIN. 00 SECONDS.	TIME	1 MIN. 00 SECONDS.
02	WASH 1.	15	DRAIN.
TIME	1 MIN. 00 SECONDS.	TIME	1 MIN. 00 SECONDS.
03	DRAIN.	16	MEDIUM SPEED.
TIME	1 MIN. 00 SECONDS.	TIME	0 MIN. 20 SECONDS.
04	HOT FILL TO LOW LEVEL.	17	WARM RINSE.
TIME	5 MIN. 00 SECONDS.	TIME	1 MIN. 30 SECONDS.
05	SUPPLY 1.	18	WARM WARM FILL TO HIGH LEVEL
TIME	0 MIN. 30 SECONDS.	TIME	5 MIN. 00 SECONDS.
06	WASH 1.	19	SUPPLY 3.
TIME	5 MIN. 00 SECONDS.	TIME	0 MIN. 30 SECONDS.
07	DRAIN.	20	WASH 1.
TIME	1 MIN. 00 SECONDS.	TIME	3 MIN. 00 SECONDS.
08	HOT FILL TO LOW LEVEL.	21	DRAIN.
time	5 MIN. 00 SECONDS.	TIME	1 MIN. 00 SECONDS.
09	SUPPLY 1.	22	HIGH SPEED.
TIME	0 MIN. 30 SECONDS.	TIME	2 MIN. 00 SECONDS. SDLY 0 MIN. 30 SECONDS.
10	SUPPLY 2.	23	WASH 1.
TIME	0 MIN. 30 SECONDS.	TIME	0 MIN. 30 SECONDS. END.
11	WASH 1.		
TIME	5 MIN. 00 SECONDS.		
12	DRAIN.		
TIME	1 MIN. 00 SECONDS.		
13	HOT FILL TO HIGH LEVEL.		
TIME	7 MIN. 00 SECONDS.		

NOTE TWO WATER LEVEL SWITCHES ARE
OPTIONAL ON THE UW30. UNLESS
SO EQUIPPED. HIGH LEVEL WILL
BE THE SAME AS LOW LEVEL WHEN
SHOWN IN THE PROGRAMS.

CYCLE 08 - NURSING HOME/HOSPITAL NO IRON BED LINEN

STEP NO.	PROCEDURE	STEP NO.	PROCEDURE
01	COLD FILL TO HIGH LEVEL.	16	WASH 1.
TIME	7 MIN. 00 SECONDS.	TIME	1 MIN. 00 SECONDS.
02	WASH 1.	17	DRAIN.
TIME	1 MIN. 00 SECONDS.	TIME	1 MIN. 00 SECONDS.
03	DRAIN.	18	MEDIUM SPEED.
TIME	1 MIN. 00 SECONDS.	TIME	0 MIN. 30 SECONDS.
04	WARM WARM FILL TO HIGH LEVEL.	19	WARM RINSE.
TIME	5 MIN. 00 SECONDS.	TIME	1 MIN. 00 SECONDS.
05	WASH 1.	20	WARM WARM FILL TO HIGH LEVEL
TIME	1 MIN. 00 SECONDS.	TIME	5 MIN. 00 SECONDS.
06	DRAIN.	21	SUPPLY 3.
TIME	1 MIN. 00 SECONDS.	TIME	0 MIN. 30 SECONDS.
07	HOT FILL TO LOW LEVEL.	22	WASH 1.
TIME	5 MIN. 00 SECONDS.	TIME	3 MIN. 00 SECONDS.
08	SUPPLY 1.	23	DRAIN.
TIME	0 MIN. 30 SECONDS.	TIME	1 MIN. 00 SECONDS.
09	WASH 1.	24	HIGH SPEED.
TIME	6 MIN. 00 SECONDS.	TIME	2 MIN. 00 SECONDS.
			SDLY 0 MIN. 30 SECONDS.
10	DRAIN.	25	WASH 1.
TIME	1 MIN. 00 SECONDS.	TIME	0 MIN. 30 SECONDS.
11	HOT FILL TO LOW LEVEL.		END.
TIME	5 MIN. 00 SECONDS.		
12	SUPPLY 2.		
TIME	0 MIN. 30 SECONDS.		
13	WASH 1.		
TIME	6 MIN. 00 SECONDS.		
14	DRAIN.		
TIME	1 MIN. 00 SECONDS.		
15	HOT FILL TO HIGH LEVEL.		
TIME	7 MIN. 00 SECONDS.		

NOTE TWO WATER LEVEL SWITCHES ARE OPTIONAL ON THE UW30. UNLESS SO EQUIPPED, HIGH LEVEL WILL BE THE SAME AS LOW LEVEL WHEN SHOWN IN THE PROGRAMS.

CYCLE 09 - ALL TERRY ITEMS

STEP NO.	PROCEDURE	STEP NO.	PROCEDURE
01	HOT FILL TO LOW LEVEL.	08	WARM WARM FILL TO HIGH
TIME	5 MIN. 00 SECONDS		LEVEL.
		TIME	5 MIN. 00 SECONDS.
02	SUPPLY 1.		
TIME	0 MIN. 30 SECONDS.	09	SUPPLY 3.
		TIME	0 MIN. 30 SECONDS.
03	SUPPLY 2.		
TIME	0 MIN. 30 SECONDS.	10	WASH 1.
		TIME	3 MIN. 00 SECONDS.
04	WASH 1.		
TIME	7 MIN. 00 SECONDS.	11	DRAIN.
		TIME	1 MIN. 00 SECONDS.
05	DRAIN.		
TIME	1 MIN. 00 SECONDS.	12	HIGH SPEED.
		TIME	5 MIN. 30 SECONDS.
06	MEDIUM SPEED.		SDLY 0 MIN. 30 SECONDS.
TIME	0 MIN. 20 SECONDS.		
		13	WASH 1.
07	WARM RINSE.	TIME	0 MIN. 30 SECONDS.
TIME	3 MIN. 00 SECONDS.		END.

NOTE TWO WATER LEVEL SWITCHES ARE
OPTIONAL ON THE UW30. UNLESS
SO EQUIPPED, HIGH LEVEL WILL
BE THE SAME AS LOW LEVEL WHEN
SHOWN IN THE PROGRAMS.

CYCLE 10 – GENERAL

STEP NO.	PROCEDURE
01	HOT FILL TO HIGH LEVEL.
TIME	7 MIN. 00 SECONDS.
02	SUPPLY 1.
TIME	0 MIN. 30 SECONDS.
03	WASH 1.
TIME	4 MIN. 00 SECONDS.
04	DRAIN.
TIME	1 MIN. 00 SECONDS.
05	HOT FILL TO LOW LEVEL.
TIME	5 MIN. 00 SECONDS.
06	SUPPLY 1.
TIME	0 MIN. 30 SECONDS.
07	SUPPLY 2.
TIME	0 MIN. 30 SECONDS.
08	WASH 1.
TIME	6 MIN. 00 SECONDS.
09	DRAIN.
TIME	1 MIN. 00 SECONDS.
10	WARM WARM FILL TO HIGH LEVEL.
TIME	5 MIN. 00 SECONDS.
11	WASH 1.
TIME	2 MIN. 00 SECONDS.
12	DRAIN.
TIME	1 MIN. 00 SECONDS.
13	COLD FILL TO HIGH LEVEL.
TIME	7 MIN. 00 SECONDS.
14	WASH 1.
TIME	2 MIN. 00 SECONDS.
15	DRAIN.
TIME	1 MIN. 00 SECONDS.

STEP NO.	PROCEDURE
16	COLD FILL TO HIGH LEVEL.
TIME	7 MIN. 00 SECONDS.
17	ADD SUPPLY 3.
TIME	0 MIN. 30 SECONDS.
18	WASH 1.
TIME	3 MIN. 00 SECONDS.
19	DRAIN.
TIME	1 MIN. 00 SECONDS.
20	HIGH SPEED.
TIME	6 MIN. 00 SECONDS. SDLY 0 MIN. 30 SECONDS.
21	WASH 1.
TIME	0 MIN. 30 SECONDS. END.

NOTE TWO WATER LEVEL SWITCHES ARE OPTIONAL ON THE UW30. UNLESS SO EQUIPPED, HIGH LEVEL WILL BE THE SAME AS LOW LEVEL WHEN SHOWN IN THE PROGRAMS.

CYCLE 11 - EXTRACT

STEP NO.   PROCEDURE

01   WASH 1 (NO REVERSE)
TIME   0 MIN. 30 SECONDS.

02   DRAIN.
TIME   1 MIN. 00 SECONDS.

03   HIGH SPEED.
TIME   5 MIN. 00 SECONDS.
                SDLY 0 MIN. 30 SECONDS.

04   WASH 1.
TIME   0 MIN. 30 SECONDS.
                END.

NOTE   TWO WATER LEVEL SWITCHES ARE
        OPTIONAL ON THE UW30. UNLESS
        SO EQUIPPED, HIGH LEVEL WILL
        BE THE SAME AS LOW LEVEL WHEN
        SHOWN IN THE PROGRAMS.

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CYCLE 12 - SHEETS

STEP NO.	PROCEDURE	STEP NO.	PROCEDURE
01 TIME	HOT FILL TO LOW LEVEL. 5 MIN. 00 SECONDS.	16 TIME	COLD FILL TO LOW LEVEL. 5 MIN. 00 SECONDS.
02 TIME	SUPPLY 1. 1 MIN. 00 SECONDS.	17 TIME	SUPPLY 3. 0 MIN. 30 SECONDS.
03 TIME	WASH 1. 4 MIN. 00 SECONDS.	18 TIME	WASH 1. 3 MIN. 30 SECONDS.
04 TIME	SUPPLY 2. 0 MIN. 30 SECONDS.	19 TIME	COLD FILL TO HIGH LEVEL. 5 MIN. 00 SECONDS.
05 TIME	WASH 1. 3 MIN. 00 SECONDS.	20 TIME	WASH 1. 0 MIN. 30 SECONDS.
06 TIME	COLD FILL TO HIGH LEVEL. 5 MIN. 00 SECONDS.	21 TIME	DRAIN. 1 MIN. 00 SECONDS.
07 TIME	WASH 1. 0 MIN. 30 SECONDS.	22 TIME	HIGH SPEED. 2 MIN. 30 SECONDS. SDLY 0 MIN. 30 SECONDS.
08 TIME	DRAIN. 1 MIN. 00 SECONDS.	23 TIME	WASH 1. 0 MIN. 30 SECONDS. END.
09 TIME	COLD FILL TO HIGH LEVEL. 7 MIN. 00 SECONDS.		
10 TIME	WASH 1. 1 MIN. 00 SECONDS.		
11 TIME	DRAIN. 1 MIN. 00 SECONDS.		
12 TIME	COLD FILL TO HIGH LEVEL. 7 MIN. 00 SECONDS.		
13 TIME	WASH 1. 1 MIN. 00 SECONDS.		
14 TIME	DRAIN. 1 MIN. 00 SECONDS.		
15 TIME	MEDIUM SPEED. 0 MIN. 30 SECONDS.		

NOTE TWO WATER LEVEL SWITCHES ARE
OPTIONAL ON THE UW30. UNLESS
SO EQUIPPED, HIGH LEVEL WILL
BE THE SAME AS LOW LEVEL WHEN
SHOWN IN THE PROGRAMS.

CYCLE 13 - COLORED TABLE LINEN

STEP NO.	PROCEDURE	STEP NO.	PROCEDURE
01	COLD FILL TO HIGH LEVEL.	17	WARM FLUSH.
TIME	7 MIN. 00 SECONDS.	TIME	0 MIN. 30 SECONDS.
02	SUPPLY 1.	18	MEDIUM SPIN.
TIME	1 MIN. 00 SECONDS.	TIME	0 MIN. 15 SECONDS.
03	WASH 1.	19	COLD SPRAY RINSE.
TIME	3 MIN. 30 SECONDS.	TIME	1 MIN. 30 SECONDS.
04	DRAIN.	20	COLD FILL TO HIGH LEVEL.
TIME	1 MIN. 00 SECONDS.	TIME	7 MIN. 00 SECONDS.
05	HOT FILL TO HIGH LEVEL.	21	COLD OVERFLOW.
TIME	7 MIN. 00 SECONDS.	TIME	2 MIN. 00 SECONDS.
06	WASH 1.	22	DRAIN.
TIME	0 MIN. 30 SECONDS.	TIME	1 MIN. 00 SECONDS.
07	DRAIN	23	MEDIUM SPEED.
TIME	1 MIN. 00 SECONDS.	TIME	0 MIN. 30 SECONDS.
08	HOT FILL TO LOW LEVEL.	24	COLD FILL TO LOW LEVEL.
TIME	5 MIN. 00 SECONDS.	TIME	5 MIN. 00 SECONDS.
09	SUPPLY 1.	25	SUPPLY 4.
TIME	1 MIN. 30 SECONDS.	TIME	0 MIN. 30 SECONDS.
10	SUPPLY 2.	26	WASH 1.
TIME	1 MIN. 30 SECONDS.	TIME	3 MIN. 00 SECONDS.
11	WASH 1.	27	COLD FILL TO HIGH LEVEL.
TIME	5 MIN. 00 SECONDS.	TIME	5 MIN. 00 SECONDS.
12	DRAIN.	28	DRAIN.
TIME	1 MIN. 00 SECONDS.	TIME	1 MIN. 00 SECONDS.
13	HOT FILL TO LOW LEVEL.	29	HIGH SPEED.
TIME	5 MIN. 00 SECONDS.	TIME	2 MIN. 30 SECONDS.
			SDLY 0 MIN. 30 SECONDS.
14	SUPPLY 2.	30	WASH 1.
TIME	1 MIN. 00 SECONDS.	TIME	0 MIN. 30 SECONDS.
15	WASH 1.		END.
TIME	6 MIN. 00 SECONDS.		
16	DRAIN.		
TIME	1 MIN. 00 SECONDS.		

NOTE TWO WATER LEVEL SWITCHES ARE
OPTIONAL ON THE UW30. UNLESS
SO EQUIPPED, HIGH LEVEL WILL
BE THE SAME AS LOW LEVEL WHEN
SHOWN IN THE PROGRAMS.

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CYCLE 25 - LIGHT SOIL

STEP NO.   PROCEDURE

01   HOT FILL TO LOW LEVEL.
TIME   4 MIN. 00 SECONDS.

02   SUPPLY 1.
TIME   0 MIN. 30 SECONDS.

03   WASH 1.
TIME   6 MIN. 00 SECONDS.

04   DRAIN.
TIME   1 MIN. 00 SECONDS.

05   WARM RINSE.
TIME   2 MIN. 30 SECONDS.

06   WARM WARM FILL TO HIGH LEVEL.
TIME   5 MIN. 00 SECONDS.

07   SUPPLY 3.
TIME   0 MIN. 30 SECONDS.

08   WASH 1.
TIME   3 MIN. 00 SECONDS.

09   DRAIN.
TIME   1 MIN. 00 SECONDS.

10   MEDIUM SPEED.
TIME   1 MIN. 00 SECONDS.

11   HIGH SPEED.
TIME   6 MIN. 00 SECONDS.
                  SDLY 0 MIN. 30 SECONDS.

12   WASH 1.
TIME   0 MIN. 30 SECONDS.
                  END.

NOTE TWO WATER LEVEL SWITCHES ARE
      OPTIONAL ON THE UW30. UNLESS
      SO EQUIPPED, HIGH LEVEL WILL
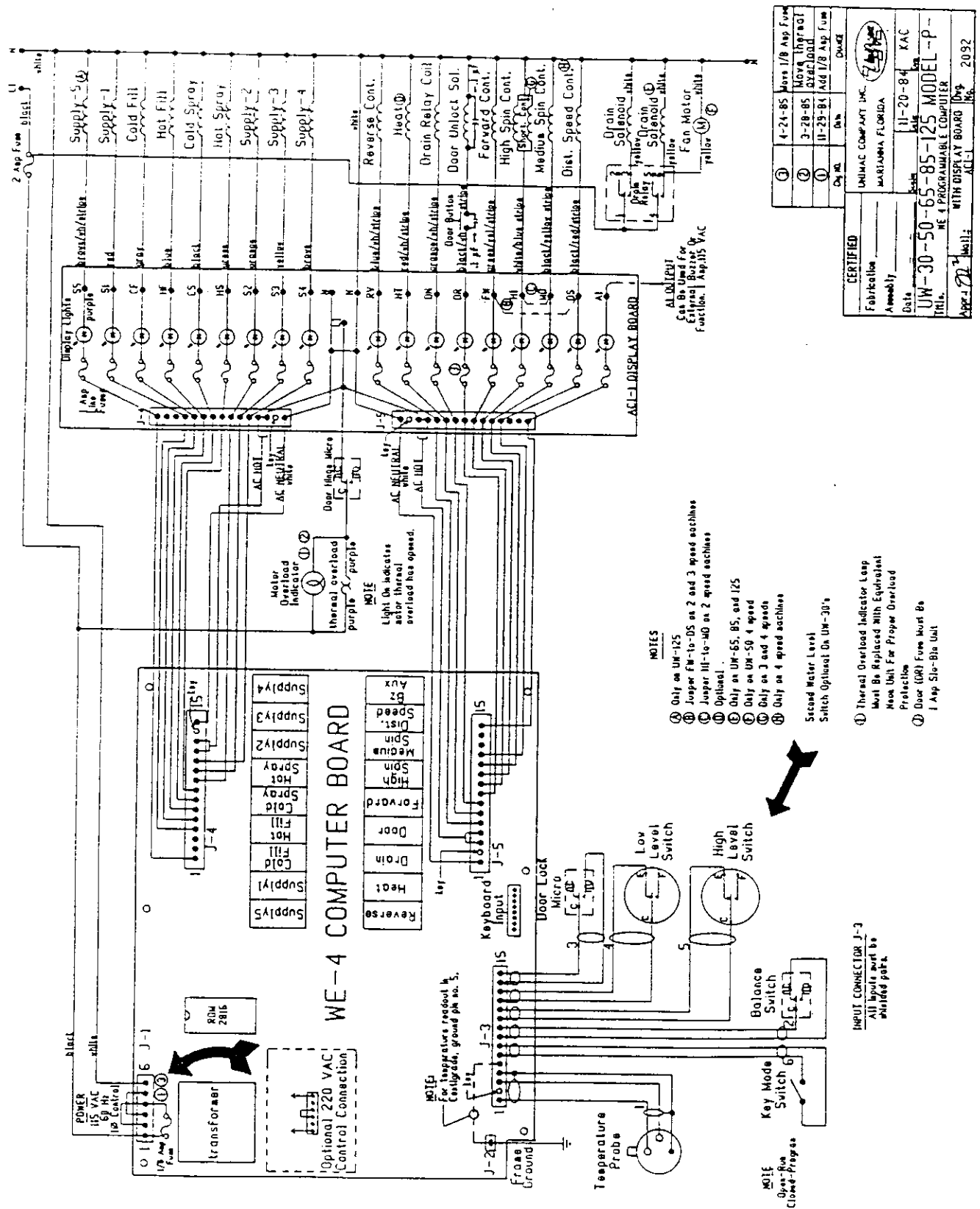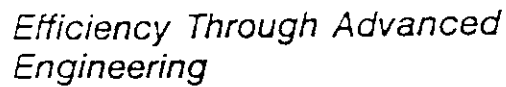   BE THE SAME AS LOW LEVEL WHEN
      SHOWN IN THE PROGRAMS.
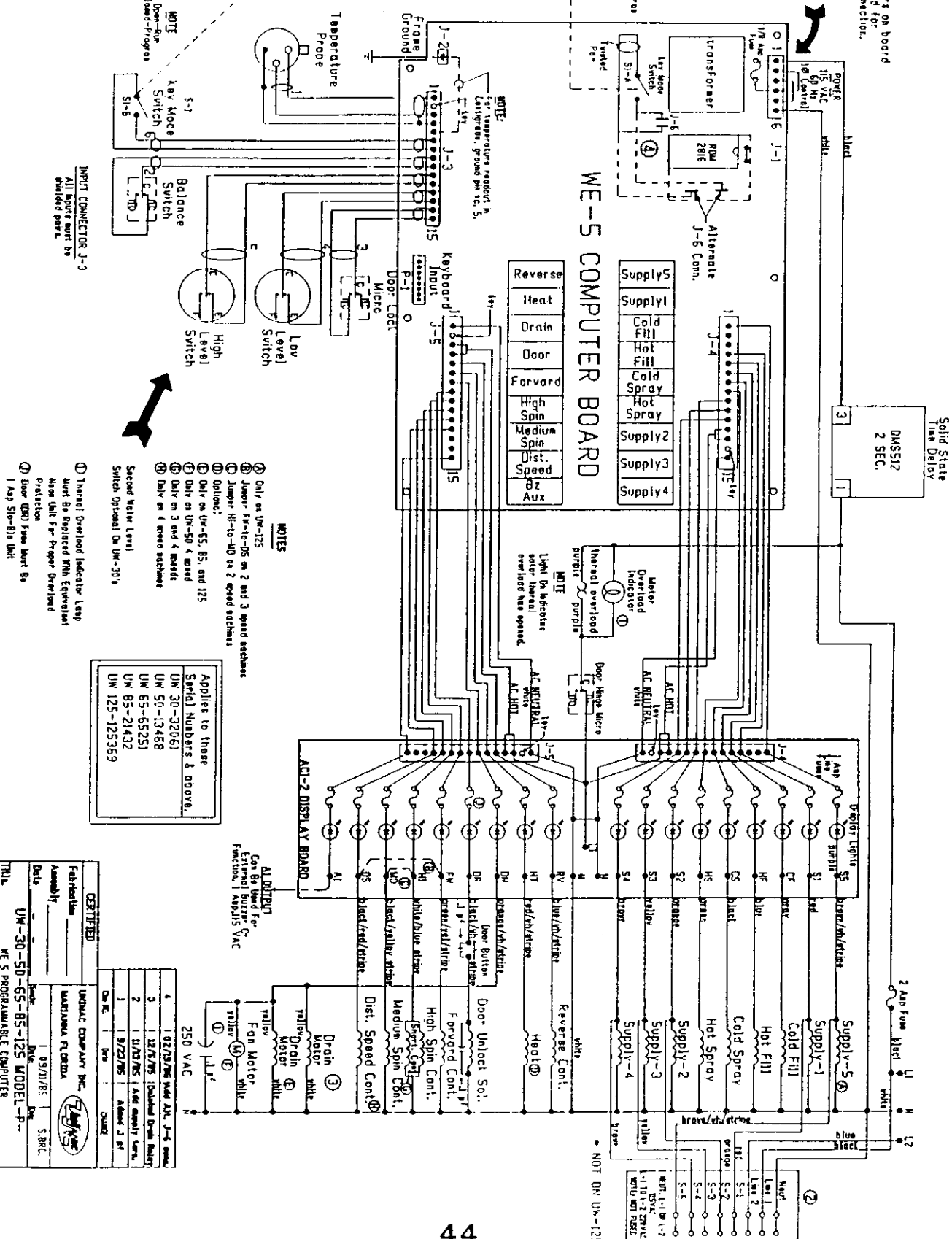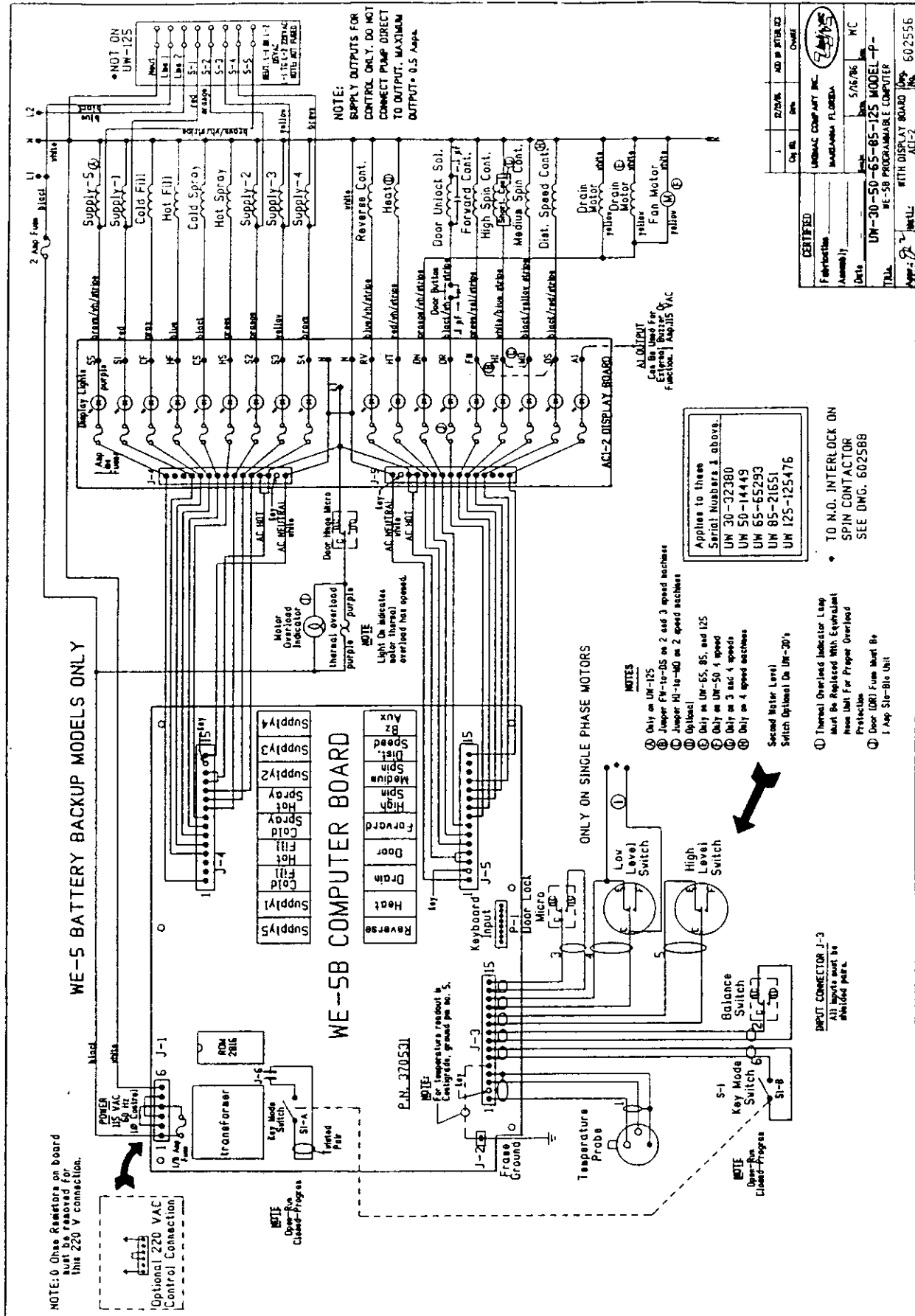
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Supply 5
Supply 1
Cold Fill
Hot Fill
Cold Spray
Hot Spray
Supply 2
Supply 3
Supply 4
Reverse Cont.
Heat
Drain Relay Coil
Door Unlock Sol.
Forward Cont.
High Spin Cont.
Medium Spin Cont.
Dist. Speed Cont.
Drain Solenoid
Drain Solenoid
Fan Motor

Drain Relay

2 Amp Fuse

Display Lights

AC1-DISPLAY BOARD

AL OUTPUT
Can Be Used For External Buzzer Or Function. 115 VAC

AC 101 — AC NEUTRAL white

Door Hinge Micro

Motor Overload Indicator purple

NOTE
Thermal overload motor

NOTE
Light On indicates motor thermal overload has opened.

WE-4 COMPUTER BOARD

Supply 4
Supply 3
Supply 2
Hot Spray
Cold Spray
Hot Fill
Cold Fill
Supply 1
Supply 5
Reverse
Heat
Drain
Door
Forward
High Spin
Medium Spin
Dist. Speed
Aux
B7

J-4

J-5

Keyboard Input

Door Lock Micro

Low Level Switch

High Level Switch

RDW 2816

Optional 220 VAC Control Connection

transformer

POWER
115 VAC
60 Hz
Control

1/8 Amp Fuse

J-1

J-2

Frame Ground

Temperature Probe

J-3

Balance Switch

Key Mode Switch

INPUT CONNECTOR J-3
All inputs must be shielded pairs.

NOTE
For temperature readout in Centigrade, ground pin no. 5.

NOTE
Open-Run Closed-Program

NOTES
- Only on UW-125
- Jumper FW-to-DS on 2 and 3 speed machines
- Jumper HI-to-MD on 2 speed machines
- Optional
- Only on UW-65, 85, and 125
- Only on UW-50 4 speed
- Only on 3 and 4 speed
- Only on 4 speed machines
- Second Motor Level Switch Optional On UW-30's

① Thermal Overload Indicator Lamp Must Be Replaced With Equivalent Neon Unit For Proper Overload Protection
② Door (DR) Fuse Must Be 1 Amp Slo-Blo Unit

④	4-24-85	Move Thermal Overload	KAC
③	3-20-85		
①	11-25-84	Add 1/8 Amp Fuse	
	Chg No.	Change	By

CERTIFIED
Fabrication
Assembly
Date 11-20-84

UNIMAC COMPANY INC.
MARIANNA FLORIDA

UW-30-50-65-85-125 MODEL -P-
WE 4 PROGRAMMABLE COMPUTER
WITH DISPLAY BOARD AC1-1

Dwg No. 2092

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LEGEND

S5	– Supply 5	HT	– Heat
S1	– Supply 1	DN	– Drain
CF	– Cold Fill	DR	– Door (Slo-Blo)
HF	– Hot Fill	FV	– Forward
CS	– Cold Spray	HI	– High Speed
HS	– Hot Spray	MD	– Medium Speed
S2	– Supply 2	DS	– Distribution Speed
S3	– Supply 3	A1	– Auxiliary
S4	– Supply 4	ACN	– A.C. Neutral
RV	– Reverse	ACH	– A.C. Hot (115 V)

ALL FUSES 3AG

UNIMAC CO. INC.
MARIANNA FLORIDA

CERTIFIED

Fabrication ————
Assembly ————
Date ————

Date: ————

CERTIFIED	Scale:	Date:	Dwn:

DISPLAY/FUSE BOARD

Title.		
Appr.:	WE-4 & WE-5 ACI-2	Dwg. No. 602091
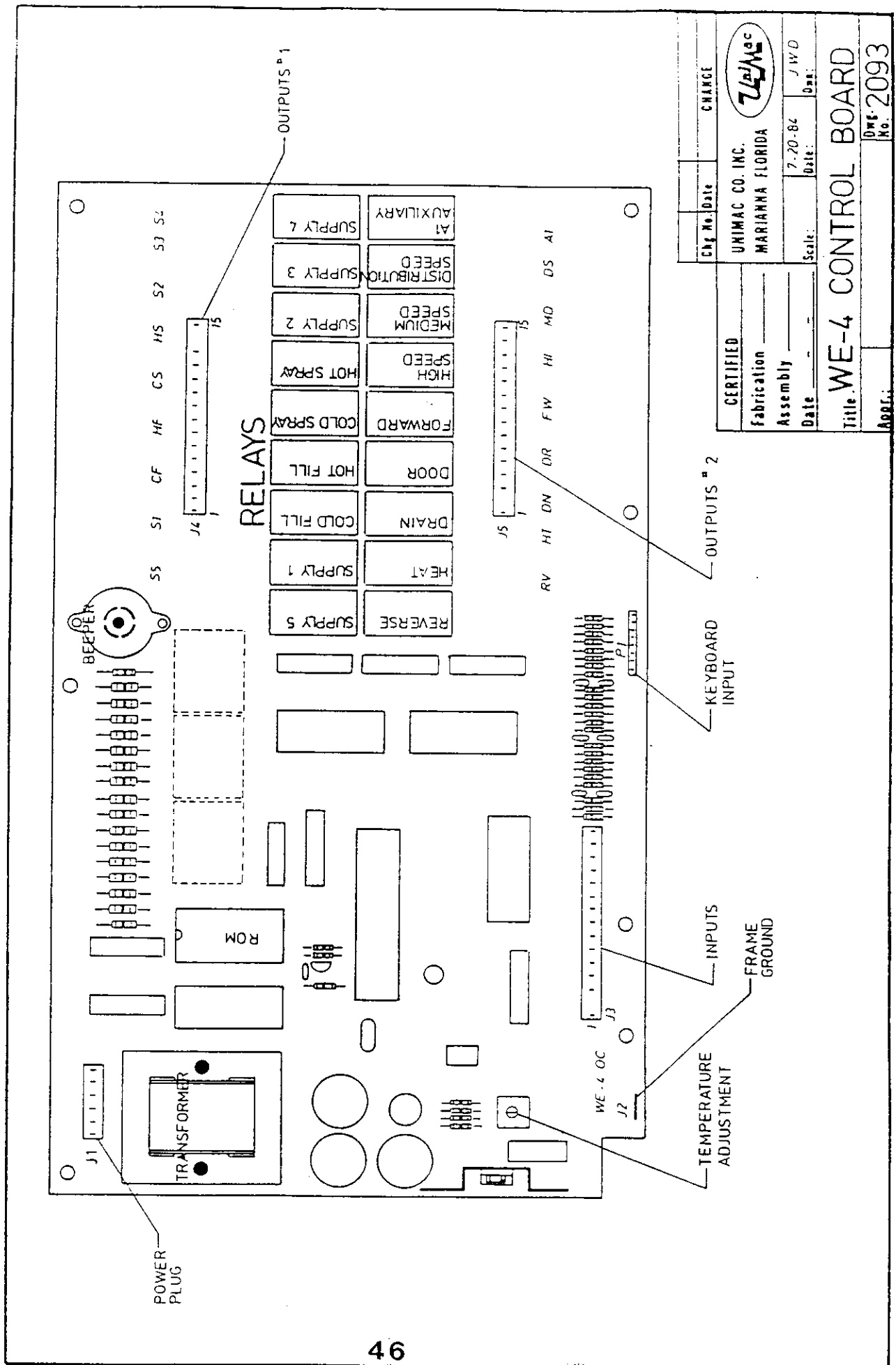
Chg No.	Date	CHANGE

OUTPUTS # 1

RELAYS

SUPPLY 4	AUXILIARY A1
SUPPLY 3	DISTRIBUTION SPEED DS
SUPPLY 2	MEDIUM SPEED MD
HOT SPRAY	HIGH SPEED HI
COLD SPRAY	FORWARD FW
HOT FILL	DOOR DR
COLD FILL	DRAIN DN
SUPPLY 1	HEAT HT
SUPPLY 5	REVERSE RV

SS   S1   CF   HF   CS   HS   S2   S3 S4

J4

OUTPUTS # 2

RV   HT   DN   DR   FW   HI   MD   DS   A1

J5

BEEPER

ROM

TRANSFORMER

POWER PLUG

J1

KEYBOARD INPUT

P1

INPUTS

FRAME GROUND

TEMPERATURE ADJUSTMENT

WE.4 OC

J2

J3

CERTIFIED

Fabrication _____
Assembly _____
Date _____

Title. WE-4 CONTROL BOARD
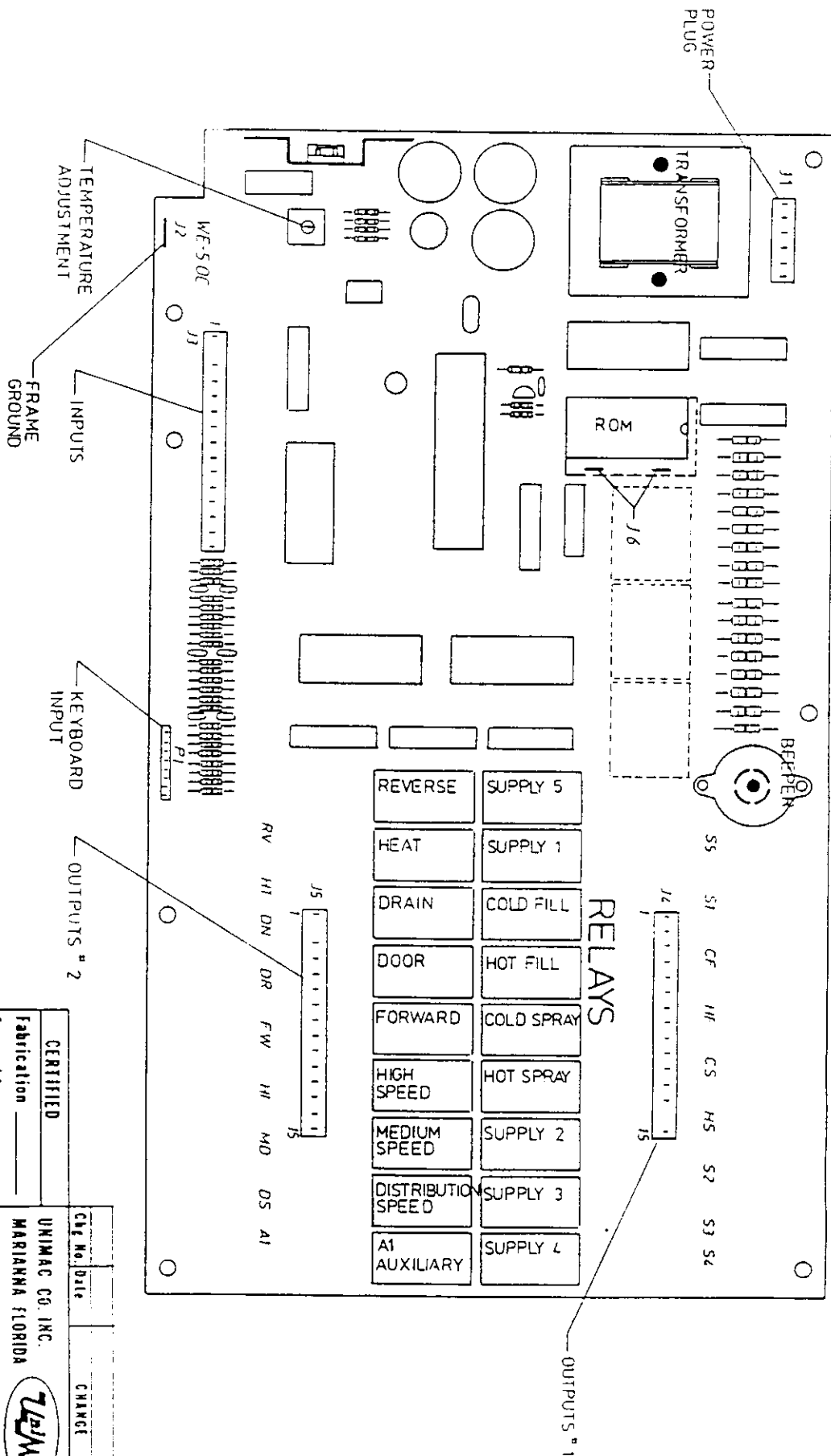
Chg. No. Date   CHANGE

UNIMAC CO. INC.
MARIANNA FLORIDA

7.20-84   J.W.D
Date: Dn:
Scale:

Dwg. No. 2093

Appr.:

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POWER PLUG

TRANSFORMER

J1

TEMPERATURE ADJUSTMENT

FRAME GROUND

WE-5 OC J2

INPUTS

J3

ROM

J6

BEEPER

KEYBOARD INPUT

P1

OUTPUTS #2

RELAYS

REVERSE	SUPPLY 5
HEAT	SUPPLY 1
DRAIN	COLD FILL
DOOR	HOT FILL
FORWARD	COLD SPRAY
HIGH SPEED	HOT SPRAY
MEDIUM SPEED	SUPPLY 2
DISTRIBUTION SPEED	SUPPLY 3
A1 AUXILIARY	SUPPLY 4

RV HI DN DR FW HI MO DS A1

J5

J4

SS S1 CF HI CS HS S2 S3 S4

J5

OUTPUTS #1

Title: WE-5 CONTROL BOARD

CERTIFIED
Fabrication _____
Assembly _____ —
Date _____ —

Chg No. Date

UNIMAC CO. INC.
MARIANNA FLORIDA

Scale:

Date: 9/9/85

CHANGE

Dwg. No. 602273

Dwn: JWD

App'r.:

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PROGRAMMABLE MICROCOMPUTER CONTROL
## INSTRUCTIONS FOR REPLACING ROM
ON WE-4 AND WE-5 CONTROL BOARD

REFERRING TO THE ADJACENT ILLUSTRATION, LOCATE THE ROM ON THE WE-4 AND WE-5 BOARD. NOTE THAT THIS IS THE ONLY USER REPLACEABLE PART ON THE WE-4 AND WE-5 BOARD THEREFORE BE SURE YOU HAVE CORRECTLY LOCATED THE ROM AS SHOWN. THE ROM ITSELF PLUGS INTO THE RECEPTACLE AND MAY BE UNPLUGGED WITH THE ASSISTANCE OF A SMALL INSTRUMENT. DO NOT ATTEMPT TO REMOVE THE RECEPTACLE, FROM THE BOARD AS THIS IS A PER-MANENT SOLDERED CONNECTION AND IS NOT RE-MOVABLE SIMPLY SEPARATE THE ROM FROM ITS RECEPTACLE.

WHEN REPLACING THE ROM, SIMPLY ALIGN THE PINS WITH THE RECEPTACLE AND CAREFULLY PRESS THE ROM INTO PLACE TO INSURE CORRECT POLARITY THE SMALL RADIUSED NOTCH AT THE TOP OF THE ROM SHOULD BE ALIGNED WITH THE NOTCH AT THE TOP OF THE RECEPTACLE.

THE REPLACEMENT ROM IS SHIPPED TO YOU IN AN ANTI-MAGNETIC SHIELDED CONTAINER AND THE DE-FECTIVE UNIT SHOULD BE RETURNED TO THE FACTORY IN THE SAME CONTAINER.

IT WILL BE NECESSARY TO REMOVE THE WE-4 AND WE-5 BOARD FROM THE CONTROL MODULE WHEN RE-PLACING THE ROM, DO NOT ATTEMPT THIS RE-PLACEMENT WITHOUT REMOVING THE BOARD FROM THE MODULE COMPLETE ACCESS IS ESSENTIAL TO PRE-VENT DAMAGE TO THE ROM.

WARNING   SERIOUS SHOCK MAY OCCUR. OPEN PRIMARY DISCONNECT SWITCH BEFORE ATTEMPTING ANY REPAIRS.
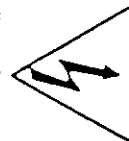
WARNING
THIS MACHINE SHOULD BE INSTALLED, AD-JUSTED AND SERVICED BY QUALIFIED, ELEC-TRICAL MAINTENANCE PERSONNEL FAMILIAR WITH THE CONSTRUCTION AND OPERATION OF THIS TYPE MACHINERY. THEY SHOULD ALSO BE FAMILIAR WITH THE POTENTIAL HAZARDS INVOLVED. IF THIS WARNING IS NOT OB-SERVED PERSONAL INJURY OR EQUIPMENT DAMAGED RESULTING IN VOIDING THE WARRANTY MAY RESULT.

Efficiency Through Advanced Engineering

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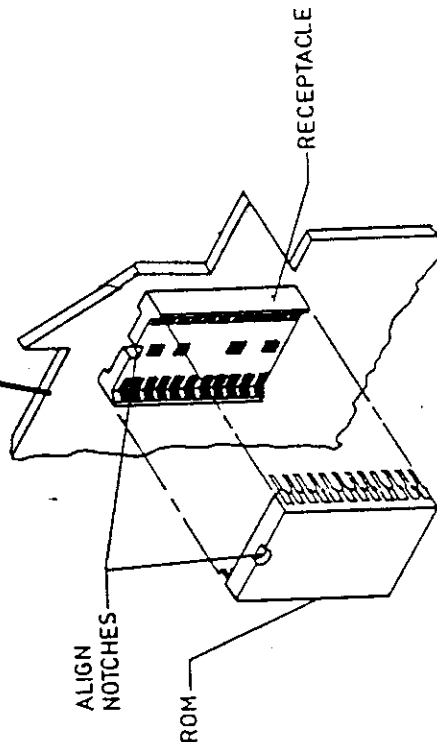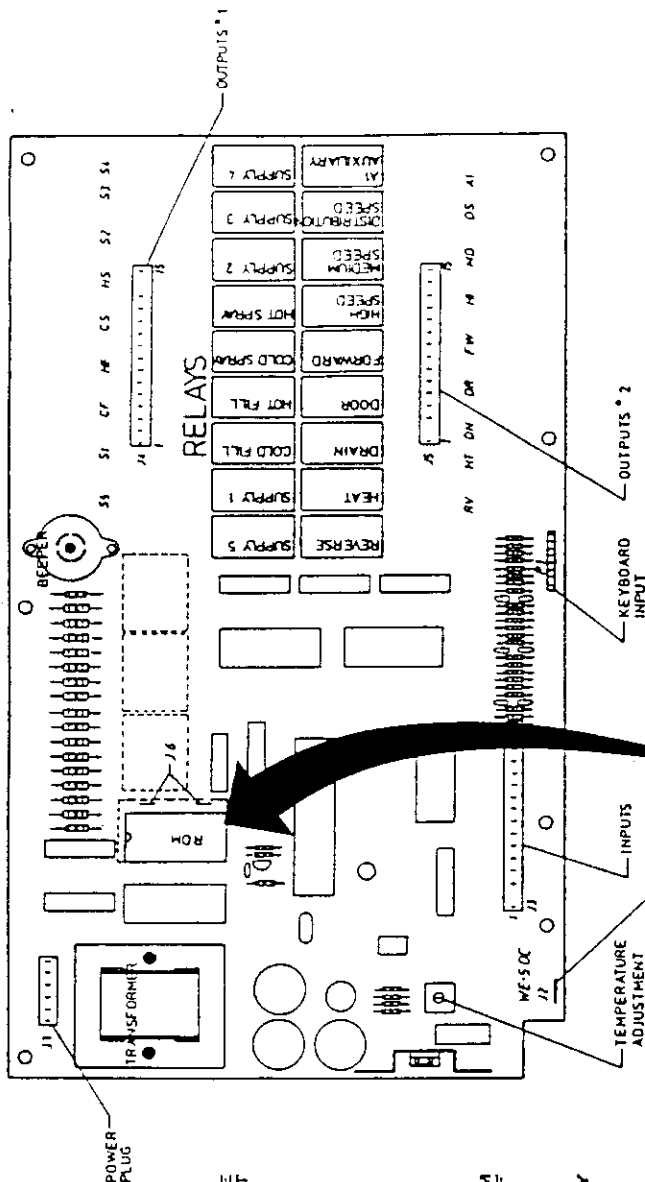
WE-4 & WE-5

OPTIONAL ADDITIONAL CYCLES

The following cycles have been tried and proven by many UniWash owners.

They are included here as options for the user in the written and ready-to-program form.

These cycles are not programmed in the computer but any or all may be quickly and easily programmed by the user.

Immediately following this section, we have included more blank program worksheets so that the user may write his own custom program(s).

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CYCLE 20 - COLORS

STEP NO.	PROCEDURE	STEP NO.	PROCEDURE
01 TIME	WARM WARM FILL TO LOW LEVEL. 5 MIN. 00 SECONDS.	16 TIME	DRAIN. 1 MIN. 00 SECONDS.
02 TIME	SUPPLY 1. 0 MIN. 30 SECONDS.	17 TIME	WARM SPIN SPRAY RINSE. 1 MIN. 00 SECONDS.
03 TIME	WASH 1. 5 MIN. 00 SECONDS.	18 TIME	WARM WARM FILL HIGH LEVEL. 4 MIN. 00 SECONDS.
04 TIME	DRAIN. 1 MIN. 00 SECONDS.	19 TIME	WASH 1. 1 MIN. 00 SECONDS.
05 TIME	WARM WARM FILL LOW LEVEL. 4 MIN. 00 SECONDS.	20 TIME	DRAIN. 1 MIN. 00 SECONDS.
06 TIME	SUPPLY 2. 0 MIN. 30 SECONDS.	21 TIME	HIGH SPEED SPIN. 5 MIN. 00 SECONDS. SDLY 0 MIN. 30 SECONDS.
07 TIME	WASH 1. 5 MIN. 00 SECONDS.	22 TIME	WASH 1. 0 MIN. 30 SECONDS. END.
08 TIME	DRAIN. 1 MIN. 00 SECONDS.		
09 TIME	WARM WARM FILL LOW LEVEL. 4 MIN. 00 SECONDS.		
10 TIME	SUPPLY 3. 0 MIN. 30 SECONDS.		
11 TIME	WASH 1. 5 MIN. 00 SECONDS.		
12 TIME	DRAIN. 1 MIN. 00 SECONDS.		
13 TIME	MEDIUM SPIN. 1 MIN. 00 SECONDS.		
14 TIME	WARM WARM FILL HIGH LEVEL. 5 MIN. 00 SECONDS.		
15 TIME	WASH 1. 1 MIN. 00 SECONDS.		

NOTE TWO WATER LEVEL SWITCHES ARE OPTIONAL ON THE UW30. UNLESS SO EQUIPPED, HIGH LEVEL WILL BE THE SAME AS LOW LEVEL WHEN SHOWN IN THE PROGRAMS.

CYCLE 21 - JEANS

STEP NO.	PROCEDURE	STEP NO.	PROCEDURE
01	WARM WARM FILL LOW LEVEL.	16	DRAIN.
TIME	5 MIN. 00 SECONDS.	TIME	1 MIN. 00 SECONDS.
02	SUPPLY 1.	17	HIGH SPIN.
TIME	0 MIN. 30 SECONDS.	TIME	6 MIN. 00 SECONDS.
			SDLY 0 MIN. 30 SECONDS.
03	WASH 1.		
TIME	7 MIN. 00 SECONDS.	18	WASH 1.
		TIME	0 MIN. 30 SECONDS.
04	DRAIN.		END.
TIME	1 MIN. 00 SECONDS.		
05	HOT FILL LOW LEVEL.		
TIME	5 MIN. 00 SECONDS.		
06	SUPPLY 2.		
TIME	0 MIN. 30 SECONDS.		
07	WASH 1.		
TIME	5 MIN. 00 SECONDS.		
08	DRAIN.		
TIME	1 MIN. 00 SECONDS.		
09	HOT SPIN SPRAY RINSE.		
TIME	1 MIN. 00 SECONDS.		
10	HOT FILL HIGH LEVEL.		
TIME	5 MIN. 00 SECONDS.		
11	WASH 1.		
TIME	2 MIN. 00 SECONDS.		
12	DRAIN.		
TIME	1 MIN. 00 SECONDS.		
13	WARM SPIN SPRAY RINSE.		
TIME	1 MIN. 00 SECONDS.		
14	WARM WARM FILL HIGH LEVEL.		
TIME	5 MIN. 00 SECONDS.		
15	WASH 1.		
TIME	2 MIN. 00 SECONDS.		

NOTE TWO WATER LEVEL SWITCHES ARE OPTIONAL ON THE UW30. UNLESS SO EQUIPPED, HIGH LEVEL WILL BE THE SAME AS LOW LEVEL WHEN SHOWN IN THE PROGRAMS.

CYCLE 22 - STARCH

STEP NO.	PROCEDURE
01	WARM WARM FILL LOW LEVEL.
TIME	4 MIN. 00 SECONDS.
02	SUPPLY 4.
TIME	0 MIN. 30 SECONDS.
03	WASH 1.
TIME	5 MIN. 00 SECONDS.
04	DRAIN.
TIME	1 MIN. 00 SECONDS.
05	HIGH SPIN.
TIME	5 MIN. 00 SECONDS.
	SDLY 0 MIN. 30 SECONDS.
06	WASH 1.
TIME	0 MIN. 30 SECONDS.
	END.

NOTE TWO WATER LEVEL SWITCHES ARE
OPTIONAL ON THE UW30. UNLESS
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BE THE SAME AS LOW LEVEL WHEN
SHOWN IN THE PROGRAMS.

CYCLE 23 - SHIRTS

STEP NO.	PROCEDURE	STEP NO.	PROCEDURE
01 TIME	HOT FILL LOW LEVEL. 5 MIN. 00 SECONDS.	16 TIME	WARM WARM FILL HIGH LEVEL. 5 MIN. 00 SECONDS.
02 TIME	SUPPLY 1. 0 MIN. 30 SECONDS.	17 TIME	WASH 1. 1 MIN. 00 SECONDS.
03 TIME	WASH 1. 5 MIN. 00 SECONDS.	18 TIME	DRAIN. 1 MIN. 00 SECONDS.
04 TIME	DRAIN. 1 MIN. 00 SECONDS.	19 TIME	WARM SPRAY RINSE SPIN. 1 MIN. 00 SECONDS.
05 TIME	HOT FILL LOW LEVEL. 4 MIN. 00 SECONDS.	20 TIME	WARM WARM FILL LOW LEVEL. 4 MIN. 00 SECONDS.
06 TIME	SUPPLY 2. 0 MIN. 30 SECONDS.	21 TIME	SUPPLY 4 SOUR. 0 MIN. 30 SECONDS.
07 TIME	WASH 1. 5 MIN. 00 SECONDS.	22 TIME	WASH 1. 3 MIN. 00 SECONDS.
08 TIME	DRAIN. 1 MIN. 00 SECONDS.	23 TIME	DRAIN. 1 MIN. 00 SECONDS.
09 TIME	HOT FILL LOW LEVEL. 4 MIN. 00 SECONDS.	24 TIME	HIGH SPIN. 5 MIN. 00 SECONDS. SDLY 0 MIN. 30 SECONDS.
10 TIME	SUPPLY 3 BLEACH. 0 MIN. 30 SECONDS.	25 TIME	WASH 1. 0 MIN. 30 SECONDS. END.
11 TIME	WASH 1. 5 MIN. 00 SECONDS.		
12 TIME	HOT FILL HIGH LEVEL. 5 MIN. 00 SECONDS.		
13 TIME	WASH 1. 1 MIN. 00 SECONDS.		
14 TIME	DRAIN. 1 MIN. 00 SECONDS.		
15 TIME	WARM SPRAY RINSE SPIN. 1 MIN. 00 SECONDS.		

NOTE TWO WATER LEVEL SWITCHES ARE OPTIONAL ON THE UW30. UNLESS SO EQUIPPED, HIGH LEVEL WILL BE THE SAME AS LOW LEVEL WHEN SHOWN IN THE PROGRAMS.

CYCLE 70 - SPECIAL NO. 2

STEP NO.	PROCEDURE
01	WARM WARM FILL TO LOW LEVEL.
TIME	5 MIN. 00 SECONDS.
02	WASH 1.
TIME	6 MIN. 00 SECONDS.
03	DRAIN.
TIME	1 MIN. 00 SECONDS.
04	HIGH SPEED.
TIME	3 MIN. 00 SECONDS.
	SDLY 0 MIN. 30 SECONDS.
05	WASH 1.
TIME	0 MIN. 30 SECONDS.
	END.

NOTE TWO WATER LEVEL SWITCHES ARE
OPTIONAL ON THE UW30. UNLESS
SO EQUIPPED, HIGH LEVEL WILL
BE THE SAME AS LOW LEVEL WHEN
SHOWN IN THE PROGRAMS.

CYCLE 71 - SHEETS

STEP NO.	PROCEDURE	STEP NO.	PROCEDURE
01	WARM WARM FILL TO LOW LEVEL.	11	WASH 1.
TIME	4 MIN. 00 SECONDS.	TIME	3 MIN. 00 SECONDS.
02	SUPPLY 1.	12	DRAIN.
TIME	0 MIN. 30 SECONDS.	TIME	1 MIN. 00 SECONDS.
03	SUPPLY 2.	13	HIGH SPEED.
TIME	0 MIN. 30 SECONDS.	TIME	3 MIN. 00 SECONDS.
			SDLY 0 MIN. 30 SECONDS.
04	WASH 1.		
TIME	5 MIN. 00 SECONDS.	14	WASH 1.
		TIME	0 MIN. 30 SECONDS.
05	DRAIN.		END.
TIME	1 MIN. 00 SECONDS.		
06	MEDIUM SPEED.		
TIME	0 MIN. 30 SECONDS.		
07	WARM RINSE.		
TIME	3 MIN. 00 SECONDS.		
08	MEDIUM SPEED.		
TIME	0 MIN. 30 SECONDS.		
09	COLD FILL TO HIGH LEVEL.		
TIME	5 MIN. 00 SECONDS.		
10	SUPPLY 3.		
TIME	0 MIN. 30 SECONDS.		

NOTE TWO WATER LEVEL SWITCHES ARE
OPTIONAL ON THE UW30. UNLESS
SO EQUIPPED, HIGH LEVEL WILL
BE THE SAME AS LOW LEVEL WHEN
SHOWN IN THE PROGRAMS.

CYCLE 72 - PILLOW CASES

STEP NO.	PROCEDURE	STEP NO.	PROCEDURE
01	WARM WARM FILL TO LOW LEVEL.	11	WASH 1.
TIME	4 MIN. 00 SECONDS.	TIME	3 MIN. 00 SECONDS.
02	SUPPLY 1.	12	DRAIN.
TIME	0 MIN. 30 SECONDS.	TIME	1 MIN. 00 SECONDS.
03	SUPPLY 2.	13	HIGH SPEED.
TIME	0 MIN. 30 SECONDS.	TIME	4 MIN. 00 SECONDS.
			SDLY 0 MIN. 30 SECONDS.
04	WASH 1.		
TIME	6 MIN. 00 SECONDS.	14	WASH 1.
		TIME	0 MIN. 30 SECONDS.
05	DRAIN.		END.
TIME	1 MIN. 00 SECONDS.		
06	MEDIUM SPIN.		
TIME	0 MIN. 30 SECONDS.		
07	WARM RINSE.		
TIME	3 MIN. 00 SECONDS.		
08	MEDIUM SPEED.		
TIME	0 MIN. 30 SECONDS.		
09	COLD FILL TO HIGH LEVEL.		
TIME	5 MIN. 00 SECONDS.		
10	SUPPLY 3.		
TIME	0 MIN. 30 SECONDS.		

NOTE TWO WATER LEVEL SWITCHES ARE
OPTIONAL ON THE UW30. UNLESS
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BE THE SAME AS LOW LEVEL WHEN
SHOWN IN THE PROGRAMS.

CYCLE 73 - TOWELS

STEP NO.	PROCEDURE	STEP NO.	PROCEDURE
01	HOT FILL TO LOW LEVEL.	11	WASH 1.
TIME	4 MIN. 00 SECONDS.	TIME	3 MIN. 00 SECONDS.
02	SUPPLY 1.	12	DRAIN.
TIME	0 MIN. 30 SECONDS.	TIME	1 MIN. 00 SECONDS.
03	SUPPLY 2.	13	HIGH SPEED.
TIME	0 MIN. 30 SECONDS.	TIME	6 MIN. 00 SECONDS.
			SDLY 0 MIN. 30 SECONDS.
04	WASH 1.		
TIME	8 MIN. 00 SECONDS.	14	WASH 1.
		TIME	0 MIN. 30 SECONDS.
05	COLD FILL TO HIGH LEVEL.		END.
TIME	5 MIN. 00 SECONDS.		
06	DRAIN.		
TIME	1 MIN. 00 SECONDS.		
07	WARM RINSE.		
TIME	3 MIN. 00 SECONDS.		
08	MEDIUM SPEED.		
TIME	0 MIN. 30 SECONDS.		
09	COLD FILL TO HIGH LEVEL.		
TIME	5 MIN. 00 SECONDS.		
10	SUPPLY 3.		
TIME	0 MIN. 30 SECONDS.		

NOTE TWO WATER LEVEL SWITCHES ARE
OPTIONAL ON THE UW30. UNLESS
SO EQUIPPED, HIGH LEVEL WILL
BE THE SAME AS LOW LEVEL WHEN
SHOWN IN THE PROGRAMS.

CYCLE 74 - BED SPREADS

STEP NO.	PROCEDURE

01   COLD FILL TO LOW LEVEL.
TIME   4 MIN. 00 SECONDS.

02   SUPPLY 1.
TIME   0 MIN. 30 SECONDS.

03   WASH 1.
TIME   6 MIN. 00 SECONDS.

04   DRAIN.
TIME   1 MIN. 00 SECONDS.

05   MEDIUM SPEED.
TIME   0 MIN. 30 SECONDS.

06   COLD FILL TO HIGH LEVEL.
TIME   5 MIN. 00 SECONDS.

07   SUPPLY 3.
TIME   0 MIN. 30 SECONDS.

08   WASH 1.
TIME   3 MIN. 00 SECONDS.

09   DRAIN.
TIME   1 MIN. 00 SECONDS.

10   HIGH SPEED.
TIME   3 MIN. 00 SECONDS.
             SDLY 0 MIN. 30 SECONDS.

11   WASH 1.
TIME   0 MIN. 30 SECONDS.
             END.

NOTE   TWO WATER LEVEL SWITCHES ARE OPTIONAL ON THE UW30. UNLESS SO EQUIPPED, HIGH LEVEL WILL BE THE SAME AS LOW LEVEL WHEN SHOWN IN THE PROGRAMS.

CYCLE 75 - BLANKETS

STEP NO.	PROCEDURE

01
TIME
WARM WARM FILL TO LOW LEVEL.
4 MIN. 00 SECONDS.

02
TIME
SUPPLY 1.
0 MIN. 30 SECONDS.

03
TIME
WASH 1.
5 MIN. 00 SECONDS.

04
TIME
DRAIN.
1 MIN. 00 SECONDS.

05
TIME
WARM WARM FILL TO HIGH LEVEL.
5 MIN. 00 SECONDS.

06
TIME
WASH 1.
2 MIN. 00 SECONDS.

07
TIME
DRAIN.
1 MIN. 00 SECONDS.

08
TIME
WARM WARM FILL TO HIGH LEVEL.
5 MIN. 00 SECONDS.

09
TIME
SUPPLY 3.
0 MIN. 30 SECONDS.

10
TIME
WASH 1.
3 MIN. 00 SECONDS.

11
TIME
DRAIN.
1 MIN. 00 SECONDS.

12
TIME
HIGH SPEED.
3 MIN. 00 SECONDS.
SDLY 0 MIN. 30 SECONDS.

13
TIME
WASH 1.
0 MIN. 30 SECONDS.
END.

NOTE TWO WATER LEVEL SWITCHES ARE
OPTIONAL ON THE UW30. UNLESS
SO EQUIPPED, HIGH LEVEL WILL
BE THE SAME AS LOW LEVEL WHEN
SHOWN IN THE PROGRAMS.

CYCLE 76 - TABLE LINEN

STEP NO.	PROCEDURE	STEP NO.	PROCEDURE
01 TIME	COLD FILL TO HIGH LEVEL. 5 MIN. 00 SECONDS.	15 TIME	SUPPLY 3. 0 MIN. 30 SECONDS.
02 TIME	SUPPLY 4. 0 MIN. 30 SECONDS.	16 TIME	WASH 1. 3 MIN. 00 SECONDS.
03 TIME	WASH 1. 3 MIN. 00 SECONDS.	17 TIME	DRAIN. 1 MIN. 00 SECONDS.
04 TIME	DRAIN. 1 MIN. 00 SECONDS.	18 TIME	HIGH SPEED. 4 MIN. 00 SECONDS. SDLY 0 MIN. 30 SECONDS.
05 TIME	MEDIUM SPEED. 0 MIN. 30 SECONDS.	19 TIME	WASH 1. 0 MIN. 30 SECONDS. END.
06 TIME	WARM WARM FILL TO LOW LEVEL. 5 MIN. 00 SECONDS.		
07 TIME	SUPPLY 1. 0 MIN. 30 SECONDS.		
08 TIME	SUPPLY 2. 0 MIN. 30 SECONDS.		
09 TIME	WASH 1. 6 MIN. 00 SECONDS.		
10 TIME	DRAIN. 1 MIN. 00 SECONDS.		
11 TIME	MEDIUM SPEED. 0 MIN. 30 SECONDS.		
12 TIME	WARM RINSE. 4 MIN. 00 SECONDS.		
13 TIME	MEDIUM SPEED. 0 MIN. 30 SECONDS.		
14 TIME	WARM WARM FILL TO HIGH LEVEL. 5 MIN. 00 SECONDS.		

NOTE TWO WATER LEVEL SWITCHES ARE OPTIONAL ON THE UW30. UNLESS SO EQUIPPED, HIGH LEVEL WILL BE THE SAME AS LOW LEVEL WHEN SHOWN IN THE PROGRAMS.

STEP NO.	PROCEDURE	STEP NO	PROCEDURE
01	HOT FILL TO LOW LEVEL.	18	WARM WARM FILL TO HIGH LEVEL.
TIME	5 MIN. 00 SECONDS.	TIME	5 MIN. 00 SECONDS.
02	SUPPLY 4.	19	WASH 1.
TIME	0 MIN. 30 SECONDS.	TIME	2 MIN. 00 SECONDS.
03	WASH 1.	20	DRAIN.
TIME	9 MIN. 60 SECONDS.	TIME	1 MIN. 00 SECONDS.
04	WASH 1.	21	MEDIUM SPEED.
TIME	5 MIN. 00 SECONDS.	TIME	0 MIN. 30 SECONDS.
05	DRAIN.	22	WARM WARM FILL TO HIGH LEVEL.
TIME	1 MIN. 00 SECONDS.	TIME	5 MIN. 00 SECONDS.
06	MEDIUM SPEED.	23	WASH 1.
TIME	0 MIN. 30 SECONDS.	TIME	2 MIN. 00 SECONDS.
07	HOT FILL TO HIGH LEVEL.	24	DRAIN.
TIME	5 MIN. 00 SECONDS.	TIME	1 MIN. 00 SECONDS.
08	WASH 1.	25	MEDIUM SPEED.
TIME	3 MIN. 00 SECONDS.	TIME	0 MIN. 30 SECONDS.
09	DRAIN.	26	WARM WARM FILL TO HIGH LEVEL.
TIME	1 MIN. 00 SECONDS.	TIME	5 MIN. 00 SECONDS.
10	HOT FILL TO LOW LEVEL.	27	SUPPLY 3.
TIME	5 MIN. 00 SECONDS.	TIME	0 MIN. 30 SECONDS.
11	SUPPLY 1.	28	WASH 1.
TIME	0 MIN. 30 SECONDS.	TIME	5 MIN. 00 SECONDS.
12	WASH 1.	29	DRAIN.
TIME	7 MIN. 00 SECONDS.	TIME	1 MIN. 00 SECONDS.
13	HOT FILL TO HIGH LEVEL.	30	HIGH SPEED.
TIME	5 MIN. 00 SECONDS.	TIME	6 MIN. 00 SECONDS.
			SDLY 0 MIN. 30 SECONDS.
14	DRAIN.	31	WASH 1.
TIME	1 MIN. 00 SECONDS.	TIME	0 MIN. 30 SECONDS.
15	MEDIUM SPEED.		END.
TIME	0 MIN. 30 SECONDS.		
16	HOT RINSE.		
TIME	3 MIN. 00 SECONDS.		
17	MEDIUM SPEED.		
TIME	0 MIN. 30 SECONDS.		

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CYCLE 79 - SPECIAL NO. 1

STEP NO.	PROCEDURE	STEP NO.	PROCEDURE
01	COLD FILL TO HIGH LEVEL.	14	SUPPLY 3.
TIME	5 MIN. 00 SECONDS.	TIME	0 MIN. 30 SECONDS.
02	SUPPLY 4.	15	WASH 1.
TIME	0 MIN. 30 SECONDS.	TIME	3 MIN. 00 SECONDS.
03	WASH 1.	16	DRAIN.
TIME	3 MIN. 00 SECONDS.	TIME	1 MIN. 00 SECONDS.
04	DRAIN.	17	HIGH SPEED.
TIME	1 MIN. 00 SECONDS.	TIME	4 MIN. 00 SECONDS.
			SDLY 0 MIN. 30 SECONDS.
05	WARM WARM FILL TO LOW LEVEL.		
TIME	5 MIN. 00 SECONDS.	18	WASH 1.
		TIME	0 MIN. 30 SECONDS.
06	SUPPLY 1.		END.
TIME	0 MIN. 30 SECONDS.		
07	SUPPLY 2.		
TIME	0 MIN. 30 SECONDS.		
08	WASH 1.		
TIME	6 MIN. 00 SECONDS.		
09	DRAIN.		
TIME	1 MIN. 00 SECONDS.		
10	MEDIUM SPEED.		
TIME	0 MIN. 30 SECONDS.		
11	WARM RINSE.		
TIME	3 MIN. 00 SECONDS.		
12	MEDIUM SPIN.		
TIME	0 MIN. 30 SECONDS.		
13	WARM WARM FILL TO HIGH LEVEL.		
TIME	5 MIN. 00 SECONDS.		

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BE THE SAME AS LOW LEVEL WHEN
SHOWN IN THE PROGRAMS.

PROGRAM WORKSHEET FOR PROGRAMMING MICROCOMPUTER CONTROL

CYCLE NO. _____

STEP NO.	PROCEDURE	STEP NO.	PROCEDURE
01 TIME		16 TIME	
02 TIME		17 TIME	
03 TIME		18 TIME	
04 TIME		19 TIME	
05 TIME		20 TIME	
06 TIME		21 TIME	
07 TIME		22 TIME	
08 TIME		23 TIME	
09 TIME		24 TIME	
10 TIME		25 TIME	
11 TIME		26 TIME	
12 TIME		27 TIME	
13 TIME		28 TIME	
14 TIME		29 TIME	
15 TIME		30 TIME	

PROGRAM WORKSHEET FOR PROGRAMMING MICROCOMPUTER CONTROL

CYCLE NO. _____

STEP NO.	PROCEDURE		STEP NO.	PROCEDURE
01 TIME			16 TIME	
02 TIME			17 TIME	
03 TIME			18 TIME	
04 TIME			19 TIME	
05 TIME			20 TIME	
06 TIME			21 TIME	
07 TIME			22 TIME	
08 TIME			23 TIME	
09 TIME			24 TIME	
10 TIME			25 TIME	
11 TIME			26 TIME	
12 TIME			27 TIME	
13 TIME			28 TIME	
14 TIME			29 TIME	
15 TIME			30 TIME	

PROGRAM WORKSHEET FOR PROGRAMMING MICROCOMPUTER CONTROL

CYCLE NO. _____

STEP NO.	PROCEDURE	STEP NO.	PROCEDURE
01		16	
TIME		TIME	
02		17	
TIME		TIME	
03		18	
TIME		TIME	
04		19	
TIME		TIME	
05		20	
TIME		TIME	
06		21	
TIME		TIME	
07		22	
TIME		TIME	
08		23	
TIME		TIME	
09		24	
TIME		TIME	
10		25	
TIME		TIME	
11		26	
TIME		TIME	
12		27	
TIME		TIME	
13		28	
TIME		TIME	
14		29	
TIME		TIME	
15		30	
TIME		TIME	

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PROGRAM WORKSHEET FOR PROGRAMMING MICROCOMPUTER CONTROL

CYCLE NO. _____

STEP NO.	PROCEDURE	STEP NO.	PROCEDURE
01 TIME		16 TIME	
02 TIME		17 TIME	
03 TIME		18 TIME	
04 TIME		19 TIME	
05 TIME		20 TIME	
06 TIME		21 TIME	
07 TIME		22 TIME	
08 TIME		23 TIME	
09 TIME		24 TIME	
10 TIME		25 TIME	
11 TIME		26 TIME	
12 TIME		27 TIME	
13 TIME		28 TIME	
14 TIME		29 TIME	
15 TIME		30 TIME	

NOTES

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