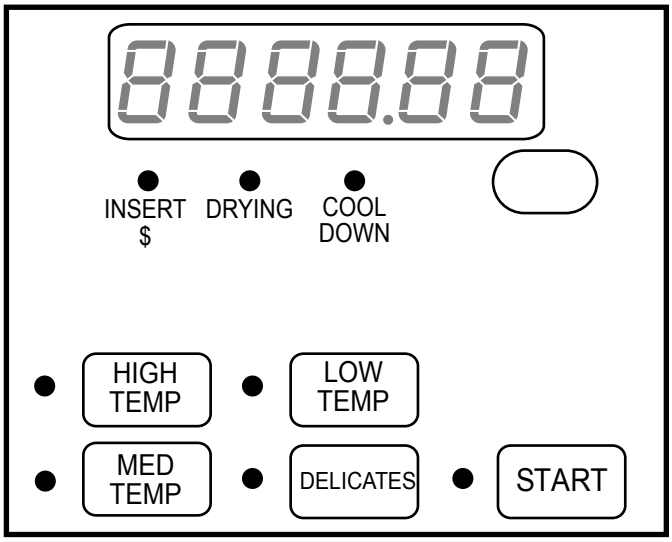
Dryer

Refer to Page 5 for Model Identification

Programming



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

Part No. D514690R1
April 2015

Front Matter

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

WARNING

For your safety and to reduce the risk of fire or an explosion, do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

W022

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.

Read all instructions before using washer.

This product uses FreeRTOS V7.2.0 (www.freertos.org).

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Model Identification

Information in this manual is applicable to these dryer models:

JDEJEAGW303EW01	JSEJEAGW303EW01	JT1JMASG413EN06	JTEJEASP303EW06
JDEJGBGW303EW01	JSEJGAGW303EW01	JT1JXASP413EW06	JTEJXASP303EW06
JDEJGBSW303EN01	JSGJEAGW303EW01	JT2JEASP413EW06	JTGJEASP303EW06
JDGJEAGW303EW01	JSGJGAGW303EW01	JT2JGASP413EW06	JTGJXASP303EW06
JDGJGBGW303EW01	JT1JEASP413EW06	JT2JMASG413EN06	
JDGJGBSW303EN01	JT1JGASP413EW06	JT2JXASP413EW06	

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Preliminary Information

About the Control

This control is an advanced, programmable computer that lets the owner control machine features by pressing a sequence of SELECT CYCLE pads. 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 other programmable features. Refer to Programming Control for a list of features. Dryers shipped from the factory have a default cycle (MED TEMP) 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 (for up to 10 years) until the electrical power is restored.

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

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 dryer willr esume into the previously active cycle (if so programmed by the owner), by pressing the START pad. If the power failure occurs while the control is in a fatal error mode, it will return to Ready Mode upon recovery.

The owner may program a special feature called POWER FAIL RESET which sets a maximum power failure duration before vend is entered and cycle progress is lost. To program this feature, refer to *Power Fail Reset PF rst*.

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 rather than resume the previously active cycle. If the length of the power failure is less than the POWER FAIL RESET time and the power failures is greater than 2 seconds, or the POWER FAIL RESET is turned off, the dryer will enter START mode.

Communications

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

The control may be programmed manually or by infra-red communication with an external device.

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 machine. 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.

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, the external device is not required to program and operate the machine. 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 serial card reader communications, refer to instructions included with 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.

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Control Identification

SELECT CYCLE Pads

(Refer to *Figure 1*)

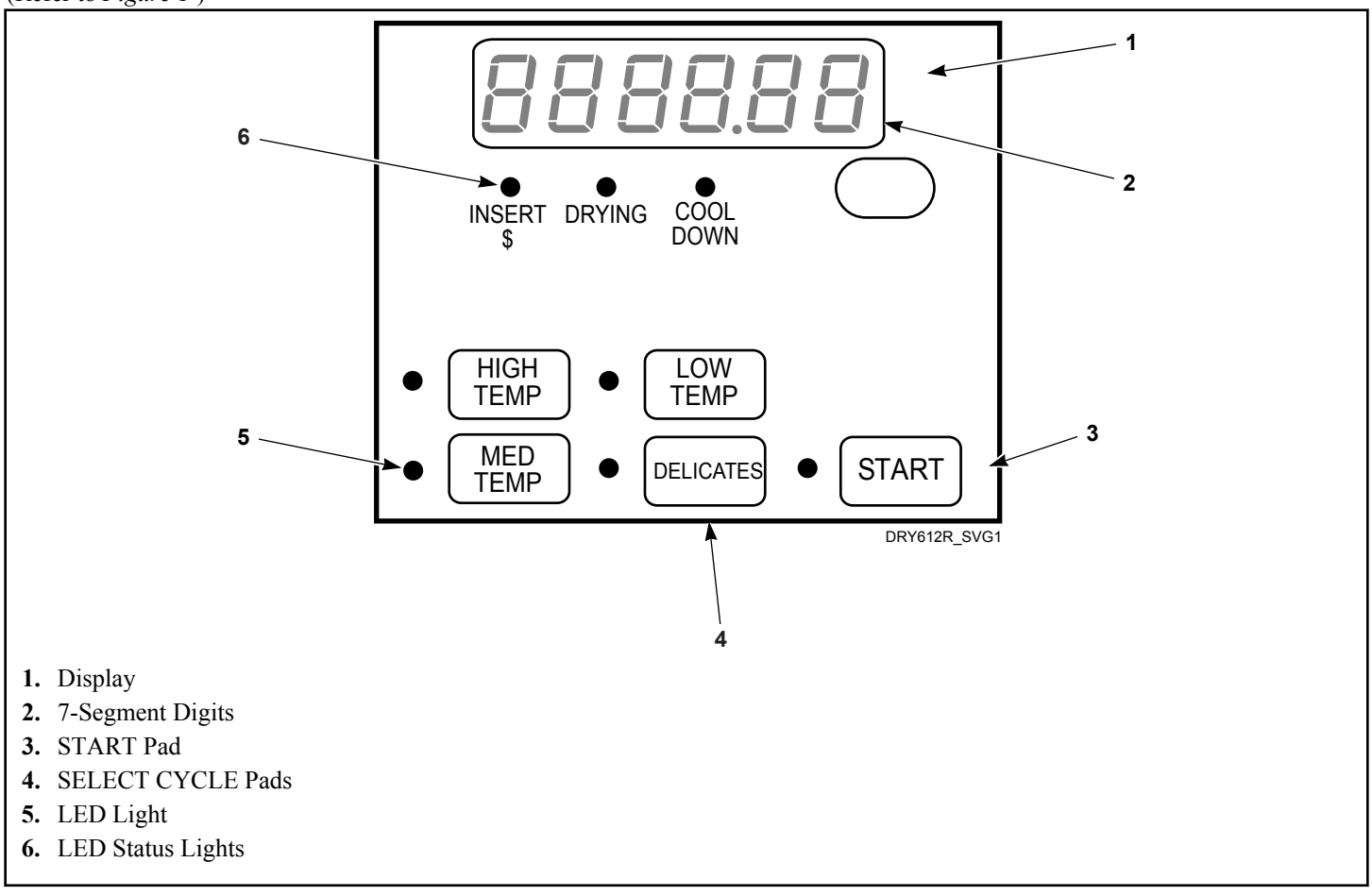
SELECT CYCLE pads are used to select the specific dryer cycle and temperature. These pads include HIGH TEMP, MED TEMP, LOW TEMP, DELICATES and NO HEAT. The selection of one of these cycles will light up the corresponding LED. The factory default cycle is MED TEMP.

The START pad is used to start the dryer after the full vend price has been satisfied and the dryer door is closed.

Both the START pad and the SELECT CYCLE pads are used in various combinations for programming cycles, retrieving audit information, running diagnostic tests, and other operations. During an active cycle (card reader equipped machines only), the START pad may be pressed (with a card inserted) to add time to a cycle.

START Pad

(Refer to *Figure 1*)



1. Display
2. 7-Segment Digits
3. START Pad
4. SELECT CYCLE Pads
5. LED Light
6. LED Status Lights

Figure 1

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Display Identification

Light Emitting Diodes (LEDs)

(Refer to *Figure 1*)

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

INSERT COINS/CARD LED

The INSERT COINS/CARD LED is lit to prompt the user to insert coins or a card to satisfy the vend price for the chosen cycle. The LED is lit during the READY mode and PArt IAl UEnd mode. During Additional Vend, the LED flashes one second on and one second off. The INSERT COINS/CARD LED will shut off when the coin vend price has been satisfied or a card has been inserted.

START LED

The START pad LED flashes one second on and one second off whenever the dryer is not in a cycle, the full vend price has been satisfied, and the dryer door is closed. When the START pad is pressed, the cycle will begin or resume. The START LED will shut off when the START pad is pressed. The START LED will also flash any time a card is inserted to add time to the current cycle.

DRYING LED

The DRYING LED is lit to indicate that one of the heated cycles (HIGH TEMP, MED TEMP, LOW TEMP, DELICATES) is currently in operation. The DRYING LED goes off at the end of a heated cycle, if the heated cycle is changed to a NO HEAT cycle, or when the COOL DOWN cycle begins.

COOL DOWN LED

The COOL DOWN LED is lit whenever the COOL DOWN portion of a heated cycle is active. It is also lit when the NO HEAT cycle is in operation. The COOL DOWN LED will shut off when a cycle ends or more time is added, pushing the cycle back into the heated portion of a cycle.

Six 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*).

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Dryer Operation

Power Up Mode

When power is applied to the dryer, the control becomes active. This mode sets the next mode before enabling power failure detection.

Ready Mode

In Ready Mode, the display shows the currently selected cycle, the full vend price is displayed and the INSERT COINS/CARD LED is lit (if enabled).

The user may select a different cycle, if desired. If the vend price is not satisfied within 4.25 minutes, the dryer control will return to the Ready Mode. The display will continue to show the remaining vend needed to start a cycle.

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 is lit.

Additional Vend Mode

The control enters this mode if the cycle is changed to a cycle that requires more money. The additional vend price will flash one second on and one second off until a coin is entered, a start pulse is entered or a vend payment is received. If the vend price is not satisfied within 60 seconds or the door is opened, the control will go back to the first selection and the cycle will continue.

Start Mode

Vends may be satisfied by a coin drop, start pulses, or by a third party card reader. If a coin drop is used, the remaining vend price will decrease with each coin entry. If start pulses are used, the remaining vend price will decrease with each received pulse. Once the vend is satisfied, the START LED will begin to flash and signal will sound for ten seconds. If a third party card reader is used, the START LED will begin to flash when a valid cash card is entered into the reader.

When the START keypad is pressed, the dryer will start. The START LED will stop flashing and either the DRYING LED or the COOL DOWN LED will be lit. The display will change to show the remaining cycle time on the display. The DRYING LED will be lit during the heat portion of a heat cycle. The COOL DOWN LED will be lit during the cool down portion of a heat cycle and during an entire no heat cycle.

When a cycle is complete, the display will show 00 until the door is opened, a key is pressed, a coin or card is entered, or a start pulse is received. When any of the above happens, the display will revert back to the Ready Mode.

Entering Coins

Coins are entered to satisfy the programmed vend price for a selected cycle. Coins may be entered before selecting a cycle or during an active cycle. When coins are entered during an active cycle, the time remaining is increased by the amount programmed by the owner (refer to *Programming Control*).

The owner may choose to add additional time for each coin entered. If coins are entered for an active cycle currently in the COOL DOWN Mode, coins entered may push the cycle back into the DRYING Mode. The maximum time for any cycle is 99 minutes.

Entering Cards

A card is entered to satisfy the programmed vend price for a selected cycle. The card may be entered before selecting a cycle or during an active cycle. When the card is entered during an active cycle and the START keypad is pressed, the time remaining is increased by the amount programmed by the owner. Refer to *Programming Control* section.

The owner may choose to add additional time by deducting a vend from the card or may require an additional full vend price be deducted from the card. If vend is deducted during an active heated cycle that is currently in the COOL DOWN Mode, the additional time added may put the cycle back into the DRYING Mode. The maximum time for any cycle is 99 minutes. Additional time cannot be added if it exceeds the 99 minute limit on a drying cycle.

Changing Active Cycles

In OPL machines, the active cycle may be changed at any time during dryer operation. In vend machines, the active cycle may be changed in the first five minutes for more expensive cycles. Cycles that are the same price or less expensive can be chosen anytime. The last five minutes of cycle can be changed with no change to vend or time remaining.

Opening the Dryer Door

Opening the dryer door in a running cycle will automatically stop the cycle. When the dryer door is opened, the DRYING LED or COOL DOWN LED is turned off.

Once the dryer door is closed, the START pad LED flashes at one second intervals until the START pad is pushed. Pressing the START pad will start or resume the active cycle.

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Signals

There are five instances when a signal may sound during dryer operation. The owner may program the signal to be turned on or off (refer to *Audio Signal AUdio*). These five instances are listed below:

1. **End of Cycle Signal**

By default, this signal is turned off. If turned on, the signal will sound for three seconds at the end of a cycle.

2. **Keypad Depression Signal**

The signal will sound for a quarter of a second each time a keypad is pressed.

3. **Coin Input/Start Pulse Input/Card Insertion Signal**

The signal will sound for a quarter of a second each time a coin or start pulse is received or a card is entered.

4. **Serial/Network Command Signal**

This signal will sound for a quarter of a second each time the control receives a valid serial or network vend command.

5. **Signal for Start**

This signal will sound one second on and one second off for 10 seconds when START LED is flashing after vend has been satisfied.

Extended Tumble Mode

The control enters Extended Tumble Mode twenty minutes after a cycle has ended. The signal will sound one second on and one second off for five seconds and then continuously for five seconds before starting the extended tumble, which is disabled by default. Extended Tumble Mode ends with any user interaction.

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Special Features

Programming Control

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

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

Collecting Audit Information

The control will store audit information in its memory that can be retrieved by pressing various keypad combinations. The control will record coins entered, total machine cycles, top-offs, 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, a card reader or a network. Refer to the appropriate instruction manual.

Testing Machine and Control Functions

Special programmable diagnostic features built into the control allow the owner to run specific diagnostic tests. By opening and closing the service door, with coin vault closed, and then pressing various sequences of keypads, the owner may retrieve and perform the following tests:

- Control Software Version Number
- Input/Output Board Software Version Number
- Service Door Opening Test
- Coin Vault Opening Test
- Coin Drop #1 Input Test
- Coin Drop #2 Input Test
- Vend Header Present Status Test
- Start Pulse Test
- Door Switch Input Test
- Dryer-on Temperature Test
- Thermistor Temperature Test
- Machine Configuration #1 Display Test
- Machine Configuration #2 Display Test
- Machine Configuration #3 Display Test
- Machine Configuration #4 Display Test
- Machine Configuration #5 Display Test

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

Rapid Advance Feature

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

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, while in Partial Vend Mode.

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

Communications Mode

This feature allows the dryer control to communicate with an external device, a card reader or a network. This allows the dryer 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 satisfy the vend.

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 or multiple pulses are received.

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 and a closed coin vault combined with various keypad presses allows the control to enter manual modes of operation if the Break-In Alarm is not on. These modes

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include Manual Programming, Audit Collection, Diagnostics, Rapid Advance, and Reset to Factory Defaults.

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.

Press the START keypad to add time to the cycle. Press the LOW TEMP and DELICATES keypads to end the cycle.

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 or a network.

Press the START keypad to add time to the cycle. Press the LOW TEMP and DELICATES keypads to end the cycle.

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*.

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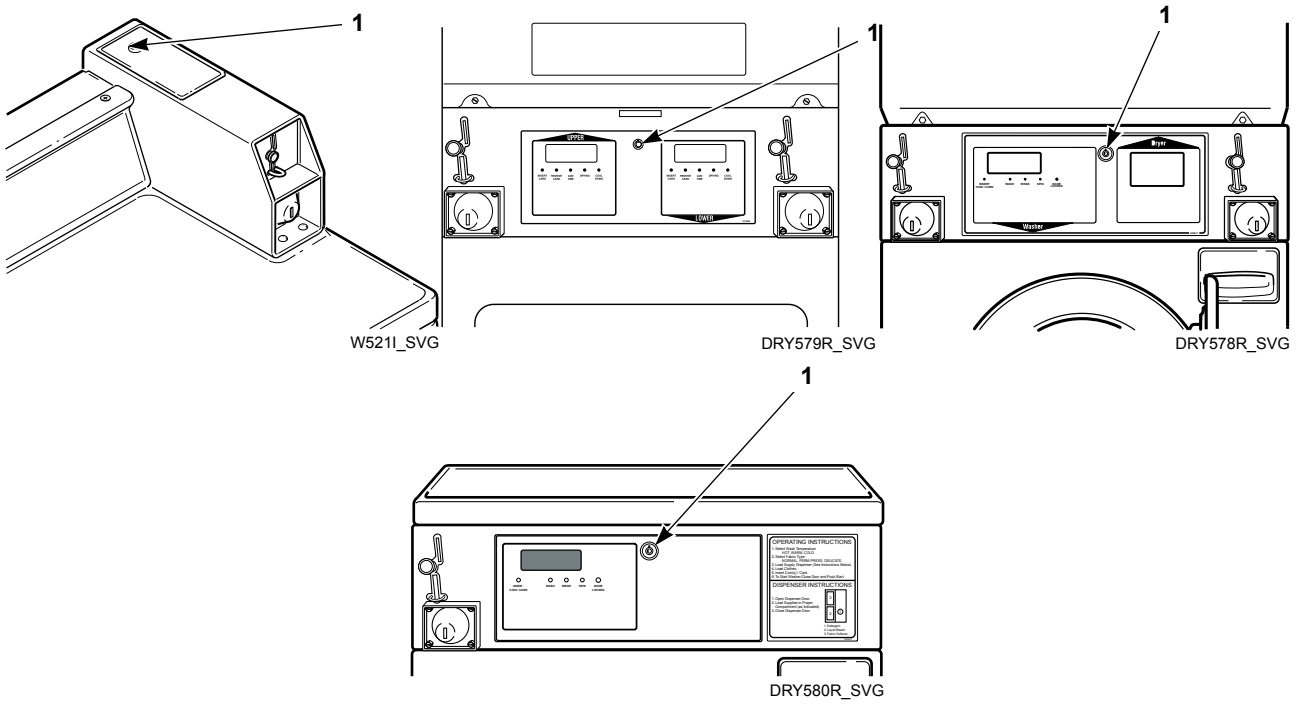
Opening the Service Door

Stacked Washers and Dryers, Stacked Dryers, Front Control Dryers, and Coin Rear Control Dryers

Manually programming the control 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.

On stacked dryers, stacked washers and dryers, and front control dryers, the service door is located in the control panel. On rear control dryers, the service door is located on the top of the meter case. Refer to *Figure 2* .

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



1. Service Door

Figure 2

Rear Control Dryers with Card Reader

Manually programming the control requires the user to remove the control panel and unplug the bullet connector located between the “white/black” and “red/blue” wires or to insert an appropriate card into the reader. This will allow the user to access various programming options, diagnostics and audit capabilities. The control panel is located on the control hood. Refer to *Figure 2* .

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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 steps below.

For an overview of entering the Manual Mode, refer to the flowchart.

How to Enter the Manual Mode

1. If accessing Diagnostic Tests, be sure the dryer is in the Ready Mode before continuing to step 2. If the dryer is in an active cycle, rapid advance through the cycle. Refer to 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: Coin Models – The coin vault switch must be closed to enter the Manual Mode. Card Reader Models – Unplug bullet connector.
3. While pressing and holding the HIGH TEMP keypad with one hand, press the MED TEMP keypad with the other hand.
4. The display will show rAP id.
5. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the options until the desired option appears in the display.
6. Press the START (enter) keypad to enter the displayed mode.
7. To exit, press the MED TEMP (<) keypad. The control will revert back to Ready Mode.

Manual Programming can only be turned on or off with an external device or a network. Refer to the appropriate instruction manual. Manual Rapid Advance and Diagnostics can be turned on and off using an external device by manual programming (refer to *IR Access (On/Off) irA En* or *Manual Rapid Advance (On/Off) rAPdEn*), or with the network.

By default, Manual Programming is turned on.

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

Rapid Advance (rAP id)

Manual Programming (Prog)

Manual Read Audit (AUd it)

Manual Reset (rESEt)

Diagnostic Tests (d iAG)

If a manual parameter is turned off or unavailable (i.e. attempting to enter diagnostics while a cycle is running), the display will change from the selected feature to oFF, an audio signal will sound for one second and the features in the parameter cannot be entered. The display will then return to the selected feature.

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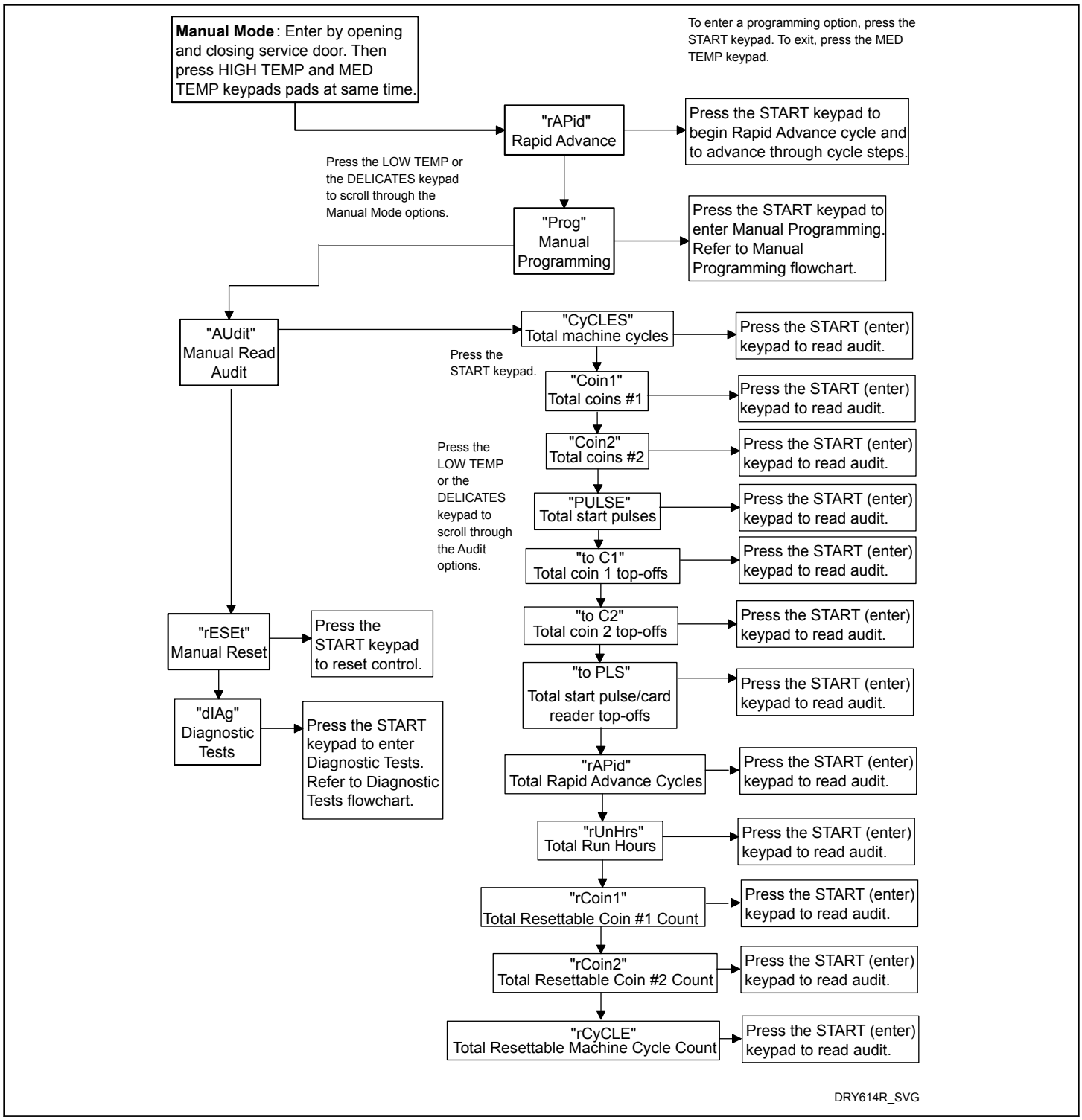

Figure 3

How to Exit Programming Feature

Press the MED TEMP (<) keypad until the control returns to Ready Mode.

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Programming Control

What Can Be Programmed?

This feature allows the owner to program cycle parameters, 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 a network. Refer to this section when programming the control.

This section offers a detailed description of all available programmable options.

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.

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

NOTE: The codes in the Option column of the Programmable Options List are what will show in the display when that option is selected.

Programmable Options Available

Option Number	Option Display	Description	Default Value	Value Range
1	AtS H	Heat Cycle Vend Price	200	0-65535
2	CYCt-	Cycle Time	–	–
a	CYCt 1	Heat Cycle Time Minutes	45	1-99
b	CYCt 2	Heat Cycle Time Seconds	0	0-59
3	toP-	Top-Off Data	–	–
a	toP 1	Top-Off On/Off	on	on/oFF
b	toP 2	Coin 1 Top-Off Time Minutes	5	0-99
c	toP 3	Coin 1 Top-Off Time Seconds	38	0-59
d	toP 4	Coin 2 Top-Off Time Minutes	22	0-99
e	toP 5	Coin 2 Top-Off Time Seconds	30	0-59
4	AtS dP	Vend Price Decimal Point	2	0, 2 (xxx.xx) or 3 (xx.xxx)
5	dEn 1	Coin #1 Value	25	1-65535
6	dEn 2	Coin #2 Value	100	1-65535

Table continues...

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Option Number	Option Display	Description	Default Value	Value Range
7	PLSE	Start Pulse Value	25	1-65535
8	PLSmod	Start Pulse Mode	128	128 (on - single pulse), 192 (on - multiple pulses) or oFF
9	AtYPE	Programmable Output Type	0	0-13
10	dFtCYC	Default Cycle	4	1 (High Temp), 2 (Low Temp), 3 (No Heat), or 4 (Delicates)
11	CArd	Card Reader Display Control On/Off	oFF	on/oFF
12	AUdio	Audio Signal	29	0-31
13	nodE	Network Node Number	250	1-250
14	Error-	Errors	–	–
a	CErr-	Coin Error Parameters	–	–
1	CErr 1	Coin Error On/Off	on	on/oFF
2	CErr 2	Coin Error Penalty On/Off	oFF	on/oFF
3	CErr 3	Vend Header Present Error On/Off	on	on/oFF
b	CLrErr	Clear Error On/Off	oFF	on/oFF
15	Cdt -	Cooldown Time	–	–
a	Cdt 1	High Temp Cooldown Time	3 - North America 10 - Outside North America	1-15
b	Cdt 2	Medium Temp Cooldown Time	3 - North America 10 - Outside North America	1-15
c	Cdt 3	Low Temp Cooldown Time	3 - North America 8 - Outside North America	1-15
d	Cdt 4	Delicates Temp Cooldown Time	3 - North America 6 - Outside North America	1-15

Table continues...

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Option Number	Option Display	Description	Default Value	Value Range
16	t d F	Time Display Format	nn	nn (minutes only) or nnSS (minutes and seconds)
17	tEmP -	Temperature	–	–
a	tEmP 1	High Temperature	160°F/72°C	100°-160°F/38°-72°C
b	tEmP 2	Medium Temperature	155°F/68°C	100°-160°F/38°-72°C
c	tEmP 3	Low Temperature	145°F/62°C	100°-160°F/38°-72°C
d	tEmP 4	Delicates Temperature	115°F/46°C	100°-160°F/38°-72°C
18	tP F C	Temperature (Fahrenheit/Celsius)	0	0 (Fahrenheit)/1 (Celsius)
19	rtC -	Real Time Clock Parameters	–	–
a	rtC 1	Set Real-Time Clock Minutes	–	0-59
b	rtC 2	Set Real-Time Clock Hours	–	0-23
c	rtC 3	Set Real-Time Clock Day	–	1-7
d	rtC 4	Set Real-Time Clock Date	–	1-31
e	rtC 5	Set Real-Time Clock Month	–	1-12
f	rtC 6	Set Real-Time Clock Year	–	0-99
20	dLS-	Daylight Savings Parameters	-	-
a	dLS 1	Daylight Savings On/Off	on	on/oFF
b	dLS 2	Start Month	3	1-12
c	dLS 3	Start Day of Week	1	1-7
d	dLS 4	Start Week of Month	2	1-4
e	dLS 5	Start Hour	2	0-23
f	dLS 6	End Month	11	1-12

Table continues...

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Option Number	Option Display	Description	Default Value	Value Range
g	dLS 7	End Day of Week	1	1-7
h	dLS 8	End Week of Month	1	1-4
i	dLS 9	End Hour	2	0-23
21	SP1-	Special Vend 1 Parameters	–	–
a	SP1 1	Special Vend 1 Days Enable	0	0 (oFF) - 255
b	SP1 2	Special Vend 1 Start Minute	0	0-59
c	SP1 3	Special Vend 1 Start Hour	0	0-23
d	SP1 4	Special Vend 1 Start Date	0	0 (oFF) - 31
e	SP1 5	Special Vend 1 Start Month	0	0 (oFF) - 12
f	SP1 6	Special Vend 1 Start Year	0	0-99
g	SP1 7	Special Vend 1 Length in Hours	0	0-24
h	SP1 8	Special Vend 1 End Date	0	0 (oFF) - 31
i	SP1 9	Special Vend 1 End Month	0	0 (oFF) - 12
j	SP1 10	Special Vend 1 End Year	0	0-99
k	SP1 11	Special Vend 1 Heat Cycle Vend Price	0	0 - 65535
l	SP1 12	Special Vend 1 Heat Cycle Time Minutes	1	1-99
m	SP1 13	Special Vend 1 Heat Cycle Time Seconds	0	0-59
n	S P1 17	Special Vend 1 Coin 1 Topoff Time Minutes	1	0-99
o	S P1 18	Special Vend 1 Coin 1 Topoff Time Seconds	0	0-59

Table continues...

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Option Number	Option Display	Description	Default Value	Value Range
p	S P 1 19	Special Vend 1 Coin 2 Topoff Time Minutes	1	0-99
q	S P 1 20	Special Vend 1 Coin 2 Topoff Time Seconds	0	0-59
22	SP2	Special Vend 2 Days Enable (On/Off)	oFF	on/oFF
23	SP3	Special Vend 3 Days Enable (On/Off)	oFF	on/oFF
24	SP4	Special Vend 4 Days Enable (On/Off)	oFF	on/oFF
25	LPAS 1	Low Power/Auto Shut-down 1 Days Enable (On/Off)	oFF	on/oFF
26	LPAS 2	Low Power/Auto Shut-down 2 Days Enable (On/Off)	oFF	on/oFF
27	LPAS 3	Low Power/Auto Shut-down 3 Days Enable (On/Off)	oFF	on/oFF
28	LPAS 4	Low Power/Auto Shut-down 4 Days Enable (On/Off)	oFF	on/oFF
29	PF rES	Power Fail Reset	oFF	0 (oFF) - 120 minutes
30	IrA En	IR Access (On/Off)	on	on/oFF
31	rAPdEn	Manual Rapid Advance (On/Off)	on	on/oFF
32	diAGEn	Manual Diagnostics (On/Off)	on	on/oFF
33	Ft En	Factory Test Cycle	on	on/oFF
34	LUC-	Lucky Cycle	-	-
a	LUC 1	Lucky Cycle Day(s) of Week Enable	on	on/oFF
b	LUC 2	Lucky Cycle Number	on	0 (oFF) - 255
c	LUC 3	Lucky Cycle Display Option (On/Off)	oFF	on/oFF

Table continues...

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Option Number	Option Display	Description	Default Value	Value Range
35	Ht dP	Heat Indicator Decimal Point (On/Off)	oFF	on/oFF
36	PCdL d	Programmable Close Door/Lid Display (On/Off)	on	on/oFF
37	PPSt d	Programmable Push Start Display (On/Off)	on	on/oFF
38	PodL d	Programmable Open Door/Lid Display (On/Off)	on	on/oFF
39	AtS do	Vend Price Display Override	oFF	on/oFF
40	oPL-	OPL Parameters	-	-
a	oPL 1	OPL Mode Enable (On/Off)	oFF	on/oFF
b	oPL 3	OPL Display Power Save (On/Off)	on	on/oFF
41	droP	Drop Off Mode (On/Off)	oFF	on/oFF
42	oUt	Out of Order (On/Off)	oFF	on/oFF

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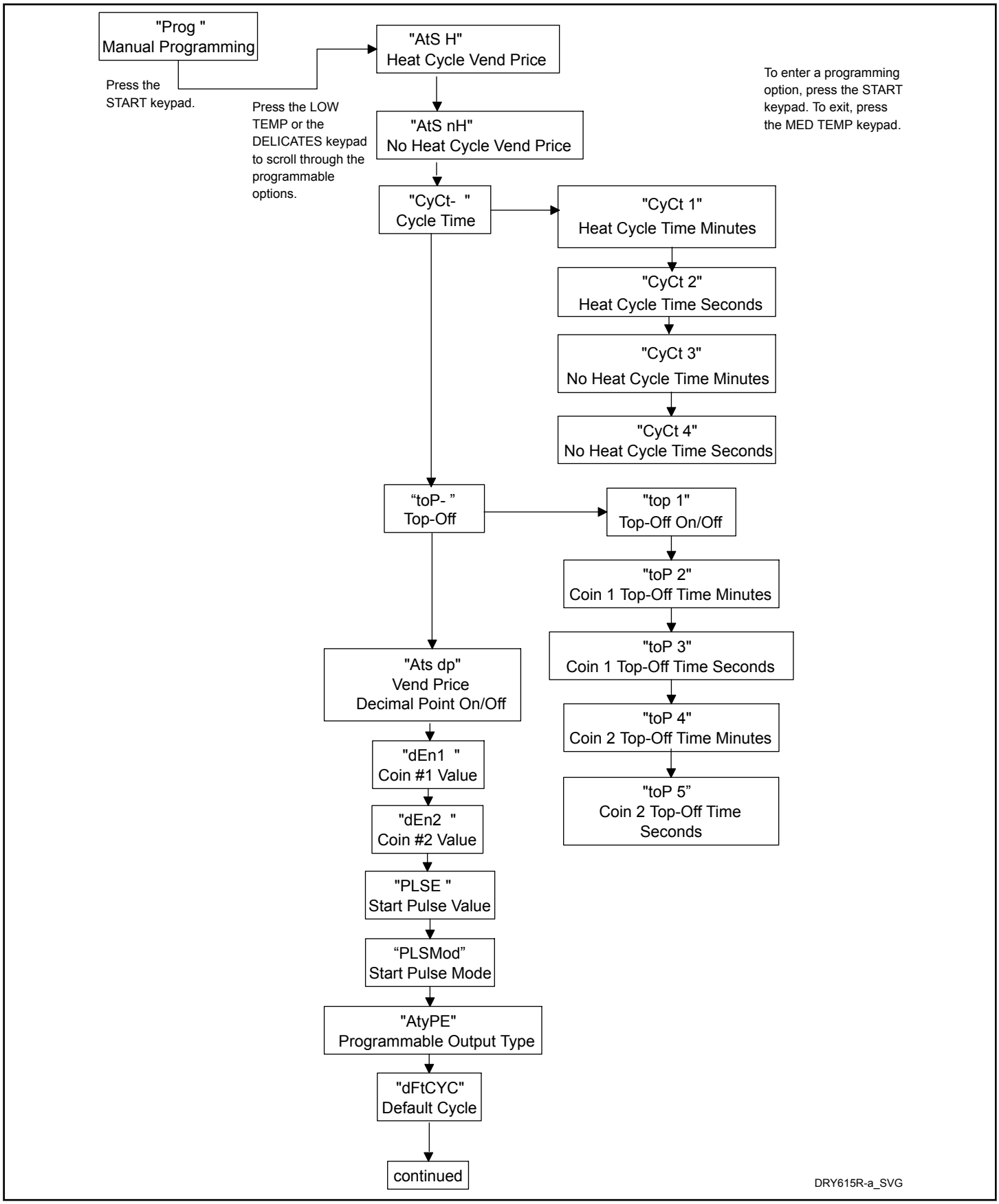

Figure 4

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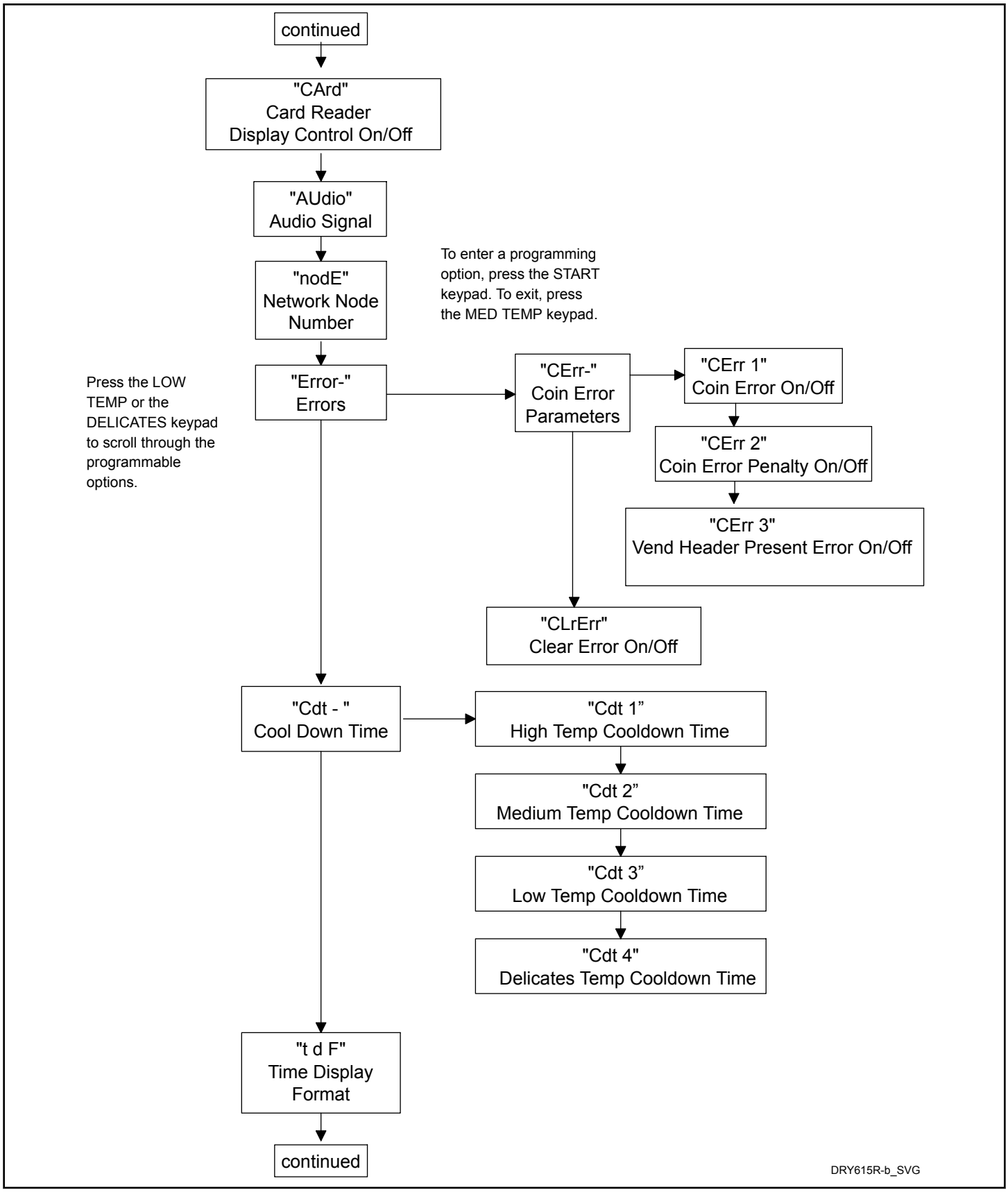

Figure 5

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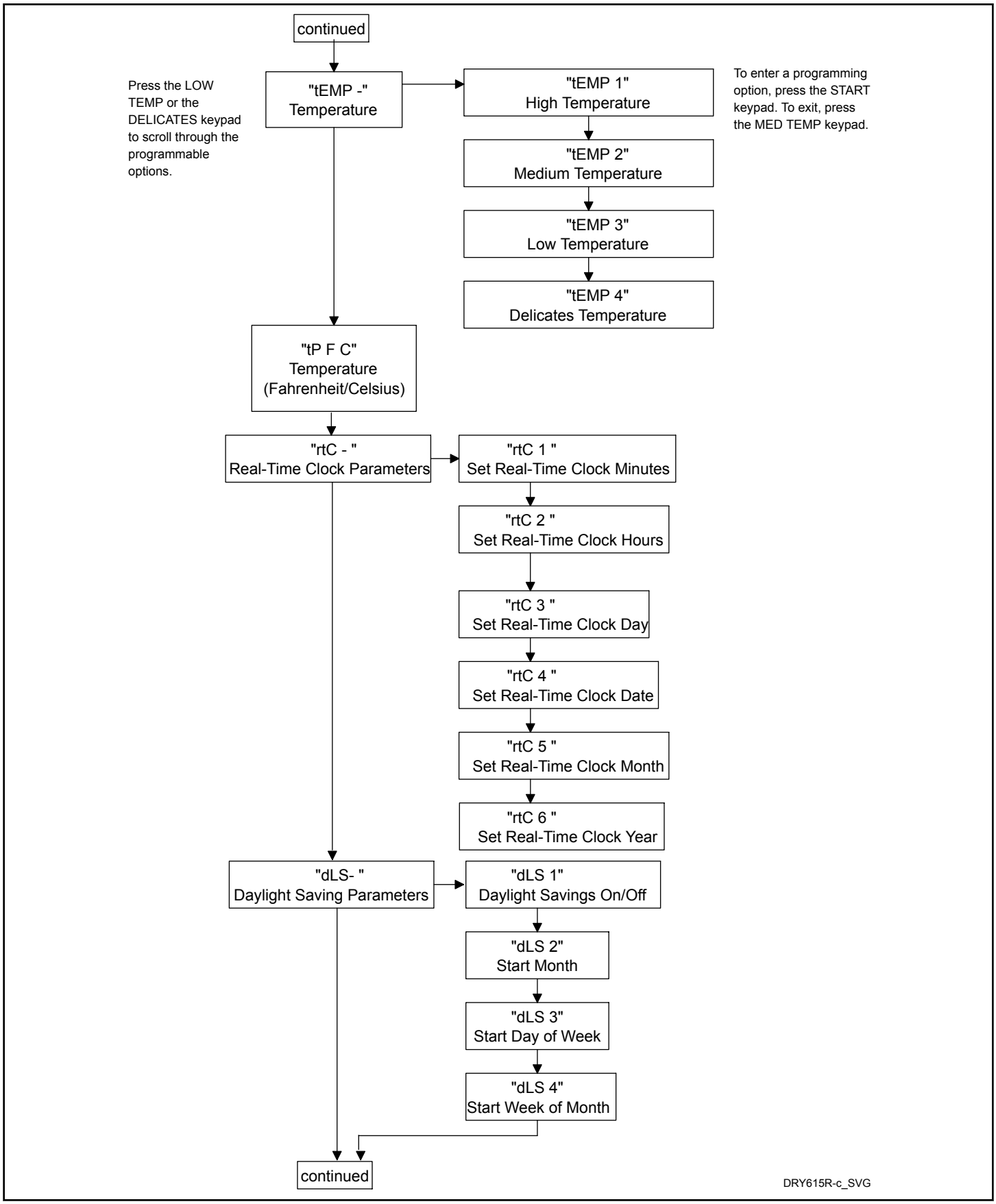

Figure 6

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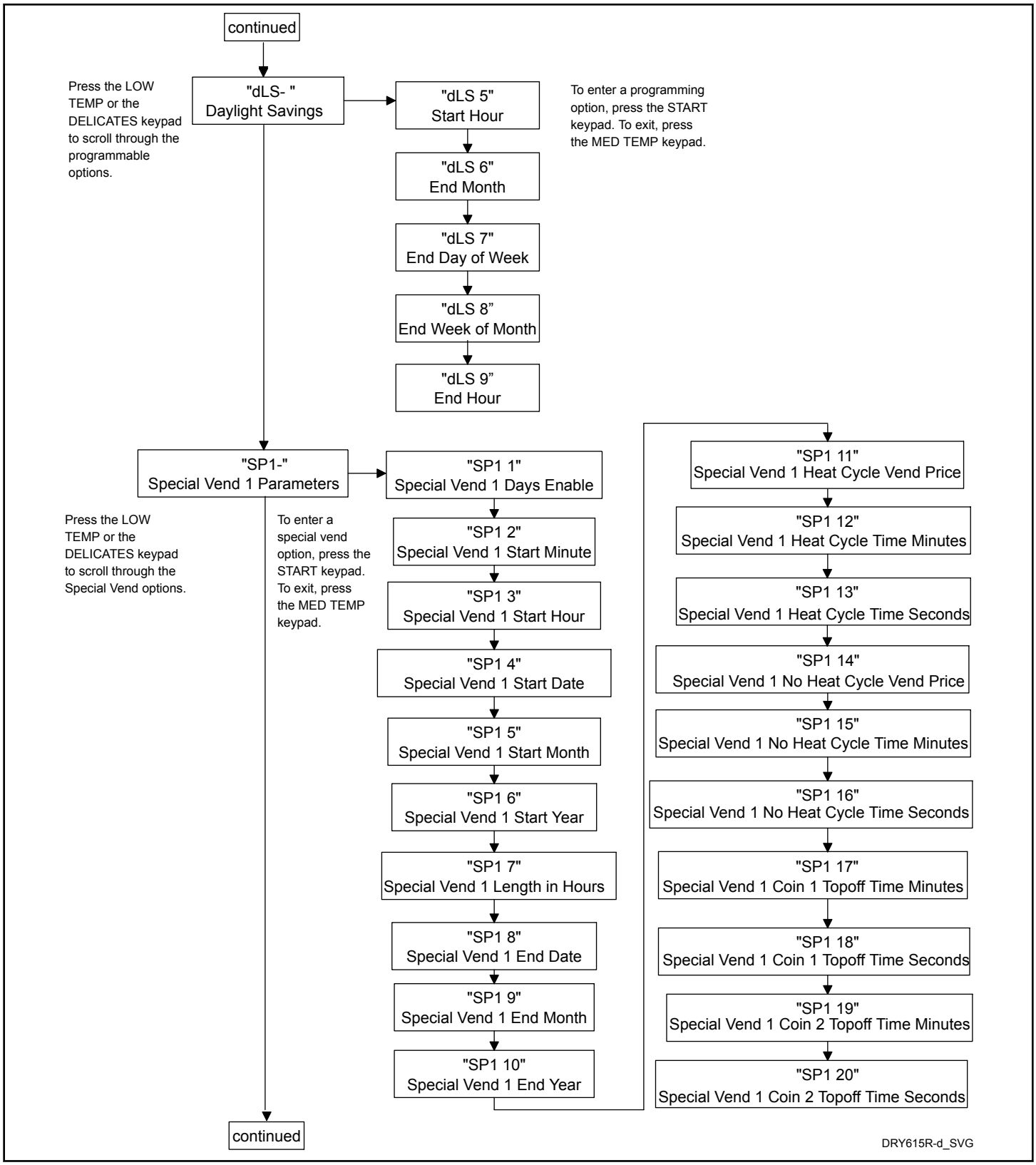

Figure 7

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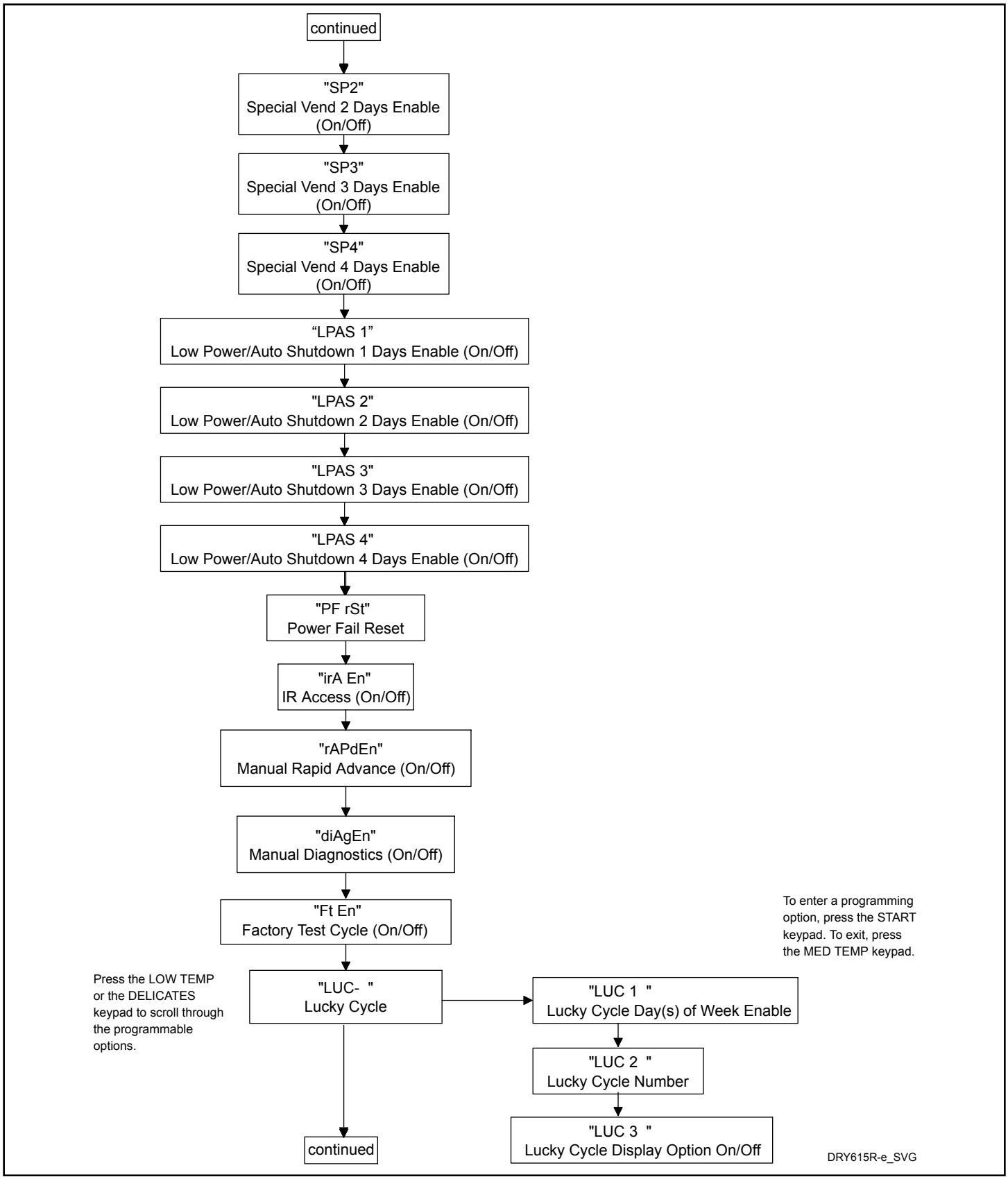

Figure 8

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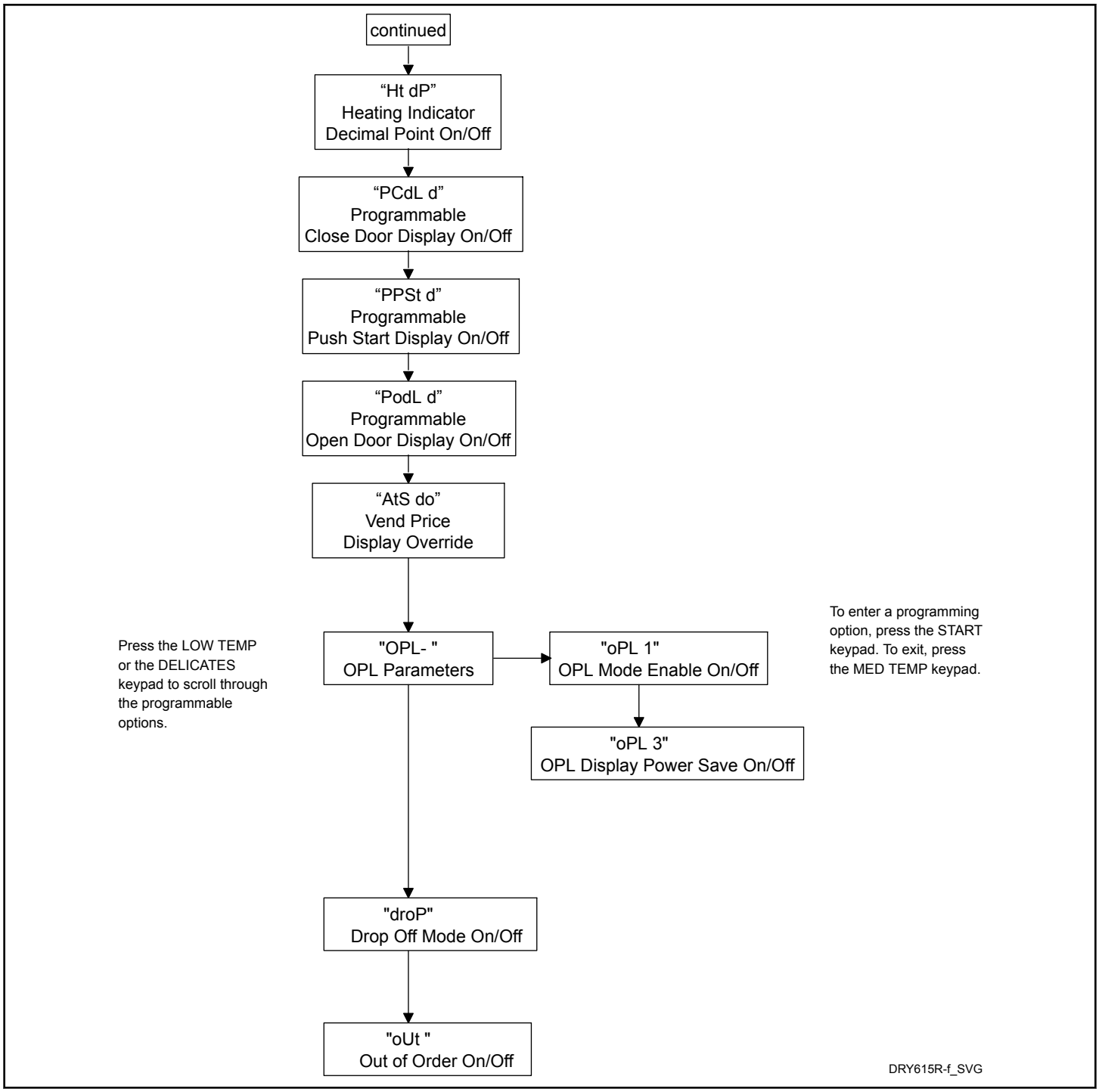

Figure 9

Heat Vend Price AtS H

This option allows the owner to set the vend price for a heated cycle. This vend price will be shown in the display when in Ready Mode.

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the LOW TEMP (∧) or the DELICATES (∨) keypad until Prog appears in the display. Press the START (enter) keypad and AtS H will appear in the display.
3. AtS H will appear in the display. Press the START (enter) keypad.
4. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to increase or decrease the value of the fifth digit.

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

NOTE: To go back to the current programmable option without changing the value press the MED TEMP (>) keypad.

5. Press the LOW TEMP (∧) or the DELICATES (∨) 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 new value is saved and the next option will appear in the display.

Cycle Time CYCt

This option allows the owner to set the amount of time for all cycles.

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the LOW TEMP (∧) or the DELICATES (∨) keypad until Prog appears in the display. Press the START (enter) keypad and AtS H will appear in the display.
3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable options until CYCt appears in the display.
4. When CYCt appears in the display, press the START (enter) keypad. There are four programmable cycle time options. Refer to *Table 1* .

Display	Cycle Time Options
CYCt 1	Heat Cycle Time Minutes (1-99)
CYCt 2	Heat Cycle Time Seconds (0-59)

Table 1

5. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to select the desired cycle time option.

   NOTE: Cycle time can be set from one (1) to 99 minutes.

   NOTE: The default value for both cycles in minutes is 45 and the default value for seconds is 0.
6. Press the START (enter) keypad when the correct option appears in the display.
7. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to increase or decrease the number of minutes or seconds displayed to the desired number of minutes or seconds.
8. Press the START (enter) keypad when the correct number of minutes or seconds appears in the display. The new value is saved and the next option in the parameter will appear in the display.

Top-Off Data toP-

This option allows the owner to set the amount of top-off time for Coin #1 and Coin #2.

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the LOW TEMP (∧) or the DELICATES (∨) keypad until Prog appears in the display. Press the START (enter) keypad and AtS H will appear in the display.
3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable options until toP- appears in the display.
4. When toP- appears in the display, press the START (enter) keypad. There are five programmable top-off options. Refer to *Table 2* .

Display	Top-Off Options
toP 1	Top-Off ON/OFF
toP 2	Coin 1 Top-Off Time Minutes (0-99)
toP 3	Coin 1 Top-Off Time Seconds (0-59)
toP 4	Coin 2 Top-Off Time Minutes (0-99)
toP 5	Coin 2 Top-Off Time Seconds (0-59)

Table 2

NOTE: If Top-Off is enabled, each coin entered will add a top-off time. If Top-Off is disabled, the full vend price must be entered to add time.

5. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to select the desired top-off option.
6. Press the START (enter) keypad when the correct option appears in the display.
7. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to increase or decrease the number of minutes or seconds displayed to the desired number of minutes or seconds.

   NOTE: Top-Off minutes can be set from 0 to 99 minutes and Top-Off seconds can be set from 0-59 seconds. The maximum amount of time for a cycle, including the top-off time, is 99 minutes. The minimum amount of time is 10 seconds.

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NOTE: Top-Off is on by default. The default values for each option are as follows:

Coin 1 Top-Off Time Minutes = 5

Coin 1 Top-Off Time Seconds = 38

Coin 2 Top-Off Time Minutes = 22

Coin 2 Top-Off TimeSeconds = 30

8. Press the START (enter) keypad when the correct number of minutes or seconds appears in the display. The new value is saved and the next option in the parameter will appear in the display.

Vend Price Decimal Point AtS dP

This option allows the owner to enable vend price decimal point. When enabled, the control will display the decimal point in a vend price in the second or third position.

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the LOW TEMP (∧) or the DELICATES (∨) keypad until Prog appears in the display. Press the START (enter) keypad and AtS H will appear in the display.
3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable options until A7S dP- appears int he display.
4. When AtS dP appears in the display, press the START (enter) keypad.
5. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the available options.

   NOTE: The decimal point can be set at 0,2 (xxx.xx), or 3 (xx.xxx). The factory default setting is 2 (xxx.xx).
6. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to select the desired option.
7. Press the START (enter) keypad when the correct number of minutes or seconds appears in the display. The new value is saved and the next option in the parameter will appear in the display.

Coin #1 Value dEn 1

This option allows the owner to set a specific numerical value for a coin entered. For example, in the United States the coin value for one quarter would be measured in cents (25). Therefore, the coin value entered for one quarter would 00025.

If the Heat Vend Price is set for 150, and the Coin #1 Value is set for 00025, the vend price displayed will decrease by 25 for each coin entered into coin drop #1.

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the LOW TEMP (∧) or the DELICATES (∨) keypad until Prog appears in the display. Press the START (enter) keypad and AtS H will appear in the display.
3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable options until dEn 1 appears in the display.
4. When dEn 1 appears in the display, press the START (enter) keypad.
5. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to increase or decrease the value of the fifth digit.

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

   NOTE: To go back to the current programmable option without changing the value press the MED TEMP (<) keypad.
6. Press the LOW TEMP (∧) or the DELICATES (∨) 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.
7. Press the START (enter) keypad with the last active digit. The new value is saved and the next option will appear in the display.

Coin #2 Value dEn 2

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 a dollar coin would be measured in cents (100). Therefore, the coin value entered for one dollar coin would be 00100.

If the Heat Vend Price is set for 200, and the Coin #2 Value is set for 00 100, the vend price displayed will decrease by 100 for each dollar coin entered in coin drop #2.

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the LOW TEMP (∧) or the DELICATES (∨) keypad until Prog appears in the display. Press the START (enter) keypad and AtS H will appear in the display.
3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable options until dEn 2 appears in the display.
4. When dEn 2 appears in the display, press the START (enter) keypad.
5. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to increase or decrease the value of the fifth digit.

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

   NOTE: To go back to the current programmable option without changing the value press the MED TEMP (<) keypad.
6. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to increase or decrease the value of the active digit and the

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START (enter) keypad to enter the value of the digit and advance to the next digit.

7. Press the START (enter) keypad with the last active digit. The new value is saved and the next option will appear in the display.

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.

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the LOW TEMP (∧) or the DELICATES (∨) keypad until Prog appears in the display. Press the START (enter) keypad and RES H will appear in the display.
3. Press the LOW TEMP (∧) or the DELICATES (∨) 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.
5. Press the LOW TEMP (∧) or the DELICATES (∨) 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 default value is 25.

   NOTE: To go back to the current programmable option without changing the value press the MED TEMP (<) keypad.
6. Press the LOW TEMP (∧) or the DELICATES (∨) 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.
7. Press the START (enter) keypad with the last active digit. The new value is saved and the next option will appear in the display.

Start Pulse Mode PLSmod

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 the value set up in (Start Pulse Value) until the vend is satisfied.

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the LOW TEMP (∧) or the DELICATES (∨) keypad until Prog appears in the display. Press the START (enter) keypad and RES H will appear in the display.
3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable options until PLSmod appears in the display.
4. When PLSmod appears in the display, press the START (enter) keypad. A number, or oFF, will appear in the display. The number corresponds to the current Start Pulse Mode Programming Value.
5. Locate the desired number in the first column of *Table 3* below.

PLSmod		
Start Pulse Mode Value	Start Pulse ON/OFF	Single Pulse/ Multiple Pulses
oFF	OFF	Single Pulse
128	ON	Single Pulse
192	ON	Multiple Pulses

Table 3

   NOTE: The default value is 128.
6. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to increase or decrease the current number until correct.

   NOTE: To go back to the current programmable option without changing the value press the MED TEMP (<) keypad.
7. Press the START (enter) keypad when the correct number appears in the display. The new value is saved and the next option will appear in the display.

Programmable Output Type RTYPE

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

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the LOW TEMP (∧) or the DELICATES (∨) keypad until Prog appears in the display. Press the START (enter) keypad and RES H will appear in the display.
3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable options until RTYPE appears in the display.
4. When RTYPE 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 LOW TEMP (∧) or the DELICATES (∨) keypad to increase or decrease the current number to the desired number selected from *Table 4* .

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Available Type Value	Mode(s) in Which Available Signal is Active
0 - Available	Ready Mode only
1 - Available at Start	Ready Mode, Start Mode
2 - Available with End of Cycle	Ready Mode, End of Cycle Mode
3 - Available with Start and End of Cycle	Ready Mode, Start Mode, End of Cycle Mode
4 - Vend is not satisfied	Ready Mode, Partial Vend Mode
5 - Vend is not satisfied with End of Cycle	Ready Mode, End of Cycle Mode, Partial Vend Mode
6 - Available with Vend	Ready Mode, Start Mode, Partial Vend Mode
7 - Available with Vend and End of Cycle	Ready Mode, Start Mode, End of Cycle Mode, Partial Vend Mode
8 - Machine is In Use	Door Locking Mode, Door Unlocking Mode, Pause Mode, Run Mode
9 - Cycle is Complete	End of Cycle Mode
10 - Lucky Cycle	For 10 seconds when Start Mode is entered
11 - Break In Alarm	For 15 seconds when Break In Alarm is triggered at same time as audio output tone
12 - End of Cycle is Entered	For 3 seconds when End of Cycle Mode is entered
13 - Motor Running	Whenever motor is running

Table 4

NOTE: The default value is 0.

6. Press the START (enter) keypad when the correct number appears in the display. The new value is saved and the next option will appear in the display.

Default Cycle dFtCYC

This option allows the owner to set the default cycle the machine will enter when in the Ready Mode. When programming the default cycle, refer to *Table 5* .

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the LOW TEMP (∧) or the DELICATES (∨) keypad until Prog appears in the display. Press the START (enter) keypad and AtS H will appear in the display.
3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable options until dFtCYC appears in the display.
4. When dFtCYC 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 5* .
5. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to increase or decrease the current number to the desired number selected from *Table 5* .
6. Press the START (enter) keypad when the correct number appears in the display. The new value is saved and the next option will appear in the display.

How to Read Default Cycle Value Table

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 corresponding cycle LED will be lit while selecting a default cycle. For example, when the display shows 5, the Delicates LED is lit.

dFtCYC	
Default Cycle Value	Cycle Type
1	HIGH TEMP
2	LOW TEMP
3	NO HEAT
4	MED TEMP
5	DELICATES

Table 5

NOTE: The default cycle programmed at the factory is 4, Med Temp.

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.

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1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the LOW TEMP (∧) or the DELICATES (∨) keypad until PrOG appears in the display. Press the START (enter) keypad and ALS H will appear in the display.
3. Press the LOW TEMP (∧) or the DELICATES (∨) 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

   NOTE: The default value is oFF.
5. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to change the current status.
6. Press the START (enter) keypad when the desired status appears in the display. The new value is saved and the next option will appear in the display.

Audio Signal AUd 10

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

There are five occasions when a signal may sound during the dryer 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. Serial/Network Command Signal

By default, this signal is turned on and will sound for a quarter of a second each time the control receives a valid serial or network vend command.

5. Signal for Start

By default, this signal is turned on and will sound one second on and one second off for 10 seconds when START LED is flashing 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 LOW TEMP (∧) or the DELICATES (∨) keypad until PrOG appears in the display. Press the START (enter) keypad and ALS H will appear in the display.
3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable options until AUd 10 (depending on control software version) appears in the display.
4. When AUd 10 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 6* .
6. Press the LOW TEMP (∧) or the DELICATES (∨) 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 new value is saved and the next option will appear in the display.

How to Read Signal Value Table

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.

NOTE: The default setting programmed at the factory is 29.

Signal Value	Start Mode	Serial/ Network Command	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

Table 6 *continues...*

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Signal Value	Start Mode	Serial/ Network Command	Coin/Card In-put	End of Cycle	Key Pressed
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

Table 6 *continues...*

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Signal Value	Start Mode	Serial/ Network Command	Coin/Card Input	End of Cycle	Key Pressed
30	ON	**ON**	**ON**	ON	OFF
31	ON	**ON**	**ON**	**ON**	ON

Table 6

Network Node Number nodE

This option allows the owner to program a unique number used for wired or wireless communication.

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the LOW TEMP (∧) or the DELICATES (∨) keypad until Prog appears in the display. Press the START (enter) keypad and RtS H will appear in the display.
3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable options until nodE appears in the display.
4. When nodE appears in the display, press the START (enter) keypad. The current Network Node Number status will appear in the display.
5. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to change the current status.

   NOTE: The Network Node Number can be set from 1 - 250. The default value is 250.
6. Press the START (enter) keypad when the desired status appears in the display. The new value is saved and the next option will appear in the display.

Error Code Programming Error-

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

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the LOW TEMP (∧) or the DELICATES (∨) keypad until Prog appears in the display. Press the START (enter) keypad and RtS H will appear in the display.
3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable options until Error- appears in the display.
4. When Error- appears in the display, press the START (enter) keypad. The control will display CErr-. Press the START (enter) keypad. The control will display CErr 1. Refer to *Table 7* .

CErr-	Coin Error Parameters	
	CErr 1	Coin Error On/Off – Determines if display will show error.
	CErr 2	Coin Error Penalty On/Off – If enabled, coin error will erase previous coins entered and reset the vend price.
	CErr3	Vend Header Present Error On/Off - If enabled and vend header is unplugged, control ignores coin inputs.
CLrErr		Clear Error On/Off

Table 7

5. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to select error code.
6. Press the START (enter) keypad when the correct code appears in the display. The current status will appear in the display.
7. oFF indicates the option is disabled. on indicates the option is enabled. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to change the status.

   NOTE: The default values for Coin Error and Coin Drops Header are on. The default value for Coin Error Penalty is oFF.
8. Press the START (enter) keypad when the correct status appears in the display. The new value is saved and the next option in the parameter will appear in the display.

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Cool Down Time CdE -

This option allows the owner to set the amount of cool down time for all heat cycles.

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the LOW TEMP (∧) or the DELICATES (∨) keypad until Prog appears in the display. Press the START (enter) keypad and AtS H will appear in the display.
3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable options until CdE - appears in the display.
4. When CdE - appears in the display, press the START (enter) keypad. There are four programmable cool down time options. Refer to *Table 8* .

Display	Cooldown Time Options
CdE 1	High Temp Cooldown Time (1-15)
CdE 2	Medium Temp Cooldown Time (1-15)
CdE 3	Low Temp Cooldown Time (1-15)
CdE 4	Delicates Cooldown Time (1-15)

Table 8

5. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to select the desired cooldown time option.

   NOTE: Cooldown time can be set from one (1) to 15 minutes. The default value for each option are as follows: North America: 3 minutes Outside North America: High Temp Cooldown Time - 10 minutes Medium Temp Cooldown Time - 10 Minutes Low Temp Cooldown Time - 8 minutes Delicates Cooldown Time - 6 minutes
6. Press the START (enter) keypad when the correct option appears in the display.
7. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to increase or decrease the number of minutes displayed to the desired number of minutes.
8. Press the START (enter) keypad when the correct number of minutes appears in the display. The new value is saved and the next option in the parameter will appear in the display.

Time Display Format t d F

This option allows the owner to program the time display format.

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the LOW TEMP (∧) or the DELICATES (∨) keypad until Prog appears in the display. Press the START (enter) keypad and AtS H will appear in the display.
3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable options until t d F appears in the display.
4. When t d F appears in the display, press the START (enter) keypad. The Time Display Format status will appear in the display.

   NOTE: The display format can be set a nn (minutes only) or nnSS (minutes and seconds). The default format is nn.
5. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to change the current status.
6. Press the START (enter) keypad when the desired status appears in the display. The new value is saved and the next option will appear in the display.

Temperature tEMP-

This option allows the owner to set the temperature of the heat cycles.

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the LOW TEMP (∧) or the DELICATES (∨) keypad until Prog appears in the display. Press the START (enter) keypad and AtS H will appear in the display.
3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable options until tEMP- appears in the display.
4. When tEMP- appears in the display, press the START (enter) keypad. There are four programmable temperature options. Refer to *Table 9* .

Display	Temperature Options
tEMP 1	High Temperature
tEMP 2	Medium Temperature
tEMP 3	Low Temperature
tEMP 4	Delicates Temperature

Table 9

5. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to select the desired temperature option.
6. Press the START (enter) keypad when the correct option appears in the display. Refer to *Table 10* for values.

Temperature Options
100°F [38°C]

Table 10 *continues...*

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105°F [41°C]
110°F [43°C]
115°F [46°C]
120°F [49°C]
125°F [52°C]
130°F [54°C]
135°F [57°C]
140°F [60°C]
145°F [62°C]
150°F [66°C]
155°F [68°C]
160°F [71°C]

Table 10

NOTE: The default values are as follows:

High Temperature = 160°F [72°C]

Medium Temperature = 155°F [68°C]

Low Temperature = 145°F [62°C]

Delicates Temperature = 115°F [46°C]

7. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to increase or decrease the current number of degrees displayed in the display to the desired number of degrees.
8. Press the START (enter) keypad when the correct number of degrees appears in the display. The new value is saved and the next option in the parameter will appear in the display.

Temperature (Fahrenheit/Celsius) tP F C

This option allows the owner to set whether the display will be shown in Fahrenheit or Celsius.

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the LOW TEMP (∧) or the DELICATES (∨) keypad until Prog appears in the display. Press the START (enter) keypad and AtS H will appear in the display.
3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable options until tP F C appears in the display.
4. When tP F C appears in the display, press the START (enter) keypad. A number will appear in the display. This number (found below) corresponds to the current Temperature (Fahrenheit/Celsius) setting. One (1) = Celsius Zero (0) = Fahrenheit

   NOTE: The default value is 0.
5. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to increase or decrease the current number to the desired number.
6. Press the START (enter) keypad when the correct number appears in the display. The new value is saved and the next option will appear in the display.

Set Real-Time Clock rtC -

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

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the LOW TEMP (∧) or the DELICATES (∨) keypad until Prog appears in the display. Press the START (enter) keypad and AtS H will appear in the display.
3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable options until rtC - appears in the display. Press the START keypad and rtC 1 will appear in the display.
4. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable options. Refer to *Table 11* .

Display	Real Time Clock Options
rtC 1	Programs Minutes
rtC 2	Programs Hours
rtC 3	Programs Day of Week
rtC 4	Programs Date of Month
rtC 5	Programs Month
rtC 6	Programs Year

Table 11

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 LOW TEMP (∧) or the DELICATES (∨) keypad to increase or decrease the minutes, hours, day of week, date of the month, month, 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 (001), Monday is day two (002) and so on. For year, the year 2000 is 00, the year 2001 is 01 and so on.
7. Press the START (enter) keypad when the correct time or date appears in the display. The new value is saved and the next Set Real-Time Clock option will appear in the display.

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Daylight Savings Time Parameters dLS-

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

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the LOW TEMP (∧) or the DELICATES (∨) keypad until Prog appears in the display. Press the START (enter) keypad and AtS H will appear in the display.
3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable options until dLS - appears in the display. Press the START keypad and dLS 1 will appear in the display.
4. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable options. Refer to *Table 12* .

Display	Daylight Savings Options
dLS 1	Daylight Savings (On/ Off)
dLS 2	Start Month
dLS 3	Start Day of Week
dLS 4	Start Week of Month
dLS 5	Start Hour
dLS 6	End Month
dLS 7	End Day of Week
dLS 8	End Week of Month
dLS 9	End Hour

Table 12

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 LOW TEMP (∧) or the DELICATES (∨) keypad to increase or decrease the minutes, hours, day of week, date of the month, month, 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 (001), Monday is day two (002) and so on. For year, the year 2000 is 00, the year 2001 is 01 and so on.

   NOTE: Daylight Savings is ON by default. The default parameter values are as follows: Start Month = 3 Start Day of Week = 1 Start Week of Month = 2 Start Hour = 2 End Month = 11 End Day of Week = 1 End week of Month = 1 End Hour = 2
7. Press the START (enter) keypad when the correct time or date appears in the display. The new value is saved and the next Daylight Savings Time option will appear in the display.

Special Vend 1 Parameters SP1-

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

Special Vend 1 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 1 option on or off if desired.

How to Program Special Vend 1 Days Enable SP1 01

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the LOW TEMP (∧) or the DELICATES (∨) keypad until Prog appears in the display. Press the START (enter) keypad and AtS H will appear in the display.
3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable options until SP1- appears in the display. Press the START (enter) keypad and SP1 1 will appear in the display.
4. When SP1 1 appears in the display, press the START (enter) keypad. A number will appear in the display that corresponds to the current Special Vend 1 Days Enable Programming Value.
5. Locate the desired number in the first column of *Table 13* on the following pages.
6. Press the LOW TEMP (∧) or the DELICATES (∨) 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 new value is saved and the next Special Vend 1 option will appear in the display.

How to Read Special Vend Value Table

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.

NOTE: The default value is 0.

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SP I I								
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**

Table 13 *continues...*

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SP I I								
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**
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**

Table 13 *continues...*

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SP I I								
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**
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**

Table 13 *continues...*

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SP I I								
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**

Table 13 *continues...*

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SP 1 1								
243	**ON**	**ON**	**ON**	**ON**	OFF	OFF	**ON**	**ON**
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 13

How to Program Special Vend 1 Start Minute SP 1 2

This option allows the owner to set the minute that Special Vend 1 will begin.

1. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable Special Vend 1 options until SP 1 2 appears in the display.
2. When SP 1 2 appears in the display, press the START (enter) keypad. The current start minute (in military time) will appear in the display.
3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to increase or decrease the start hour to the desired hour.

   NOTE: The value can be set from 0-59. The default value is 0.
4. Press the START (enter) keypad when the correct hour appears in the display. The new value is saved and the next Special Vend 1 option, SP 1 3, will appear in the display.

How to Program Special Vend 1 Start Hour SP 1 3

This option allows the owner to set the hour that Special Vend 1 will begin.

1. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable Special Vend 1 options until SP 1 3 appears in the display.
2. When SP 1 3 appears in the display, press the START (enter) keypad. The current start hour will appear in the display.

   NOTE: The hours will be displayed in military time.
3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to increase or decrease the start minute to the desired minute.

   NOTE: The value can be set from 0-23 hours. The default value is 0.
4. Press the START (enter) keypad when the correct minute appears in the display. The new value is saved and the next Special Vend 1 option, SP 1 4, will appear in the display.

How to Program Special Vend 1 Start Date SP 1 4

This option allows the owner to set the start date for Special Vend 1.

1. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable Special Vend 1 options until SP 1 4 appears in the display.
2. When SP 1 4 appears in the display, press the START (enter) keypad. The current start date will appear in the display.
3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to increase or decrease the current length of hours to the desired number of hours.

   If 0 is selected and Special Vend 1 is on, Special Vend 1 will occur at the time and days of week selected, regardless of the date.

   NOTE: The value can be set 0 (oFF) or from 1-31. The default value is 0.
4. Press the START (enter) keypad when the correct hour appears in the display. The new value is saved and the next Special Vend 1 option, SP 1 5, will appear in the display.

How to Program Special Vend 1 Start Month SP 1 5

This option allows the owner to set the month that Special Vend 1 will begin.

NOTE: If Special Vend 1 Start Month, Start Date, End Month, or End Date are programmed to zero (default is zero), the Special Vend 1 will be active every week on the days programmed in *Table 13* .

1. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable Special Vend 1 options until SP 1 5 appears in the display.
2. When SP 1 5 appears in the display, press the START (enter) keypad. The current start month will appear in the display.
3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to increase or decrease the start month to the desired month.

If 0 is selected and Special Vend 1 is on, Special Vend 1 will occur at the time and days of week selected, regardless of the month.

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NOTE: The value can be set at 0 (off) or from 1-12. The default value is 0.

4. Press the START (enter) keypad when the correct month appears in the display. The new value is saved and the next Special Vend 1 option, SP 1 6, will appear in the display.

How to Program Special Vend 1 Start Year SP 1 6

This option allows the owner to set the year that Special Vend 1 will begin.

1. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable Special Vend 1 options until SP 1 6 appears in the display.
2. When SP 1 6 appears in the display, press the START (enter) keypad. The current start year will appear in the display.
3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to increase or decrease the start date to the desired date.

If the start/end date or month are set to 0, the year is ignored. 01 is year 2001. 02 is year 2002, and so on.

NOTE: The value can be set from 0-99. The default value is 0.

4. Press the START (enter) keypad when the correct date appears in the display. The new value is saved and the next Special Vend 1 option, SP 1 7, will appear in the display.

How to Program Special Vend 1 Length in Hours SP 1 7

This option allows the owner to set length in hours of Special Vend 1.

1. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable Special Vend 1 options until SP 1 7 appears in the display.
2. When SP 1 7 appears in the display, press the START (enter) keypad. The current length in hours will appear in the display.

NOTE: The hours will be displayed in military time.

3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to increase or decrease the start year to the desired year.

NOTE: The value can be set from 0-24. The default value is 0.

4. Press the START (enter) keypad when the correct year appears in the display. The new value is saved and the next Special Vend 1 option, SP 1 8, will appear in the display.

How to Program Special Vend 1 End Date SP 1 8

This option allows the owner to set the date that Special Vend 1 will end.

1. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable Special Vend 1 options until SP 1 8 appears in the display.
2. When SP 1 8 appears in the display, press the START (enter) keypad. The current end date will appear in the display.
3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to increase or decrease the end month to the desired month.

If 0 is selected and Special Vend 1 is on, Special Vend 1 will occur at the time and day of week selected, regardless of the month.

NOTE: The value can be set at 0 (off) or from 1-31. The default value is 0.

4. Press the START (enter) keypad when the correct month appears in the display. The new value is saved and the next Special Vend 1 option, SP 1 9, will appear in the display.

How to Program Special Vend 1 End Month SP 1 9

This option allows the owner to set the month that Special Vend 1 will end.

1. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable Special Vend 1 options until SP 1 9 appears in the display.
2. When SP 1 9 appears in the display, press the START (enter) keypad. The current end month will appear in the display.
3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to increase or decrease the end date to the desired date.

If 0 is selected and Special Vend 1 is on, Special Vend 1 will occur at the time and days of week selected, regardless of the date.

NOTE: The value can be set at 0 (off) or from 1-12. The default value is 0.

4. Press the START (enter) keypad when the correct date appears in the display. The new value is saved and the next Special Vend 1 option, SP 1 10, will appear in the display.

How to Program Special Vend 1 End Year SP 1 10

This option allows the owner to set the year that Special Vend 1 will end.

1. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable Special Vend 1 options until SP 1 10 appears in the display.
2. When SP 1 10 appears in the display, press the START (enter) keypad. The current end year will appear in the display.
3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to increase or decrease the end year to the desired year.

If the start/end date or month are set to 0, the year is ignored. 01 is year 2001, 02 is year 2002 and so on.

NOTE: The value can be set from 0-99. The default value is 0.

4. Press the START (enter) keypad when the correct year appears in the display. The new value is saved and the next Special Vend 1 option, SP 1 11, will appear in the display.

How to Program Special Vend 1 Heat Cycle Vend Price SP 1 11

This option allows the owner to set the vend price for a heat cycle in Special Vend 1.

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1. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable Special Vend 1 options until SP 1 11 appears in the display.
2. When SP 1 11 appears in the display, press the START (enter) keypad. There are five digits in the Special Vend 1 Heat Price.
3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to increase or decrease the value of the fifth digit.

   NOTE: The vend price can be set from 0 to 65,535. The default value is 0.
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 1 option without changing the value, press the MED TEMP (<) keypad.
5. Press the LOW TEMP (∧) or the DELICATES (∨) 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 new value is saved and the next Special Vend 1 option, SP 1 12, will appear in the display.

How to Program Special Vend 1 Heat Cycle Time Minutes SP 1 12

This option allows the owner to set minutes for a heat cycle in Special Vend 1.

1. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable Special Vend 1 options until SP 1 12 appears in the display.
2. When SP 1 12 appears in the display, press the START (enter) keypad.
3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to increase or decrease the value of the fifth digit.

   NOTE: The value can be set from 1-99 minutes. The default value is 0.
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 1 option without changing the value, press the MED TEMP (<) keypad.
5. Press the LOW TEMP (∧) or the DELICATES (∨) 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 new value is saved and the next Special Vend 1 option, SP 1 13, will appear in the display.

How to Program Special Vend 1 Heat Cycle Time Seconds SP 1 13

This option allows the owner to set the seconds for a heat cycle in Special Vend 1.

1. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable Special Vend 1 options until SP 1 13 appears in the display.
2. When SP 1 13 appears in the display, press the START (enter) keypad.
3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to increase or decrease the value of the fifth digit.

   NOTE: The value can be set from 0 to 59 seconds. The default value is 0.
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 1 option without changing the value, press the MED TEMP (<) keypad.
5. Press the LOW TEMP (∧) or the DELICATES (∨) 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 new value is saved and the next Special Vend 1 option, SP 1 17, will appear in the display.

How to Program Special Vend 1 Coin Topoff Time Minutes SP 1 17

This option allows the owner to set the minutes for Coin 1 Topoff in Special Vend 1.

1. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable Special Vend 1 options until SP 1 17 appears in the display.
2. When SP 1 17 appears in the display, press the START (enter) keypad.
3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to increase or decrease the value of the fifth digit.

   NOTE: The value can be set from 0-99 minutes. The default value is 1.
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 1 option without changing the value, press the MED TEMP (<) keypad.
5. Press the LOW TEMP (∧) or the DELICATES (∨) 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.

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6. Press the START (enter) keypad with the last active digit. The new value is saved and the next Special Vend 1 option, SP 1 18, will appear in the display.

How to Program Special Vend 1 Coin 1 Topoff Time Seconds SP 1 18

This option allows the owner to set the seconds for Coin 1 Topoff in Special Vend 1.

1. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable Special Vend 1 options until SP 1 18 appears in the display.
2. When SP 1 18 appears in the display, press the START (enter) keypad.
3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to increase or decrease the value of the fifth digit.

   NOTE: The value can be set from 0-59 seconds. The default value is 0.
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 1 option without changing the value, press the MED TEMP (<) keypad.
5. Press the LOW TEMP (∧) or the DELICATES (∨) 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 new value is saved and the next Special Vend 1 option, SP 1 19, will appear in the display.

How to Program Special Vend 1 Coin 2 Topoff Time Minutes SP 1 19

This option allows the owner to set the minutes for Coin 2 Topoff in Special Vend 1.

1. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable Special Vend 1 options until SP 1 19 appears in the display.
2. When SP 1 19 appears in the display, press the START (enter) keypad.
3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to increase or decrease the value of the fifth digit.

   NOTE: The value can be set from 0-99 minutes. The default value is 1.
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 1 option without changing the value, press the MED TEMP (<) keypad.
5. Press the LOW TEMP (∧) or the DELICATES (∨) 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 new value is saved and the next Special Vend 1 option, SP 1 19, will appear in the display.

How to Program Special Vend 1 Coin 2 Topoff Time Seconds SP 1 20

This option allows the owner to set the seconds for Coin 2 Topoff in Special Vend 1.

1. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable Special Vend 1 options until SP 1 20 appears in the display.
2. When SP 1 20 appears in the display, press the START (enter) keypad.
3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to increase or decrease the value of the fifth digit.

   NOTE: The value can be set from 0-59 seconds. The default value is 0.
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 1 option without changing the value, press the MED TEMP (<) keypad.
5. Press the LOW TEMP (∧) or the DELICATES (∨) 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 new value is saved and the next Special Vend 2 option will appear in the display.

How to Program Special Vend 2 Days Enable SP2

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

Special Vend 2 can be programmed using an external device or network.

The owner may also turn the Special Vend 2 option on or off if desired.

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the LOW TEMP (∧) or the DELICATES (∨) keypad until Prog appears in the display. Press the START (enter) keypad and Ats H will appear in the display.
3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable options until SP2- appears in the display.

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4. When SP2- appears in the display, press the START (enter) keypad. The control displays on or oFF for this parameter.

   NOTE: The default value is oFF.

5. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to select on or oFF.
6. Press the START (enter) keypad when the desired status appears in the display. The new value is saved and the next option, SP3-, will appear in the display.

How to Program Special Vend 3 Days Enable SP3

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

Special Vend 3 can be programmed using an external device or network.

The owner may also turn the Special Vend 3 option on or off if desired.

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the LOW TEMP (∧) or the DELICATES (∨) keypad until Prog appears in the display. Press the START (enter) keypad and Ats H will appear in the display.
3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable options until SP3- appears in the display.
4. When SP3- appears in the display, press the START (enter) keypad. The control displays on or oFF for this parameter.

   NOTE: The default value is oFF.

5. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to select on or oFF.
6. Press the START (enter) keypad when the desired status appears in the display. The new value is saved and the next option, SP4-, will appear in the display.

How to Program Special Vend 4 Days Enable SP4

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

Special Vend 4 can be programmed using an external device or network.

The owner may also turn the Special Vend 4 option on or off if desired.

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the LOW TEMP (∧) or the DELICATES (∨) keypad until Prog appears in the display. Press the START (enter) keypad and Ats H will appear in the display.
3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable options until SP4 appears in the display.
4. When SP4 appears in the display, press the START (enter) keypad. The control displays on or oFF for this parameter.

   NOTE: The default value is oFF.

5. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to select on or oFF.
6. Press the START (enter) keypad when the desired status appears in the display. The new value is saved and the next option, SP5, will appear in the display.

Low Power-Auto Shutdown 1 Days Enable LPAS 1

This option allows the owner to enable or disable Low Power/ Auto Shutdown. Low Power or Auto Shutdown duration are programmed using an external device or network.

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the LOW TEMP (∧) or the DELICATES (∨) keypad until Prog appears in the display. Press the START (enter) keypad and Ats H will appear in the display.
3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable options until LPAS 1 appears in the display.
4. When LPAS 1 appears in the display, press the START (enter) keypad. The current Low Power/Auto Shutdown 1 Days Enable status will appear in the display. on = Option Enabled oFF = Option Disabled

   NOTE: The default value is oFF.

5. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to select on or oFF.
6. Press the START (enter) keypad when the correct number appears in the display. The new value is saved and the next option, LPAS 2, will appear in the display.

Low Power-Auto Shutdown 2 Days Enable LPAS 2

This option allows the owner to enable or disable Low Power/ Auto Shutdown. Low Power or Auto Shutdown duration are programmed using an external device or network.

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the LOW TEMP (∧) or the DELICATES (∨) keypad until Prog appears in the display. Press the START (enter) keypad and Ats H will appear in the display.
3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable options until LPAS 2 appears in the display.

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4. When LPAS 2 appears in the display, press the START (enter) keypad. The current Low Power/Auto Shutdown 2 Days Enable status will appear in the display. on = Option Enabled oFF = Option Disabled

   NOTE: The default value is oFF.

5. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to select on or oFF.
6. Press the START (enter) keypad when the desired status appears in the display. The new value is saved and the next option, LPAS 3, will appear in the display.

Low Power-Auto Shutdown 3 Days Enable LPAS 3

This option allows the owner to enable or disable Low Power/ Auto Shutdown. Low Power or Auto Shutdown duration are programmed using an external device or network.

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the LOW TEMP (∧) or the DELICATES (∨) keypad until Prog appears in the display. Press the START (enter) keypad and RtS H will appear in the display.
3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable options until LPAS 3 appears in the display.
4. When LPAS 3 appears in the display, press the START (enter) keypad. The current Low Power/Auto Shutdown 3 Days Enable status will appear in the display. on = Option Enabled oFF = Option Disabled

   NOTE: The default value is oFF.

5. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to select on or oFF.
6. Press the START (enter) keypad when the desired status appears in the display. The new value is saved and the next option, LPAS 4, will appear in the display.

Low Power-Auto Shutdown 4 Days Enable LPAS 4

This option allows the owner to enable or disable Low Power/ Auto Shutdown. Low Power or Auto Shutdown duration are programmed using an external device or network.

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the LOW TEMP (∧) or the DELICATES (∨) keypad until Prog appears in the display. Press the START (enter) keypad and RtS H will appear in the display.
3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable options until LPAS 4 appears in the display.
4. When LPAS 4 appears in the display, press the START (enter) keypad. The current Low Power/Auto Shutdown 4 Days Enable status will appear in the display. on = Option Enabled oFF = Option Disabled

   NOTE: The default value is oFF.

5. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to change the current status.
6. Press the START (enter) keypad when the desired status appears in the display. The new value is saved and the next option will appear in the display.

Power Fail Reset PF rSt

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.

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the LOW TEMP (∧) or the DELICATES (∨) keypad until Prog appears in the display. Press the START (enter) keypad and RtS H will appear in the display.
3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable options until PF rSt appears in the display.
4. When PF rSt appears in the display, press the START (enter) keypad. A number will appear in the display. This number corresponds to the current Power Fail Reset setting.
5. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to increase or decrease the current number to the desired number selected from *Table 14* .
6. Press the START (enter) keypad when the desired status appears in the display. The new value is saved and the next option will appear in the display.

How to Read Power Fail Reset Table

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 0 is entered, the current cycle will be saved for up to five seconds. If power is not restored within five seconds, the control will erase the cycle status. The minimum power failure time is five seconds. The maximum power fail reset time is 120 minutes.

NOTE: The default value is oFF.

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PF rES	
DISPLAY TO ENTER IN STEP 6	POWER FAIL RESET TIME
oFF	Turned OFF. Cycle will be saved.
0	5 seconds without power before cycle and vend are lost
1	1 minute without power before cycle and vend are lost
. . . add one minute for every number up to	
120	120 minutes without power before cycle and vend are lost

Table 14

IR Access (On/Off) irA En

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

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the LOW TEMP (∧) or the DELICATES (∨) keypad until Prog appears in the display. Press the START (enter) keypad and AtS H will appear in the display.
3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable options until irA En appears in the display.
4. When irA En appears in the display, press the START (enter) keypad. The current IR Access status will appear in the display. on = Option Enabled oFF = Option Disabled

   NOTE: The default value is on.
5. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to change the current status.
6. Press the START (enter) keypad when the desired status appears in the display. The new value is saved and the next option will appear in the display.

Manual Rapid Advance (On/Off) rAPdEn

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

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the LOW TEMP (∧) or the DELICATES (∨) keypad until Prog appears in the display. Press the START (enter) keypad and AtS H will appear in the display.
3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable options until rAPdEn appears in the display.
4. When rAPdEn appears in the display, press the START (enter) keypad. The current Manual Rapid Advance status will appear in the display. on = Option Enabled oFF = Option Disabled

   NOTE: The default value is on.
5. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to change the current status.
6. Press the START (enter) keypad when the desired status appears in the display. The new value is saved and the next option will appear in the display.

Manual Diagnostics (On/Off) d iAGEn

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.

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the LOW TEMP (∧) or the DELICATES (∨) keypad until Prog appears in the display. Press the START (enter) keypad and AtS H will appear in the display.
3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable options until d iAGEn appears in the display.
4. When d iAGEn appears in the display, press the START (enter) keypad. The current Manual Diagnostics status will appear in the display. on = Option Enabled oFF = Option Disabled

   NOTE: The default value is on.
5. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to change the current status.
6. Press the START (enter) keypad when the desired status appears in the display. The new value is saved and the next option will appear in the display.

Factory Test Cycle (On/Off) FtEn

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

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the LOW TEMP (∧) or the DELICATES (∨) keypad until Prog appears in the display. Press the START (enter) keypad and AtS H will appear in the display.
3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable options until Ft En appears in the display.
4. When Ft En appears in the display, press the START (enter) keypad. The current Production Test Cycle status will appear in the display. on = Option Enabled oFF = Option Disabled

   NOTE: The default value is on.
5. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to change the current status.
6. Press the START (enter) keypad when the desired status appears in the display. The new value is saved and the next option will appear in the display.

Lucky Cycle LUC-

This option allows the owner to program the machine to provide a free or reduced vend cycle to users after a certain number of machine cycles have occurred.

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the LOW TEMP (∧) or the DELICATES (∨) keypad until Prog appears in the display. Press the START (enter) keypad and AtS H will appear in the display.
3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable options until LUC- appears in the display.
4. When LUC- appears in the display, press the START (enter) keypad. There are three programmable Lucky Cycle options. Refer to *Table 15* .

Display	Lucky Cycle Options
LUC 1	Lucky Cycle Day(s) of Week Enable On/Off
LUC 2	Lucky Cycle Number (0-255)
LUC 3	Lucky Cycle Display Option On/Off

Table 15

5. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to change the current status.

   NOTE: The default values are as follows: Lucky Cycle Day(s) of the Week Enable = On Lucky Cycle Number = 50 Lucky Display Option On/Off = Off
6. Press the START (enter) keypad when the desired status appears in the display. The new value is saved and the next option will appear in the display.

Heating Indicator Decimal Point Ht dP

This option allows the owner to enable or disable the heating indicator decimal point on the machine.

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the LOW TEMP (∧) or the DELICATES (∨) keypad until Prog appears in the display. Press the START (enter) keypad and AtS H will appear in the display.
3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable options until Ht dP appears in the display.
4. When Ht dP appears in the display, press the START (enter) keypad. The current Heating Indicator Decimal Point Enable/Disable status will appear in the display. on = Option Enabled oFF = Option Disabled

   NOTE: The default value is oFF.
5. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to change the current status.
6. Press the START (enter) keypad when the desired status appears in the display. The new value is saved and the next option will appear in the display.

Programmable Close Door-Lid Display PCdl d

This option allows the owner to enable or disable the Close Door/Lid Display. When enabled this option will display a command to close door once vend has been satisfied along with the cycle time

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the LOW TEMP (∧) or the DELICATES (∨) keypad until Prog appears in the display. Press the START (enter) keypad and AtS H will appear in the display.
3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable options until PCdl d appears in the display.
4. When PCdl d appears in the display, press the START (enter) keypad. The current Close Door/Lid Display status will appear in the display. on = Option Enabled oFF = Option Disabled

   NOTE: The default value is on.
5. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to change the current status.

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6. Press the START (enter) keypad when the desired status appears in the display. The new value is saved and the next option will appear in the display.

Programmable Push Start Display PPSt d

This option allows the owner to enable or disable the Push Start Display. When enabled this option will display a command to push start once vend has been satisfied along with the cycle time

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the LOW TEMP (∧) or the DELICATES (∨) keypad until Prog appears in the display. Press the START (enter) keypad and Ats H will appear in the display.
3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable options until PPSt d appears in the display.
4. When PPSt d appears in the display, press the START (enter) keypad. The current Push Start Display status will appear in the display. on = Option Enabled oFF = Option Disabled

   NOTE: The default value is on.
5. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to change the current status.
6. Press the START (enter) keypad when the desired status appears in the display. The new value is saved and the next option will appear in the display.

Programmable Open Door Display PodL d

This option allows the owner to enable or disable the Open Door/Lid Display. When enabled this option will display a command to open door once vend has been satisfied along with the cycle time

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the LOW TEMP (∧) or the DELICATES (∨) keypad until Prog appears in the display. Press the START (enter) keypad and Ats H will appear in the display.
3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable options until PodL d appears in the display.
4. When PodL d appears in the display, press the START (enter) keypad. The current Close Door/Lid Display status will appear in the display. on = Option Enabled oFF = Option Disabled

   NOTE: The default value is on.
5. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to change the current status.
6. Press the START (enter) keypad when the desired status appears in the display. The new value is saved and the next option will appear in the display.

Vend Price Display Override Ats do

This option allows the owner to override the previously set vend price

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the LOW TEMP (∧) or the DELICATES (∨) keypad until Prog appears in the display. Press the START (enter) keypad and Ats H will appear in the display.
3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable options until Ats do appears in the display.
4. When Ats do appears in the display, press the START (enter) keypad. The current Vend Price Override status will appear in the display. on = Option Enabled oFF = Option Disabled

   NOTE: The default value is oFF.
5. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to change the current status.
6. Press the START (enter) keypad when the desired status appears in the display. The new value is saved and the next option will appear in the display.

OPL Parameters oPL -

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

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the LOW TEMP (∧) or the DELICATES (∨) keypad until Prog appears in the display. Press the START (enter) keypad and Ats H will appear in the display.
3. Press the LOW TEMP (∧) or the DELICATES (∨) 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. There are three programmable OPL Parameter options. Refer to *Table 16* .

Display	OPL Parameter Options
oPL 1	OPL Mode Enable (On/Off)
oPL 3	OPL Display Power Save On/Off

Table 16

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NOTE: The default values are as follows: OPL Mode Enable = Off OPL Delayed Start = Off OPL Display Power Save = On

5. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to change the current status.
6. Press the START (enter) keypad when the desired status appears in the display. The new value is saved and the next option will appear in the display.

Drop Off Mode (On/Off) dr oP

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

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the LOW TEMP (∧) or the DELICATES (∨) keypad until Pr oG appears in the display. Press the START (enter) keypad and Ht S H will appear in the display.
3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable options until dr oP appears in the display.
4. When dr oP 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

   NOTE: The default value is oFF.

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 HIGH TEMP, LOW TEMP, MED TEMP, DELICATES.

5. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to change the current status.
6. Press the START (enter) keypad when the desired status appears in the display. The new value is saved and the next option will appear in the display.

Out of Order (On/Off) oUt

This option allows the owner to disable machine use to an attendant by displaying an out of order message.

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the LOW TEMP (∧) or the DELICATES (∨) keypad until Pr oG appears in the display. Press the START (enter) keypad and Ht S H will appear in the display.
3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable options until oUt appears in the display.
4. When oUt appears in the display, press the START (enter) keypad. The current Out of Order (On/Off) Status will appear in the display. on = Option Enabled oFF = Option Disabled

   NOTE: The default value is oFF.

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 HIGH TEMP, LOW TEMP, MED TEMP, DELICATES.

5. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to change the current status.
6. Press the START (enter) keypad when the desired status appears in the display. The new value is saved and the next option will appear in the display.

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Collecting Audit Information

This feature allows the owner to retrieve audit information stored in the dryer by pressing a sequence of pads on the control. For an explanation of the audit options available, refer to the Audit Options List on this page.

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. Refer to *Entering the Manual Mode*.
2. Press the LOW TEMP (∧) or the DELICATES (∨) keypad until AUd it appears.
3. Press the START keypad. CYC will appear.

If the procedure did not work, the control will return to the Ready Mode.

Entering the Audit Feature with the Coin Vault Open

1. Open coin vault. The service door must be closed, and have remained closed for 4.25 minutes.
2. Press the START (enter) keypad.

How to Read Audit Data

1. Use the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the various options until the desired option is shown int he display. Refer to the Audit Options List, *Table 17* , for an explanation of the audit options available.

Audit Options List	
Display	Description
CYCLES	Total # of machine cycles
Coin 1	Total # of coins #1
Coin 2	Total # of coins #2
PULSE	Total # of start pulses
to C1	Total # of coin 1 top-offs
to C2	Total # of coin 2 top-offs
to PLS	Total # of start pulse/card reader top-offs
rAPid	Total # of rapid advance cycles
rUnHrS	Total # of run hours
rCoin1	Total # of resettable coin #1 counts
rCoin2	Total # of resettable coin #2 counts
rCYcLE	Total # of resettable machine cycle counts

Table 17 *continues...*

Table 17

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.

For Example: In the Total Number of Coins #1 option with dEn 1 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 000 10009 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 MED TEMP (<) keypad until the control returns to Ready Mode.

NOTE: To exit Audit Feature when using Coin Vault method, owner must close coin vault.

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Manual Reset

This feature allows the owner to reset the dryer 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 Dryer Settings.

How to Enter Manual Reset

1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the LOW TEMP (∧) or the DELICATES (∨) keypad until rESEt 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 revert back to the Manual Mode, displaying d iAg.

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Testing Machine and Electronic Control Functions

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

- Control Software Version Number
- Input/Output Board Software Number
- Service Door Opening Test
- Coin Vault Opening Test
- Coin Drop #1 Input Test
- Coin Drop #2 Input Test
- Vend Header Present Status Test
- Start Pulse Test
- Dryer-on Temperature Test
- Door Switch Input Test
- Thermistor Temperature Test
- Machine Configuration #1 Display Test
- Machine Configuration #2 Display Test
- Machine Configuration #3 Display Test
- Machine Configuration #4 Display Test
- Machine Configuratoin #5 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 Ready Mode. If it is not, rapid advance through a cycle, refer to *Rapid Advance Feature*, or if coins or a card has been entered, refer to *Clear Vend Feature*.
2. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
3. Press the LOW TEMP (∧) or the DELICATES (∨) keypad until d 19 appears.
4. Press the START (enter) keypad. Display will change to d001 indicating the control software version number test.
5. Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the diagnostic test options.

How to Start Tests

To start a diagnostic test, refer to the quick reference chart (*Table 18*). 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 MED TEMP (<) keypad. The display will return to Ready mode.

Diagnostic (Testing) Mode – Quick Reference Chart

Test Number	Diagnostic Mode	Display
d 1	Control Software Version # Test	S HHH
d 2	Input/Output Board Software Number	ob HH
d 8	Service Door Opening Test	S oP or S CL
d 9	Coin Vault Opening Test	U oP or U CL
d 10	Coin Drop #1 Input Test	C1 HH
d 11	Coin Drop #2 Input Test	C2 HH
d 12	Vend Header Present Status Test	CHoP (Open) or CHCL (Closed)

Table 18 *continues...*

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Diagnostic (Testing) Mode – Quick Reference Chart		
d 13	Start Pulse Test	St HH
d 14	Dryer-on Temperature Test	HHHF or HHHC
d 15	Door Switch Input Test	dr oP, dr CL
d 19	Thermistor Temperature Test	HHHP, HHHC, SHort or oPEn
d 29	Machine Configuration #1 Display Test	A HHH
d 30	Machine Configuration #2 Display Test	b HHH
d 31	Machine Configuration #3 Display Test	C HHH
d 32	Machine Configuration #4 Display Test	d HHH
d 33	Machine Configuration #5 Display Test	E HHH

Table 18

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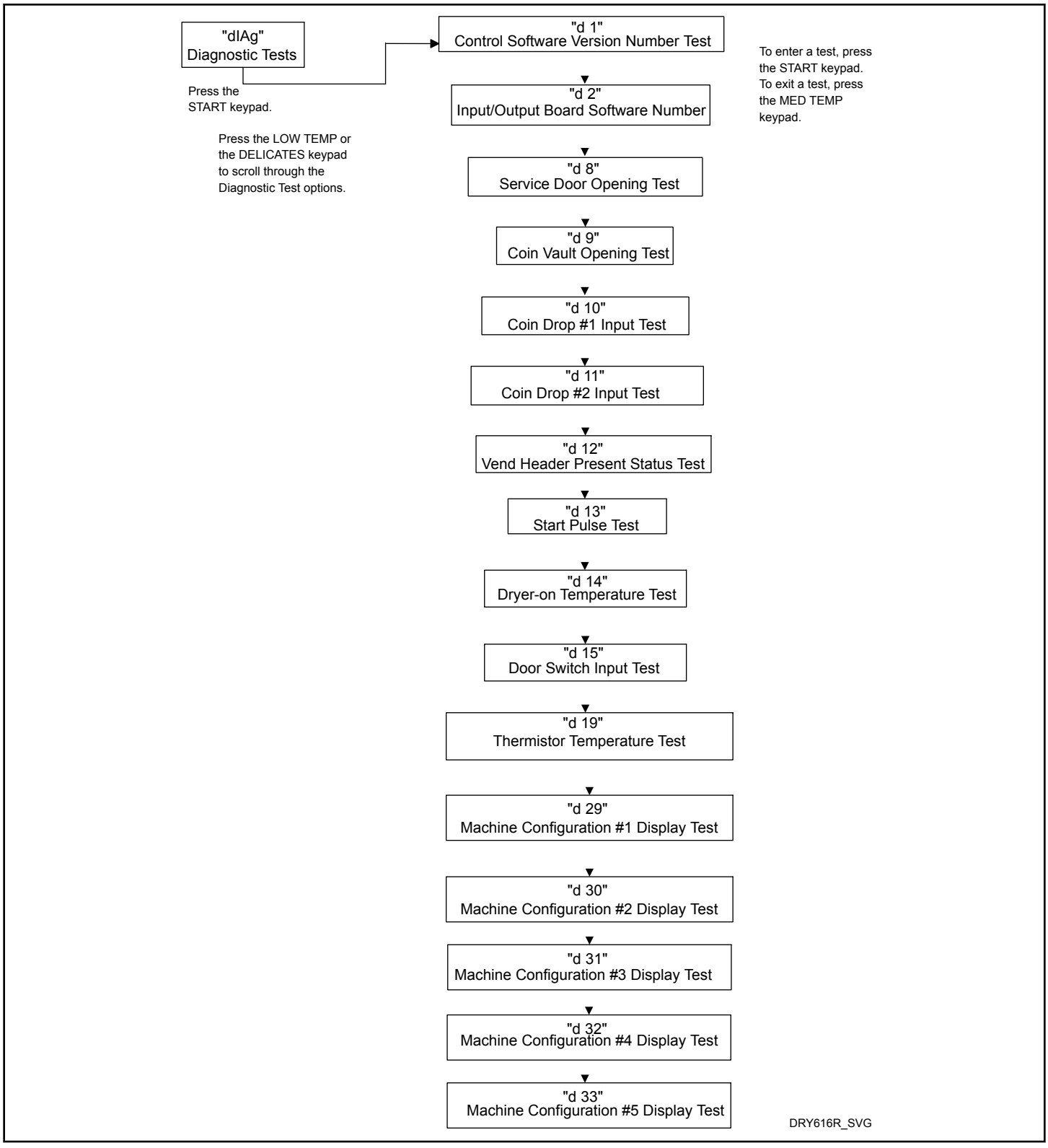

Figure 10

Diagnostic Test Descriptions

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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 HHH where HHH is the software version number.

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

Input/Output Board Software Version Number Test

This option displays the input/output board 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 obHH where HH is the software version number.

To exit the Software Version Number Test, press the MED TEMP (<) 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 to make a valid count. This test will add counts to the service door opening counter for the audit and save the date/time for each opening of the test.

To exit the Service Door Opening Test, press the MED TEMP (<) 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 to make a valid count. This test will add counts to the coin vault opening counter for the audit and save the time/date for each opening of the test.

To exit the Coin Vault Opening Test, press the MED TEMP (<) 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 C 1HH. The HH 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 MED TEMP (<) 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 C2HH. The HH 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 MED TEMP (<) keypad. The control will return to the testing mode.

Vend Header Present Status Test

This option tests the status of the vend header present jumper.

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 CHCL if jumper is present and CHoP if jumper is not present.

To exit the Vend Header Present Status Test, press the MED TEMP (<) 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 StHH. The HH will show the number of pulses entered. This test will add counts to the total number of Start Pulses counter.

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

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Dryer-on Temperature Test

This option tests the temperature inside the cylinder while running a cycle.

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 H--- for degrees in Fahrenheit or H--- for degrees in Celsius. The --- will show the degrees.

To exit the test, open the door. The control will then return to the testing mode.

NOTE: MED TEMP (<) keypad can't be used to exit Dryer-on Temperature Test since it is needed to select the Medium cycle.

Door Switch Input Test

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

To enter, press the START (center) keypad. The display will show drop if loading door is open or drCL if loading door is closed.

To exit the Door Switch Input Test, press the MED TEMP (<) keypad. The control will return to the testing mode.

Thermistor Temperature Test

This option displays the temperature sensed at the thermistor in 5°F increments.

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 HHHF or HHHC. The F will show Fahrenheit, the C will show Celsius and the HHH will show degrees. If control senses a shorted thermistor, the display will show SH. If the control senses an open thermistor, the display will show oP.

To exit this test, press the MED TEMP (<) keypad. The control will return to the testing mode.

Machine Configuration Display #1 Test

This option shows whether coin drops and communication interfaces are connected. 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 A HHH, with HHH a number corresponding to whether or not coin drops are connected, or serial card reader or network board are connected.

Refer to *Table 19* for test information.

To exit Machine Configuration Display #1 Test, press the MED TEMP (<) keypad. The control will return to the testing mode.

Machine Configuration Table

CONFIGVALUE	NETWORK BOARD PRESENT	VEND CONNECTION PRESENT	COIN DROP #2 PRESENT	COIN DROP #1 PRESENT
0	0	0	0	0
5	0	1	0	1
6	0	1	1	0
7	0	1	1	1
8	1	0	0	0
13	1	1	0	1
14	1	1	1	0
15	1	1	1	1

Table 19

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Machine Configuration Display #2 Test

This option is not used on this model.

Machine Configuration Display #3 Test

This option is not used on this model.

Machine Configuration Display #4 Test

This option shows which dipswitches are set on the control.

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 dHHH, with HHH representing the machine capacity. Refer to .

Config Value	Payment System Present	120VAC Supply*
0	0	0
1	0	1
4	1	0
5	1	1

*120VAC is supplied to the control for 120VAC Single Phase and 240VAC Split Phase configurations.

If supply voltage is 100-127VAC per phase, the voltage configuration should be 120VAC.

If supply voltage is 200-240VAC per phase, the voltage configuration should be 240VAC.

To exit Machine Configuration Display #4 Test, press the MED TEMP (<) keypad. The control will return to the testing mode.

Machine Configuration Display #5 Test

This option is not used on this model.

Factory Test Cycle

To Enter Factory Test Cycle

1. Be certain control is in Ready Mode, and service door or coin valut is open.
2. While pressing and holding the HIGH TEMP keypad with one hand, press the LOW TEMP keypad with the other hand.
3. When the control enters the Factory Test Cycle, it will first display dr for product type (dryer).
4. The control will advance through the sequence of test steps whenever the START (enter) keypad is pressed, with the exception of the Keypad Test. Refer to *Table 20* for all tests in the Factory Test Cycle.

To Exit Factory Test Cycle

The test will be exited when the time reaches 00 on the control in Step #10. Otherwise, the control must be powered down to end the test.

Factory Test Cycle Quick Reference Table		
Display	Test Mode	Comments
dr	Machine Type	dr is the machine type (dryer)
SHH	Software Version	HH is the software version number.
obHH	Output Board Version Number	HH is the output board version number.
AH	Control Type	H is the feature level of the control.
HH	DipSwitch Configuration	HH is the machine type. 00 is 120V and 01 is 240V.

Table 20 *continues...*

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PAd or PAHH	Keypad Test	When a key is pressed, the control will display the number assigned to the keypad (1 - HIGH TEMP, 2 - LOW TEMP, 3 - NO HEAT, 4 - MED TEMP, 5 - DELICATES, 6 - START). 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 Show Entire Display Mode test cycle.
All LEDs and display segments will light	Show Entire Display Mode	This mode will light all display elements.
CHCH	Coin Drop Test	H is the number of coins entered. If dual coin drops are installed, coin drop #1 will be shown on the left of the display and coin drop #2 will be shown on the right of the display. If a single coin drop is used, only one coin count will increment.
U oP or U CL	Coin Vault Switch Test	oP signifies the coin vault switch is open or CL signifies the coin vault switch is closed.
S oP or U CL	Service Door Switch Test	oP signifies the service door switch is open or CL signifies the service door switch is closed.
HHHF or HHHC	Thermistor Temperature Test	The temperature will be displayed in either Fahrenheit or Celsius, depending on machine's configuration (refer to *Temperature (Fahrenheit/Celsius) tP F C*). If control senses a shorted thermistor, SH will be displayed. If control senses an open thermistor, oP will be displayed.
10	10 Minute Test Cycle	Determines if dryer can function in a cycle for 10 minutes. LED display will flash one second on and one second off. If the door is opened while the START LED is flashing, the control will display "door" until the door is closed. While this 10 Minute Test Cycle is running, the START pad may be used to decrement the remaining cycle time. If power to the control is turned off before this test cycle has ended, the cycle is cleared. When the control is powered back up, it will be reset to Ready Mode.
Pd	Power Down	This is the final step of the Factory Test Cycle and when displayed it signifies the test has been completed.

Table 20

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NOTE: If power to the control is turned off before 10 Minute Test Cycle has ended, the cycle will be cleared from control.

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Error Codes

Following is a list of possible error codes for an electronic control. Errors beginning with E1 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
E1 01	Transmission Failure	Communication failure. Re-aim external device and try again.
E1 02	Device Time-out	Communication failure. Re-aim external device and try again.
E1 03	Invalid Command Code	Incorrect machine type. Before downloading, ensure data is for current machine type.
E1 04	Command Packet Time Out	Communication failure. Re-aim external device and try again.
E1 05	Invalid or Out-of-Range Data	Incorrect machine type. Before downloading, ensure data is for current machine type and values entered are within the minimum and maximum limits.
E1 09	CRC-16 Error	Communication failure. Re-aim external device and try again.
E1 0A	Framing Error	Communication error. Re-aim external device and try again.
E1 0C	Time-out Exceeded	Communication error. Re-aim external device and try again.
E1 0E	Encryption Error	Incorrect machine type. Before downloading, ensure data is for current machine type.
E1 0F	Invalid Wake-up or 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	Incorrect machine type. Before downloading, ensure data is for current machine type.
EC05	Invalid or Out-of-Range Data	Incorrect machine type. Before downloading, ensure data is for current machine type and values entered are within the minimum and maximum limits.
EC 11	No Card Reader Initialization	Communication is valid, but there is no card reader initialization. Power down, power up and try again.

Table 21 *continues...*

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Display	Description	Cause/ Corrective Action
EC 18	No Communication	Card reader initialized, communication lost. Power down, power up and try again. If error persists, replace control or card reader.
EC 19	No Card Reader Communication and No Card Reader Initialization	Communication failure. Power down, power up, check connections and try again. If error persists, replace control or card reader.
EC36	Audit Card Removed Prematurely	Re-insert Audit Card and wait until machine prompts for card removal.
Right most decimal point Lit	Network Communication Error	Communication problem. Wait for 1.5 minutes for error to clear. If error doesn't clear, power-down and power-up the machine. Check all network connections. If error persists, replace control or network board.
ALArn	Break-in Alarm Error	Service the service door or coin vault switches.
oFF	Break-in Alarm Shutdown Error	Service the service door or coin vault switches.
Err	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 SH	Shorted Thermistor Error	Remove any lint build-up around thermistor. If problem persists, replace control or thermistor.
E oP	Open Thermistor Error	Remove any lint build-up around thermistor. If problem persists, replace control or thermistor.
E id	Board ID	Incorrect replacement control. Replace user control or output board with correct part.
E dS	Brownout/Voltage Configuration	Unexpected supply voltage. Check the harness connections between the user control and the output board. If the user control was replaced, set dipswitch #1 to the same setting as the previous control. If reworking the machine to use a different supply voltage, the dip switch #1 setting may need to be changed. If the dip switch #1 setting is changed, power down, power up and try again.

Table 21 *continues...*

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Display	Description	Cause/ Corrective Action
E nr	Output Board Not Ready	Hardware failure. Replace output board.
E bS	Output Board Communication	Hardware failure. Replace output board.
EnHH	Machine ID	Communication failure. Power down, power up and try again. If error persists, check connection between user control and Machine ID chip, or try replacing the user control or the Machine ID chip.
E Co	Output Board Communication	Communication failure. Power down, power up and try again. If error persists, check connection between user control and output board, or try replacing the user control or the output board.
E 59	Door Input Acquisition	Hardware failure. Replace output board.
E 60	Centrifugal Switch Input Acquisition	Hardware failure. Replace output board.
E 61	High Limit Thermostat Input Acquisition	Hardware failure. Replace output board.
E ro	Locked Rotor	The motor is not sensed as rotating when it should be. Check that nothing is obstructing motor rotation, check connection between user control and output board, or try replacing the user control or the output board.
E nS	Motor Output Shorted	Hardware failure. Replace output board.

Table 21

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Rapid Advance Feature

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

How to Enter Rapid Advance from Ready Mode

1. If control is in Ready Mode, control must be put into Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the LOW TEMP (∧) or the DELICATES (∨) keypad until rAP id appears in the display.
3. Press the START (enter) keypad. The display will show PUSH then Strt followed by the cycle time.
4. Press the START (enter) keypad to start cycle.

While in the Rapid Advance Mode, pressing the START (enter) keypad will advance the cycle time by one minute. Pressing and holding the START (enter) keypad will advance the cycle four minutes for every second the START (enter) keypad is held down.

How to Enter Rapid Advance During an Active Cycle

1. Be certain service door is open.
2. While pressing and holding the HIGH TEMP keypad with one hand, press the MED TEMP keypad with the other hand. The display will show rAP id.

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

How to Exit Rapid Advance Feature

Advance through the cycles until reaching the Ready Mode.

Advance through the cycles until reaching the Start Mode.

NOTE: The Manual Rapid Advance option must be turned on for Rapid Advance to work. Refer to *Manual Rapid Advance (Enable/Disable) rAEn* in *Programming Control*.

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Clear Vend Feature

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

NOTE: The Clear Vend Feature does not work with Additional Vend Mode or Additional Cycle Top-Off.

How to Clear Vend

1. Open the service door. Refer to Opening the Service Door **.** The coin vault must remain closed.
2. While pressing and holding the MED TEMP keypad with one hand, press the LOW TEMP keypad with the other hand. The control will reset to the ready mode.

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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 a cycle is in progress when the power fails, the cycle status is saved in memory. When power recovers, the control will determine whether to automatically continue the cycle from the point it left off, requiring the user to press the START pad to continue the cycle, or end the cycle and put the control into the Ready Mode. To program this feature, refer to *Programming Control*.

Power Fail Reset Disabled

If the Power Fail feature is disabled, the control will resume the cycle from the point it left off after the START pad is pressed.

Power Fail Reset Enabled

If the length of the power failure is less than the programmed Power Failure Reset time, the control will resume the cycle from the point it left off. The cycle will resume after the START pad is pressed.

If the power failure lasted more than the programmed power failure reset time, the control will end the cycle and will return to the Ready Mode.

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Communications Mode

Infra-red Communications

The Infra-red Communications feature allows the control to communicate with an external device. The 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. The display will return to the previous mode. If an error occurs that terminates communication, the display will show EI HH (HH represents the error code).

NOTE: The Infra-red Communications option must be turned on. Refer to *IR Access (Enable/Disable) IrA* in *Programming Control*.

Card Reader Communications (Card Models Only)

The Card Reader Communications feature allows the control to communicate with the card reader. The 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 control to communicate with a network. The control can be programmed and have its data read without using the keypad.

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