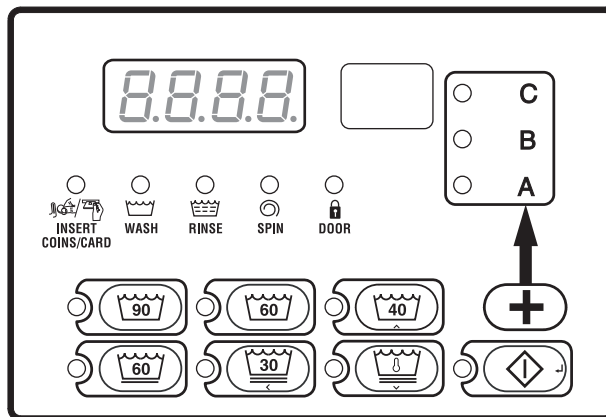


Frontload Washer

Refer to Page 4 for Model Numbers



FLW20R

Keep These Instructions for Future Reference.

(If this machine changes ownership, this manual must accompany machine.)



WARNING

Failure to install, maintain, and/or operate this machine according to the manufacturer's instructions may result in conditions which can produce bodily injury and/or property damage.

W030

NOTE: The WARNING and IMPORTANT instructions appearing in this manual are not meant to cover all possible conditions and situations that may occur. It must be understood that common sense, caution, and carefulness are factors which cannot be built into these washers. These factors MUST BE supplied by the person(s) installing, maintaining, or operating the washer.

Always contact the distributor, service agent, or the manufacturer about any problems or conditions you do not understand.

Table of Contents

Model Identification	4
Preliminary Information	5
About the Control	5
Glossary of Terms.....	5
Power Failure Recovery	5
Communications	5
Control Identification	6
Select Cycle Pads.....	6
START Keypad	6
Soil Level Pad.....	6
Display Identification	8
Light Emitting Diodes (LEDs)	8
Washer Operation	9
Start Up.....	9
Ready Mode.....	9
Partial Vend Mode.....	9
Additional Vend Mode	9
Start Mode	9
End of Cycle Mode.....	9
Cycle Sequence.....	9
Closing Washer Door	9
Signals.....	10
Changing Cycles.....	10
Special Features	11
Programming Control	11
Collecting Audit Information	11
Testing Machine and Control Functions.....	11
Rapid Advance Feature.....	11
Clearing the Vend Feature.....	11
Communications Mode.....	11
Coin Drop	11
Start Pulse Operation	11
Service Door and Coin Vault Openings	12
Break-In Alarm.....	12
Special Vend.....	12
OPL Mode	12
Drop-Off Mode.....	12
Low Power/Auto-Shutdown Option.....	12
Temperature Display	12
Opening the Service Door	13
Entering the Manual Mode	14
How to Enter the Manual Mode	14
Manual Diagnostics	14
Programming Control	16
What Can Be Programmed?	16
Programmable Options Available.....	16
1. Vend Price #1 “AtS1”	25
2. Coin #1 Value “dEn1”	26
3. Coin #2 Value “dEn2”	27
4. Start Pulse Value “PLSE”	28
5. Start Pulse Mode “PLSn”	29
6. Available Type “AtyP”	30

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7. Default Cycle “dCYC”	31
8. OPL Mode “oPL”	32
9. Audio Signal “AUd”	33
10. Card Reader Display Control “CArd”	35
11. Error Code Programming “Err”	36
12. Cycle Programming “CyC-”	37
13. Vend Price #2 “AtS2”	43
14. Vend Price #3 “AtS3”	44
15. Vend Price #4 “AtS4”	45
16. Vend Price #5 “AtS5”	46
17. Vend Price #6 “AtS6”	47
18. Set Real-Time Clock “rtC-”	48
19. Special Vend A Data “SPA-”	49
20. Special Vend B Days Enable “SPb-”	66
21. Special Vend C Days Enable “SPC-”	66
22. Special Vend D Days Enable “SPd-”	67
23. Cycle Modifier Programming “CnP-”	68
24. Cycle Time Display “Pct-” (software version “S 02” or higher only)	73
25. Drop Off Mode (On/Off) “droP”	77
26. Low Power/Auto Shutdown A Days Enable “LPSA”	77
27. Low Power/Auto Shutdown B Days Enable “LPSb”	78
28. Low Power/Auto Shutdown C Days Enable “LPSC”	78
29. Low Power/Auto Shutdown D Days Enable “LPSd”	79
30. Power Fail Reset “PFr”	79
31. IR Access (On/Off) “rA”	81
32. Manual Rapid Advance (On/Off) “rAEn”	81
33. Manual Diagnostics (On/Off) “dAEn”	82
34. Production Test Cycle (On/Off) “PtEn”	82
Collecting Audit Information	83
Manual Reset	84
Testing Machine and Electronic Control Functions	85
Diagnostic Test Descriptions	88
Production Test Cycle	91
Error Codes	94
Rapid Advance Feature	96
Clear Vend Feature	97
Power Fail Recovery	98
Communications Mode	99
Infra-red Communications	99
Card Reader Communications (Card Models Only)	99
Network Communications	99
Default Cycle Time	100

Model Identification

Information in this manual is applicable to these washer models:

BF3LLFSG401UN01	NF3LXFSG401UN01
BF3LLFSG401UW01	NF3LXFSG401UW01
BF3LLFSP401UN01	NF3LXFSP401UN01
BF3LLFSP401UW01	NF3LXFSP401UW01
BF3LXFSG401UN01	NF3LYFSG401UW01
BF3LXFSG401UW01	NT1LLFSP411UW06
BF3LXFSP401UN01	NT1LXFSP401UW01
BF3LXFSP401UW01	NT1LXFSP401UN01
BT3LLFSG401UN01	NT2LLFSP401UW01
BT3LLFSG401UW01	NT2LLFSP401UW06
BT3LLFSP401UN01	NT2LLFSP401UN01
BT3LLFSP401UW01	NT2LXFSP401UW01
BT3LXFSG401UN01	NT2LXFSP401UN01
BT3LXFSG401UW01	NT3LLFSP401NN22
BT3LXFSP401UN01	NT3LLFSP401NW22
BT3LXFSP401UW01	NT3LLFSP401UW01
NF3LLFSP401NN22	NT3LLFSP401UN01
NF3LLFSP401NW22	NT3LXFSP401UW01
NF3LLFSG401UT01	NT3LXFSP401UN01
NF3LLFSG401UT06	NTHLXFSP571NW01
NF3LLFSP401UN01	NTHLYFSP571NW01
NF3LLFSP401UT01	ST3LXFSP401NW22
NF3LLFSP401UT06	

Preliminary Information

About the Control

This control is an advanced, programmable computer that lets the owner control most machine features by pressing a sequence of keypads. Refer to *Figure 1*.

The control allows the owner to program custom cycles, set vend prices, retrieve audit information, run diagnostic tests, program special vend features and set other programmable features. Refer to ***Programming Control*** for a list of features. Washers shipped from the factory have a default cycle setting of PERM PRESS 60 built in. However, the owner can change the default cycle, or any cycle, as needs permit.

IMPORTANT: In the event of a power failure, the control will not have to be reprogrammed. It is designed with a memory system that will remember how it was programmed until the electrical power is restored.

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

Glossary of Terms

The following are a few terms and abbreviations to learn. These are referred to throughout the instructions.

Display - This term refers to the window area of the control that displays words and values.

LED (Light Emitting Diode) - This term refers to the lights next to the keypads and status words of the control.

Power Failure Recovery

If a cycle is in progress and the power fails, the cycle status is saved in memory. When the power recovers, the washer will resume into the previously active cycle if so programmed by the owner.

The owner may program a special feature called POWER FAIL RESET which sets a maximum power failure duration. To program this feature, refer to ***Programming Control, option 30***.

If the length of the power failure is greater than the POWER FAIL RESET time, the control will end the cycle and the display will revert back to the ready mode. On drain pump models, if the wash basket is full of water, the control will move to a Delicate final high speed spin and prompt the user to press the START (enter) pad. Once the START (enter) pad is pressed, the control will spin out the cycle.

Communications

The control may be programmed manually, by infra-red communication with an external device or by the network. A limited number of features can be programmed by a card reader.

Infra-red Communications (Optional)

An external device, such as a PDA, allows the owner to program and retrieve information from the control without touching the keypad. An external device greatly expands the programming options available to the owner. However, it is not required to program and operate the washer. The operation of an external device and the advanced features available are covered separately in the instructions included with the external device software. Contact Alliance Laundry Systems for a list of approved PDAs and other external devices.

Serial Card Reader Communications (Card Models Only)

The control will accept communication with a serial card reader in order to perform vending transactions when a card is inserted to pay for cycles. The card reader can also allow the owner to program a limited number of features and collect audit information.

For detailed information on the serial card reader communications, refer to instructions included with the card reader.

Network Communications





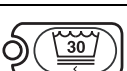

The control will also accept communication with a network interface board which allows the control to be linked to a personal computer. This network link allows an owner to program, collect data, and run diagnostics on any machine.

For detailed information on network communications, refer to the network instructions.

Control Identification

Select Cycle Pads

SELECT CYCLE pads are used to select the specific washer cycle. These pads include NORMAL 90, NORMAL 60, NORMAL 40, PERM PRESS 60, DELICATES 30 and DELICATES COLD. These pads allow the user to select a cycle other than the default cycle (PERM PRESS 60). The SELECT CYCLE keypads are not active after the first fill step of the cycle. The selected cycle is indicated by the light (LED) on the pad. Pressing the flashing START pad will confirm the selection and the cycle will begin. When the card reader is used, pressing the START pad will start the cycle and deduct the vend price from the card.

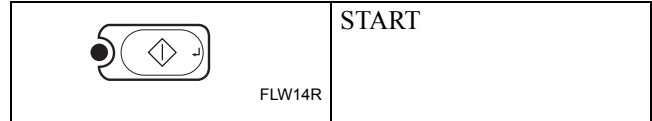
 FLW21R	NORMAL 90
 FLW22R	NORMAL 60
 FLW23R	NORMAL 40
 FLW24R	PERM PRESS 60
 FLW25R	DELICATES 30
 FLW26R	DELICATES COLD (temperature of water from tap)

NOTE: The number on each keypad corresponds to the wash temperature in °C.

The SELECT CYCLE pads are used in various combinations for programming cycles, retrieving audit information, running diagnostic tests, and other operations. These instructions cover the manual programming and data retrieval options.

START Keypad

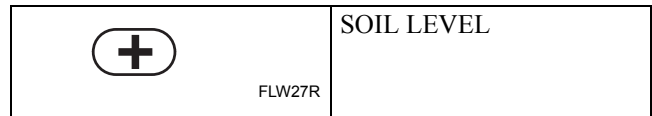
The START keypad is used to start the washer after the full vend price has been satisfied.



Soil Level Pad

The SOIL LEVEL pad is used to select cycle modifier options. Option A is the default and indicates no cycle modifiers are active. Options B and C can be programmed to offer extra features for an added vend price. Features available include an added prewash, extra wash time, an added extra rinse, and a warm rinse temperature.

For details on programming the Soil Level option, refer to *Programming Control*.



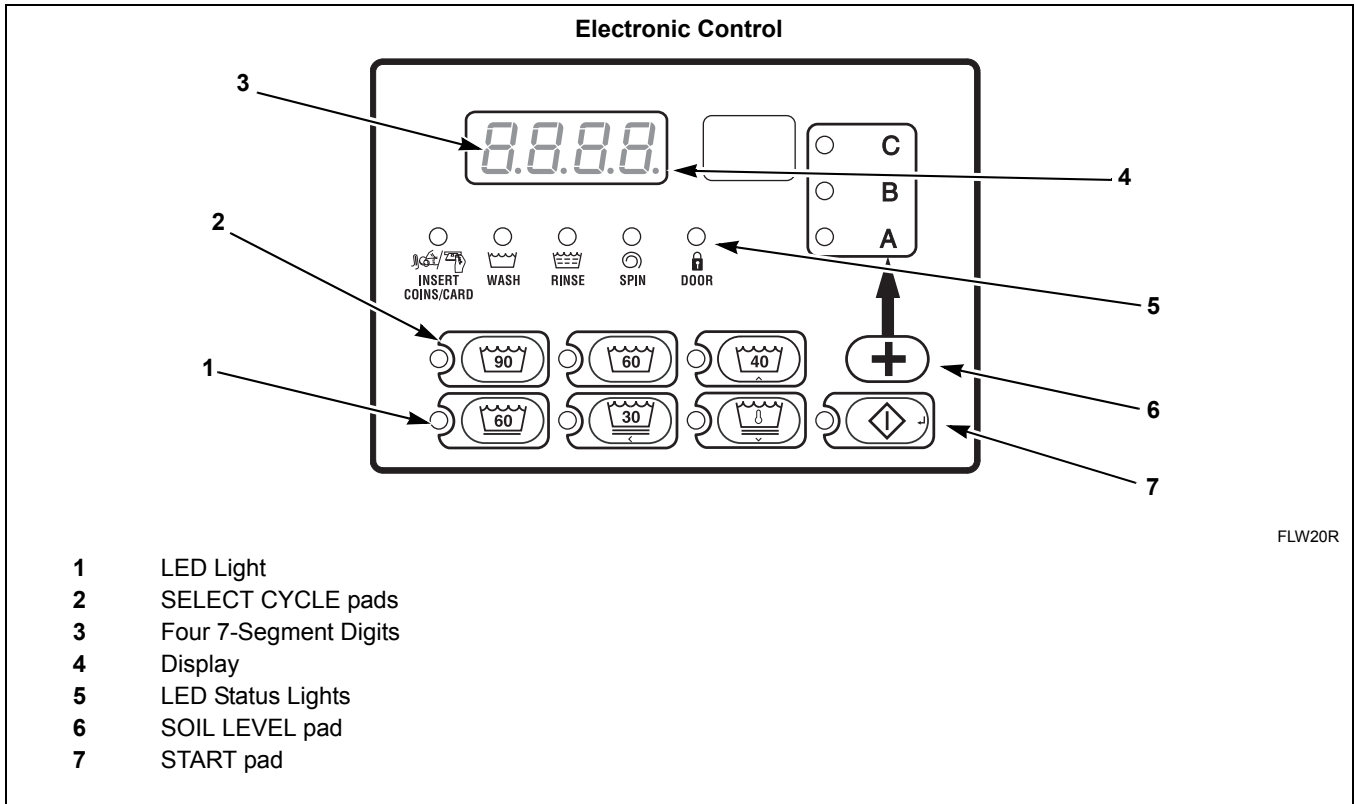


Figure 1

Display Identification

Light Emitting Diodes (LEDs)

(Refer to *Figure 1*.)

LIGHT EMITTING DIODES (LEDs) are used to indicate the chosen cycle, wash temperature, cycle status and door lock information. See below for information on each LED.

CYCLE LED

CYCLE LED will remain lit the entire cycle.

WASH LED

WASH LED is lit at the beginning of a wash portion of the cycle and will remain lit until the wash is complete.

RINSE LED

RINSE LED is lit at the beginning of a rinse portion of the cycle and will remain lit until the rinse is complete.

SPIN LED

SPIN LED is lit during the Final Spin portion of the cycle.

INSERT COINS/CARD LED

INSERT COINS/CARD LED prompts the user for coins or a card to satisfy the vend price. Four digits show the vend price remaining to be satisfied. The vend price displayed will decrease with each coin inserted. If new options are selected during the first fill step of the wash cycle and it requires additional vend, the *INSERT COINS/CARD* light will flash one (1) second on and one (1) second off, and the display will show the vend price remaining to be satisfied.

DOOR LED

DOOR LED is lit whenever the door is locked. The door can't be opened when this LED is lit.

A LED

A LED is lit when the Option A soil level is selected.

B LED

B LED is lit when the Option B soil level is selected.

C LED

C LED is lit when the Option C soil level is selected.

Four 7-Segment Digits

The 7-SEGMENT DIGITS are used to display the time remaining in a cycle, vend price, error messages and descriptive codes. During diagnostic testing or manual programming of the control, these digits will display descriptive codes and values (as described in *Entering the Manual Mode*).

Washer Operation

Start Up

When power is applied to the washer, the control will display its software version as “S XX” (“XX” is the version number) for one (1) second. If the control was not powered down during a running cycle, it will enter the Ready Mode.

Ready Mode

In this mode of operation, the display shows the current selected cycle, temperature and soil level, and the full current vend price for that cycle. The *INSERT COINS/CARD* LED is lit.

To start the cycle, the user must satisfy the vend price and then press the START keypad.

The user will be able to select a different cycle/wash water temperature or soil level by pressing a cycle pad when the machine is in the ready mode or in the first fill step.

Partial Vend Mode

The control enters this mode when part of the vend price has been entered, but not enough vend is entered to satisfy the vend price. The control will display the remaining vend price needed to start the cycle and the *INSERT COINS/CARD* LED will be lit.

Additional Vend Mode

The control enters this mode if the first fill was interrupted to change a cycle/temperature or soil level that requires more money. If the vend price is not satisfied within one (1) minute, the washer control will go back to the first selection and the cycle will continue. After the first fill, all key presses will be ignored, allowing the washer to go through the complete cycle.

Start Mode

The control enters this mode when the full vend price is satisfied, the vend price is zero or the control is in OPL Mode. The START pad LED will flash one (1) second on and one (1) second off. If Start Mode is entered because the vend price is satisfied or the control is in OPL Mode, the display will show “PUSH” for one (1) second, “Strt” for one (1) second and the current cycle time for one (1) second. If Start Mode is entered because the vend price is zero (0), the display will show “FREE”. When first entering Start Mode, a signal will sound for one (1) second on and one (1) second off for 10 seconds if signal for Start is enabled.

After pressing the START keypad, the door will lock and the cycle will begin.

End of Cycle Mode

When a cycle is complete, the control will display “00” until the washer door is opened, a key is pressed, or a coin/card is entered. When one of these three options occurs, the display will revert back to the ready mode.

Cycle Sequence

Upon the start of a cycle, the control will display the total cycle time. The appropriate LEDs will light while the machine passes through different cycle steps. Any coin entered after the first fill cycle will be added to the total coin counter, but the user will not be able to change cycles.

Closing Washer Door

If the door is not closed when the vend price is satisfied, “door” will be displayed until the door is closed. Once door is closed, the START pad must be pressed to lock door and start the cycle. If the door does not lock within 15 seconds of being closed, “E dL” will be displayed, indicating a door lock error, while the door continues to try to lock.

If the door locks after 15 seconds, the door lock error will clear and the cycle will continue normally.

Washer Operation

Signals

There are five options when a signal can be used during the washer operation. These five options are listed below:

1. **End of Cycle Signal**
By default, this signal is turned off. If turned on, the signal sounds for three (3) seconds at the end of a cycle.
2. **Signal On Keypad Depression**
By default, this signal is turned on and sounds for a quarter of a second each time a keypad is pressed.
3. **Signal On Coin Input/Card Insertion**
By default, this signal is turned on and will sound for a quarter of a second each time a coin or card is entered.
4. **Signal for Card Removal (Card Models Only)**
By default, this signal is turned on and will sound one (1) second on and one (1) second off when the control is prompting for card removal.
5. **Signal for Start**
By default, this signal is turned on and will sound one (1) second on and one (1) second off for 10 seconds after vend price has been satisfied.

NOTE: Refer to *Programming Control* to program signal options.

Changing Cycles

Cycles can be changed anytime during the first fill step. After the first fill step, all key presses are ignored.

Selecting a higher priced cycle/wash temperature or soil level will pause the first fill step, and *INSERT COINS/CARD* will flash one (1) second on and one (1) second off until the vend price has been satisfied. After the vend price has been satisfied, the cycle will continue with the new selections. If the vend price is not satisfied within one (1) minute, the washer control will go back to the previously set cycle/wash temperature and soil level.

Special Features

Programming Control

The control allows the washer owner to program the control with the use of the keypad. Cycle and vend options may be programmed, audit information may be viewed and diagnostic tests may be run by pressing combinations of the Select Cycle pads.

For details on programming cycle and vend options, refer to *Programming Control*.

Collecting Audit Information

The control stores audit information in its memory that can be retrieved by pressing various combinations of Select Cycle pads. The control will record coins entered, total machine cycles, and total start pulses.

For more information on the audit features, refer to *Collecting Audit Information*.

NOTE: Additional audit information is retrievable with an external device, the card reader and the network. Refer to the appropriate instruction manual.

Testing Machine and Control Functions

Special diagnostic features built into the control allow the owner to run specific diagnostic tests. By opening and closing the service door and then pressing various sequences of Select Cycle pads, the owner may perform the following tests:

- Control Software Version Number
- Service Door Opening Test
- Coin Vault Opening Test
- Coin Drop #1 Input Test
- Coin Drop #2 Input Test
- Door Switch Input Test
- Door Lock Switch Input Test
- Pump/Gravity Drain Test
- Show Fill Time Test
- Temperature Sensor Display Test
- Start Pulse Test
- Configuration #1 Display Test
- Configuration #2 Display Test

For detailed information on running diagnostic tests, refer to *Testing Machine and Control Functions*.

Rapid Advance Feature

This feature allows the user to quickly advance through active cycles or advance into a cycle from the ready mode. This feature is useful when tests must be performed immediately on a washer currently in an active cycle. In this case, the user can quickly advance through the cycles to the ready mode. At this point, the user can perform the required tests and then return the washer to the point it was interrupted.

For detailed information on using the Rapid Advance feature, refer to *Rapid Advance Feature*.

Clearing the Vend Feature

This feature allows the user to return the control back to the ready mode if coins have been entered but the full vend price has not yet been satisfied.

For more information on using the Clear Vend feature, refer to *Clear Vend Feature*.

Communications Mode

This feature allows the washer control to communicate with an external device, the card reader, or the network. This allows the washer control to be programmed and have its data read without using the keypad.

For more detailed information on using the Communications Mode feature, refer to *Communications Mode*.

Coin Drop

The control will accept pulses from a single or dual coin drop to satisfy vend price. Each coin drop will have the ability to start a cycle.

Start Pulse Operation

The control will accept pulses from optional payment systems. The machine can be programmed to receive a single start pulse or multiple start pulses, or the Start Pulse Option can be turned off. The Start Pulse Mode allows the machine to go from the Ready Mode to the Start Mode after a single pulse or multiple pulses are received.

Special Features

Service Door and Coin Vault Openings

The control will capture the times and dates of the openings of the Coin Vault and the Service Door. The information is saved in memory. An open service door combined with various keypad presses allows the control to enter manual modes of operation if the Break-In Alarm is not on. These modes include Manual Programming, Audit Collection and Diagnostics.

Break-In Alarm

This feature allows the owner to program the machine to signal a network alarm, cause a machine alarm or shut down the machine if the service door or coin vault is opened without disabling the alarm first. The date and time of the break-in is recorded. To avoid the alarm during coin collections, the alarm must be turned off or temporarily disabled by pressing the two programmed keys.

The alarm is turned off by default. The alarm can be turned on by programming the control with an external device or network.

Special Vend

This feature allows the owner to program the control to allow programmable vend prices for specific hours and dates.

For details on programming Special Vend, refer to *Programming Control*.

OPL Mode

This feature allows the user to start a cycle without satisfying the vend price.

For details on enabling OPL Mode, refer to *Programming Control*.

Drop-Off Mode

This feature allows the owner to limit machine use to an attendant without requiring vend. Starting the machine will require the correct sequence of four keypad presses as programmed by an external device, card reader or network.

For details on enabling Drop-Off Mode, refer to *Programming Control*.

Low Power/Auto-Shutdown Option

This feature allows the owner to program the control to shut down or enter a low power consumption mode based on programmable times and dates if either of these options are enabled.

For details on programming the Low Power/Auto-Shutdown option, refer to *Programming Control*.

Temperature Display

This feature allows the owner to view the water temperature on the display by pressing the keypad of the active cycle during the fill or agitate step of the cycle.

The temperature display is turned off by default. The feature can be turned on by programming the control with an external device or network.

Opening the Service Door

Coin and Card Reader Units

Manual programming requires the user to open and close the service door. Opening and closing the service door trips a switch allowing access to various programming options, diagnostics, and audit capabilities.

The service door is located in the control panel. Refer to *Figure 2*.

After opening and closing the service door, the programmer has 4.25 minutes to begin programming. If a keypad has not been pressed in that time, the control will revert back to the Ready Mode. Refer to *Figure 2*.

NOTE: If the Break-In Alarm option is enabled, it must be turned off or disabled by pressing the two programmed keys before opening service door. For more information on using the Break-In Alarm, refer to the external device or network software instructions.

Units Prepped for Central Pay System

Manual programming requires the user to remove the control panel and unplug the bullet connector located between the “white/black” and “red/blue” wires. This will allow the user to access various programming options, diagnostics, and audit capabilities. Refer to *Figure 2*.

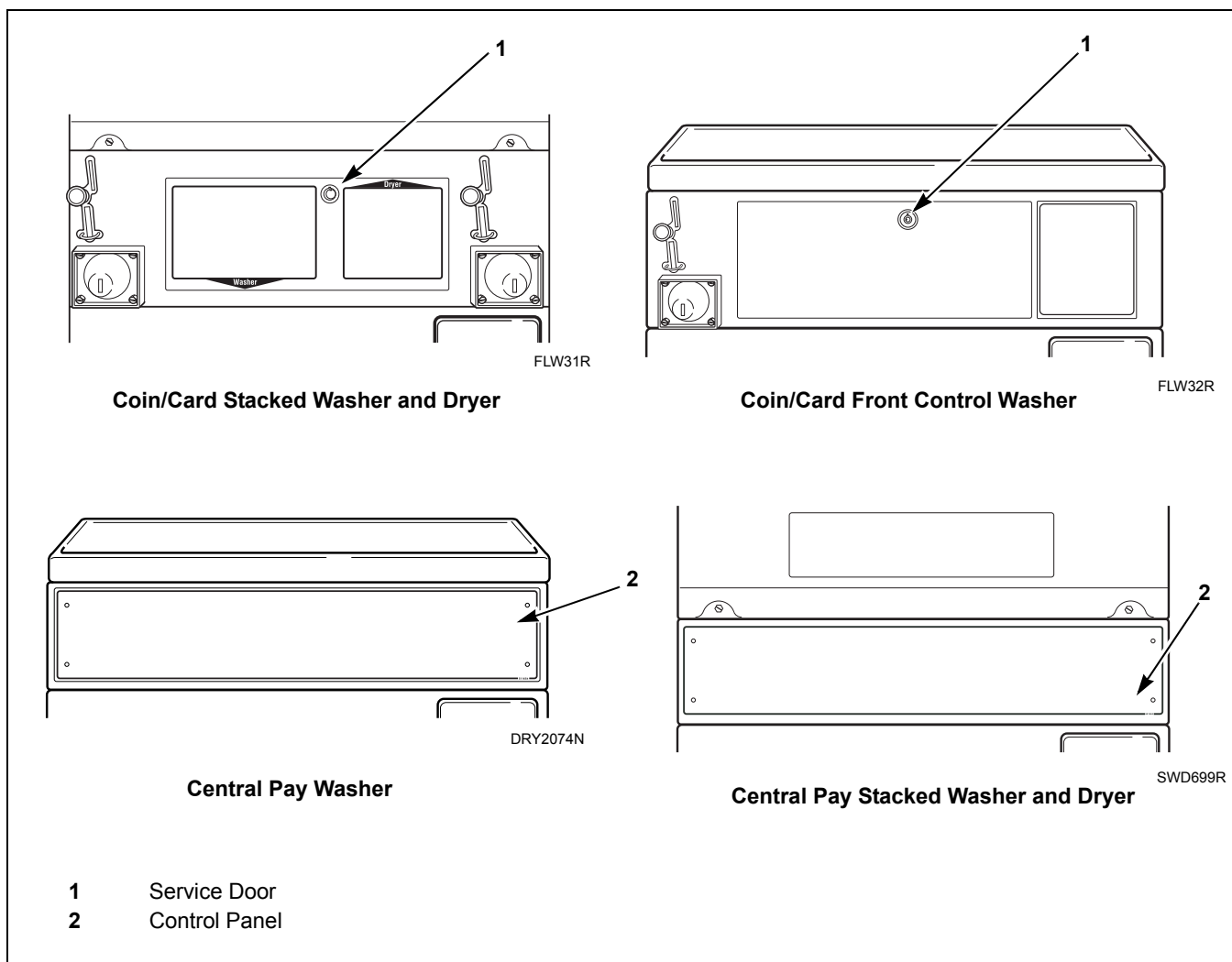


Figure 2

Entering the Manual Mode

For programming, testing, and retrieving information from the control, it is often necessary to enter the Manual Mode by following the four simple steps below. For an overview of entering the Manual Mode, refer to the flowchart on the following page.

How to Enter the Manual Mode

1. If accessing Diagnostic Tests, be sure the washer is in the Ready Mode before continuing to step 2. If the washer is in an active cycle, rapid advance through the cycle. Refer to the **Rapid Advance Feature**. If coins or a card has been entered, refer to **Clear Vend Feature**.
2. Open the service door. Refer to **Opening the Service Door**.

NOTE: The coin vault switch must be closed to enter Manual Mode.

3. While pressing and holding the NORMAL 90 keypad with one hand, press the PERM PRESS 60 keypad with the other hand.
4. The display will show “rAPd”.
5. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the options until the desired option appears in the display.
6. Press the START (enter) keypad.

NOTE: After entering Manual Mode, if no keypads are pressed for 4.25 minutes, the control will return to the previous mode of operation.

7. To exit, press the DELICATES 30 (<) keypad. The control will revert back to Ready Mode.

Manual Mode is broken into three groups: Manual Programming, Manual Rapid Advance and Manual Diagnostics. Manual Programming can only be turned on or off with an external device or the network. Refer to the appropriate instruction manual. Manual Rapid Advance and Manual Diagnostics can be turned on and off using an external device, by manual programming (refer to *options 32 and 33 of Programming Control*), or with the network.

By default, all groups are turned “on”.

The manual features available in each group are as follows (the menu shown on the display in this mode is in parentheses).

Manual Programming

Manual Programming (Prog)

Manual Read Audit (AUdt)

Manual Reset (rSEt)

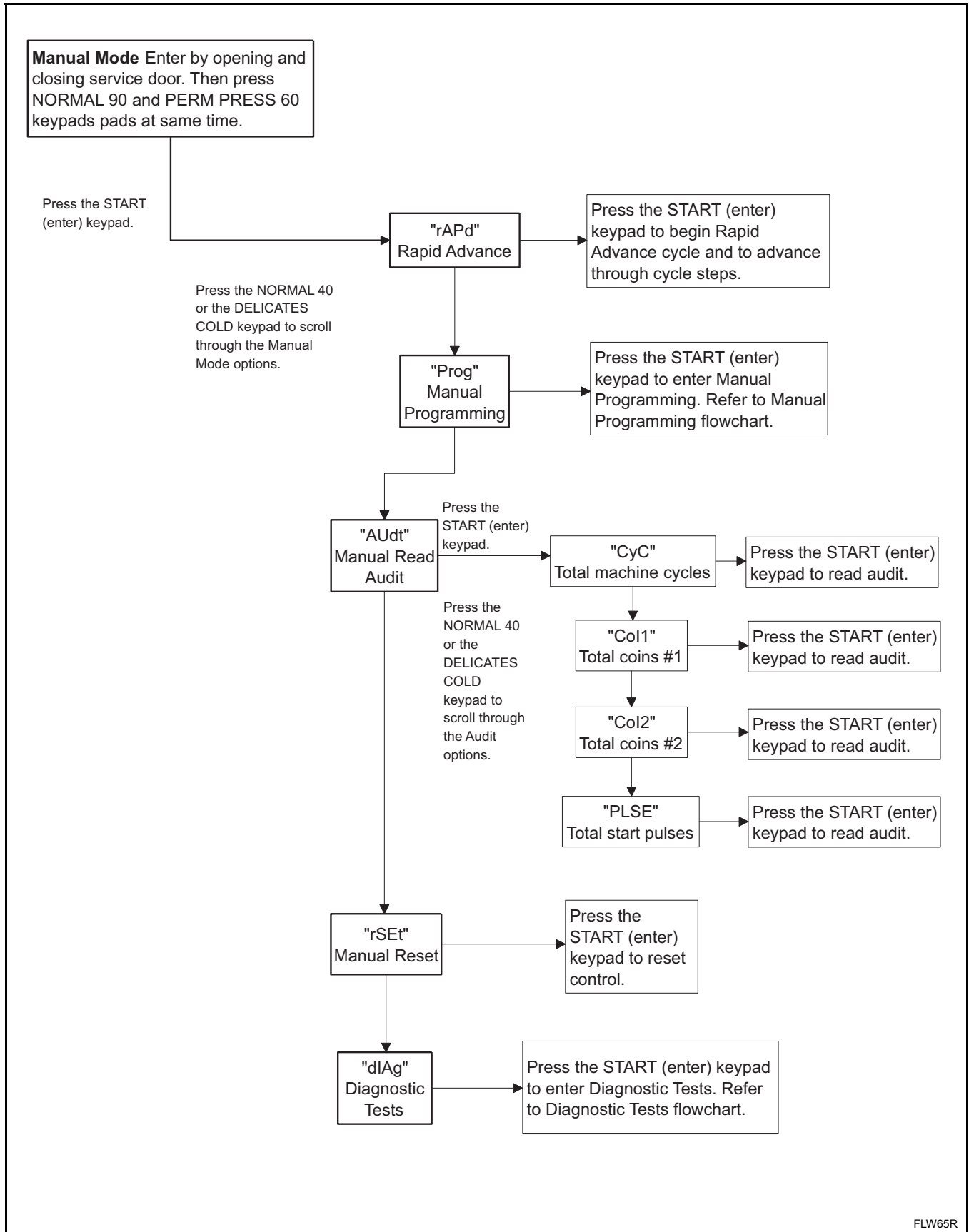
Manual Rapid Advance

Rapid Advance (rAPd)

Manual Diagnostics

Manual Diagnostic Tests (dIAG)

If a group is turned off, the display will change from the selected feature to “OFF” when the START (enter) pad is pressed. An audio signal will then sound for one (1) second and the display will return to the selected feature. The features in the group cannot be entered.



FLW65R

Figure 3

Programming Control

What Can Be Programmed?

This feature allows the owner to program cycle information, standard vend pricing, special vends and other features by using the keypads. The control must have the Manual Programming Mode enabled, which is the factory default. This mode can only be turned “OFF” and “ON” by using an external device or the network. Refer to this section when programming the control.

This section offers a detailed description of all 33 options available to program.

Each description includes instructions on when and why the option might be used and, more importantly, how to program the option.

For an overview of the programming organization, refer to the flowcharts on the following pages.

For more advanced users, a quick reference list of the options available through the programming mode is located on this page.

NOTE: The letters and numbers in the Option Display column of the Programmable Options List are what will be shown in the display when that option is selected.

Programmable Options Available

Option Number	Option Display	Description	Factory Default	Value Range
1	“AtS1”	Vend Price #1	200	0 - 65,535
2	“dEn1”	Coin #1 Value	25	1 - 65,535
3	“dEn2”	Coin #2 Value	100	1 - 65,535
4	“PLSE”	Start Pulse Value	25	1 - 65,535
5	“PLSn”	Start Pulse Mode	oFF	oFF, 128, 192
6	“AtyP”	Available Type	0	0 - 3
7	“dCYC”	Default Cycle	5	1 - 9
8	“oPL”	OPL Mode	oFF	on/oFF
9	“AUd”	Audio Signal	29	0 - 31
10	“CArd”	Card Reader Display Control	oFF	on/oFF
11	“Err”	Errors	—	—
a	“CErr”	Coin Error Parameters	—	—
1	“CEr1”	Coin Error	on	on/oFF
2	“CEr2”	Coin Error Penalty	oFF	on/oFF
3	“CEr3”	Coin Drops Header Present Error	on	on/oFF
b	“E FL”	Fill Error	on	on/oFF
c	“E Ub”	Unbalance Error	on	on/oFF
d	“E oP”	Open Thermistor Error	on	on/oFF
e	“E SH”	Shorted Thermistor Error	on	on/oFF
f	“E Ht”	Heater Error	on	on/oFF
12	“CyC-”	Cycle Programming	Refer to <i>option 12</i>	
13	“AtS2”	Vend Price #2	200	0 - 65,535
14	“AtS3”	Vend Price #3	200	0 - 65,535
15	“AtS4”	Vend Price #4	200	0 - 65,535
16	“AtS5”	Vend Price #5	200	0 - 65,535

(continued)

(continued)

Option Number	Option Display	Description	Factory Default	Value Range
17	“AtS6”	Vend Price #6	200	0 - 65,535
18	“rtC-”	Real Time Clock	—	—
a	“rtC1”	Set Real Time Clock Minutes	—	—
b	“rtC2”	Set Real Time Clock Hours	—	—
c	“rtC3”	Set Real Time Clock Day	—	—
d	“rtC4”	Set Real Time Clock Date	—	—
e	“rtC5”	Set Real Time Clock Month	—	—
f	“rtC6”	Set Real Time Clock Year	—	—
g	“rtC7”	Daylight Savings Option	on	on/oFF
19	“SPA-”	Special Vend A Data	—	—
a	“SA01”	Special Vend A Days Enable	0	Refer to <i>Table 10</i>
b	“SA02”	Special Vend A Start Hour	0	0 - 23
c	“SA03”	Special Vend A Start Minute	0	0 - 59
d	“SA04”	Special Vend A Length in Hours	0	0 - 24
e	“SA05”	Special Vend A Start Month	0	0 - 12
f	“SA06”	Special Vend A Start Date	0	0 - 31
g	“SA07”	Special Vend A Start Year	0	0 - 99
h	“SA08”	Special Vend A End Month	0	0 - 12
i	“SA09”	Special Vend A End Date	0	0 - 31
j	“SA10”	Special Vend A End Year	0	0 - 99
k	“SA11”	Special Vend A Price #1	0	0 - 65,535
l	“SA12”	Special Vend A Price #2	0	0 - 65,535
m	“SA13”	Special Vend A Price #3	0	0 - 65,535
n	“SA14”	Special Vend A Price #4	0	0 - 65,535
o	“SA15”	Special Vend A Price #5	0	0 - 65,535
p	“SA16”	Special Vend A Price #6	0	0 - 65,535
q	“SA20”	Special Vend A Added Wash #4 Fill/Agitate Time	0	0 - 15
r	“SA21”	Special Vend A Subtracted Wash #4 Fill/Agitate Time	0	0 - 15
20	“SPb-”	Special Vend B Days Enable (On/Off)	oFF	on/oFF
21	“SPC-”	Special Vend C Days Enable (On/Off)	oFF	on/oFF
22	“SPd-”	Special Vend D Days Enable (On/Off)	oFF	on/oFF
23	“CnP-”	Cycle Modifier Programming	—	—

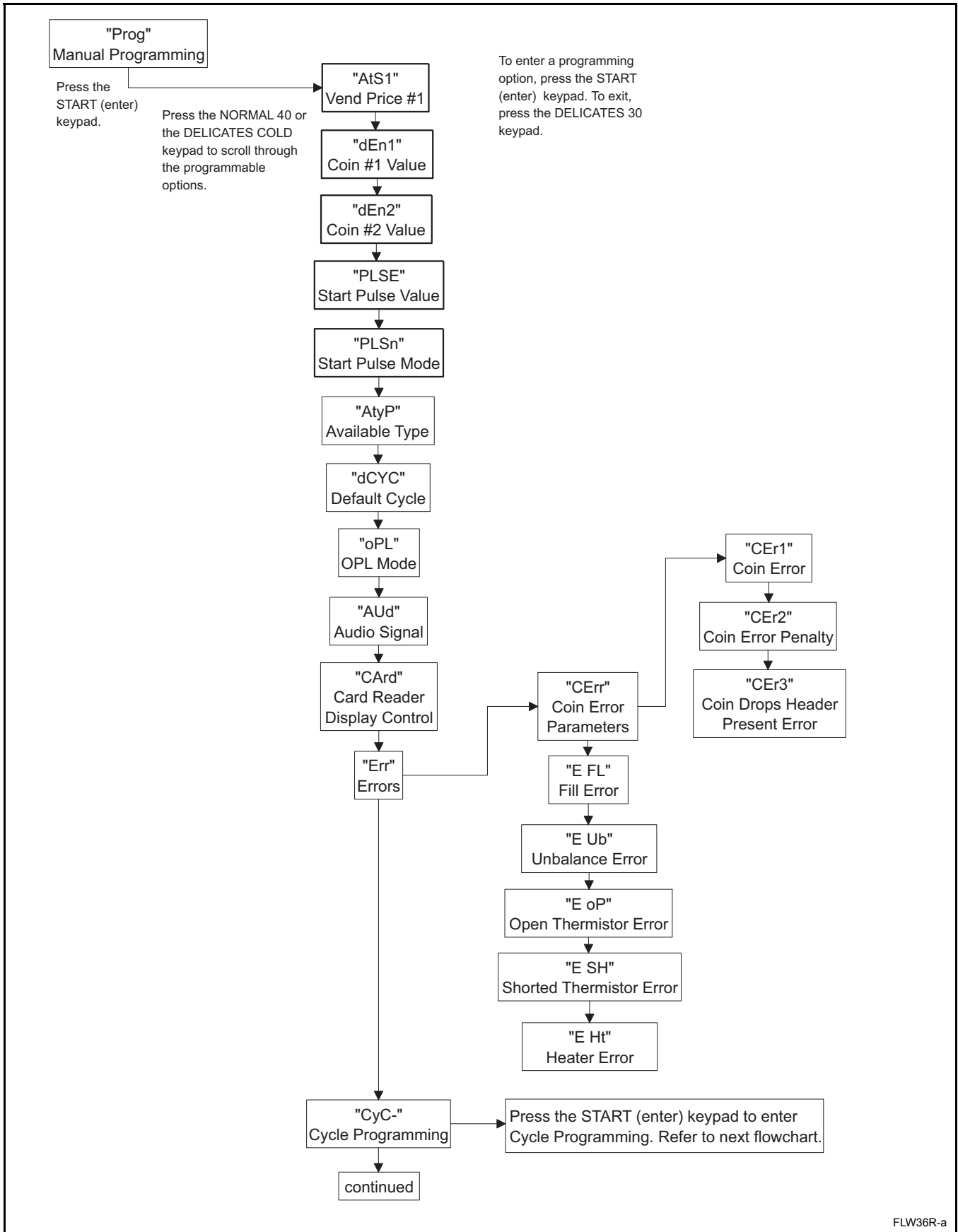
(continued)

Programming Control

(continued)

Option Number	Option Display	Description	Factory Default	Value Range
a	“CnP1”	Cycle Modifier B Price	25	0 - 65,535
b	“CnP2”	Cycle Modifier C Price	50	0 - 65,535
c	“CnP3”	Cycle Modifier B Option	2	0 - 15
d	“CnP4”	Cycle Modifier C Option	3	0 - 15
e	“CnP5”	Cycle Modifier Added Wash Time	2	0 - 15
*f	“CnP6”	Default Cycle Modifier	0	0 - 2
*24	“Pct-”	Cycle Time Display	—	—
*a	“PctE”	Cycle Time Display Enable	oFF	on/oFF
*b	“Pct1”	Cycle #1 Time	34	0 - 255
*c	“Pct2”	Cycle #2 Time	34	0 - 255
*d	“Pct3”	Cycle #3 Time	32	0 - 255
*e	“Pct4”	Cycle #4 Time	31	0 - 255
*f	“Pct5”	Cycle #5 Time	28	0 - 255
*g	“Pct6”	Cycle #6 Time	28	0 - 255
25	“droP”	Drop Off Mode (On/Off)	oFF	on/oFF
26	“LPSA”	Low Power/Auto Shutdown A Days Enable (On/Off)	oFF	on/oFF
27	“LPSb”	Low Power/Auto Shutdown B Days Enable (On/Off)	oFF	on/oFF
28	“LPSC”	Low Power/Auto Shutdown C Days Enable (On/Off)	oFF	on/oFF
29	“LPSd”	Low Power/Auto Shutdown D Days Enable (On/Off)	oFF	on/oFF
30	“PFr”	Power Fail Reset	oFF	oFF/133 - 255
31	“IrA”	IR Access (On/Off)	on	on/oFF
32	“rAEn”	Manual Rapid Advance (On/Off)	on	on/oFF
33	“dAEn”	Manual Diagnostics (On/Off)	on	on/oFF
34	“PtEn”	Production Test Cycle (On/Off)	on	on/oFF

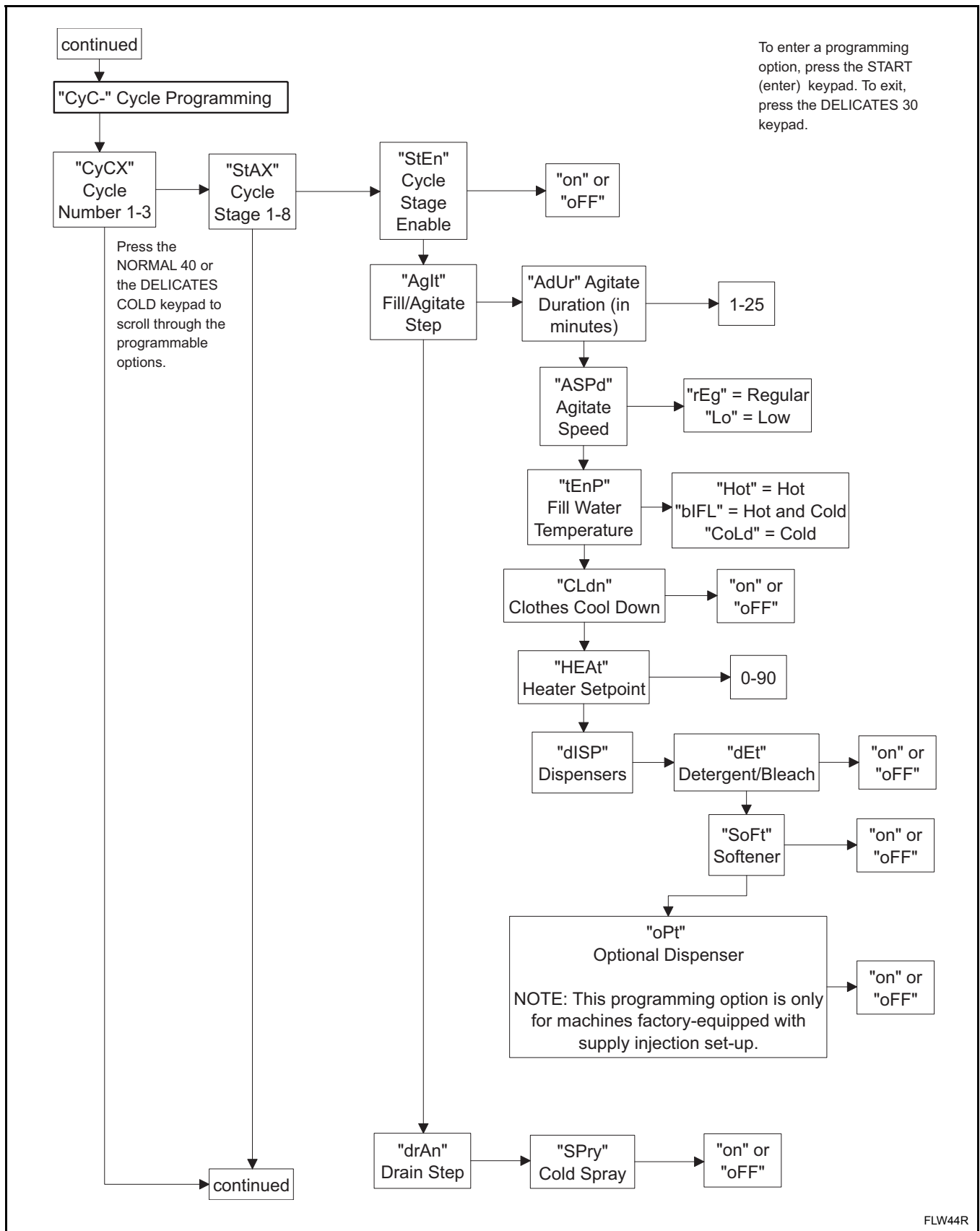
*This option available in software version “S 02” or higher only.



FLW36R-a

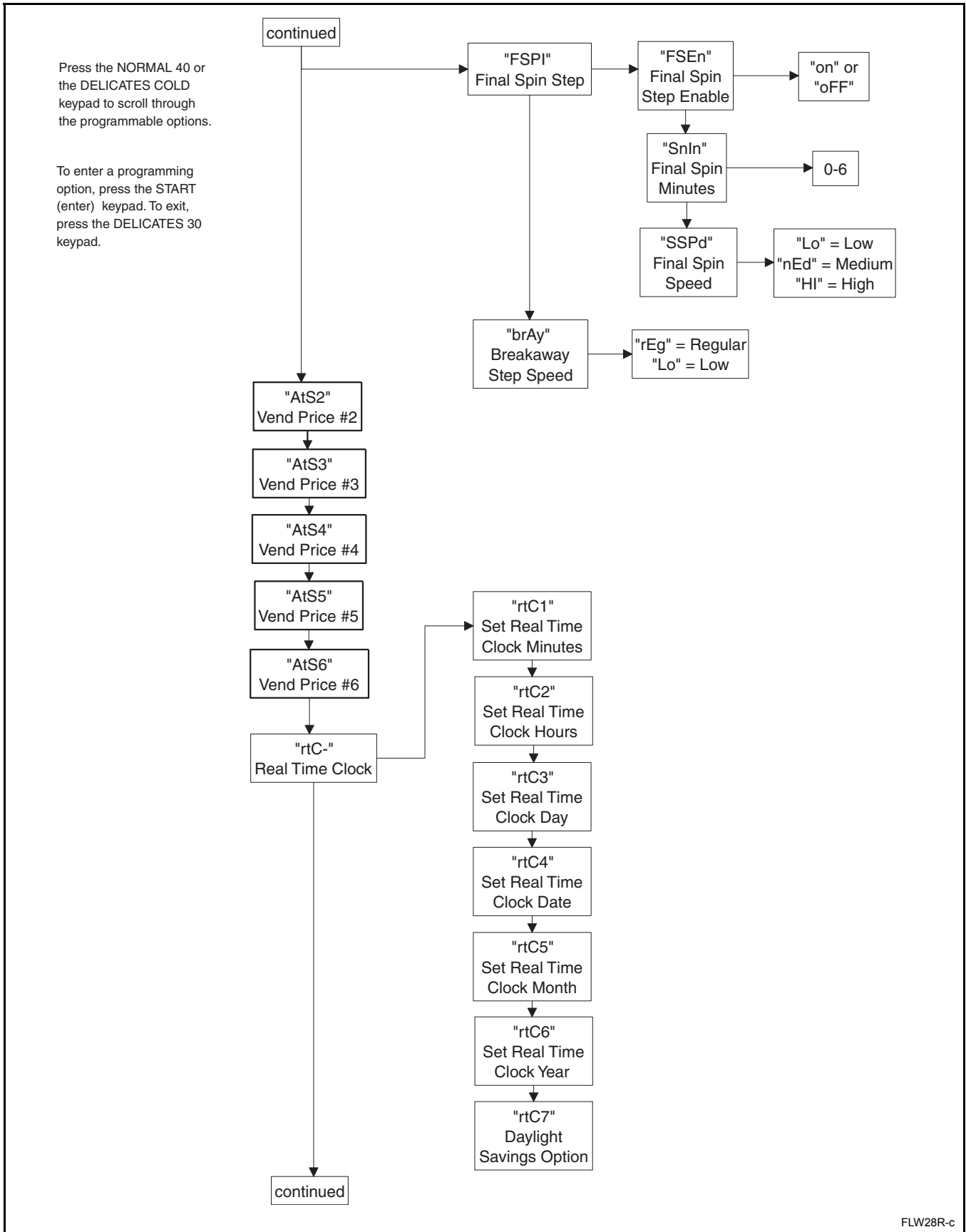
Figure 4

Programming Control



FLW44R

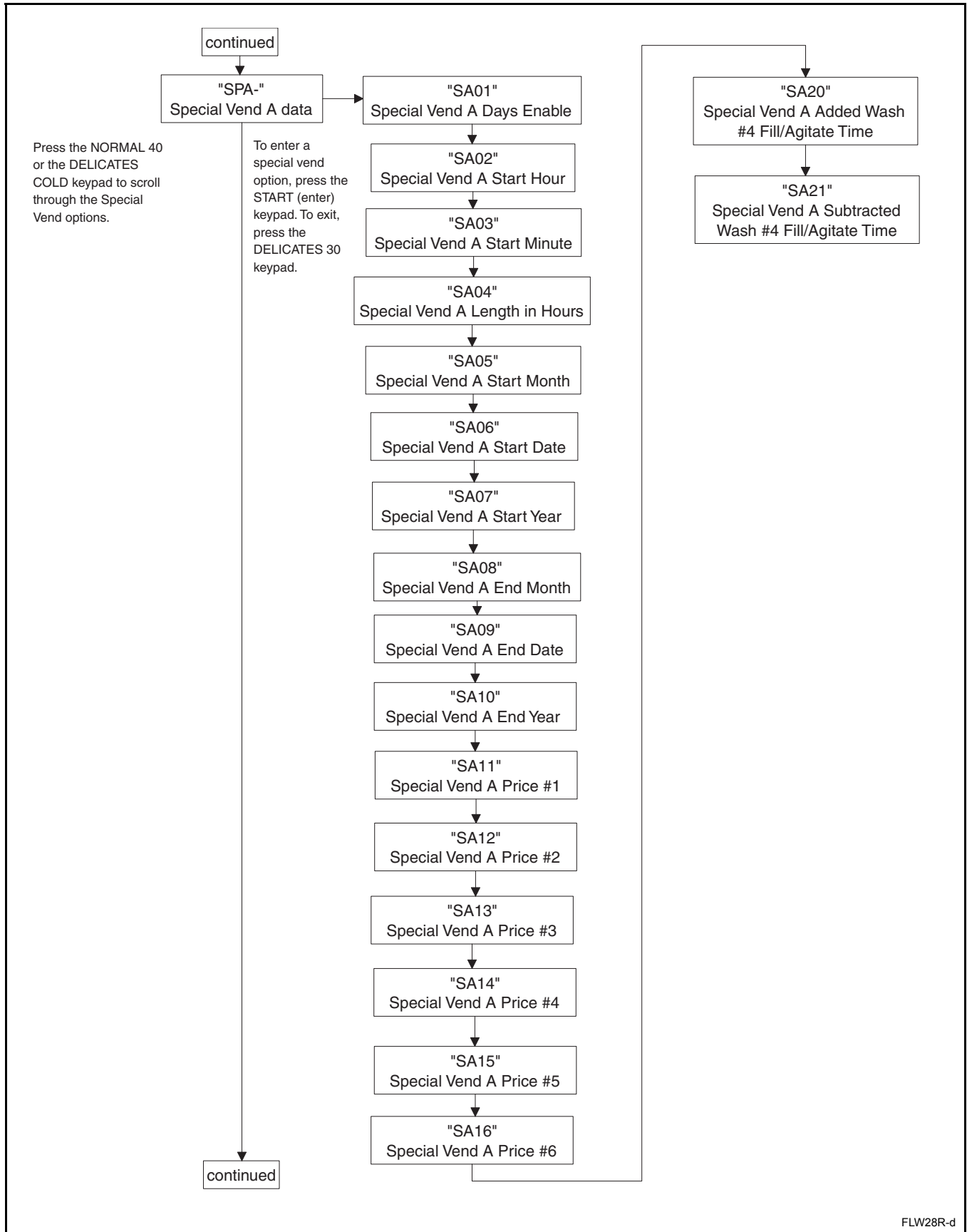
Figure 5



FLW28R-c

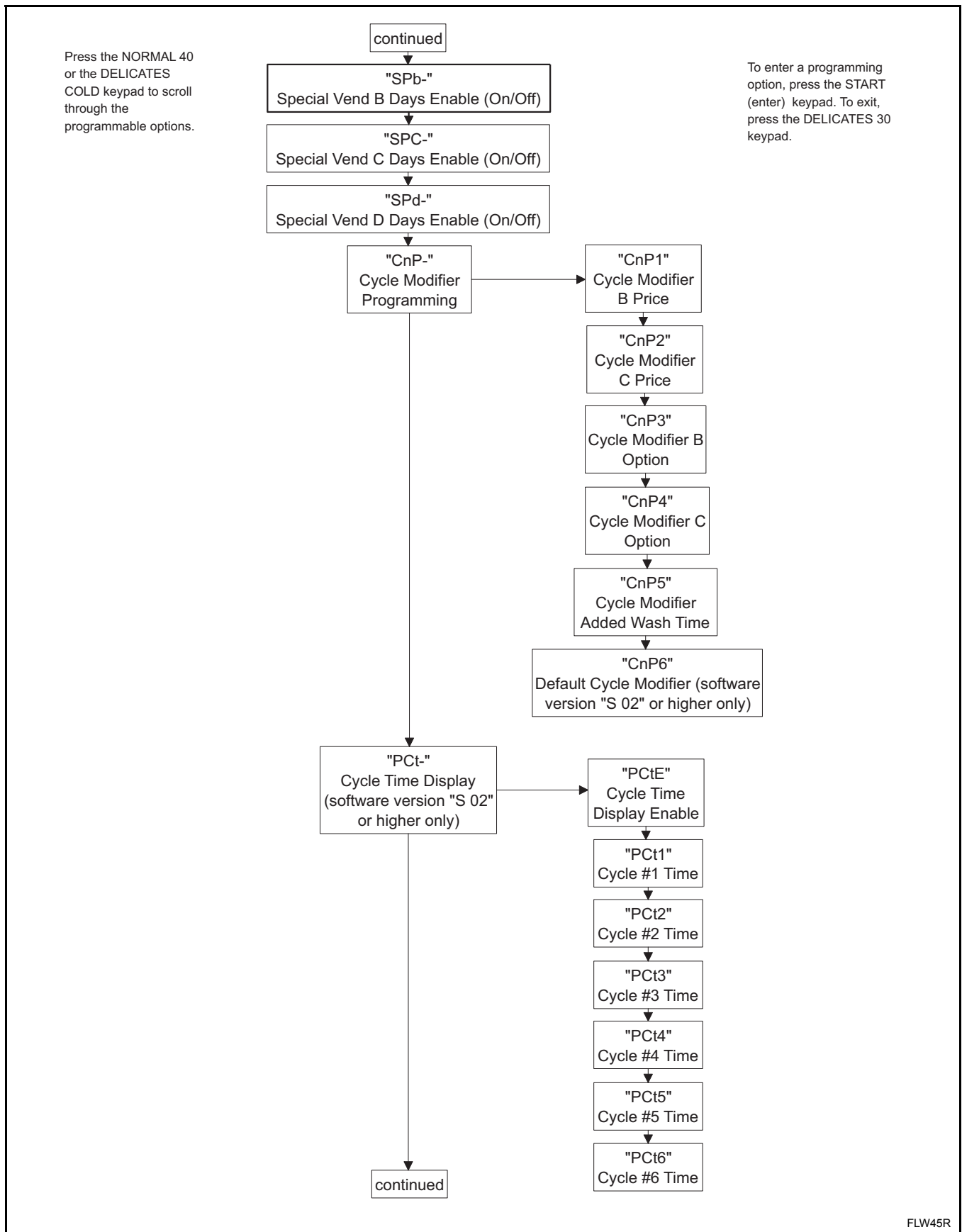
Figure 6

Programming Control



FLW28R-d

Figure 7



FLW45R

Figure 8

Programming Control

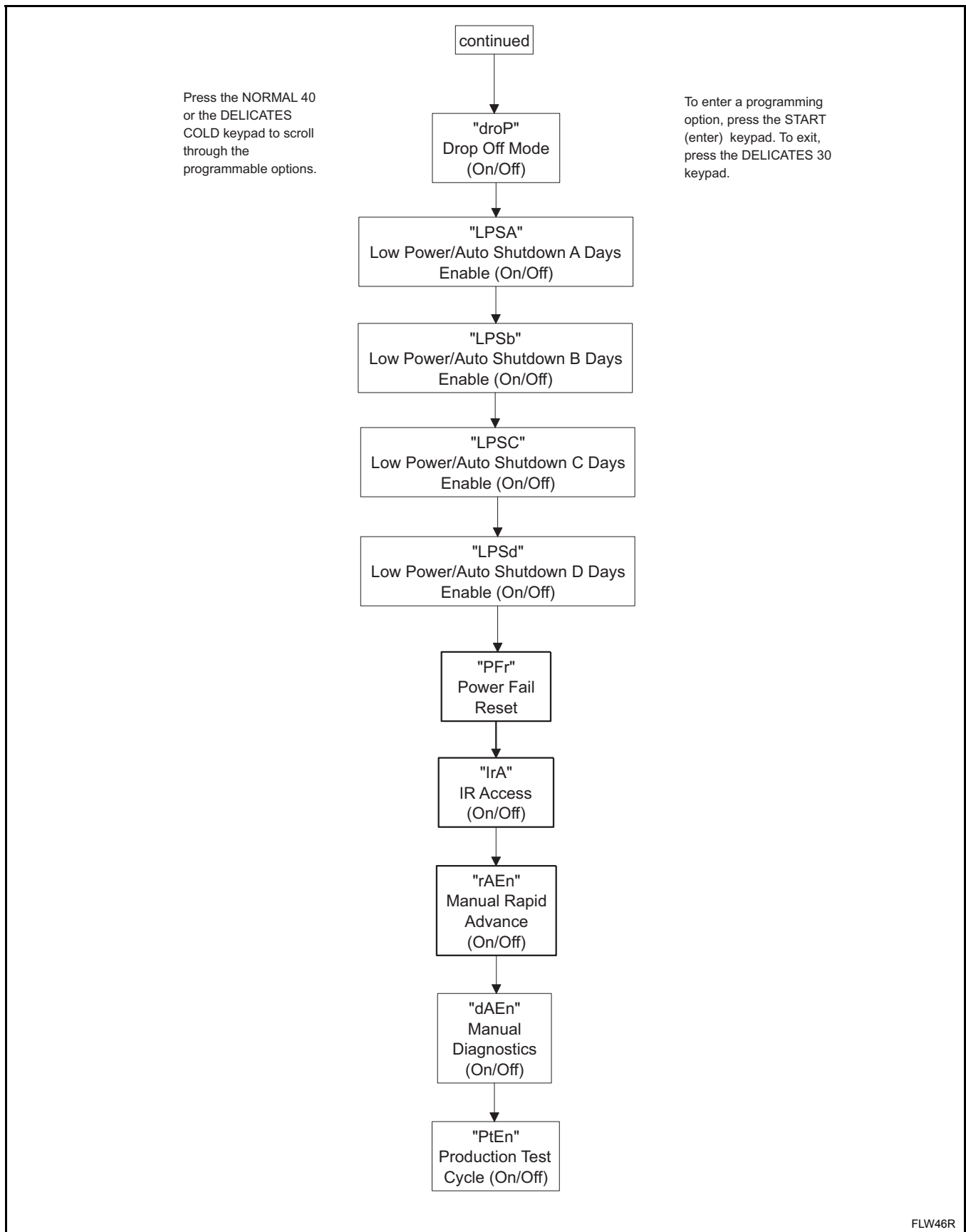


Figure 9

1. Vend Price #1 “AtS1”

This option allows the owner to set the vend price for a NORMAL 90 wash. This vend price will be shown in the display when NORMAL 90 is selected.

How to Program the Vend Price #1

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad until “Prog” appears in the display. Press the START (enter) keypad.
3. “AtS1” will appear in the display. Press the START (enter) keypad. The NORMAL 90 LED will be lit to show which cycle/temperature price is being programmed.
4. There are five digits in the Vend Price #1. The fifth digit will appear in the display and will flash one second on, one second off. Refer to *Figure 10*.

NOTE: If the vend price is 10000 or more, the fifth digit is “1-6”. If the vend price is 9999 or less, the fifth digit is “0”.



Figure 10

5. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the value of the fifth digit.

NOTE: The vend price can be set from 0 to 65,535. The factory default setting is 200.

6. Press the START (enter) keypad to enter the fifth digit and display remaining four digits. The active digit will flash one second on and one second off.

NOTE: To go back to the current programmable option without changing the value, press the DELICATES 30 (<) keypad.

7. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the value of the active digit and the START (enter) keypad to enter the value of the digit and advance to the next digit.
8. Press the START (enter) keypad with the last active digit. The next option, “dEn1”, will appear in the display.

NOTE: To program “dEn1” (Coin #1 Value), refer to *option 2*. To program other options, refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

Programming Control

2. Coin #1 Value “dEn1”

This option allows the owner to set a specific numerical value for a coin entered. For example, in the European Union the coin value for one euro would be measured in cents (100). Therefore, the coin value entered for one euro would be 00100.

If the Vend Price #1 (*option 1*) is set for “200”, and the Coin Value is set for “00100”, the vend price displayed will decrease by 100 for each one euro coin entered.

How to Program Coin #1 Value

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad until “Prog” appears in the display. Press the START (enter) keypad and “AtS1” will appear in the display.
3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable options until “dEn1” appears in the display.
4. When “dEn1” appears in the display, press the START (enter) keypad. There are five digits in the Coin #1 Value. The fifth digit will appear in the display and will flash one second on, one second off. Refer to *Figure 11*.

NOTE: If the vend price is 10000 or more, the fifth digit is “1-6”. If the vend price is 9999 or less, the fifth digit is “0”.

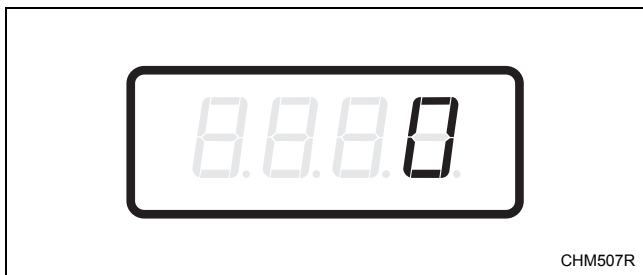


Figure 11

5. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the value of the fifth digit.

NOTE: The coin value can be set from 1 to 65,535. The factory default setting is 25.

6. Press the START (enter) keypad to enter the fifth digit and display remaining four digits. The active digit will flash one second on and one second off.

NOTE: To go back to the current programmable option without changing the value, press the DELICATES 30 (<) keypad.

7. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the value of the active digit and the START (enter) keypad to enter the value of the digit and advance to the next digit.
8. Press the START (enter) keypad with the last active digit. The next option, “dEn2”, will appear in the display.

NOTE: To program “dEn2” (Coin #2 Value), refer to *option 3*. To program other options, refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

3. Coin #2 Value “dEn2”

This option allows the owner to set a specific numerical value for a coin entered when using the dual coin drop. For example, the coin value for one euro coin would be measured in cents (100). Therefore, the coin value entered for one euro coin would be 00100.

If the Vend Price #1 (*option 1*) is set for “200”, and the Coin Value is set for “00100”, the vend price displayed will decrease by 100 for each one euro coin entered.

How to Program Coin #2 Value

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad until “Prog” appears in the display. Press the START (enter) keypad and “AtS1” will appear in the display.
3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable options until “dEn2” appears in the display.
4. When “dEn2” appears in the display, press the START (enter) keypad. There are five digits in the Coin #2 Value. The fifth digit will appear in the display and will flash one second on and one second off. Refer to *Figure 12*.

NOTE: If the coin value is 10000 or more, the fifth digit is “1-6”. If the coin value is 9999 or less, the fifth digit is “0”.

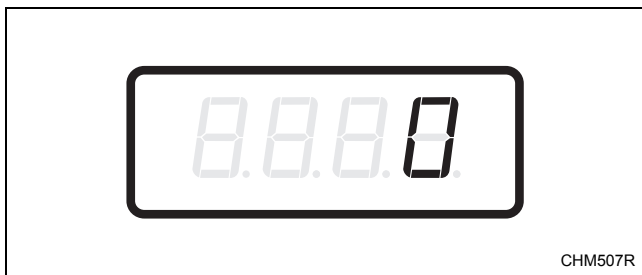


Figure 12

5. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the value of the fifth digit.

NOTE: The coin value can be set from 1 to 65,535. The factory default setting is 100.

6. Press the START (enter) keypad to enter the fifth digit and display remaining four digits. The active digit will flash one second on and one second off.

NOTE: To go back to the current programmable option without changing the value, press the DELICATES 30 (<) keypad.

7. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the value of the active digit and the START (enter) keypad to enter the value of the digit and advance to the next digit.
8. Press the START (enter) keypad with the last active digit. The next option, “PLSE”, will appear in the display.

NOTE: To program “PLSE” (Start Pulse Value), refer to *option 4*. To program other options, refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

Programming Control

4. Start Pulse Value “PLSE”

This option allows the owner to program the value of the Start Pulse if used for multiple pulses with an after-market central card reader or pay system. Refer to *option 5* for additional information.

How to Program Start Pulse Value

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad until “Prog” appears in the display. Press the START (enter) keypad and “AtS1” will appear in the display.
3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable options until “PLSE” appears in the display.
4. When “PLSE” appears in the display, press the START (enter) keypad. There are five digits in the Start Pulse Value. The fifth digit will appear in the display and will flash one second on and one second off. Refer to *Figure 13*.

NOTE: If the Start Pulse Value is 10000 or more, the fifth digit is “1-6”. If the Start Pulse Value is 9999 or less, the fifth digit is “0”.

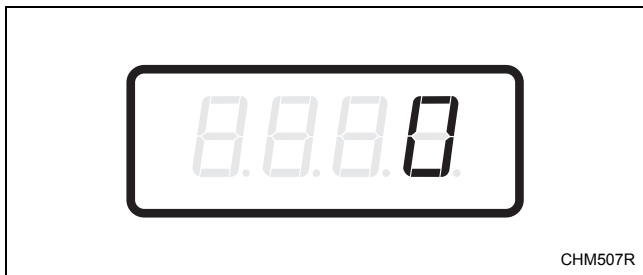


Figure 13

5. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the value of the fifth digit.

NOTE: The Start Pulse Value can be set from 1 to 65,535. The factory default setting is 25.

6. Press the START (enter) keypad to enter the fifth digit and display remaining four digits. The active digit will flash one second on and one second off.

NOTE: To go back to the current programmable option without changing the value, press the DELICATES 30 (<) keypad.

7. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the value of the active digit and the START (enter) keypad to enter the value of the digit and advance to the next digit.
8. Press the START (enter) keypad with the last active digit. The next option, “PLSn”, will appear in the display.

NOTE: To program “PLSn” (Start Pulse Mode), refer to *option 5*. To program other options, refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

5. Start Pulse Mode “PLSn”

This option allows the owner to program the Start Pulse Input. The Start Pulse Mode can be used for after-market central pay or card systems. The central system sends the start pulse to the Start Pulse Input of the control to start the cycle. If set for single pulse, one start pulse from the central system will start the cycle. If set for multiple pulses, each pulse will deduct from the vend price value set up in *option 4 (Start Pulse Value)* until the vend is satisfied.

How to Program Start Pulse Mode

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad until “Prog” appears in the display. Press the START (enter) keypad and “AtS1” will appear in the display.
3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable options until “PLSn” appears in the display.
4. When “PLSn” appears in the display, press the START (enter) keypad. “OFF” or a number will appear in the display. This number corresponds to the current Start Pulse Mode Programming Value.

5. Locate the desired number in the first column of *Table 1* below.

“PLSn”		
Start Pulse Mode Value	Start Pulse ON/OFF	Single Pulse/ Multiple Pulses
“OFF”*	OFF	OFF
128	ON	Single Pulse
192	ON	Multiple Pulses

*Factory default setting.

Table 1

6. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the current number until correct.

NOTE: To go back to the current programmable option without changing the current value, press the DELICATES 30 (<) keypad.

7. Press the START (enter) keypad when the correct number appears in the display. The next option, “AtyP”, will appear in the display.

NOTE: To program “AtyP” (Available Type), refer to *option 6*. To program other options, refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

6. Available Type “AtyP”

This option allows the owner to program when the control provides an available output for card and central pay systems.

How to Program Available Type

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad until “Prog” appears in the display. Press the START (enter) keypad and “AtS1” will appear in the display.
3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable options until “AtyP” appears in the display.
4. When “AtyP” appears in the display, press the START (enter) keypad. A number will appear in the display. This number corresponds to the current Available Type Value.

5. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the current number to the desired number selected from *Table 2*.

Available Type Value	Mode(s) in Which Available Signal is Active
0*	Ready Mode only
1	Ready Mode, Partial Vend Mode
2	Ready Mode, End of Cycle Mode
3	Ready Mode, End of Cycle Mode, Partial Vend Mode

*Factory default setting.

Table 2

6. Press the START (enter) keypad when the correct number appears in the display. The next option, “dCYC”, will appear in the display.

NOTE: To program “dCYC” (Default Cycle), refer to *option 7*. To program other options, refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

7. Default Cycle “dCYC”

This option allows the owner to set the default cycle that the machine will enter when in the Ready Mode. When programming the default cycle, refer to *Table 3*.

How to Program Default Cycle

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad until “Prog” appears in the display. Press the START (enter) keypad and “AtS1” will appear in the display.
3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable options until “dCYC” appears in the display.
4. When “dCYC” appears in the display, press the START (enter) keypad. A number will appear in the display. This number corresponds to the current default cycle value. Refer to *Table 3*. The cycle LED that corresponds to the selected cycle also will be lit.
5. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the current number to the desired number selected from *Table 3*.
6. Press the START (enter) keypad when the correct number appears in the display. The next option, “OPL”, will appear in the display.

NOTE: To program “OPL” (OPL Mode), refer to *option 8*. To program other options, refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

How to Read *Table 3*

To determine the correct number required to program Default Cycle, use the following table. The Default Value column contains the number required in step 5. The other column corresponds to Cycle Type.

The default cycle programmed at the factory is 4, PERM PRESS 60.

“dCYC”	
Default Value	Cycle Type
1	Normal 90
2	Normal 60
3	Normal 40
4*	Perm Press 60
5	Delicates 30
6	Delicates Cold

*Factory default setting.

Table 3

Programming Control

8. OPL Mode “oPL”

This option allows the owner to enable or disable the OPL Mode in which no vend price needs to be satisfied to operate the machine.

How to Program the OPL Mode

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad until “Prog” appears in the display. Press the START (enter) keypad and “AtS1” will appear in the display.
3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable options until “oPL” appears in the display.
4. When “oPL” appears in the display, press the START (enter) keypad. The current OPL Mode Enable/Disable status will appear in the display.
“on” = Option Enabled
“off” = Option Disabled (factory default setting)
5. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to change the current status.
6. Press the START (enter) keypad when the desired status appears in the display. The next option, “AUd”, will appear in the display.

NOTE: To program “AUd” (Audio Signal), refer to option 9. To program other options, refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

9. Audio Signal “AUd”

This option allows the owner to program when the audio signal will sound.

There are five occasions when a signal may sound during the washer operation. These five occasions are listed below:

1. **End of Cycle Signal**
By default, the signal is turned off. If turned on, the signal will sound for three seconds at the end of a cycle.
2. **Keypad Depression Signal**
By default, this signal is turned on and will sound for a quarter of a second. This signal will sound each time a keypad is pressed.
3. **Coin Input/Card Insertion Signal**
By default, this signal is turned on and will sound for a quarter of a second each time a coin or card is entered.
4. **Remove Card Signal (Card Models Only)**
By default, this signal is turned on and will sound one second on and one second off when the control is prompting for card removal.
5. **Signal for Start**
By default, this signal is turned on and will sound one second on and one second off for 10 seconds after vend price has been satisfied.

How to Program the Audio Signal

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad until “Prog” appears in the display. Press the START (enter) keypad and “AtS1” will appear in the display.
3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable options until “AUd” appears in the display.

4. When “AUd” appears in the display press the START (enter) keypad. A number will appear in the display. This number corresponds to the current Audio Signal Programming Value.
5. Locate the desired number in the first column of *Table 4* on the following page.
6. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the current number until correct.

For Example: A user might wish to have the signal sound only when a keypad is pressed. Entering the number “1” in step 5 would turn off all the options except KEYPAD. In this instance, the signal would sound only when a keypad is pressed.

7. Press the START (enter) keypad when the correct number appears in the display. The next option, “CArd”, will appear in the display.

NOTE: To program “CArd” (Card Reader Display Control), refer to *option 10*. To program other options, refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

Programming Control

How to Read *Table 4*

To determine the correct number required to program the Audio Signal, use the following chart. The Signal Value column contains the number required in step 6. The other columns correspond to individual options.

Each column of options contains a unique combination of the words “ON” and “OFF” that indicates if that column’s option is turned on or off when the Signal Value is entered. Select the desired combination of options and enter the number found in the Signal Value column.

The default cycle programmed at the factory is 29.

Signal Value	Start Mode	Remove Card	Coin/ Card Input	End of Cycle	Key Pressed
0	OFF	OFF	OFF	OFF	OFF
1	OFF	OFF	OFF	OFF	ON
2	OFF	OFF	OFF	ON	OFF
3	OFF	OFF	OFF	ON	ON
4	OFF	OFF	ON	OFF	OFF
5	OFF	OFF	ON	OFF	ON
6	OFF	OFF	ON	ON	OFF
7	OFF	OFF	ON	ON	ON
8	OFF	ON	OFF	OFF	OFF
9	OFF	ON	OFF	OFF	ON
10	OFF	ON	OFF	ON	OFF
11	OFF	ON	OFF	ON	ON
12	OFF	ON	ON	OFF	OFF
13	OFF	ON	ON	OFF	ON
14	OFF	ON	ON	ON	OFF
15	OFF	ON	ON	ON	ON
16	ON	OFF	OFF	OFF	OFF
17	ON	OFF	OFF	OFF	ON
18	ON	OFF	OFF	ON	OFF
19	ON	OFF	OFF	ON	ON
20	ON	OFF	ON	OFF	OFF
21	ON	OFF	ON	OFF	ON
22	ON	OFF	ON	ON	OFF
23	ON	OFF	ON	ON	ON
24	ON	ON	OFF	OFF	OFF
25	ON	ON	OFF	OFF	ON
26	ON	ON	OFF	ON	OFF
27	ON	ON	OFF	ON	ON
28	ON	ON	ON	OFF	OFF
29*	ON	ON	ON	OFF	ON
30	ON	ON	ON	ON	OFF
31	ON	ON	ON	ON	ON

*Factory default setting.

Table 4

10. Card Reader Display Control “CArd”

This option allows the owner to program whether the display is controlled by the machine’s electronic control or by the card reader.

NOTE: This feature does not need to be programmed manually. The card reader itself makes this determination.

How to Program the Card Reader Display Control

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad until “Prog” appears in the display. Press the START (enter) keypad and “AtS1” will appear in the display.
3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable options until “CArd” appears in the display.
4. When “CArd” appears in the display, press the START (enter) keypad. The current Card Reader Display Control Status will appear in the display.
 “on” = Card Reader controls display
 “oFF” = Machine Electronic Control controls display (factory default setting)

5. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to change the current status.
6. Press the START (enter) keypad when the desired status appears in the display. The next option, “Err”, will appear in the display.

NOTE: To program “Err” (Error Code Programming), refer to *option 11*. To program other options, refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

Programming Control

11. Error Code Programming “Err”

This option allows the owner to turn on or turn off certain errors in the control.

How to Program Error Code Programming

- Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
- Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad until “Prog” appears in the display. Press the START (enter) keypad and “AtS1” will appear in the display.
- Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable options until “Err” appears in the display.
- When “Err” appears in the display, press the START (enter) keypad. There are six programmable error code parameters. Refer to *Table 5*.

		Factory Default Setting
“CErr”	Coin Error Parameters	
“CEr1”	Coin Error - Determines if display will show error.	“on”
“CEr2”	Coin Error Penalty - If enabled, coin error will erase previous coins entered and reset the vend price.	“oFF”
“CEr3”	Coin Drops Header Present Error - If enabled and coin drop header is unplugged, control ignores coin inputs.	“on”
“E FL”	Fill Error	“on”
“E ub”	Unbalance Error	“on”
“E oP”	Open Thermistor Error	“on”
“E SH”	Shorted Thermistor Error	“on”
“E Ht”	Heater Error	“on”

Table 5

- Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to select error code.
- Press the START (enter) keypad when the correct code appears in the display. The current status will appear in the display.

NOTE: Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad and then the START (enter) keypad again to choose a specific coin error parameter. Refer to *Table 5*.

- “oFF” indicates the option is disabled. “on” indicates the option is enabled. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to change the status.
- Press the START (enter) keypad when the correct status appears in the display. The next Error Code Programming option will appear in the display.

NOTE: To program “CyC-” (Cycle Programming), press the DELICATES 30 (<) keypad and refer to *option 12*. To program other options, refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

12. Cycle Programming “CyC-”

This option allows the owner to program different aspects for various steps in each type of cycle. There are six cycles available for programming.

For an overview of the cycle programming options, refer to *Table 6*.

“CyCX” Cycle Number 1-6					
Cycle Stage	Step	Time	Speed	Dispensers	Temperature
1	Fill/Agitate	1-25	Regular or Low	on or off	0-90°C
	Cold Spray on or off				
2	Fill/Agitate	1-25	Regular or Low	on or off	0-90°C
	Cold Spray on or off				
3	Fill/Agitate	1-25	Regular or Low	on or off	0-90°C
	Cold Spray on or off				
4	Fill/Agitate	1-25	Regular or Low	on or off	0-90°C
	Cold Spray on or off				
5	Fill/Agitate	1-25	Regular or Low	on or off	0-90°C
	Cold Spray on or off				
6	Fill/Agitate	1-25	Regular or Low	on or off	0-90°C
	Cold Spray on or off				
7	Fill/Agitate	1-25	Regular or Low	on or off	0-90°C
	Cold Spray on or off				
8	Fill/Agitate	1-25	Regular or Low	on or off	0-90°C
	Cold Spray on or off				
Final Spin Step	on or off	0-6	Low, Medium or High		
Breakaway Step Speed			Regular or Low		

Table 6

Programming Control

How to Enter Cycle Programming

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad until “Prog” appears in the display. Press the START (enter) keypad and “AtS1” will appear in the display.
3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable options until “CyC-” appears in the display. Press the START (enter) keypad and “CyC1” will appear in the display.

NOTE: The LED light next to the select cycle keypad will be lit to indicate which cycle is being programmed.

4. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the six cycles to program. Press the START (enter) keypad when the desired cycle appears in the display.
5. The first Cycle Programming option, “StA1”, will appear in the display.

NOTE: To program “StA1” (Cycle Stage), continue to next option. To program other options, press the DELICATES 30 (<) keypad and refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

How to Program Cycle Stages “StAx”

There are eight programmable cycle stages. Within each stage, there are three programmable options.

1. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the eight programmable Cycle Stages until the desired stage appears in the display.
2. When the desired stage appears in the display, press the START (enter) keypad. “StEn” (Cycle Stage Enable) will appear in the display.
3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the Cycle Stage programmable options.

NOTE: If the Cycle Stage Enable is programmed “OFF”, the other Cycle Stage programming options can’t be accessed.

4. Press the START (enter) keypad when the desired Cycle Stage programmable option appears in the display.

Programming Cycle Stage Enable

1. When “StEn” appears in the display, press the START (enter) keypad. The current Cycle Stage Enable/Disable status will appear in the display.
“On” = Cycle Stage is enabled (factory default setting for stages 4, 6 and 8)
“OFF” = Cycle Stage is disabled (factory default setting for stages 1-3, 5 and 7)
2. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to change the current status.

NOTE: If the Cycle Stage enable is programmed “OFF”, the other Cycle Stage programming options can’t be accessed.

3. Press the START (enter) keypad when the desired status appears in the display. The next Cycle Stage option, “AgIt”, will appear in the display if option is enabled.

NOTE: To program “AgIt” (Fill/Agitate Step), continue to next Cycle Stage option. To program other options, press the DELICATES 30 (<) keypad and refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

Programming Fill/Agitate Step

1. When “Agt” appears in the display, press the START (enter) keypad. The first Fill/Agitate step programming option will appear in the display.
2. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable Fill/Agitate step options. Refer to *Table 7*.
3. Press the START (enter) keypad when the desired option appears in the display. The current status/value will appear in the display. Refer to *Table 7*.
4. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to change the current status/value.
5. Press the START (enter) keypad when the desired status/value appears in the display. The next Fill/Agitate step option will appear in the display.

NOTE: To program “drAn” (Drain Step), press the DELICATES 30 (<) keypad and continue to next Cycle Stage option. To program other options, press the DELICATES 30 (<) keypad and refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

Programming Drain Step

1. When “drAn” appears in the display, press the START (enter) keypad. “SPry” will appear in the display.
2. Press the START (enter) keypad.
3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to change the current status.
 “on” = Cold Spray is enabled (factory default setting for stage 4)
 “OFF” = Cold Spray is disabled (factory default setting for all other stages)
4. Press the START (enter) keypad when the desired status appears in the display.

NOTE: To program the next cycle Programming option “FSPI” (Final High Spin Step), press the DELICATES 30 (<) keypad twice and continue to next option. To program other options, refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

Programming Control

Fill/Agitate Step	Description	Status/Value	Factory Default Setting – Stage 4	Factory Default Setting – Stage 6	Factory Default Setting – Stage 8
“AdUr”	Agitate Duration (in minutes)	1-25	NORMAL 90, NORMAL 60 = 9 NORMAL 40 = 7 PERM PRESS 60 = 6 DELICATES 30, DELICATES COLD = 5	2	2
“ASPd”	Agitate Speed	“rEg” = regular speed “Lo” = low speed	NORMAL 90, NORMAL 60, NORMAL 40, PERM PRESS 60 = “rEg” DELICATES 30, DELICATES COLD = “Lo”	NORMAL 90, NORMAL 60, NORMAL 40, PERM PRESS 60 = “rEg” DELICATES 30 = “rEg” (software version “S 01”) “Lo” (software version “S 02” or higher) DELICATES COLD = “Lo”	NORMAL 90, NORMAL 60, NORMAL 40, PERM PRESS 60 = “rEg” DELICATES 30, DELICATES COLD = “Lo”
“tEnP”	Fill Water Temperature	“Hot” = hot fill “bIFL” = hot and cold fill “CoLd” = cold fill	NORMAL 90, NORMAL 60, PERM PRESS 60 = “Hot” NORMAL 40 = “bIFL” DELICATES 30, DELICATES COLD = “CoLd”	“CoLd”	“CoLd”
“CLdn”	Clothes Cool Down	“on”/“oFF”	NORMAL 90, NORMAL 60, PERM PRESS 60 = “on” NORMAL 40, DELICATES 30, DELICATES COLD = “oFF”	“oFF”	“oFF”
“HEAt”	Heater Setpoint	0 - 90 (degrees Celsius)	NORMAL 90 = 90 NORMAL 60, PERM PRESS 60 = 60 NORMAL 40 = 40 DELICATES 30 = 30 DELICATES COLD = 0	0	0
“diSP”	Dispensers	Press START (enter) to access options			
“dEt”	Detergent/ Bleach	“on”/“oFF”	“on”	“on”	“on”
“SoFt”	Softener	“on”/“oFF”	“oFF”	“oFF”	“on”
“oPt”	Optional Dispenser	“on”/“oFF”	“on”	“oFF”	“oFF”

NOTE: This programming option is only for machines factory- equipped with supply injection set-up.

Table 7

How to Program Final Spin Step “FSPI”

This option allows the owner to set the amount of time and speed for a final spin.

1. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable Cycle Programming options until “FSPI” appears in the display.
2. When “FSPI” appears in the display, press the START (enter) keypad. The first Final Spin Step option will appear in the display.
3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable options. Refer to *Table 8*.
4. Press the START (enter) keypad when the desired programmable option appears in the display. The current status/value will appear in the display. Refer to *Table 8*.
5. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to change the current status/value.
6. Press the START (enter) keypad when the desired status/value appears in the display. The next Final Spin Step option will appear in the display.

NOTE: To program “brAy” (Breakaway Step Speed), press the DELICATES 30 (<) keypad and continue to next Cycle Programming option. To program other options, press the DELICATES 30 (<) keypad and refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

Final Spin Step	Description	Status/ Value	Factory Default Setting
“FSEn”	Final Spin Step Enable	“on”/“oFF”	“on”
“SnIn”	Final Spin Minutes	1-6	NORMAL 90, NORMAL 60, NORMAL 40, PERM PRESS 60 = 6 DELICATES 30, DELICATES COLD = 4
“SSPd”	Final Spin Speed	“Lo” = Low Speed “nEd” = Medium Speed “HI” = High Speed	NORMAL 90, NORMAL 60 NORMAL 40 = “HI” PERM PRESS 60 = “nEd” DELICATES 30, DELICATES COLD = “Lo”

Table 8

Programming Control

How to Program Breakaway Step Speed “brAy”

This option allows the owner to set the breakaway speed.

1. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable Cycle Programming options until “brAy” appears in the display.
2. When “brAy” appears in the display, press the START (enter) keypad. The current Breakaway Step Speed will appear in the display.
“rEg” = Regular agitate speed (factory default setting for NORMAL 90, NORMAL 60, NORMAL 40, PERM PRESS 60)
“LO” = Low agitate speed (factory default setting for DELICATES 30, DELICATES COLD)

3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to change the current status.
4. Press the START (enter) keypad when the desired status appears in the display. The next Cycle Programming option, “StA1”, will appear in the display.

NOTE: To program another cycle, repeat Cycle Programming steps. To program other options, press the DELICATES 30 (<) keypad and refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

13. Vend Price #2 “AtS2”

This option allows the owner to set the vend price for a NORMAL 60 wash. This vend price will be shown in the display when NORMAL 60 is selected.

How to Program the Vend Price #2

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad until “Prog” appears in the display. Press the START (enter) keypad, and “AtS1” will appear in the display.
3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable options until “AtS2” appears in the display. The NORMAL 60 LED will be lit to show which cycle/temperature price is being programmed.
4. When “AtS2” appears in the display, press the START (enter) keypad. There are five digits in the Vend Price #2. The fifth digit will appear in the display and will flash one second on, one second off. Refer to *Figure 14*.

NOTE: If the vend price is 10000 or more, the fifth digit is “1-6”. If the vend price is 9999 or less, the fifth digit is “0”.

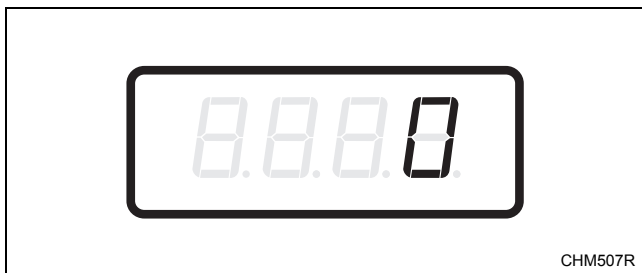


Figure 14

5. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the value of the fifth digit.

NOTE: The vend price can be set from 0 to 65,535. The factory default setting is 200.

6. Press the START (enter) keypad to enter the fifth digit and display remaining four digits. The active digit will flash one second on and one second off.

NOTE: To go back to the current programmable option without changing the value, press the DELICATES 30 (<) keypad.

7. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the value of the active digit and the START (enter) keypad to enter the value of the digit and advance to the next digit.
8. Press the START (enter) keypad with the last active digit. The next option, “AtS3”, will appear in the display.

NOTE: To program “AtS3” (Vend Price #3), refer to *option 14*. To program other options, refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

Programming Control

14. Vend Price #3 “AtS3”

This option allows the owner to set the vend price for a NORMAL 40 wash. This vend price will be shown in the display when NORMAL 40 is selected.

How to Program the Vend Price #3

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad until “Prog” appears in the display. Press the START (enter) keypad and “AtS1” will appear in the display.
3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable options until “AtS3” appears in the display. The NORMAL 40 LED will be lit to show which cycle/temperature price is being programmed.
4. When “AtS3” appears in the display, press the START (enter) keypad. There are five digits in the Vend Price #3. The fifth digit will appear in the display and will flash one second on, one second off. Refer to *Figure 15*.

NOTE: If the vend price is 10000 or more, the fifth digit is “1-6”. If the vend price is 9999 or less, the fifth digit is “0”.

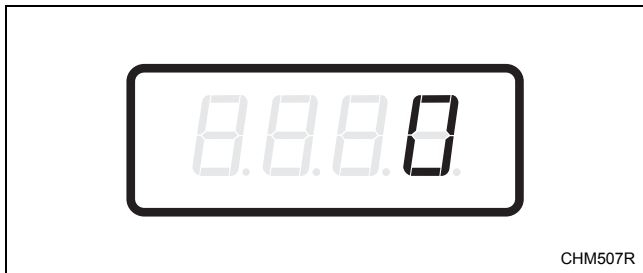


Figure 15

5. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the value of the fifth digit.

NOTE: The vend price can be set from 0 to 65,535. The factory default setting is 200.

6. Press the START (enter) keypad to enter the fifth digit and display remaining four digits. The active digit will flash one second on and one second off.

NOTE: To go back to the current programmable option without changing the value, press the DELICATES 30 (<) keypad.

7. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the value of the active digit and the START (enter) keypad to enter the value of the digit and advance to the next digit.
8. Press the START (enter) keypad with the last active digit. The next option, “AtS4”, will appear in the display.

NOTE: To program “AtS4” (Vend Price #4), refer to *option 15*. To program other options, refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

15. Vend Price #4 “AtS4”

This option allows the owner to set the vend price for a PERM PRESS 60 wash. This vend price will be shown in the display when PERM PRESS 60 is selected.

How to Program the Vend Price #4

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad until “Prog” appears in the display. Press the START (enter) keypad and “AtS1” will appear in the display.
3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable options until “AtS4” appears in the display. The PERM PRESS 60 LED will be lit to show which cycle/temperature price is being programmed.
4. When “AtS4” appears in the display, press the START (enter) keypad. There are five digits in the Vend Price #4. The fifth digit will appear in the display and will flash one second on, one second off. Refer to *Figure 16*.

NOTE: If the vend price is 10000 or more, the fifth digit is “1-6”. If the vend price is 9999 or less, the fifth digit is “0”.

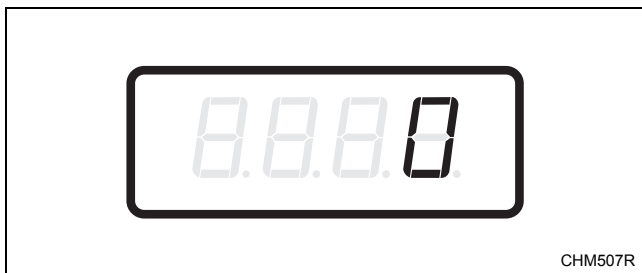


Figure 16

5. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the value of the fifth digit.

NOTE: The vend price can be set from 0 to 65,535. The factory default setting is 200.

6. Press the START (enter) keypad to enter the fifth digit and display remaining four digits. The active digit will flash one second on and one second off.

NOTE: To go back to the current programmable option without changing the value, press the DELICATES 30 (<) keypad.

7. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the value of the active digit and the START (enter) keypad to enter the value of the digit and advance to the next digit.
8. Press the START (enter) keypad with the last active digit. The next option, “AtS5”, will appear in the display.

NOTE: To program “AtS5” (Vend Price #5), refer to *option 16*. To program other options, refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

Programming Control

16. Vend Price #5 “AtS5”

This option allows the owner to set the vend price for a DELICATES 30 wash. This vend price will be shown in the display when DELICATES 30 is selected.

How to Program the Vend Price #5

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad until “Prog” appears in the display. Press the START (enter) keypad and “AtS1” will appear in the display.
3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable options until “AtS5” appears in the display. The DELICATES 30 LED will be lit to show which cycle/temperature price is being programmed.
4. When “AtS5” appears in the display, press the START (enter) keypad. There are five digits in the Vend Price #5. The fifth digit will appear in the display and will flash one second on, one second off. Refer to *Figure 17*.

NOTE: If the vend price is 10000 or more, the fifth digit is “1-6”. If the vend price is 9999 or less, the fifth digit is “0”.

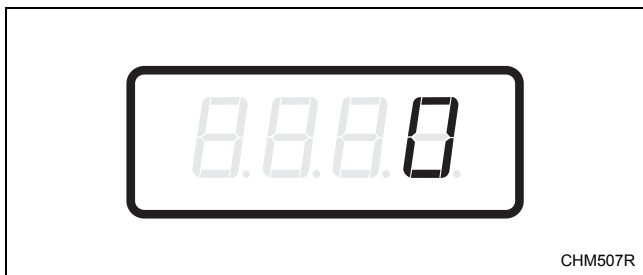


Figure 17

5. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the value of the fifth digit.

NOTE: The vend price can be set from 0 to 65,535. The factory default setting is 200.

6. Press the START (enter) keypad to enter the fifth digit and display remaining four digits. The active digit will flash one second on and one second off.

NOTE: To go back to the current programmable option without changing the value, press the DELICATES 30 (<) keypad.

7. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the value of the active digit and the START (enter) keypad to enter the value of the digit and advance to the next digit.
8. Press the START (enter) keypad with the last active digit. The next option, “AtS6”, will appear in the display.

NOTE: To program “AtS6” (Vend Price #6), refer to *option 17*. To program other options, refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

17. Vend Price #6 “AtS6”

This option allows the owner to set the vend price for a DELICATES COLD wash. This vend price will be shown in the display when DELICATES COLD is selected.

How to Program the Vend Price #6

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad until “Prog” appears in the display. Press the START (enter) keypad and “AtS1” will appear in the display.
3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable options until “AtS6” appears in the display. The DELICATES COLD LED will be lit to show which cycle/temperature price is being programmed.
4. When “AtS6” appears in the display, press the START (enter) keypad. There are five digits in the Vend Price #6. The fifth digit will appear in the display and will flash one second on, one second off. Refer to *Figure 18*.

NOTE: If the vend price is 10000 or more, the fifth digit is “1-6”. If the vend price is 9999 or less, the fifth digit is “0”.

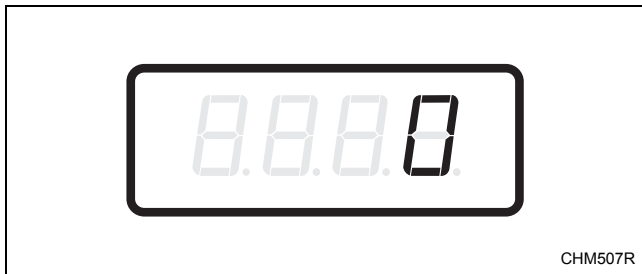


Figure 18

5. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the value of the fifth digit.

NOTE: The vend price can be set from 0 to 65,535. The factory default setting is 200.

6. Press the START (enter) keypad to enter the fifth digit and display remaining four digits. The active digit will flash one second on and one second off.

NOTE: To go back to the current programmable option without changing the value, press the DELICATES 30 (<) keypad.

7. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the value of the active digit and the START (enter) keypad to enter the value of the digit and advance to the next digit.
8. Press the START (enter) keypad with the last active digit. The next option, “AtS7”, will appear in the display.

NOTE: To program “rtC-” (Real Time Clock), refer to *option 18*. To program other options, refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

Programming Control

18. Set Real-Time Clock “rtC-”

This option allows the owner to set the control’s internal clock to the correct time and date.

How to Program the Time and Date

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad until “Prog” appears in the display. Press the START (enter) keypad and “AtS1” will appear in the display.
3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable options until “rtC-” appears in the display. Press the START keypad and “rtC1” will appear in the display.
4. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable options. Refer to *Table 9*.

“rtC1”	Programs Minutes
“rtC2”	Programs Hours
“rtC3”	Programs Day of Week
“rtC4”	Programs Date of Month
“rtC5”	Programs Month
“rtC6”	Programs Year
“rtC7”	Programs Daylight Savings

Table 9

5. When the desired option appears in the display, press the START (enter) keypad. The current value will appear in the display.
6. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the minutes, hours, day of week, date of month, month or year to the correct time or date.

NOTE: The hours will be displayed in military time. For day of week, Sunday is considered day one (1), Monday is day two (2) and so on. For year, the year 2000 is “0”, the year 2001 is “1” and so on.

If programming Daylight Savings, “rtc7”, “on” (factory default setting) enables Daylight Savings Time and “OFF” disables Daylight Savings Time.

7. Press the START (enter) keypad when the correct time or date appears in the display. The next Set Real-Time Clock option will appear in the display.

NOTE: To program “SPA-” (Special Vend A Data), press the DELICATES 30 (<) keypad and refer to *option 19*. To program other options, refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

19. Special Vend A Data “SPA-”

This option allows the owner to set the day or days of a special vend.

Special Vend A is used to change the standard vend prices for special occasions. The special vend can be programmed to start and end on a specific day or days of the week.

The owner may also turn the Special Vend A option on or off if desired.

The factory default setting for all Special Vend A programming options is zero (0).

How to Program Special Vend A Days Enable “SA01”

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad until “Prog” appears in the display. Press the START (enter) keypad and “AtS1” will appear in the display.
3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable options until “SPA-” appears in the display. Press the START (enter) keypad and “SA01” will appear in the display.
4. When “SA01” appears in the display, press the START (enter) keypad. A number will appear in the display that corresponds to the current Special Vend A Days Enable Programming Value.
5. Locate the desired number in the first column of *Table 10* on the following pages.
6. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the current number until correct.
7. Press the START (enter) keypad when the correct number appears in the display. The next Special Vend A option, “SA02”, will appear in the display.

NOTE: To program “SA02” (Special Vend A Start Hour), continue to the next Special Vend A option. To program other options, press the DELICATES 30 (<) keypad and refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

Programming Control

How to Read *Table 10*

To determine the correct number required to program the Special Vend Days Enable, use the following table. The Special Vend Value column contains the number required in step 6. The other columns correspond to individual days.

Each column of days contains a unique combination of the words “ON” and “OFF” that indicates if that column’s day is turned on or off when the value is entered. Select the desired combination of days and enter the number found in the value column.

“SA01”								
SPECIAL VEND VALUE	SAT	FRI	THUR	WED	TUE	MON	SUN	ON/OFF
0*	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
3	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON
5	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON
7	OFF	OFF	OFF	OFF	OFF	ON	ON	ON
9	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON
11	OFF	OFF	OFF	OFF	ON	OFF	ON	ON
13	OFF	OFF	OFF	OFF	ON	ON	OFF	ON
15	OFF	OFF	OFF	OFF	ON	ON	ON	ON
17	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON
19	OFF	OFF	OFF	ON	OFF	OFF	ON	ON
21	OFF	OFF	OFF	ON	OFF	ON	OFF	ON
23	OFF	OFF	OFF	ON	OFF	ON	ON	ON
25	OFF	OFF	OFF	ON	ON	OFF	OFF	ON
27	OFF	OFF	OFF	ON	ON	OFF	ON	ON
29	OFF	OFF	OFF	ON	ON	ON	OFF	ON
31	OFF	OFF	OFF	ON	ON	ON	ON	ON
33	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON
35	OFF	OFF	ON	OFF	OFF	OFF	ON	ON
37	OFF	OFF	ON	OFF	OFF	ON	OFF	ON
39	OFF	OFF	ON	OFF	OFF	ON	ON	ON
41	OFF	OFF	ON	OFF	ON	OFF	OFF	ON
43	OFF	OFF	ON	OFF	ON	OFF	ON	ON
45	OFF	OFF	ON	OFF	ON	ON	OFF	ON
47	OFF	OFF	ON	OFF	ON	ON	ON	ON
49	OFF	OFF	ON	ON	OFF	OFF	OFF	ON
51	OFF	OFF	ON	ON	OFF	OFF	ON	ON
53	OFF	OFF	ON	ON	OFF	ON	OFF	ON
55	OFF	OFF	ON	ON	OFF	ON	ON	ON
57	OFF	OFF	ON	ON	ON	OFF	OFF	ON
59	OFF	OFF	ON	ON	ON	OFF	ON	ON
61	OFF	OFF	ON	ON	ON	ON	OFF	ON
63	OFF	OFF	ON	ON	ON	ON	ON	ON
65	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON
67	OFF	ON	OFF	OFF	OFF	OFF	ON	ON

*Factory default setting.

Table 10 (continued)

Table 10 (continued)

"SA01"								
SPECIAL VEND VALUE	SAT	FRI	THUR	WED	TUE	MON	SUN	ON/OFF
69	OFF	ON	OFF	OFF	OFF	ON	OFF	ON
71	OFF	ON	OFF	OFF	OFF	ON	ON	ON
73	OFF	ON	OFF	OFF	ON	OFF	OFF	ON
75	OFF	ON	OFF	OFF	ON	OFF	ON	ON
77	OFF	ON	OFF	OFF	ON	ON	OFF	ON
79	OFF	ON	OFF	OFF	ON	ON	ON	ON
81	OFF	ON	OFF	ON	OFF	OFF	OFF	ON
83	OFF	ON	OFF	ON	OFF	OFF	ON	ON
85	OFF	ON	OFF	ON	OFF	ON	OFF	ON
87	OFF	ON	OFF	ON	OFF	ON	ON	ON
89	OFF	ON	OFF	ON	ON	OFF	OFF	ON
91	OFF	ON	OFF	ON	ON	OFF	ON	ON
93	OFF	ON	OFF	ON	ON	ON	OFF	ON
95	OFF	ON	OFF	ON	ON	ON	ON	ON
97	OFF	ON	ON	OFF	OFF	OFF	OFF	ON
99	OFF	ON	ON	OFF	OFF	OFF	ON	ON
101	OFF	ON	ON	OFF	OFF	ON	OFF	ON
103	OFF	ON	ON	OFF	OFF	ON	ON	ON
105	OFF	ON	ON	OFF	ON	OFF	OFF	ON
107	OFF	ON	ON	OFF	ON	OFF	ON	ON
109	OFF	ON	ON	OFF	ON	ON	OFF	ON
111	OFF	ON	ON	OFF	ON	ON	ON	ON
113	OFF	ON	ON	ON	OFF	OFF	OFF	ON
115	OFF	ON	ON	ON	OFF	OFF	ON	ON
117	OFF	ON	ON	ON	OFF	ON	OFF	ON
119	OFF	ON	ON	ON	OFF	ON	ON	ON
121	OFF	ON	ON	ON	ON	OFF	OFF	ON
123	OFF	ON	ON	ON	ON	OFF	ON	ON
125	OFF	ON	ON	ON	ON	ON	OFF	ON
127	OFF	ON	ON	ON	ON	ON	ON	ON
129	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON
131	ON	OFF	OFF	OFF	OFF	OFF	ON	ON
133	ON	OFF	OFF	OFF	OFF	ON	OFF	ON
135	ON	OFF	OFF	OFF	OFF	ON	ON	ON
137	ON	OFF	OFF	OFF	ON	OFF	OFF	ON
139	ON	OFF	OFF	OFF	ON	OFF	ON	ON
141	ON	OFF	OFF	OFF	ON	ON	OFF	ON
143	ON	OFF	OFF	OFF	ON	ON	ON	ON
145	ON	OFF	OFF	ON	OFF	OFF	OFF	ON
147	ON	OFF	OFF	ON	OFF	OFF	ON	ON
149	ON	OFF	OFF	ON	OFF	ON	OFF	ON
151	ON	OFF	OFF	ON	OFF	ON	ON	ON
153	ON	OFF	OFF	ON	ON	OFF	OFF	ON
155	ON	OFF	OFF	ON	ON	OFF	ON	ON

Table 10 (continued)

Programming Control

Table 10 (continued)

“SA01”								
SPECIAL VEND VALUE	SAT	FRI	THUR	WED	TUE	MON	SUN	ON/OFF
157	ON	OFF	OFF	ON	ON	ON	OFF	ON
159	ON	OFF	OFF	ON	ON	ON	ON	ON
161	ON	OFF	ON	OFF	OFF	OFF	OFF	ON
163	ON	OFF	ON	OFF	OFF	OFF	ON	ON
165	ON	OFF	ON	OFF	OFF	ON	OFF	ON
167	ON	OFF	ON	OFF	OFF	ON	ON	ON
169	ON	OFF	ON	OFF	ON	OFF	OFF	ON
171	ON	OFF	ON	OFF	ON	OFF	ON	ON
173	ON	OFF	ON	OFF	ON	ON	OFF	ON
175	ON	OFF	ON	OFF	ON	ON	ON	ON
177	ON	OFF	ON	ON	OFF	OFF	OFF	ON
179	ON	OFF	ON	ON	OFF	OFF	ON	ON
181	ON	OFF	ON	ON	OFF	ON	OFF	ON
183	ON	OFF	ON	ON	OFF	ON	ON	ON
185	ON	OFF	ON	ON	ON	OFF	OFF	ON
187	ON	OFF	ON	ON	ON	OFF	ON	ON
189	ON	OFF	ON	ON	ON	ON	OFF	ON
191	ON	OFF	ON	ON	ON	ON	ON	ON
193	ON	ON	OFF	OFF	OFF	OFF	OFF	ON
195	ON	ON	OFF	OFF	OFF	OFF	ON	ON
197	ON	ON	OFF	OFF	OFF	ON	OFF	ON
199	ON	ON	OFF	OFF	OFF	ON	ON	ON
201	ON	ON	OFF	OFF	ON	OFF	OFF	ON
203	ON	ON	OFF	OFF	ON	OFF	ON	ON
205	ON	ON	OFF	OFF	ON	ON	OFF	ON
207	ON	ON	OFF	OFF	ON	ON	ON	ON
209	ON	ON	OFF	ON	OFF	OFF	OFF	ON
211	ON	ON	OFF	ON	OFF	OFF	ON	ON
213	ON	ON	OFF	ON	OFF	ON	OFF	ON
215	ON	ON	OFF	ON	OFF	ON	ON	ON
217	ON	ON	OFF	ON	ON	OFF	OFF	ON
219	ON	ON	OFF	ON	ON	OFF	ON	ON
221	ON	ON	OFF	ON	ON	ON	OFF	ON
223	ON	ON	OFF	ON	ON	ON	ON	ON
225	ON	ON	ON	OFF	OFF	OFF	OFF	ON
227	ON	ON	ON	OFF	OFF	OFF	ON	ON
229	ON	ON	ON	OFF	OFF	ON	OFF	ON
231	ON	ON	ON	OFF	OFF	ON	ON	ON
233	ON	ON	ON	OFF	ON	OFF	OFF	ON
235	ON	ON	ON	OFF	ON	OFF	ON	ON
237	ON	ON	ON	OFF	ON	ON	OFF	ON
239	ON	ON	ON	OFF	ON	ON	ON	ON
241	ON	ON	ON	ON	OFF	OFF	OFF	ON
243	ON	ON	ON	ON	OFF	OFF	ON	ON

Table 10 (continued)

Table 10 (continued)

"SA01"								
SPECIAL VEND VALUE	SAT	FRI	THUR	WED	TUE	MON	SUN	ON/OFF
245	ON	ON	ON	ON	OFF	ON	OFF	ON
247	ON	ON	ON	ON	OFF	ON	ON	ON
249	ON	ON	ON	ON	ON	OFF	OFF	ON
251	ON	ON	ON	ON	ON	OFF	ON	ON
253	ON	ON	ON	ON	ON	ON	OFF	ON
255	ON	ON	ON	ON	ON	ON	ON	ON

Table 10

Programming Control

How to Program Special Vend A Start Hour “SA02”

This option allows the owner to set the hour that Special Vend A will begin.

1. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable Special Vend A options until “SA02” appears in the display.
2. When “SA02” appears in the display, press the START (enter) keypad. The current start time (in military time) will appear in the display.

NOTE: The hours will be displayed in military time.

3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the start hour to the desired hour.
4. Press the START (enter) keypad when the correct hour appears in the display. The next Special Vend A option, “SA03”, will appear in the display.

NOTE: To program “SA03” (Special Vend A Start Minute), continue to next Special Vend A option. To program other options, press the DELICATES 30 (<) keypad and refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

How to Program Special Vend A Start Minute “SA03”

This option allows the owner to set the minute that Special Vend A will begin.

1. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable Special Vend A options until “SA03” appears in the display.
2. When “SA03” appears in the display, press the START (enter) keypad. The current start minute will appear in the display.
3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the start minute to the desired minute.
4. Press the START (enter) keypad when the correct minute appears in the display. The next Special Vend A option, “SA04”, will appear in the display.

NOTE: To program “SA04” (Special Vend A Length in Hours), continue to next Special Vend A option. To program other options, press the DELICATES 30 (<) keypad and refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

How to Program Special Vend A Length in Hours “SA04”

This option allows the owner to set the length in hours for Special Vend A.

1. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable Special Vend A options until “SA04” appears in the display.
2. When “SA04” appears in the display, press the START (enter) keypad. The current length in hours will appear in the display.
3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the current length of hours to the desired number of hours.
4. Press the START (enter) keypad when the correct hour appears in the display. The next Special Vend A option, “SA05”, will appear in the display.

NOTE: To program “SA05” (Special Vend A Start Month), continue to next Special Vend A option. To program other options, press the DELICATES 30 (<) keypad and refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

How to Program Special Vend A Start Month “SA05”

This option allows the owner to set the month that Special Vend A will begin.

NOTE: If Special Vend A Start Month, Start Date, End Month, or End Date are programmed to zero (default is zero), the Special Vend A will be active every week on the days programmed in Table 10.

1. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable Special Vend A options until “SA05” appears in the display.
2. When “SA05” appears in the display, press the START (enter) keypad. The current start month will appear in the display.
3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the start month to the desired month.

If “0” is selected and Special Vend A is on, Special Vend A will occur at the time and days of week selected, regardless of the month.

4. Press the START (enter) keypad when the correct month appears in the display. The next Special Vend A option, “SA06”, will appear in the display.

NOTE: To program “SA06” (Special Vend A Start Date), continue to next Special Vend A option. To program other options, press the DELICATES 30 (<) keypad and refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

Programming Control

How to Program Special Vend A Start Date “SA06”

This option allows the owner to set the date that Special Vend A will begin.

1. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable Special Vend A options until “SA06” appears in the display.
2. When “SA06” appears in the display, press the START (enter) keypad. The current start date will appear in the display.
3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the start date to the desired date.

If “0” is selected and Special Vend A is on, Special Vend A will occur at the time and days of week selected, regardless of the date.

4. Press the START (enter) keypad when the correct date appears in the display. The next Special Vend A option, “SA07”, will appear in the display.

NOTE: To program “SA07” (Special Vend A Start Year), continue to next Special Vend A option. To program other options, press the DELICATES 30 (<) keypad and refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

How to Program Special Vend A Start Year “SA07”

This option allows the owner to set the year that Special Vend A will begin.

1. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable Special Vend A options until “SA07” appears in the display.
2. When “SA07” appears in the display, press the START (enter) keypad. The current start year will appear in the display.
3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the start year to the desired year.

If “0” is selected and Special Vend A is on, Special Vend A will occur at the time or days of week selected, regardless of the year. “1” is year 2001, “2” is year 2002, and so on.

4. Press the START (enter) keypad when the correct year appears in the display. The next Special Vend A option, “SA08”, will appear in the display.

NOTE: To program “SA08” (Special Vend A End Month), continue to next Special Vend A option. To program other options, press the DELICATES 30 (<) keypad and refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

How to Program Special Vend A End Month “SA08”

This option allows the owner to set the month that Special Vend A will end.

1. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable Special Vend A options until “SA08” appears in the display.
2. When “SA08” appears in the display, press the START (enter) keypad. The current end month will appear in the display.
3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the end month to the desired month.

If “0” is selected and Special Vend A is on, Special Vend A will occur at the time and day of week selected, regardless of the month.

4. Press the START (enter) keypad when the correct month appears in the display. The next Special Vend A option, “SA09”, will appear in the display.

NOTE: To program “SA09” (Special Vend A End Date), continue to next Special Vend A option. To program other options, press the DELICATES 30 (<) keypad and refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

How to Program Special Vend A End Date “SA09”

This option allows the owner to set the date that Special Vend A will end.

1. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable Special Vend A options until “SA09” appears in the display.
2. When “SA09” appears in the display, press the START (enter) keypad. The current end date will appear in the display.
3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the end date to the desired date.

If “0” is selected and Special Vend A is on, Special Vend A will occur at the time or days of week selected, regardless of the date.

4. Press the START (enter) keypad when the correct date appears in the display. The next Special Vend A option, “SA10”, will appear in the display.

NOTE: To program “SA10” (Special Vend A End Year), continue to next Special Vend A option. To program other options, press the DELICATES 30 (<) keypad and refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

Programming Control

How to Program Special Vend A End Year “SA10”

This option allows the owner to set the year that Special Vend A will end.

1. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable Special Vend A options until “SA10” appears in the display.
2. When “SA10” appears in the display, press the START (enter) keypad. The current end year will appear in the display.
3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the end year to the desired year.

If “0” is selected and Special Vend A is on, Special Vend A will occur at the time or days of week selected, regardless of the year. “1” is year 2001, “2” is year 2002 and so on.

4. Press the START (enter) keypad when the correct year appears in the display. The next Special Vend A option, “SA11”, will appear in the display.

NOTE: To program “SA11” (Special Vend A Vend Price #1), continue to next Special Vend A option. To program other options, press the DELICATES 30 (<) keypad and refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

How to Program Special Vend A Vend Price #1 “SA11”

This option allows the owner to set the vend price for a NORMAL 90 wash in Special Vend A. The corresponding cycle LED will be lit while programming.

1. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable Special Vend A options until “SA11” appears in the display.
2. When “SA11” appears in the display, press the START (enter) keypad. There are five digits in the Special Vend A Vend Price #1. The fifth digit will appear in the display and will flash one second on and one second off. Refer to *Figure 19*.

NOTE: If the vend price is 10000 or more, the fifth digit is “1-6”. If the vend price is 9999 or less, the fifth digit is “0”.

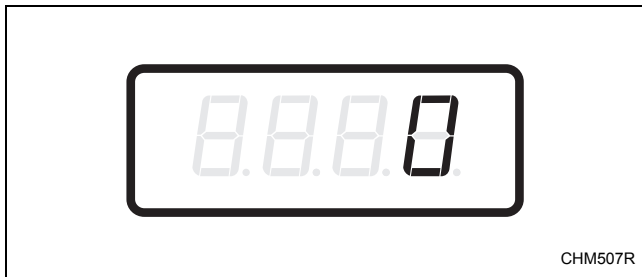


Figure 19

3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the value of the fifth digit.

NOTE: The vend price can be set from 0 to 65,535.

4. Press the START (enter) keypad to enter the fifth digit and display remaining four digits. The active digit will flash one second on and one second off.

NOTE: To go back to the current programmable Special Vend A option without changing the value, press the DELICATES 30 (<) keypad.

5. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the value of the active digit and the START keypad to enter the value of the digit and advance to the next digit.
6. Press the START (enter) keypad with the last active digit. The next Special Vend A option, “SA12”, will appear in the display.

NOTE: To program “SA12” (Special Vend A Vend Price #2), continue to next Special Vend A option. To program other options, press the DELICATES 30 (<) keypad and refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

Programming Control

How to Program Special Vend A Vend Price #2 “SA12”

This option allows the owner to set the vend price for a NORMAL 60 wash in Special Vend A. The corresponding cycle LED will be lit while programming.

1. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable Special Vend A options until “SA12” appears in the display.
2. When “SA12” appears in the display, press the START (enter) keypad. There are five digits in the Special Vend A Vend Price #2. The fifth digit will appear in the display and will flash one second on and one second off. Refer to *Figure 20*.

NOTE: If the vend price is 10000 or more, the fifth digit is “1-6”. If the vend price is 9999 or less, the fifth digit is “0”.

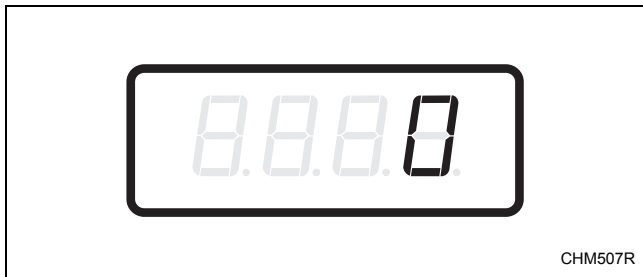


Figure 20

3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the value of the fifth digit.

NOTE: The vend price can be set from 0 to 65,535.

4. Press the START (enter) keypad to enter the fifth digit and display remaining four digits. The active digit will flash one second on and one second off.

NOTE: To go back to the current programmable Special Vend A option without changing the value, press the DELICATES 30 (<) keypad.

5. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the value of the active digit and the START keypad to enter the value of the digit and advance to the next digit.
6. Press the START (enter) keypad with the last active digit. The next Special Vend A option, “SA13”, will appear in the display.

NOTE: To program “SA13” (Special Vend A Vend Price #3), continue to next Special Vend A option. To program other options, press the DELICATES 30 (<) keypad and refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

How to Program Special Vend A Vend Price #3 “SA13”

This option allows the owner to set the vend price for a NORMAL 40 wash in Special Vend A. The corresponding cycle LED will be lit while programming.

1. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable Special Vend A options until “SA13” appears in the display.
2. When “SA13” appears in the display, press the START (enter) keypad. There are five digits in the Special Vend A Vend Price #3. The fifth digit will appear in the display and will flash one second on and one second off. Refer to *Figure 21*.

NOTE: If the vend price is 10000 or more, the fifth digit is “1-6”. If the vend price is 9999 or less, the fifth digit is “0”.

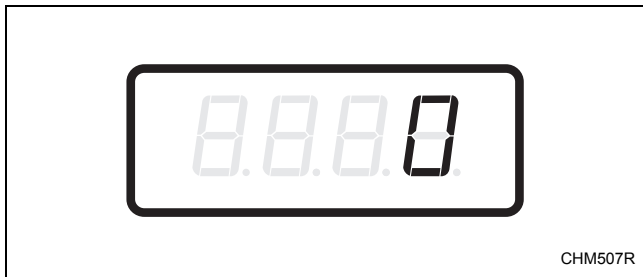


Figure 21

3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the value of the fifth digit.

NOTE: The vend price can be set from 0 to 65,535.

4. Press the START (enter) keypad to enter the fifth digit and display remaining four digits. The active digit will flash one second on and one second off.

NOTE: To go back to the current programmable Special Vend A option without changing the value, press the DELICATES 30 (<) keypad.

5. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the value of the active digit and the START keypad to enter the value of the digit and advance to the next digit.
6. Press the START (enter) keypad with the last active digit. The next Special Vend A option, “SA14”, will appear in the display.

NOTE: To program “SA14” (Special Vend A Vend Price #4), continue to next Special Vend A option. To program other options, press the DELICATES 30 (<) keypad and refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

Programming Control

How to Program Special Vend A Vend Price #4 “SA14”

This option allows the owner to set the vend price for a PERM PRESS 60 wash in Special Vend A. The corresponding cycle LED will be lit while programming.

1. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable Special Vend A options until “SA14” appears in the display.
2. When “SA14” appears in the display, press the START (enter) keypad. There are five digits in the Special Vend A Vend Price #4. The fifth digit will appear in the display and will flash one second on and one second off. Refer to *Figure 22*.

NOTE: If the vend price is 10000 or more, the fifth digit is “1-6”. If the vend price is 9999 or less, the fifth digit is “0”.

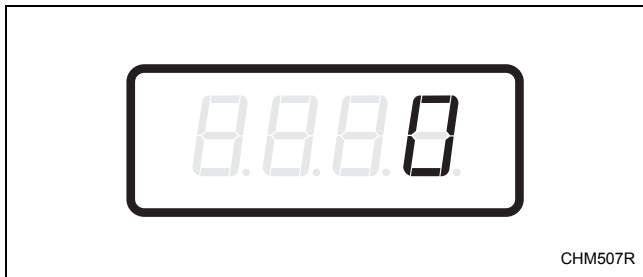


Figure 22

3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the value of the fifth digit.

NOTE: The vend price can be set from 0 to 65,535.

4. Press the START (enter) keypad to enter the fifth digit and display remaining four digits. The active digit will flash one second on and one second off.

NOTE: To go back to the current programmable Special Vend A option without changing the value, press the DELICATES 30 (<) keypad.

5. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the value of the active digit and the START keypad to enter the value of the digit and advance to the next digit.
6. Press the START (enter) keypad with the last active digit. The next Special Vend A option, “SA15”, will appear in the display.

NOTE: To program “SA15” (Special Vend A Vend Price #5), continue to next Special Vend A option. To program other options, press the DELICATES 30 (<) keypad and refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

How to Program Special Vend A Vend Price #5 “SA15”

This option allows the owner to set the vend price for a DELICATES 30 wash in Special Vend A. The corresponding cycle LED will be lit while programming.

1. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable Special Vend A options until “SA15” appears in the display.
2. When “SA15” appears in the display, press the START (enter) keypad. There are five digits in the Special Vend A Vend Price #5. The fifth digit will appear in the display and will flash one second on and one second off. Refer to *Figure 23*.

NOTE: If the vend price is 10000 or more, the fifth digit is “1-6”. If the vend price is 9999 or less, the fifth digit is “0”.

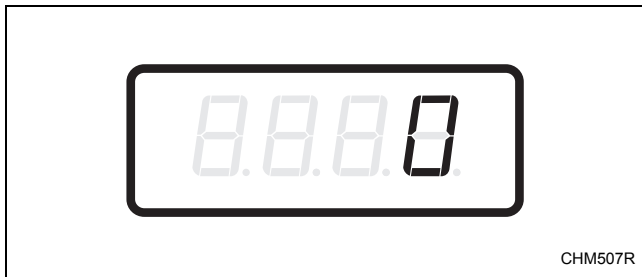


Figure 23

3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the value of the fifth digit.

NOTE: The vend price can be set from 0 to 65,535.

4. Press the START (enter) keypad to enter the fifth digit and display remaining four digits. The active digit will flash one second on and one second off.

NOTE: To go back to the current programmable Special Vend A option without changing the value, press the DELICATES 30 (<) keypad.

5. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the value of the active digit and the START keypad to enter the value of the digit and advance to the next digit.
6. Press the START (enter) keypad with the last active digit. The next Special Vend A option, “SA16”, will appear in the display.

NOTE: To program “SA16” (Special Vend A Vend Price #6), continue to next Special Vend A option. To program other options, press the DELICATES 30 (<) keypad and refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

Programming Control

How to Program Special Vend A Vend Price #6 “SA16”

This option allows the owner to set the vend price for a DELICATES COLD wash in Special Vend A. The corresponding cycle LED will be lit while programming.

1. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable Special Vend A options until “SA16” appears in the display.
2. When “SA16” appears in the display, press the START (enter) keypad. There are five digits in the Special Vend A Vend Price #6. The fifth digit will appear in the display and will flash one second on and one second off. Refer to *Figure 24*.

NOTE: If the vend price is 10000 or more, the fifth digit is “1-6”. If the vend price is 9999 or less, the fifth digit is “0”.

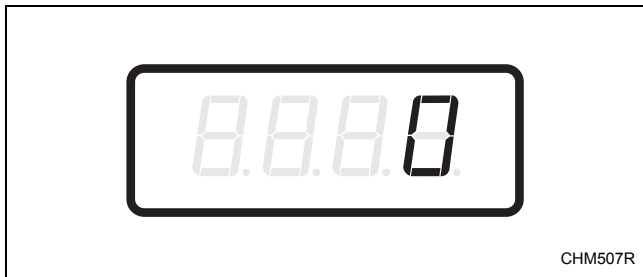


Figure 24

3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the value of the fifth digit.

NOTE: The vend price can be set from 0 to 65,535.

4. Press the START (enter) keypad to enter the fifth digit and display remaining four digits. The active digit will flash one second on and one second off.

NOTE: To go back to the current programmable Special Vend A option without changing the value, press the DELICATES 30 (<) keypad.

5. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the value of the active digit and the START keypad to enter the value of the digit and advance to the next digit.
6. Press the START (enter) keypad with the last active digit. The next Special Vend A option, “SA17”, will appear in the display.

NOTE: To program “SA20” (Special Vend A Added Wash Agitate Time), continue to next Special Vend A option. To program other options, press the DELICATES 30 (<) keypad and refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

How to Program Special Vend A Added Wash #4 Fill/Agitate Time “SA20”

This option allows the owner to add time to the wash agitate part of the cycle in Special Vend A.

1. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable Special Vend A options until “SA20” appears in the display.
2. When “SA20” appears in the display, press the START (enter) keypad.
3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the number of minutes displayed to the desired number of added minutes.

NOTE: The Special Vend A Added Wash Agitate Time can be set from zero “0” to 15 minutes.

4. Press the START (enter) keypad when the correct number of minutes appears in the display. The next Special Vend A option, “SA21”, will appear in the display.

NOTE: To program “SA21” (Special Vend A Subtracted Wash Agitate Time), continue to next Special Vend A option. To program other options, press the DELICATES 30 (<) keypad and refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

How to Program Special Vend A Subtracted Wash #4 Fill/Agitate Time “SA21”

This option allows the owner to subtract time from the wash agitate part of the cycle in Special Vend A.

1. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable Special Vend A options until “SA21” appears in the display.
2. When “SA21” appears in the display, press the START (enter) keypad.
3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the number of minutes displayed to the desired number of subtracted minutes.

NOTE: The Special Vend A Subtracted Wash Agitate Time can be set from zero “0” to 15 minutes.

4. Press the START (enter) keypad when the correct number of minutes appears in the display. The next Special Vend A option, “SA01”, will appear in the display.

NOTE: To program “SPb-” (Special Vend B Enable), press the DELICATES 30 (<) keypad and refer to *option 20*. To program other options refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

Programming Control

20. Special Vend B Days Enable “SPb-”

This option allows the owner to enable or disable a second special vend.

Special Vend B can be programmed using an external device or network.

How to Program Special Vend B Days Enable

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad until “Prog” appears in the display. Press the START (enter) keypad and “AtS1” will appear in the display.
3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable options until “SPb-” appears in the display.
4. When “SPb-” appears in the display, press the START (enter) keypad. The current Special Vend B Days Enable status will appear in the display.
“on” = Option Enabled
“off” = Option Disabled (factory default setting)
5. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to change the current status.
6. Press the START (enter) keypad when the correct status appears in the display. The next option, “SPC-”, will appear in the display.

NOTE: To program “SPC-” (Special Vend C Days Enable), refer to *option 21*. To program other options, refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

21. Special Vend C Days Enable “SPC-”

This option allows the owner to enable or disable a third special vend.

Special Vend C can be programmed using an external device or network.

How to Program Special Vend C Days Enable

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad until “Prog” appears in the display. Press the START (enter) keypad and “AtS1” will appear in the display.
3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable options until “SPC-” appears in the display.
4. When “SPC-” appears in the display, press the START (enter) keypad. The current Special Vend C Days Enable status will appear in the display.
“on” = Option Enabled
“off” = Option Disabled (factory default setting)
5. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to change the current status.
6. Press the START (enter) keypad when the correct status appears in the display. The next option, “SPd-”, will appear in the display.

NOTE: To program “SPd-” (Special Vend D Days Enable), refer to *option 22*. To program other options, refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

22. Special Vend D Days Enable “SPd-”

This option allows the owner to enable or disable a fourth special vend.

Special Vend D can be programmed using an external device or network.

How to Program Special Vend D Days Enable

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad until “Prog” appears in the display. Press the START (enter) keypad and “AtS1” will appear in the display.
3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable options until “SPd-” appears in the display.
4. When “SPd-” appears in the display, press the START (enter) keypad. The current Special Vend D Days Enable status will appear in the display.
“on” = Option Enabled
“oFF” = Option Disabled (factory default setting)
5. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to change the current status.
6. Press the START (enter) keypad when the correct status appears in the display. The next option, “CnP-”, will appear in the display.

NOTE: To program “CnP-” (Cycle Modifier Programming), refer to *option 23*. To program other options, refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

23. Cycle Modifier Programming “CnP-”

This option allows the owner to program the machine to offer an added prewash, extra wash time, an added extra rinse, a warm rinse, or any combination of the above to the customers for an added vend price. This option is selected when B or C is selected using the SOIL LEVEL keypad.

How to Program Cycle Modifier B Price “CnP1”

This price setting will be added to the current vend price. For example, if the vend price is 200 and Cycle Modifier B Price is set to 50, the total vend price when the B Soil Level is chosen will be 250.

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad until “Prog” appears in the display. Press the START (enter) keypad and “AtS1” will appear in the display.
3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable options until “CnP-” appears in the display. Press the START (enter) keypad and “CnP1” will appear in the display.
4. When “CnP1” appears in the display, press the START (enter) keypad. There are five digits in the Cycle Modifier B Price. The fifth digit will appear in the display and will flash for one second on, one second off. Refer to *Figure 25*.

NOTE: If the vend price is 10000 or more, the fifth digit is “1-6”. If the vend price is 9999 or less, the fifth digit is “0”.

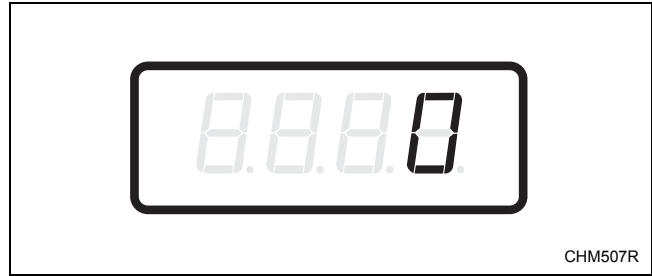


Figure 25

5. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the value of the fifth digit.

NOTE: The vend price can be set from 0 to 65,535. The factory default setting is 25.

6. Press the START (enter) keypad to enter the fifth digit and display remaining four digits. The active digit will flash one second on and one second off.

NOTE: To go back to the current programmable option without changing the value, press the DELICATES 30 (<) keypad.

7. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the value of the active digit and the START (enter) keypad to enter the value of the digit and advance to the next digit.
8. Press the START (enter) keypad with the last active digit. The next Cycle Modifier option, “CnP2”, will appear in the display.

NOTE: To program “CnP2” (Cycle Modifier C Price), continue to next Cycle Modifier option. To program other options, press the DELICATES 30 (<) keypad and refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

How to Program Cycle Modifier C Price “CnP2”

This price setting will be added to the current vend price. For example, if the vend price is 200 and Cycle Modifier C Price is set to 50, the total vend price when the C Soil Level is chosen will be 250.

1. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable Cycle Modifier options until “CnP2” appears in the display.
2. When “CnP2” appears in the display, press the START (enter) keypad. There are five digits in the Cycle Modifier C Price. The fifth digit will appear in the display and will flash for one second on, one second off. Refer to *Figure 26*.

NOTE: If the vend price is 10000 or more, the fifth digit is “1-6”. If the vend price is 9999 or less, the fifth digit is “0”.

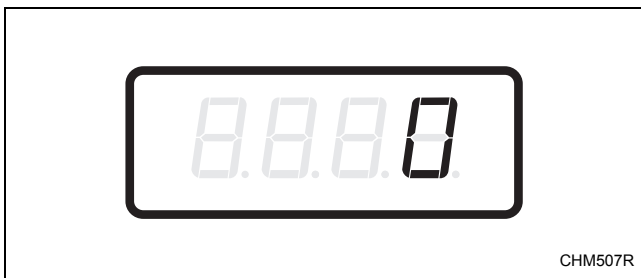


Figure 26

3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the value of the fifth digit.

NOTE: The vend price can be set from 0 to 65,535. The factory default setting is 50.

4. Press the START (enter) keypad to enter the fifth digit and display remaining four digits. The active digit will flash one second on and one second off.

NOTE: To go back to the current programmable option without changing the value, press the DELICATES 30 (<) keypad.

5. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the value of the active digit and the START (enter) keypad to enter the value of the digit and advance to the next digit.
6. Press the START (enter) keypad with the last active digit. The next Cycle Modifier option, “CnP3”, will appear in the display.

NOTE: To program “CnP3” (Cycle Modifier B Option), continue to next Cycle Modifier option. To program other options, press the DELICATES 30 (<) keypad and refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

Programming Control

How to Program Cycle Modifier B Option “CnP3”

This option allows the owner to enable or disable the Cycle Modifier B Option.

1. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable Cycle Modifier options until “CnP3” appears in the display.
2. When “CnP3” appears in the display, press the START (enter) keypad. A number will appear in the display. This number corresponds to the current Cycle Modifier B Option value. Refer to *Table 11*.
3. Locate the desired number in the first column of *Table 11*.
4. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the current number until correct.
5. Press the START (enter) keypad when the desired number appears in the display. The next Cycle Modifier option, “CnP4”, will appear in the display.

NOTE: To program “CnP4” (Cycle Modifier C Option), continue to next Cycle Modifier option. To program other options, press the DELICATES 30 (<) keypad and refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

How to Read *Table 11*

To determine the correct number required to program the Cycle Modifier Option, use the following chart. The Cycle Modifier Value column contains the number required in step 3. The other columns correspond to individual options.

Each column of options contains a unique combination of the words “ON” and “OFF” that indicates if that column’s option is turned on or off when the Cycle Modifier Value is entered. Select the desired combination of options and enter the number found in the Cycle Modifier Value column.

The default programmed at the factory is 2 for the Cycle Modifier B Option and 3 for the Cycle Modifier C Option.

Cycle Modifier Value	Prewash	Extra Rinse	Extra Wash	Warm Rinse
0	OFF	OFF	OFF	OFF
1	ON	OFF	OFF	OFF
2*	OFF	ON	OFF	OFF
3**	ON	ON	OFF	OFF
4	OFF	OFF	ON	OFF
5	ON	OFF	ON	OFF
6	OFF	ON	ON	OFF
7	ON	ON	ON	OFF
8	OFF	OFF	OFF	ON
9	ON	OFF	OFF	ON
10	OFF	ON	OFF	ON
11	ON	ON	OFF	ON
12	OFF	OFF	ON	ON
13	ON	OFF	ON	ON
14	OFF	ON	ON	ON
15	ON	ON	ON	ON

*Factory default setting for B.

**Factory default setting for C.

Table 11

How to Program Cycle Modifier C Option “CnP4”

This option allows the owner to enable or disable the Cycle Modifier C Option.

1. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable Cycle Modifier options until “CnP4” appears in the display.
2. When “CnP4” appears in the display, press the START (enter) keypad. A number will appear in the display. This number corresponds to the current Cycle Modifier C Option value. Refer to *Table 11*.
3. Locate the desired number in the first column of *Table 11*.
4. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the current number until correct.

NOTE: To go back to the current programmable option without changing the value of the active digit, press the DELICATES 30 (<) keypad.

5. Press the START (enter) keypad when the desired number appears in the display. The next Cycle Modifier option, “CnP5”, will appear in the display.

NOTE: To program “CnP5” (Cycle Modifier Added Wash Time), continue to next Cycle Modifier option. To program other options, press the DELICATES 30 (<) keypad and refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

How to Program Cycle Modifier Added Wash Time “CnP5”

This option allows the owner to set the amount of additional wash time for the B and C Cycle Modifier Options. The Extra Wash option needs to be turned on (refer to Cycle Modifier B and C options) for the Cycle Modifier Added Wash Time to take effect.

1. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable Cycle Modifier options until “CnP5” appears in the display.
2. When “CnP5” appears in the display, press the START (enter) keypad. The current number of minutes set for the Cycle Modifier Added Wash Time will appear in the display.
3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the current number of minutes shown in the display to the desired number of minutes.

NOTE: The Cycle Modifier Added Wash Time can be set from zero “0” to 15 minutes. The factory default setting is 2.

4. Press the START (enter) keypad when the desired number of minutes appears in the display. The next Cycle Modifier option, “CnP1” (software version “S 01”) or “CnP6” (software version “S 02” or higher), will appear in the display.

NOTE: For software version “S 01”, to program “drop” (Drop Off Mode) (on/off), press the DELICATES 30 (<) keypad and refer to *option 25*. For software version “S 02” or higher, to program “CnP6” (Default Cycle Modifier) continue to next Cycle Modifier option. To program other options, press the DELICATES 30 (<) keypad and refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

Programming Control

How to Program Default Cycle Modifier “CnP6” (software version “S 02” or higher only)

This option allows the owner to set the Default Cycle Modifier.

1. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable Cycle Modifier options until “CnP6” appears in the display.
2. When “CnP6” appears in the display, press the START (enter) keypad. A number will appear in the display. This number corresponds to the current default cycle modifier. Refer to *Table 12*.
3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the current number to the desired number selected from *Table 12*.
4. Press the START (enter) keypad when the desired number appears in the display. The next Cycle Modifier option, “CnP1”, will appear in the display.

NOTE: To program “Pct-” (Cycle Time Display), press the DELICATES 30 (<) keypad and refer to *option 24*. To program other options, press the DELICATES 30 (<) keypad and refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

“CnP6”	
Default Value	Cycle Modifier
0*	A
1	B
2	C

*Factory default setting.

Table 12

24. Cycle Time Display “PCt-” (software version “S 02” or higher only)

This option allows the owner to program the machine to display a chosen cycle time in minutes instead of the calculated cycle time.

The cycle time display will not pause for fills or heating. The display will switch to 01 if the breakaway step is reached before the time display reaches 01. If the time displayed reaches 01 before the breakaway step, the display will pause at 01 until the cycle ends.

How to Program Cycle Time Display Enable “PCtE”

This option allows the owner to enable or disable the Cycle Time Display.

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad until “Prog” appears in the display. Press the START (enter) keypad and “AtS1” will appear in the display.
3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable options until “PCt-” appears in the display. Press the START (enter) keypad and “PCtE” will appear in the display.
4. When “PCtE” appears in the display, press the START (enter) keypad. The current Cycle Time Display Enable status will appear in the display.
“on” = Option Enabled
“oFF” = Option Disabled (factory default setting)
5. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to change the current status.
6. Press the START (enter) keypad when the desired status appears in the display.
7. Press the START (enter) keypad with the last active digit. The next Cycle Time Display option, “PCt1”, will appear in the display.

NOTE: To program “PCt1” (Cycle #1 Time), continue to next Cycle Time Display option. To program other options, press the DELICATES 30 (<) keypad and refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

How to Program Cycle #1 Time “PCt1”

This option allows the owner to set the Cycle #1 Time display.

1. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable Cycle Time Display options until “PCt1” appears in the display.
2. When “PCt1” appears in the display, press the START (enter) keypad. The current Cycle #1 Time is displayed.
3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the current number of minutes to the desired number of minutes.

NOTE: The Cycle #1 Time can be set from 0 to 255. The factory default setting is 34.

4. Press the START (enter) keypad when the desired number of minutes appears in the display.
5. The next Cycle Time Display option, “PCt2”, will appear in the display.

NOTE: To program “PCt2” (Cycle #2 Time), continue to next Cycle Time Display option. To program other options, press the DELICATES 30 (<) keypad and refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

Programming Control

How to Program Cycle #2 Time “Pct2”

This option allows the owner to set the Cycle #2 Time display.

1. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable Cycle Time Display options until “Pct2” appears in the display.
2. When “Pct2” appears in the display, press the START (enter) keypad. The current Cycle #2 Time is displayed.
3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the current number of minutes to the desired number of minutes.

NOTE: The Cycle #2 Time can be set from 0 to 255. The factory default setting is 34.

4. Press the START (enter) keypad when the desired number of minutes appears in the display.
5. The next Cycle Time Display option, “Pct3”, will appear in the display.

NOTE: To program “Pct3” (Cycle #3 Time), continue to next Cycle Time Display option. To program other options, press the DELICATES 30 (<) keypad and refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

How to Program Cycle #3 Time “Pct3”

This option allows the owner to set the Cycle #3 Time display.

1. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable Cycle Time Display options until “Pct3” appears in the display.
2. When “Pct3” appears in the display, press the START (enter) keypad. The current Cycle #3 Time is displayed.
3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the current number of minutes to the desired number of minutes.

NOTE: The Cycle #3 Time can be set from 0 to 255. The factory default setting is 32.

4. Press the START (enter) keypad when the desired number of minutes appears in the display.
5. The next Cycle Time Display option, “Pct4”, will appear in the display.

NOTE: To program “Pct4” (Cycle #4 Time), continue to next Cycle Time Display option. To program other options, press the DELICATES 30 (<) keypad and refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

How to Program Cycle #4 Time “PCt4”

This option allows the owner to set the Cycle #4 Time display.

1. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable Cycle Time Display options until “PCt4” appears in the display.
2. When “PCt4” appears in the display, press the START (enter) keypad. The current Cycle #4 Time is displayed.
3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the current number of minutes to the desired number of minutes.

NOTE: The Cycle #4 Time can be set from 0 to 255. The factory default setting is 31.

4. Press the START (enter) keypad when the desired number of minutes appears in the display.
5. The next Cycle Time Display option, “PCt5”, will appear in the display.

NOTE: To program “PCt5” (Cycle #5 Time), continue to next Cycle Time Display option. To program other options, press the DELICATES 30 (<) keypad and refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

How to Program Cycle #5 Time “PCt5”

This option allows the owner to set the Cycle #5 Time display.

1. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable Cycle Time Display options until “PCt5” appears in the display.
2. When “PCt5” appears in the display, press the START (enter) keypad. The current Cycle #5 Time is displayed.
3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the current number of minutes to the desired number of minutes.

NOTE: The Cycle #5 Time can be set from 0 to 255. The factory default setting is 28.

4. Press the START (enter) keypad when the desired number of minutes appears in the display.
5. The next Cycle Time Display option, “PCt6”, will appear in the display.

NOTE: To program “PCt6” (Cycle #6 Time), continue to next Cycle Time Display option. To program other options, press the DELICATES 30 (<) keypad and refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

Programming Control

How to Program Cycle #6 Time “PCt6”

This option allows the owner to set the Cycle #6 Time display.

1. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable Cycle Time Display options until “PCt6” appears in the display.
2. When “PCt6” appears in the display, press the START (enter) keypad. The current Cycle #6 Time is displayed.
3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the current number of minutes to the desired number of minutes.

NOTE: The Cycle #6 Time can be set from 0 to 255. The factory default setting is 28.

4. Press the START (enter) keypad when the desired number of minutes appears in the display.
5. The next Cycle Time Display option, “PCtE”, will appear in the display.

NOTE: To program “droP” (Drop Off Mode) (on/off), press the DELICATES 30 (<) keypad and refer to *option 25*. To program other options, press the DELICATES 30 (<) keypad and refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

25. Drop Off Mode (On/Off) “droP”

This option allows the owner to limit machine use to an attendant without requiring vend.

How to Program the Drop Off Mode (On/Off)

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad until “Prog” appears in the display. Press the START (enter) keypad and “AtS1” will appear in the display.
3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable options until “droP” appears in the display.
4. When “droP” appears in the display, press the START (enter) keypad. The current Drop Off Mode (On/Off) Status will appear in the display.
“on” = Option Enabled
“oFF” = Option Disabled (factory default setting)

When the Drop Off Mode is enabled, starting the machine requires the correct sequence of four keypad presses. The default sequence programmed at the factory is NORMAL 90, NORMAL 60, NORMAL 40, SOIL LEVEL.

5. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to change the current status.
6. Press the START (enter) keypad when the desired status appears in the display. The next option, “LPSA”, will appear in the display.

NOTE: To program “LPSA” (Low Power/Auto Shutdown A Days Enable), refer to *option 26*. To program other options, refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

26. Low Power/Auto Shutdown A Days Enable “LPSA”

This option allows the owner to set Low Power/Auto Shutdown on certain day(s) of the week. Low Power or Auto Shutdown duration are programmed using an external device or network.

How to Program the Low Power/Auto Shutdown A Days Enable

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad until “Prog” appears in the display. Press the START (enter) keypad and “AtS1” will appear in the display.
3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable options until “LPSA” appears in the display.
4. When “LPSA” appears in the display, press the START (enter) keypad. The current Low Power/Auto Shutdown A Days Enable status will appear in the display.
“on” = Option Enabled
“oFF” = Option Disabled (factory default setting)
5. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to change the current status.
6. Press the START (enter) keypad when the correct status appears in the display. The next option, “LPSb”, will appear in the display.

NOTE: To program “LPSb” (Low Power/Auto Shutdown B Days Enable), refer to *option 27*. To program other options, refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

27. Low Power/Auto Shutdown B Days Enable “LPSb”

This option allows the owner to set Low Power/Auto Shutdown on certain day(s) of the week. Low Power or Auto Shutdown duration are programmed using an external device or network.

How to Program the Low Power/Auto Shutdown B Days Enable

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad until “Prog” appears in the display. Press the START (enter) keypad and “AtS1” will appear in the display.
3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable options until “LPSb” appears in the display.
4. When “LPSb” appears in the display, press the START (enter) keypad. The current Low Power/Auto Shutdown B Days Enable status will appear in the display.
“on” = Option Enabled
“OFF” = Option Disabled (factory default setting)
5. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to change the current status.
6. Press the START (enter) keypad when the correct status appears in the display. The next option, “LPSC”, will appear in the display.

NOTE: To program “LPSC” (Low Power/Auto Shutdown C Days Enable), refer to option 28. To program other options, refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

28. Low Power/Auto Shutdown C Days Enable “LPSC”

This option allows the owner to set Low Power/Auto Shutdown on certain day(s) of the week. Low Power or Auto Shutdown duration are programmed using an external device or network.

How to Program the Low Power/Auto Shutdown C Days Enable

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad until “Prog” appears in the display. Press the START (enter) keypad and “AtS1” will appear in the display.
3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable options until “LPSC” appears in the display.
4. When “LPSC” appears in the display, press the START (enter) keypad. The current Low Power/Auto Shutdown C Days Enable status will appear in the display.
“on” = Option Enabled
“OFF” = Option Disabled (factory default setting)
5. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to change the current status.
6. Press the START (enter) keypad when the correct status appears in the display. The next option, “LPSd”, will appear in the display.

NOTE: To program “LPSd” (Low Power/Auto Shutdown D Days Enable), refer to option 29. To program other options, refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

29. Low Power/Auto Shutdown D Days Enable “LPSd”

This option allows the owner to set Low Power/Auto Shutdown on certain day(s) of the week. Low Power or Auto Shutdown duration are programmed using an external device or network.

How to Program the Low Power/Auto Shutdown D Days Enable

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad until “Prog” appears in the display. Press the START (enter) keypad and “AtS1” will appear in the display.
3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable options until “LPSd” appears in the display.
4. When “LPSd” appears in the display, press the START (enter) keypad. The current Low Power/Auto Shutdown D Days Enable status will appear in the display.
“on” = Option Enabled
“OFF” = Option Disabled (factory default setting)
5. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to change the current status.
6. Press the START (enter) keypad when the correct status appears in the display. The next option, “PFR”, will appear in the display.

NOTE: To program “PFR” (Power Fail Reset), refer to *option 30*. To program other options, refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

30. Power Fail Reset “PFR”

This option allows the owner to set the amount of time the control will store active cycle information in the event of a power failure. The default setting for Power Fail Reset is OFF. If Power Fail Reset is turned OFF, the cycle will be saved.

How to Program Power Fail Reset

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad until “Prog” appears in the display. Press the START (enter) keypad and “AtS1” will appear in the display.
3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable options until “PFR” appears in the display.
4. When “PFR” appears in the display, press the START (enter) keypad. “OFF” or a number will appear in the display. This number corresponds to the current Power Fail Reset setting.
5. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to increase or decrease the current number to the desired number selected from *Table 13*.
6. Press the START (enter) keypad when the correct number appears in the display. The next option, “lRA”, will appear in the display.

NOTE: To program “lRA” (IR Access [On/Off]), refer to *option 31*. To program other options, refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

Programming Control

How to Read *Table 13*

Use this table to set the amount of time for Power Fail Reset.

“oFF” turns the option OFF. The current cycle status will be saved. When power is restored, the cycle will begin where it was interrupted.

If 133 is entered, the current cycle will be saved for up to five minutes. If power is not restored within five minutes, the control will erase the cycle status. The minimum power failure time is five minutes. The maximum power fail reset time is 127 minutes.

“PFr”	
DISPLAY TO ENTER IN STEP 6	POWER FAIL RESET TIME
“oFF”*	Turned OFF. Cycle will be saved.
133	5 minutes without power before cycle is lost
. . . add one minute for every number up to	
255	127 minutes without power before cycle is lost

*Factory default setting.

Table 13

31. IR Access (On/Off) “IrA”

This option allows the owner to enable or disable allowing the control to be read by an external device.

How to Program the IR Access (On/Off)

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad until “Prog” appears in the display. Press the START (enter) keypad and “AtS1” will appear in the display.
3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable options until “IrA” appears in the display.
4. When “IrA” appears in the display, press the START (enter) keypad. The current IR Access status will appear in the display.
“on” = Option Enabled (factory default setting)
“off” = Option Disabled
5. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to change the current status.
6. Press the START (enter) keypad when the desired status appears in the display. The next option, “rAEn”, will appear in the display.

NOTE: To program “rAEn” (Manual Rapid Advance [On/Off]), refer to *option 32*. To program other options, refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

32. Manual Rapid Advance (On/Off) “rAEn”

This option allows the owner to enable or disable the rapid advance feature. Refer to *Rapid Advance Feature* section for more information.

How to Program the Manual Rapid Advance (On/Off)

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad until “Prog” appears in the display. Press the START (enter) keypad and “AtS1” will appear in the display.
3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable options until “rAEn” appears in the display.
4. When “rAEn” appears in the display, press the START (enter) keypad. The current Manual Rapid Advance status will appear in the display.
“on” = Option Enabled (factory default setting)
“off” = Option Disabled
5. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to change the current status.
6. Press the START (enter) keypad when the desired status appears in the display. The next option, “dAEn”, will appear in the display.

NOTE: To program “dAEn” (Manual Diagnostics [On/Off]), refer to *option 33*. To program other options, refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

33. Manual Diagnostics (On/Off) “dAEn”

This option allows the owner to enable or disable the manual diagnostics option. Refer to *Testing Machine and Electronic Control Functions* section for more information.

How to Program the Manual Diagnostics (On/Off)

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad until “Prog” appears in the display. Press the START (enter) keypad and “AtS1” will appear in the display.
3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable options until “dAEn” appears in the display.
4. When “dAEn” appears in the display, press the START (enter) keypad. The current Manual Diagnostics status will appear in the display. “on” = Option Enabled (factory default setting) “oFF”= Option Disabled
5. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to change the current status.
6. Press the START (enter) keypad when the desired status appears in the display. The next option, “PtEn”, will appear in the display.

NOTE: To program “PtEn” (Production Test Cycle [On/Off]), refer to *option 34*. To program other options, refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

34. Production Test Cycle (On/Off) “PtEn”

This option allows the owner to enable or disable access to the production test cycle. Refer to *Production Test Cycle* section for more information.

How to Program the Production Test Cycle (On/Off)

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad until “Prog” appears in the display. Press the START (enter) keypad and “AtS1” will appear in the display.
3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the programmable options until “PtEn” appears in the display.
4. When “PtEn” appears in the display, press the START (enter) keypad. The current Production Test Cycle status will appear in the display. “on” = Option Enabled (factory default setting) “oFF”= Option Disabled
5. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to change the current status.
6. Press the START (enter) keypad when the desired status appears in the display. The first option, “AtS1”, will appear in the display.

NOTE: To program “AtS1” (Vend Price #1), refer to *option 1*. To program other options, refer to the appropriate section.

How to Exit Programming Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

Collecting Audit Information

This feature allows the owner to retrieve audit information stored in the washer by pressing a sequence of pads on the control. For an explanation of the audit options available, refer to *Table 14*.

How to Enter Audit Feature

There are two methods the owner can use to enter the Audit Feature.

Entering the Audit Feature by Manual Mode

1. Control must be in Manual Mode to start. Refer to *Entering the Manual Mode*.
2. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad until “AUDt” appears. Refer to *Figure 27*.



Figure 27

3. Press the START (enter) keypad. “CyC” will appear.

Entering the Audit Feature with the Coin Vault Open

1. Open coin vault. Make sure service door is closed.
2. Press the START (enter) keypad.

How to Read Audit Data

1. Use the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through various options until the desired option is shown in the display. Refer to the Audit Options List, *Table 14*, for an explanation of the audit options available.

Audit Options List		
#	Display	Description
1	“CyC”	Total # of machine cycles
2	“Col1”	Total # of coins #1
3	“Col2”	Total # of coins #2
4	“PLSE”	Total # of Start Pulses

Table 14

2. Once the desired option appears in the display, press the START (enter) keypad **once** to start the audit count. At this point, the display will show the first four-digit segment of the audit value. If the audit count is 10,000 or higher, press the START (enter) keypad again to view the last four digits of the number.

NOTE: The display can show up to 4 digits at one time. Audit counts 10,000 or higher are separated into two 4-digit segments. Each time the START (enter) keypad is pressed in step 2, the display will show the next 4-digit segment in the audit value. If the value is 9,999 or less, only one 4-digit segment will be shown.

For Example: In the Total Number of Coins #1 option with “Col1” shown in the display, the audit has counted 10,009 coins. Pressing the START (enter) keypad one time will show “_ _ _ 1” to represent ten thousand. Pressing the START (enter) keypad a second time will display “0009” meaning nine. The total equals “00010009” or 10,009.

3. Press the START (enter) keypad again. The control will go to the next audit option in the Audit Options List.
4. To select other audit options, repeat steps 1 – 4.

How to Exit Audit Feature

Press the DELICATES 30 (<) keypad until the control returns to Ready Mode.

NOTE: To exit Audit Feature when using Coin Vault Open method, owner must close coin vault. The control will then return to Ready Mode.

Manual Reset

This feature allows the owner to reset the washer control's programming data to the factory default settings by pressing a sequence of pads on the control. For an explanation of the Factory Default Settings, refer to *Default Washer Settings*.

How to Enter Manual Reset

1. Control must be in Manual Mode to start.
Refer to *Entering the Manual Mode*.
2. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad until "rSEt" appears.
3. Press the START (enter) keypad. The control will be blank until the programming is complete. Once the program has been reset, the control will display the next Manual Mode option, "dIAG".

Testing Machine and Electronic Control Functions

This feature allows the owner to run diagnostic tests on various washer operations without servicing the washer. The following tests are available:

- Control Software Version Number
- Service Door Opening Test
- Coin Vault Opening Test
- Coin Drop #1 Input Test
- Coin Drop #2 Input Test
- Coin Drops Header Present Test (software version “S 02” or higher only)
- Door Switch Input Test
- Door Lock Input Test
- Pump/Gravity Drain Test
- Show Fill Time Test
- Temperature Sensor Display Test
- Start Pulse Test
- Configuration #1 Display Test
- Configuration #2 Display Test

For an overview of the manual diagnostic test feature, refer to the flowchart on the following page.

How to Enter Testing Feature

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad until “dIAG” appears.
3. Press the START (enter) keypad. Display will change to “d001” indicating the control software version number test.
4. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad to scroll through the diagnostic test options.

How to Start Tests

To start a diagnostic test, refer to the quick reference charts below (*Table 15 or Table 16*). Press the START (enter) keypad when the desired test number is displayed. For detailed information on each test, read the appropriate description.

How to Exit Testing Feature

Press the DELICATES 30 (<) keypad until the display returns to the previous mode of operation.

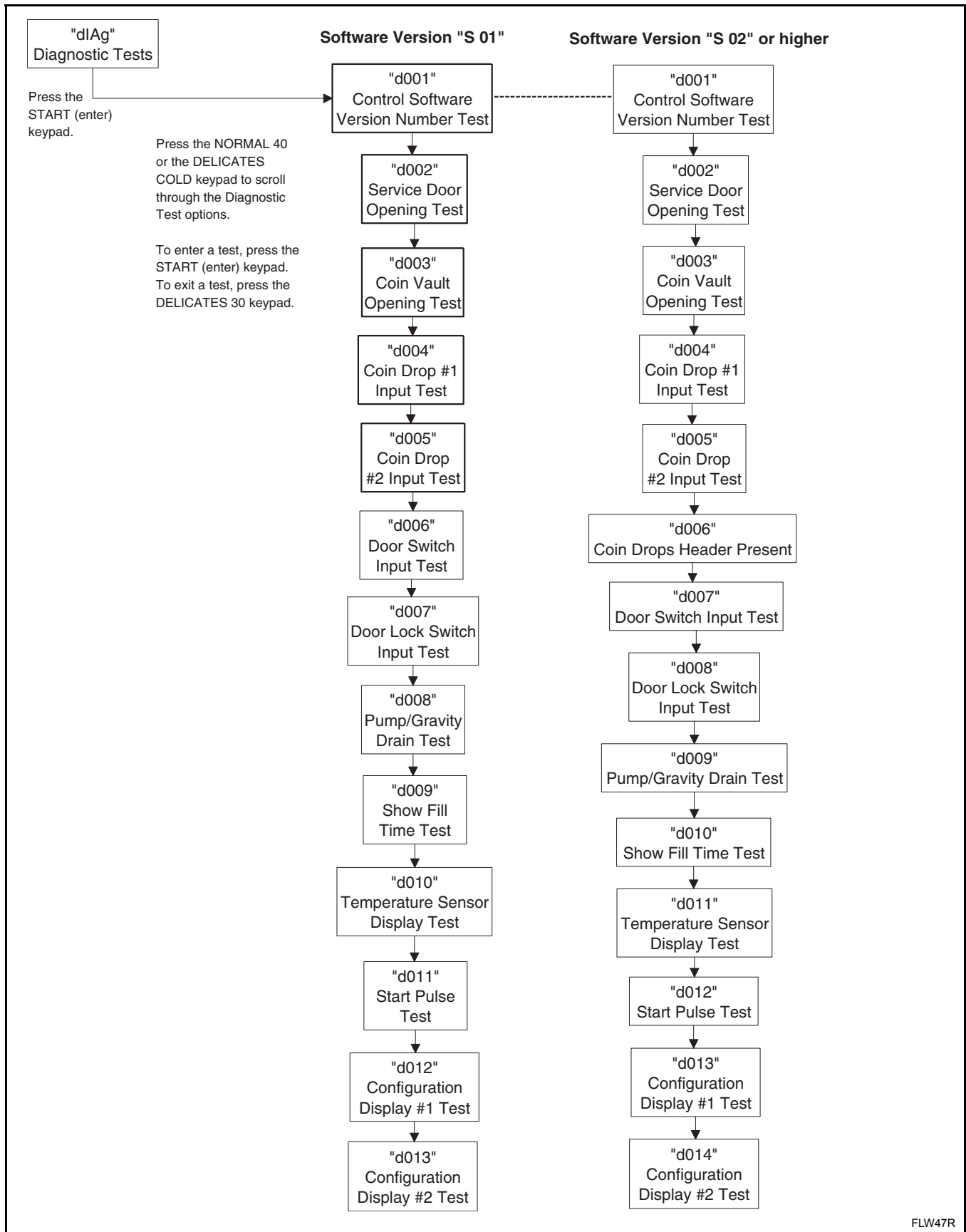
Diagnostic (Testing) Mode – Quick Reference Chart Software Version “S 01”		
Test Number	Diagnostic Mode	Display
“d001”	Control Software Version # Test	“SXX”
“d002”	Service Door Opening Test	“SXX”
“d003”	Coin Vault Opening Test	“UXX”
“d004”	Coin Drop #1 Input Test	“C1XX”
“d005”	Coin Drop #2 Input Test	“C2XX”
“d006”	Door Switch Input Test	“drCL” or “droP”
“d007”	Door Lock Switch Input Test	“drUL” or “drLo”
“d008”	Pump/Gravity Drain Test	“PunP” or “drAi”
“d009”	Show Fill Time Test	“FXXX”
“d010”	Temperature Sensor Display Test	“C XX”
“d011”	Start Pulse Test	“StXX”
“d012”	Configuration #1 Display Test	“A0XX”
“d013”	Configuration #2 Display Test	“b0XX”

Table 15

Testing Machine and Electronic Control Functions

Diagnostic (Testing) Mode – Quick Reference Chart Software Version “S 02” or higher		
Test Number	Diagnostic Mode	Display
“d001”	Control Software Version # Test	“SXX”
“d002”	Service Door Opening Test	“SXX”
“d003”	Coin Vault Opening Test	“UXX”
“d004”	Coin Drop #1 Input Test	“C1XX”
“d005”	Coin Drop #2 Input Test	“C2XX”
“d006”	Coin Drops Header Present Test	“CHoP” or “CHCL”
“d007”	Door Switch Input Test	“drCL” or “droP”
“d008”	Door Lock Switch Input Test	“drUL” or “drLo”
“d009”	Pump/Gravity Drain Test	“PunP” or “drAi”
“d010”	Show Fill Time Test	“FXXX”
“d011”	Temperature Sensor Display Test	“C XX”
“d012”	Start Pulse Test	“StXX”
“d013”	Configuration #1 Display Test	“A0XX”
“d014”	Configuration #2 Display Test	“b0XX”

Table 16



FLW47R

Figure 28

Diagnostic Test Descriptions

Control Software Version Number Test

This option displays the control software version number. To start test, control must be in the Testing Mode. Refer to *How to Enter Testing Feature* at the beginning of this section.

To enter, press the START (enter) keypad. The display will show “S XX” where “XX” is the software version number.

To exit the Software Version Number Test, press the DELICATES 30 (<) keypad. The control will return to the testing mode.

Service Door Opening Test

This option tests the service door switch. To start test, control must be in the Testing Mode. Refer to *How to Enter Testing Feature* at the beginning of this section.

To enter, press the START (enter) keypad. The display will show “S oP” when the service door switch is open and “S CL” when the service door switch is closed.

The service door switch has to be closed for at least one second and opened for at least a half a second for the display to change. This test will add a count to the service door opening counter for the audit and save the date/time for each opening.

To exit the Service Door Opening Test, press the DELICATES 30 (<) keypad. The control will return to the testing mode.

Coin Vault Opening Test

This option tests the coin vault switch. To start test, the control must be in the Testing Mode. Refer to *How to Enter Testing Feature* at the beginning of this section.

To enter, press the START (enter) keypad. The display will show “U oP” when the coin vault switch is open and “U CL” when the coin vault switch is closed.

The coin vault switch has to be closed for at least one second and opened for at least a half a second for the display to change. This test will add a count to the coin vault opening counter for the audit and save the time/date for each opening.

To exit the Coin Vault Opening Test, press the DELICATES 30 (<) keypad. The control will return to the testing mode.

Coin Drop #1 Input Test

This option tests coin drop #1. To start test, control must be in the Testing Mode. Refer to *How to Enter Testing Feature* at the beginning of this section.

To enter, press the START (enter) keypad. The display will show “C1XX”. The “XX” will show the number of coins entered and will increment one for each coin entered in coin drop #1.

NOTE: Coins entered in test mode will not increment the total # of coins counter that is accessed in the audit feature.

To exit the Coin Drop #1 Input Test, press the DELICATES 30 (<) keypad. The control will return to the testing mode.

Coin Drop #2 Input Test

This option tests coin drop #2. To start test, control must be in the Testing Mode. Refer to *How to Enter Testing Feature* at the beginning of this section.

To enter, press the START (enter) keypad. The display will show “C2XX”. The “XX” will show the number of coins entered and will increment one for each coin entered in coin drop #2.

NOTE: Coins entered in test mode will not increment the total # of coins counter that is accessed in the audit feature.

To exit the Coin Drop #2 Input Test, press the DELICATES 30 (<) keypad. The control will return to the testing mode.

Coin Drops Header Present Test (software version “S 02” or higher only)

This option tests the coin drop header connection. To start test, control must be in the Testing Mode. Refer to *How to Enter Testing Feature* at the beginning of this section.

To enter, press the START (enter) keypad. The display will show “CHoP” when the wiring connection is open and “CHCL” when the connection is closed.

To exit Coin Drops Header Present Test, press the DELICATES 30 (<) keypad. The control will return to the testing mode.

Door Switch Input Test

This test will display whether the washer door is open or closed.

To start test, control must be in the Testing Mode. Refer to ***How to Enter Testing Feature*** at the beginning of this section.

To enter, press the START (enter) keypad. If the door is closed, the display will show “drCL”. If the door is open, the display will show “droP”.

To exit the test, press the DELICATES 30 (<) keypad. The control will return to the testing mode.

Door Lock Input Test

This test will display whether the door is locked or unlocked.

To start test, control must be in the Testing Mode. Refer to ***How to Enter Testing Feature*** at the beginning of this section.

To enter, close the door and press the START (enter) keypad. The control will lock the door. If the door is open, the display will show “door”. The door must be closed to enter test.

If the door is unlocked, the display will show “drUL”. After the door is locked, the display shows “drLo” and turns off power to the door lock. The door will take approximately one minute to unlock. This sequence is repeated every time the START (enter) keypad is pressed.

To exit the test, press the DELICATES 30 (<) keypad. The control will return to the testing mode.

Pump/Gravity Drain Test

This test turns on the pump/gravity drain output.

To start test, control must be in the Testing Mode. Refer to ***How to Enter Testing Feature*** at the beginning of this section.

To enter, door must be closed. Press the START (enter) keypad. The control will lock the door and turn on the pump/gravity drain output. The display will show “PunP” for a pump equipped machine and “drAI” for a gravity drain equipped machine.

To exit the Pump/Gravity Drain Test, press the DELICATES 30 (<) keypad. The control will return to the testing mode.

Show Fill Time Test

This test will display the average fill time. This average will be calculated by taking the average of the last 10 fill times.

To start test, control must be in the Testing Mode. Refer to ***How to Enter Testing Feature*** at the beginning of this section.

To enter, press the START (enter) keypad. The display will show “FXXX”. The “XXX” will be the average fill time in seconds.

To exit the Show Fill Time Test, press the DELICATES 30 (<) keypad. The control will return to the testing mode.

Temperature Sensor Display Test

This test displays the temperature in degrees Celsius.

To start test, control must be in Testing Mode. Refer to ***How to Enter Testing Feature*** at the beginning of this section.

To enter, press the START (enter) keypad. The display will show “C XX”. The “XX” will be the temperature in degrees Celsius. If the control senses a shorted sensor, it will display “SH”. If the control senses an open sensor, it will display “OP”.

To exit the Temperature Sensor Display Test, press the DELICATES 30 (<) keypad. The control will return to the testing mode.

Start Pulse Test

This option tests the Start Pulse. To start test, control must be in the Testing Mode. Refer to ***How to Enter Testing Feature*** at the beginning of this section.

To enter, press the START (enter) keypad. The display will show “StXX”. The “XX” will show the number of pulses entered. This test will add counts to the total number of Start Pulses counter. Refer to ***Collecting Audit Information***.

To exit the Start Pulse Test, press the DELICATES 30 (<) keypad. The control will return to the testing mode.

Testing Machine and Electronic Control Functions

Configuration #1 Display Test

This option shows the machine configuration values. To start test, control must be in the Testing Mode. Refer to *How to Enter Testing Feature* at the beginning of this section.

To enter, press the START (enter) keypad. For configuration value #1, the display will show “A0XX”. “XX” is a number corresponding to whether or not coin drops are connected, or a card reader or network board are connected. Refer to *Table 17*.

To exit a Configuration Display Test, press the DELICATES 30 (<) keypad. The control will return to the testing mode.

Configuration #2 Display Test

This option shows the machine configuration values. To start test, control must be in the Testing Mode. Refer to *How to Enter Testing Feature* at the beginning of this section.

To enter, press the START (enter) keypad. For configuration value #2, the display will show “b0XX”. “XX” is a number corresponding to whether or not gravity drain jumper is present.

0 = Gravity drain jumper is not present. The machine is equipped with a pump.

16 = Gravity drain jumper is installed. The machine is equipped with a gravity drain.

To exit a Configuration Display Test, press the DELICATES 30 (<) keypad. The control will return to the testing mode.

Machine Configuration Table

CONFIG VALUE	COIN HEADER PRESENT	NETWORK BOARD PRESENT	CARD READER PRESENT	COIN DROP #2 PRESENT	COIN DROP #1 PRESENT
16	OFF	OFF	OFF	OFF	OFF
17	OFF	OFF	OFF	OFF	ON
18	OFF	OFF	OFF	ON	OFF
19	OFF	OFF	OFF	ON	ON
20	OFF	OFF	ON	OFF	OFF
21	OFF	OFF	ON	OFF	ON
22	OFF	OFF	ON	ON	OFF
23	OFF	OFF	ON	ON	ON
24	OFF	ON	OFF	OFF	OFF
25	OFF	ON	OFF	OFF	ON
26	OFF	ON	OFF	ON	OFF
27	OFF	ON	OFF	ON	ON
28	OFF	ON	ON	OFF	OFF
29	OFF	ON	ON	OFF	ON
30	OFF	ON	ON	ON	OFF
31	OFF	ON	ON	ON	ON
80	ON	OFF	OFF	OFF	OFF
81	ON	OFF	OFF	OFF	ON
82	ON	OFF	OFF	ON	OFF
83	ON	OFF	OFF	ON	ON
84	ON	OFF	ON	OFF	OFF
85	ON	OFF	ON	OFF	ON
86	ON	OFF	ON	ON	OFF
87	ON	OFF	ON	ON	ON

Table 17 (continued)

Table 17 (continued)

CONFIG VALUE	COIN HEADER PRESENT	NETWORK BOARD PRESENT	CARD READER PRESENT	COIN DROP #2 PRESENT	COIN DROP #1 PRESENT
88	ON	ON	OFF	OFF	OFF
89	ON	ON	OFF	OFF	ON
90	ON	ON	OFF	ON	OFF
91	ON	ON	OFF	ON	ON
92	ON	ON	ON	OFF	OFF
93	ON	ON	ON	OFF	ON
94	ON	ON	ON	ON	OFF
95	ON	ON	ON	ON	ON

NOTE: Configuration values 80-95 are on software version “S 02” or higher only.

Table 17

Production Test Cycle

To Enter Production Test Cycle

1. Be certain control is in Ready Mode and access panel or coin vault is open.
2. While pressing and holding the NORMAL 40 keypad with one hand, press the PERM PRESS 60 keypad with the other hand.
3. When the control enters the Production Test Cycle, it will first display “S XX” with the “XX” showing the software version of the control.
4. The control will advance through the sequence of test steps whenever START (enter) is pressed, with the exception of the Keypad Test. Refer to *Table 18* for all tests in the Production Test Cycle.

To Exit Production Test Cycle

To exit a test step, press START (enter) unless otherwise noted in *Table 18*.

Testing Machine and Electronic Control Functions

Production Test Cycle Quick Reference Chart		
Display	Test Mode	Comments
S XX	Software Version	XX is the software version number.
CtXX	Control Type	XX is the control type.
FL X	Machine Type	X is either P for pump equipped machines or d for gravity drain equipped machines.
8888	Display Test	All LEDs and display segments will light.
PAdX	Keypad Test	When a key is pressed, the control will display the number assigned to the keypad [X is 1 – NORMAL 90, 2 – NORMAL 60, 3 – NORMAL 40, 4 – SOIL LEVEL, 5 – PERM PRESS 60, 6 – DELICATES 30, 7 – DELICATES COLD, 8 – START (enter)]. As each keypad is pressed, its corresponding LED will be lit and remain on for the duration of the test. When all keypads have been pressed, the control will advance to Door Switch Test step.
droP or drCL	Door Switch Test	droP is displayed when loading door is open. drCL is displayed when loading door is closed.
drLo or drUL	Door Lock Test	When step is entered, control will lock door and will then check to make sure door is locked. drLo is displayed if door is locked. drUL is displayed if door is unlocked.
U oP or U CL	Coin Vault Test	U oP is displayed when coin vault switch is open. U CL is displayed when coin vault switch is closed.
S oP or S CL	Service Door Switch Test	S oP is displayed when service door switch is open. S CL is displayed when service door switch is closed.
CXCX	Coin Drop Test	X is the number of coins entered. Coin drop #1 is shown on the left of the display and coin drop #2 is shown on the right of the display.
CLdE	Cold/Detergent Fill	Cold Water Fill valve and Detergent/Bleach valve are turned on.
HoSF	Hot/Softener Fill	Hot Water Fill valve and Softener valve are turned on.
PS (software version "S 01") PSL (software version "S 02" or higher)	Pressure Switch Test	Both water valves are turned on. When the pressure switch level is satisfied, the water valves are turned off. The control will not advance to next step until pressure switch level is satisfied and START (enter) keypad is pressed.
C XX	Heater Test	This step checks heater operation. XX is the temperature in degrees Celsius.
oFLo	Overflow Test	All water and dispenser valves are turned on. When the overflow level is reached the water valves are turned off.
LoAg	Low Agitate	Machine enters low agitate.
rEAg	Regular Agitate	Machine enters regular agitate.

Table 18 (continued)

Table 18 (continued)

Production Test Cycle Quick Reference Chart		
Display	Test Mode	Comments
PunP or drAi	Pump/Gravity Drain Test	Pump is turned on or gravity drain is opened. The control will not advance to next step until pressure switch is closed indicating drum is empty and PERM PRESS 60 keypad is pressed.
Step Time in Minutes	Clothes Spin	The control runs a spin step. The drum will ramp up to 650 RPM for 3 minutes then 1000 RPM for 1 minute. The control will advance to the next step when finished.
01	Door Unlock	Door Lock is unpowered. The door will take approximately one minute to unlock. When the door unlocks, the control will advance to the next step.
LoAd	Load Weight	The control will remain in this step until the loading door is closed and the START (enter) keypad is pressed.
LoAd	Door Lock	Door Lock is powered. Machine will remain in this step until door is locked.
RPM speed displayed	Spin Test	Machine steps through all spin speeds for 30 seconds at each speed. Speeds are 90, 500, 650, and 1000. After 1000 RPM step, motor will stop.
brAy	Breakaway	Motor runs at Regular Agitate speed until door is unlocked. When door unlocks, control will exit test.

Table 18

Error Codes

The following table is a list of possible error codes for an electronic control. Errors beginning with “EI” refer to external device Infra-red communication errors.

Errors beginning with “EC” refer to card reader errors. All other errors refer to machine errors.

Display	Description	Cause/ Corrective Action
EI01	Transmission Failure	Communication failure. Re-aim external device and try again.
EI02	Time-out Error	Communication failure. Re-aim external device and try again.
EI03	Invalid Command Code	Communication successful, but the command was not valid for this machine type, or the control could not perform the command in its current mode of operation. Ensure data is for current machine type and control is in correct mode.
EI04	Expecting Upload Request	Communication failure. Re-aim external device and try again.
EI05	Invalid or Out-of-Range Data	The value in at least one of the programming options is invalid or out of range. Recheck the programming option’s value and try again.
EI09	CRC-16 Error	Communication failure. Re-aim external device and try again.
EI0A	Framing Error	Communication error. Re-aim external device and try again.
EI0C	Time-out Exceeded	Communication error. Re-aim external device and try again.
EI0E	Encryption Error	Communication error. Re-aim external device and try again. If the problem persists, check that the security code is correct.
EI0F	Infra-red Disabled	Communication failure or infra-red is disabled. Manually enable infra-red on control or re-aim external device and try again.
EC02	Time-out Error	Communication failure. Try card again.
EC03	Invalid Command Code	Communication successful, but the command was not valid for this machine type, or the control could not perform the command in its current mode of operation. Ensure data is for current machine type and control is in correct mode.
EC05	Invalid or Out-of-Range Data	The value in at least one of the programming options is invalid or out of range. Recheck the programming option’s value and try again.
EC11	No Card Reader Initialization	Communication is valid, but there is no card reader initialization. Power down, power up and try again.

Table 19 (continued)

Table 19 (continued)

Display	Description	Cause/ Corrective Action
EC18	No Communication	Card reader is initialized, communication lost. Power down, power up and try again. If error persists, replace control or card reader.
EC19	No Card Reader Communication	Communication failure. Power down, power up and try again. If error persists, replace control or card reader.
Right most decimal point Lit	Network Communication Error	Communication problem. Wait 1.5 minutes for error to clear. If error doesn't clear, power down and power up the machine. If error persists, replace control or network board.
ALrn	Break-in Alarm Error	Service the door or coin vault switches.
oFF	Break-in Alarm Shutdown Error	Service the door or coin vault switches.
E FL	Fill Error	Pressure switch fails to open in 30 minutes (or other programmed length of time) in any fill agitate cycle.
E SP	SPI Communications Error	Master control cannot communicate with motor control. Caused by transformer unplugged or wiring to motor control incorrect. Power down the machine, power up and try again.
E dL	Door Lock Error	Door does not lock within 15 seconds of closing (open and reclose door) or doesn't unlock 3 minutes after cycle completion.
E do	Door Opened During A Running Cycle	Control detects door open and door locked inputs high. Caused by pulling on door while locked or about to lock. Correct inoperative door locking system.
E Ub	Unbalance Error	Unable to balance load. Redistribute load and run cycle.
E dF	Drive Failure	Motor unplugged, motor failure, tachometer circuit open or drum locked up. Unpower machine to reset.
door	Door Open Indicator	Door is not closed during an active cycle. If door is closed, check for improper wiring or faulty door switch.
E rr	Coin Error	Invalid coin pulse or inoperative coin sensor. Check coin drop area and remove obstructions. If error persists, tampering may have occurred. Evaluate security procedures.
E oP	Open Thermistor Error	Thermistor circuit opens while heating. Heater will turn off and cycle will continue.
E SH	Shorted Thermistor Error	Thermistor circuit is shorted while heating. Heater will turn off and cycle will continue.
E Ht	Heater Error	Programmed temperature hasn't been reached in more than two hours. Cycle will continue with heater off.

Table 19

Rapid Advance Feature

The Rapid Advance feature allows the owner to quickly advance through active cycles or advance into a cycle from the ready mode.

How to Enter Rapid Advance

1. If control is in Ready Mode, control must be put into Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad until “rAPd” appears in the display.
3. Press the START (enter) keypad. The display will show “PUSH” then “Strt” followed by the cycle time and the START (enter) keypad LED will flash.
4. Press the START (enter) keypad to start cycle.

NOTE: Door must be closed to start cycle.

How to Enter Rapid Advance During an Active Cycle

1. Be certain service door is open.
2. While pressing and holding the NORMAL 90 keypad with one hand, press the PERM PRESS 60 keypad with the other hand.
3. Press the NORMAL 40 (^) or the DELICATES COLD (v) keypad until “rAPd” appears in the display.
4. Press START (enter) to activate rapid advance cycle.

Control may be in an active cycle or in the ready mode to use the Rapid Advance feature.

While in the Rapid Advance Mode, pressing the START (enter) keypad will advance the washer to the next cycle step. The cycle indicator lights will tell which cycle step the washer is in.

For Example: If the washer is in the first fill/agitate cycle step, pressing the START (enter) keypad will advance the washer into the Wash Drain/Distribute cycle step.

Continue pressing the START (enter) keypad until the cycle is completed.

How to Exit Rapid Advance Feature

1. Advance through the cycles until reaching the ready mode.

NOTE: The Rapid Advance option must be turned on for Rapid Advance to work. Refer to *option 32 in Programming Control*.

Clear Vend Feature

The Clear Vend feature allows the owner to clear a control which is in the middle of satisfying a vend price, and set it back to the ready mode.

How to Clear Vend

1. Open the service door. Refer to *Opening the Service Door*.
2. While pressing and holding the NORMAL 60 keypad with one hand, press the PERM PRESS 60 keypad with the other hand. The control will reset to the ready mode.

Power Fail Recovery

The Power Fail Recovery feature allows the cycle status to be saved in memory in the event of a power failure.

If the power failure lasted less than 30 seconds and the door is locked, the cycle will resume without requiring the user to press the START (enter) keypad to restart.

If the power failure lasted longer than 30 seconds, the Power Fail Reset option is turned "ON," the door is unlocked, and the duration of the power failure is less than or equal to the time programmed in the Power Fail Reset option, the START (enter) keypad will flash until it is pressed and the cycle will restart from the point it left off.

If the power failure lasted longer than 30 seconds, the Power Fail Reset option is turned "OFF," and the door is unlocked, the START (enter) keypad will flash one second on and one second off until it is pressed. The cycle will restart from the point it left off when START (enter) is pressed.

If the power failure lasted longer than 30 seconds, lasted longer than the time programmed in the Power Fail Reset option, and the Power Fail Reset option is turned "ON," the control will flash the START (enter) keypad one (1) second on and one (1) second off. When the pad is pressed, the cycle will start a delicate final high spin.

Communications Mode

Infra-red Communications

The Infra-red Communications feature allows the washer control to communicate with an external device. The washer control can be programmed and have its data read without using the keypad. It may also be used to start and stop various diagnostic tests.

How to Begin Communications with An External Device

The control will go blank and the display will show “-C-” until the communication is complete. If an error occurs that terminates communication, the display will show “E1XX” (“XX” represents the error code).

NOTE: The Infra-red Communications option must be turned on. Refer to *option 31* in *Programming Control*.

Card Reader Communications (Card Models Only)

The Card Reader Communications feature allows the washer control to communicate with the card reader. The washer control can be programmed for a limited number of options and have its data read without using the keypad.

Network Communications

The Network Communications feature allows the washer control to communicate with a network. The washer control can be programmed and have its data read without using the keypad.

Default Cycle Time

The cycle listed is the default PERM PRESS 60 cycle programmed in at the factory. This cycle can be made longer or shorter by reprogramming the fill/agitate times. Refer to ***Programming Control*** to change these times. All other times are not programmable.

Cycle	Default
Wash Fill/Agitate	6:00 *
Wash Drain/Distribute	0:45
Wash Spin	2:15
Rinse Fill/Agitate	2:00 *
Rinse Drain/Distribute	0:45
Rinse Spin	2:15
Final Rinse Fill/Agitate	2:00 *
Final Rinse Drain/Distribute	0:45
Final Rinse Spin	2:15
Final High Spin	6:00
Breakaway	Variable

* = Programmable Times