# Tumble Dryer

Refer to Page 8 for Model Identification Designs 3, 5 and 6

Original Instructions Keep These Instructions for Future Reference. CAUTION: Read the instructions before using the machine. (If this machine changes ownership, this manual must accompany machine.)



Part No. 70537701ENR6 July 2021



## WARNING

Machine installations must comply with minimum specifications and requirements stated in the applicable Installation Manual, any applicable municipal building codes, water supply requirements, electrical wiring regulations and any other relevant statutory regulations. Due to varied requirements and applicable local codes, this machine must be installed, adjusted, and serviced by qualified maintenance personnel familiar with applicable local codes and the construction and operation of this type of machinery. They must also be familiar with the potential hazards involved. Failure to observe this warning may result in personal injury, property damage, and/or equipment damage, and will void the warranty.

W820

NOTE: The WARNINGS and IMPORTANT SAFETY IN-STRUCTIONS appearing in this manual are not meant to cover all possible conditions and situations that may occur. Common sense, caution, and care must be exercised when installing, maintaining, or operating the machine.

NOTE: The default values written in this manual are set according to the EU market. There is a possibility that default values can differ in other markets settings.

Any problems or conditions not understood should be reported to the dealer, distributor, service agent or the manufacturer.

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## **Model Identification**

Information in this manual is applicable to these models. **Refer** to the machine serial plate for the model number.

25 Series (	11 Kg)						
BA025E	BH025L	BK025R	HA025R	HJ025D	HR025S	PA025L	PJ025S
BA025F	BH025N	BL025E	HA025S	НЈ025Е	HT025E	PA025N	РК025Е
BA025L	BH025R	BL025L	HG025D	HJ025F	HT025F	PA025S	PK025L
BA025N	BH025S	BR025E	HG025E	HJ025L	HT025L	PG025E	PK025N
BA025R	BJ025D	BR025S	HG025F	HJ025N	HT025N	PG025L	PR025E
BA025S	BJ025E	BU025E	HG025L	HJ025R	HT025R	PG025N	PR025S
BG025D	BJ025F	BU025F	HG025N	HJ025S	HT025S	PG025S	РТ025Е
BG025E	BJ025L	BU025L	HG025R	HK025E	HU025E	PH025E	PT025L
BG025F	BJ025N	BU025N	HG025S	HK025F	HU025F	PH025L	PT025N
BG025L	BJ025R	BU025R	HH025E	HK025L	HU025L	PH025N	PT025S
BG025N	BJ025S	BU025S	HH025F	HK025N	HU025N	PH025S	PU025E
BG025R	BK025E	HA025E	HH025L	HK025R	HU025R	PJ025E	PU025L
BG025S	BK025F	HA025F	HH025N	HL025E	HU025S	PJ025L	PU025N
BH025E	BK025L	HA025L	HH025R	HL025L	PA025E	PJ025N	PU025S
BH025F	BK025N	HA025N	HH025S	HR025E			

30 Series (13 Kg)											
BA030E	BH030S	BU030F	НН030Е	HL030E	NA030N	NR030S	PJ030E				
BA030F	BJ030D	BU030L	HH030F	HL030L	NA030S	NU030E	PJ030L				
BA030L	BJ030E	BU030N	HH030L	HR030E	NG030E	NU030L	PJ030N				
BA030N	BJ030F	BU030R	HH030N	HR030S	NG030L	NU030N	PJ030S				
BA030R	BJ030L	BU030S	HH030R	HT030E	NG030N	NU030S	PK030E				
BA030S	BJ030N	HA030E	HH030S	HT030F	NG030S	PA030E	PK030L				
BG030D	BJ030R	HA030F	HJ030D	HT030L	NH030E	PA030L	PK030N				
BG030E	BJ030S	HA030L	HJ030E	HT030N	NH030L	PA030N	PR030E				
BG030F	BK030E	HA030N	HJ030F	HT030R	NH030N	PA030S	PR030S				
BG030L	BK030F	HA030R	HJ030L	HT030S	NH030S	PG030E	PT030E				
BG030N	BK030L	HA030S	HJ030N	HU030E	NJ030E	PG030L	PT030L				
BG030R	BK030N	HG030D	HJ030R	HU030F	NJ030L	PG030N	PT030N				

30 Series (1	I3 Kg)						
BG030S	BK030R	HG030E	HJ030S	HU030L	NJ030N	PG030S	PT030S
BH030E	BL030E	HG030F	HK030E	HU030N	NJ030S	PH030E	PU030E
BH030F	BL030L	HG030L	HK030F	HU030R	NK030E	PH030L	PU030L
BH030L	BR030E	HG030N	HK030L	HU030S	NK030L	PH030N	PU030N
BH030N	BR030S	HG030R	HK030N	NA030E	NK030N	PH030S	PU030S
BH030R	BU030E	HG030S	HK030R	NA030L	NR030E		

T30 Serie	es (13/13 Kg)						
BAT30E	BHT30S	BUT30F	HHT30E	HLT30E	NAT30N	NRT30S	PJT30E
BAT30F	BJT30D	BUT30L	HHT30F	HLT30L	NAT30S	NUT30E	PJT30L
BAT30L	BJT30E	BUT30N	HHT30L	HRT30E	NGT30E	NUT30L	PJT30N
BAT30N	BJT30F	BUT30R	HHT30N	HRT30S	NGT30L	NUT30N	PJT30S
BAT30R	BJT30L	BUT30S	HHT30R	HTT30E	NGT30N	NUT30S	PKT30E
BAT30S	BJT30N	HAT30E	HHT30S	HTT30F	NGT30S	PAT30E	PKT30L
BGT30D	BJT30R	HAT30F	HJT30D	HTT30L	NHT30E	PAT30L	PKT30N
BGT30E	BJT30S	HAT30L	HJT30E	HTT30N	NHT30L	PAT30N	PRT30E
BGT30F	BKT30E	HAT30N	HJT30F	HTT30R	NHT30N	PAT30S	PRT30S
BGT30L	BKT30F	HAT30R	HJT30L	HTT30S	NHT30S	PGT30E	PTT30E
BGT30N	BKT30L	HAT30S	HJT30N	HUT30E	NJT30E	PGT30L	PTT30L
BGT30R	BKT30N	HGT30D	HJT30R	HUT30F	NJT30L	PGT30N	PTT30N
BGT30S	BKT30R	HGT30E	HJT30S	HUT30L	NJT30N	PGT30S	PTT30S
BHT30E	BLT30E	HGT30F	HKT30E	HUT30N	NJT30S	PHT30E	PUT30E
BHT30F	BLT30L	HGT30L	HKT30F	HUT30R	NKT30E	PHT30L	PUT30L
BHT30L	BRT30E	HGT30N	HKT30L	HUT30S	NKT30L	PHT30N	PUT30N
BHT30N	BRT30S	HGT30R	HKT30N	NAT30E	NKT30N	PHT30S	PUT30S
BHT30R	BUT30E	HGT30S	HKT30R	NAT30L	NRT30E		

35 Series (16 Kg)										
BA035E	BH035S	BU035M	HH035L	HR035S	NG035E	NU035E	РЈ035Е			
BA035F	BJ035D	BU035N	HH035M	НТ035Е	NG035L	NU035L	PJ035L			
BA035L	BJ035E	BU035R	HH035N	HT035F	NG035M	NU035M	PJ035M			

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35 Series (16 Kg)										
BA035M	BJ035F	BU035S	HH035R	HT035L	NG035N	NU035N	PJ035N			
BA035N	BJ035L	HA035E	HH035S	HT035M	NG035S	NU035S	PJ035S			
BA035R	BJ035M	HA035F	HJ035D	HT035N	NH035E	PA035E	PK035E			
BA035S	BJ035N	HA035L	НЈ035Е	HT035R	NH035L	PA035L	PK035L			
BG035D	BJ035R	HA035M	HJ035F	HT035S	NH035M	PA035M	PK035N			
BG035E	BJ035S	HA035N	HJ035L	HU035E	NH035N	PA035N	PR035E			
BG035F	BK035E	HA035R	HJ035M	HU035F	NH035S	PA035S	PR035S			
BG035L	BK035F	HA035S	HJ035N	HU035L	NJ035E	PG035E	РТ035Е			
BG035M	BK035L	HG035D	HJ035R	HU035M	NJ035L	PG035L	PT035L			
BG035N	BK035N	HG035E	HJ035S	HU035N	NJ035M	PG035M	PT035M			
BG035R	BK035R	HG035F	НК035Е	HU035R	NJ035N	PG035N	PT035N			
BG035S	BL035E	HG035L	HK035F	HU035S	NJ035S	PG035S	PT035S			
BH035E	BL035L	HG035M	HK035L	NA035E	NK035E	PH035E	PU035E			
BH035F	BR035E	HG035N	HK035N	NA035L	NK035L	PH035L	PU035L			
BH035L	BR035S	HG035R	HK035R	NA035M	NK035N	PH035M	PU035M			
BH035M	BU035E	HG035S	HL035E	NA035N	NR035E	PH035N	PU035N			
BH035N	BU035F	НН035Е	HL035L	NA035S	NR035S	PH035S	PU035S			
BH035R	BU035L	HH035F	HR035E							

T45 Serie	T45 Series (20/20 Kg) * Only available in gas											
BAT45L	BHT45R	BUT45L	HGT45R	HKT45N	NAT45L	NKT45N	PJT45L					
BAT45N	BJT45D	BUT45N	HHT45L	HKT45R	NAT45N	NUT45L	PJT45N					
BAT45R	BJT45L	BUT45R	HHT45N	HLT45L	NGT45L	NUT45N	PKT45L					
BGT45D	BJT45N	HAT45L	HHT45R	HTT45L	NGT45N	PAT45L	PKT45N					
BGT45L	BJT45R	HAT45N	HJT45D	HTT45N	NHT45L	PAT45N	PTT45L					
BGT45N	BKT45L	HAT45R	HJT45L	HTT45R	NHT45N	PGT45L	PTT45N					
BGT45R	BKT45N	HGT45D	HJT45N	HUT45L	NJT45L	PGT45N	PUT45L					
BHT45L	BKT45R	HGT45L	HJT45R	HUT45N	NJT45N	PHT45L	PUT45N					
BHT45N	BLT45L	HGT45N	HKT45L	HUT45R	NKT45L	PHT45N						

50 Series (2	25 Kg)						
BA050E	BJ050L	HA050L	HJ050N	HU050L	NJ050E	PA050N	PK050E
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50 Series (25 Kg)							
BA050L	BJ050N	HA050N	HJ050S	HU050N	NJ050L	PA050S	PK050L
BA050N	BJ050S	HA050S	HK050E	HU050S	NJ050N	PG050E	PK050N
BA050S	BK050E	HG050D	HK050L	NA050E	NJ050S	PG050L	PR050E
BG050D	BK050L	HG050E	HK050N	NA050L	NK050E	PG050N	PR050S
BG050E	BK050N	HG050L	HL050E	NA050N	NK050L	PG050S	PT050C
BG050L	BL050E	HG050N	HL050L	NA050S	NK050N	PH050E	PT050E
BG050N	BL050L	HG050S	HR050E	NG050E	NR050E	PH050L	PT050L
BG050S	BR050E	HH050E	HR050S	NG050L	NR050S	PH050N	PT050N
BH050E	BR050S	HH050L	HT050C	NG050N	NU050E	PH050S	PT050S
BH050L	BU050E	HH050N	HT050E	NG050S	NU050L	PJ050E	PU050E
BH050N	BU050L	HH050S	HT050L	NH050E	NU050N	PJ050L	PU050L
BH050S	BU050N	HJ050D	HT050N	NH050L	NU050S	PJ050N	PU050N
BJ050D	BU050S	HJ050E	HT050S	NH050N	PA050E	PJ050S	PU050S
BJ050E	HA050E	HJ050L	HU050E	NH050S	PA050L		

55 Series (24 Kg) * Only available in gas and electric							
BA055E	BH055R	BU055E	HG055R	HK055N	HU055R	NK055L	PH055N
BA055F	BJ055D	BU055F	HH055E	HK055R	NA055E	NK055N	PJ055E
BA055L	BJ055E	BU055L	HH055F	HL055E	NA055L	NR055E	PJ055L
BA055N	BJ055F	BU055N	HH055L	HL055L	NA055N	NU055E	PJ055N
BA055R	BJ055L	BU055R	HH055N	HR055E	NG055E	NU055L	PK055E
BG055D	BJ055N	HA055E	HH055R	HT055E	NG055L	NU055N	PK055L
BG055E	BJ055R	HA055F	HJ055D	HT055F	NG055N	PA055E	PK055N
BG055F	BK055E	HA055L	НЈ055Е	HT055L	NH055E	PA055L	PR055E
BG055L	BK055F	HA055N	HJ055F	HT055N	NH055L	PA055N	РТ055Е
BG055N	BK055L	HA055R	HJ055L	HT055R	NH055N	PG055E	PT055L
BG055R	BK055N	HG055D	HJ055N	HU055E	NJ055E	PG055L	PT055N
BH055E	BK055R	HG055E	HJ055R	HU055F	NJ055L	PG055N	PU055E
BH055F	BL055E	HG055F	НК055Е	HU055L	NJ055N	PH055E	PU055L
BH055L	BL055L	HG055L	HK055F	HU055N	NK055E	PH055L	PU055N
BH055N	BR055E	HG055N	HK055L				

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75 Series (34 Kg)							
BA075E	BH075S	BU075R	HH075M	НТ075Е	NG075L	NU075L	PJ075L
BA075F	BJ075D	BU075S	HH075N	HT075F	NG075M	NU075M	PJ075M
BA075L	BJ075E	HA075E	HH075R	HT075L	NG075N	NU075N	PJ075N
BA075M	BJ075F	HA075F	HH075S	HT075M	NG075S	NU075S	PJ075S
BA075N	BJ075L	HA075L	HJ075D	HT075N	NH075E	PA075E	PK075E
BA075R	BJ075M	HA075M	НЈ075Е	HT075R	NH075L	PA075L	PK075L
BA075S	BJ075N	HA075N	HJ075F	HT075S	NH075M	PA075M	PK075N
BG075D	BJ075R	HA075R	HJ075L	HU075E	NH075N	PA075N	PR075E
BG075E	BJ075S	HA075S	HJ075M	HU075F	NH075S	PA075S	PR075S
BG075F	BK075E	HG075D	HJ075N	HU075L	NJ075E	PG075E	PT075C
BG075L	BK075F	HG075E	HJ075R	HU075M	NJ075L	PG075L	РТ075Е
BG075M	BK075L	HG075F	HJ075S	HU075N	NJ075M	PG075M	PT075L
BG075N	BK075N	HG075L	НК075Е	HU075R	NJ075N	PG075N	PT075M
BG075R	BK075R	HG075M	HK075F	HU075S	NJ075S	PG075S	PT075N
BG075S	BR075E	HG075N	HK075L	NA075E	NK075E	PH075E	PT075S
BH075E	BR075S	HG075R	HK075N	NA075L	NK075L	PH075L	PU075E
BH075F	BU075E	HG075S	HK075R	NA075M	NK075N	PH075M	PU075L
BH075L	BU075F	НН075Е	HR075E	NA075N	NR075E	PH075N	PU075M
BH075M	BU075L	HH075F	HR075S	NA075S	NR075S	PH075S	PU075N
BH075N	BU075M	HH075L	HT075C	NG075E	NU075E	PJ075E	PU075S
BH075R	BU075N						

#### Heater Digit (Position 6)

C - Steam (CRN)

D - Liquid Petroleum (L.P.) Gas, Japan

E - Electric

F - Reduced Electric (Eco Line)

L - L.P. Gas

M - Medium Electric

N - Natural Gas

R - Reduced Gas, Natural Gas (Eco Line)

S - Steam

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Vended Control Suffixes		
Control Digit (position 7)	Actuation Digit (position 8)	Example Control Suffix Combi- nation
N - Electronic Display Control, Network- able W - Electronic Display Control, Net- worked	C - Single Coin Drop	NC - Electronic Display Control Net-
	D - Dual Coin Drop	workable, Single Coin Drop
	E - Electronic Coin Drop	
	F - Single Coin Drop + CD Lock and Key	
	H - Electronic Coin Drop + CD Lock and Key	
	L - Prep for Central Pay	
	Q - Dual Coin Drop + CD Lock and Key	
	T - Token Drop	
	V - Token Drop + CD Lock and Key	
	X - Prep for Coin	
	Y - Prep for Card	

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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 SE-LECT 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.

IrDA - Infra-red External Device

### **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 will resume 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.

### Communications

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

#### Infra-red Communication

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**

Network communication is available on models with Serial Numbers beginning 1706.

Network communications allow an owner to program, collect data and run diagnostics on any machine.

## **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 and DELICATES. The selection of one of these cycles will light up the corresponding LED. The factory default cycle is MED TEMP.

## START Pad

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





**Control Identification** 



## **Display Identification**

## Light Emitting Diodes (LEDs)

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 Partial Vend 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 loading and lint doors are 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 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. 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*).

## **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 default cycle. 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.

### **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 (one second on, one second off if audio enabled). 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.

### **Run Mode**

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.

## **End of Cycle Mode**

When a cycle is complete, the display will show **DD** until the door is opened, a key is pressed, a coin or card is entered, or a start pulse is received. (If programmable open door display is enabled, display will toggle **DD**, **DPEn**, **door**.) If a vend is entered, the control will go to Partial Vend or Start Mode. All other instances, 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 section.

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**

The active cycle may be changed at any time.

## Opening the Dryer Loading or Lint Doors

Opening the dryer loading or lint doors in a running cycle will automatically stop the cycle. When either 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.

Time continues to count down while either door is open.

### 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**

If the door hasn't been opened and no keys have been pressed 20 minutes after the cycle has ended, the control increments the Total Number Extended Tumble Cycles audit counter and enters Extended Tumble. The cylinder will tumble for two minutes every 60 minutes for up to 18 hours or until the door is opened, a key is pressed, a coin is entered, a vend payment is made or a start pulse is received.

If extended tumble runs for the full 18 hours, the Extended Tumble Exceeded audit counter will be incremented.



## WARNING

Disabling this feature may lead to overheating of clothes, which may lead to spontaneous combustion and fire. By disabling this feature, you hereby release and hold harmless Alliance Laundry Systems LLC of any damages caused by fire, including but not limited to, property damage, personal injury or death, and agree to indemnity Alliance Laundry Systems LLC from in any proceeding or cause of action related to such action.

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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
- Drive Software Version Number
- Fan Software Version Number (Designs 3 and 5 only)
- Ignition Control Software Version Number (gas models only)
- 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 TemperatureTest
- Door Switch Input Test
- Lint Door Switch Test
- Temperature Sensor Display Test
- 12.5VDC Voltage Test
- 24VDC Voltage Test
- AC Mains Voltage 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
- ICM Alarm Status (gas models only)
- ICM Reset Test (gas models only)
- Heat Interlock Test (Cabinet Limit Thermostat, Stove Limit Thermostat 1, Stove Limit Thermostat 2, Manual Reset Limit Thermostat)
- Air Flow Switch Test
- Fan Motor Test
- Damper Motor Test (steam models only)
- Drive Motor 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** section.

## 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 last seven 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. These modes 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.

## **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.

## **Opening the Service Door**

## Stacked Tumble Dryer

Open service door and disconnect bullet connector located between the "white/black" and "red/blue" wires for one second, then reconnect. Refer to *Figure 2*.

## Stand Alone Tumble Dryer

Unlock access panel over control and remove.



Figure 1

## **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 flow-chart.

## 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**.
  - a. For Stand Alone Tumble Dryer: Open the service door for one second, then close and lock.
  - b. For Stacked Tumble Dryer: Open service door and disconnect bullet connector located between the "white/black" and "red/blue" wires for one second, then reconnect. Refer to *Figure 2*.



Figure 2

#### IMPORTANT: If the service door circuit is broken or left in an open state, unauthorized people may gain access to programming.

## NOTE: Coin Models – The coin vault switch must be closed to enter the Manual Mode.

- 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 **r RP** .d.
- 5. Press the LOW TEMP (Λ) or the DELICATES (V) 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 *Manual Rapid Advance rAPdEn* or *Manual Diagnostics diAgEn*), or with the network. If the feature is off, with it passcode protected, attempting to enter the feature will cause the display to show: *oFF*, *EntEr*, *PR55*, *CodE*, *CD---* prompting the user to enter the passcode.

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 (*r RP id*) Manual Programming (*Pr a 9*) Manual Read Audit (*RUd iE*) Manual Reset (*r E 5 E E*) Diagnostic Tests (*d iR9*)

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 **\_***FF*, 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.





## How to Exit Programming Feature

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

## **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. 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.

### **Programmable Options Available**

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 Display column of the Programmable Options List are what will show in the display when that option is selected.

Option Number	Option Display	Description	Default Value	Value Range
1	RES H	Heat Vend Price	25	0-65535
2	CYCF-	Cycle Time	-	-
a	נאנד ו	Heat Cycle Time Mi- nutes	5	1-99
b	נאנד 5	Heat Cycle Time Sec- onds	0	0-59
3	toP-	Top-Off Data	-	-
a	LoP I	Top-Off	on	on/oFF
b	EOP 2	Coin 1 Top-Off Time Minutes	5	0-99
с	EoP 3	Coin 1 Top-Off Time Seconds	0	0-59 (NOTE: Mini- mum is 10 if minutes is set to 0.)
d	ЕоР Ч	Coin 2 Top-Off Time Minutes	20	0-99
e	EoP 5	Coin 2 Top-Off Time Seconds	0	0-59 (NOTE: Mini- mum is 10 if minutes is set to 0.)
4	RES dP	Vend Price Decimal Point	2	0 (disabled), 2 (enabled - xxx.xx), 3 (enabled - xx.xxx)
5	dEn l	Coin #1 Value	25	1-65535

Option Number	Option Display	Description	Default Value	Value Range
6	dEn 2	Coin #2 Value	100	1-65535
7	PLSE	Start Pulse Value	25	1-65535
8	PLSNod	Start Pulse Mode	128	128 (on - single pulse), 192 (on - multiple puls- es) or oFF
9	RESPE	Programmable Output Type	0	0-13
10	dFECYC	Default Cycle	4	1 (High Temp), 2 (Low Temp), 4 (Med Temp), or 5 (Delicates)
11	ERrd	Card Reader Display Control On/Off	oFF	on/oFF
12	RUd io	Audio Signal	29	0-31
13	nodE	Network Node Number	250	1-250
14	Error-	Errors	_	-
a	[Err-	Coin Error Parameters	_	_
1	EErr I	Coin Error On/Off	on	on/oFF
2	[Err 2	Coin Error Penalty On/Off	oFF	on/oFF
3	[Err ]	Vend Header Present Error On/Off	on	on/oFF
b	Е ГЦ ЧЕ	Limit Cycles Display	oFF	on/oFF
с	E FFLN	False Flame Error Dis- play	oFF	on/oFF
d	ELrErr	Clear Error On/Off	oFF	on/oFF
15	Cdt -	Cool Down Time	_	-
a	Cdt I	High Temp Cool Down Time	1	1-15
b	Cd£ 2	Medium Temp Cool Down Time	1	1-15
с	Cd£ 3	Low Temp Cool Down Time	1	1-15
d	CdE 4	Delicates Temp Cool Down Time	1	1-15

Option Number	Option Display	Description	Default Value	Value Range
16	EdF	Time Display Format	nn	nn (minutes only) or nnSS (minutes and sec- onds)
17	ЕЕПР -	Temperature	-	-
a	ЕЕПР І	High Temperature	190°F [88°C]	100°-190°F [38°-88°C]
b	FEUD S	Medium Temperature	180°F [82°C]	100°-190°F [38°-88°C]
с	ЕЕПР З	Low Temperature	160°F [71°C]	100°-190°F [38°-88°C]
d	ЕЕПР Ч	Delicates Temperature	130°F [54°C]	100°-190°F [38°-88°C]
18	EP F C	Temperature (Fahren- heit/Celsius)	0	0 (Fahrenheit)/1 (Cel- sius)
19	R ,9	Auto-Ignite Retry (gas models only)	3	0-255
20	ELEn	Extended Tumble Ena- ble	on	on/oFF
21	r£[ -	Real Time Clock Pa- rameters	_	-
a	rt[	Set Real-Time Clock Minutes	-	0-59
b	rt[ 2	Set Real-Time Clock Hours	-	0-23
c	r£[ ]	Set Real-Time Clock Day	_	1-7
d	r£[ 4	Set Real-Time Clock Date	_	1-31
e	r£[ 5	Set Real-Time Clock Month	_	1-12
f	rt[ 6	Set Real-Time Clock Year	_	0-99
22	dL5-	Daylight Savings Pa- rameters	on	on/oFF
a	dL5 1	Daylight Savings On/Off	-	-
b	dL5 2	Start Month	3	1-12
c	dL5 3	Start Day of Week	1	1-7

Option Number	Option Display	Description	Default Value	Value Range
d	dLS 4	Start Week of Month	2	1-4
e	dL5 5	Start Hour	2	0-23
f	dL5 6	End Month	11	1-12
g	dls 7	End Day of Week	1	1-7
h	dLS 8	End Week of Month	1	1-4
i	dL5 9	End Hour	2	0-23
23	5P I-	Special Vend 1 Param- eters	_	_
a	5P	Special Vend 1 Days Enable	0	0 (oFF) - 255
b	5P I 2	Special Vend 1 Start Minute	0	0-59
с	SP I 3	Special Vend 1 Start Hour	0	0-23
d	5P   4	Special Vend 1 Start Date	0	0 (oFF) - 31
e	SP   5	Special Vend 1 Start Month	0	0 (oFF) - 12
f	5P   7	Special Vend 1 Length in Hours	0	0-24
g	SPIB	Special Vend 1 End Date	0	0 (oFF) - 31
h	SP I 9	Special Vend 1 End Month	0	0 (oFF) - 12
i	5P	Special Vend 1 Heat Cycle Vend Price	0	0 - 65535
j	SP I 12	Special Vend 1 Heat Cycle Time Minutes	1	1-99
k	SP   13	Special Vend 1 Heat Cycle Time Seconds	0	0-59
1	5 P I 17	Special Vend 1 Coin 1 Topoff Time Minutes	1	0-99

Option Number	Option Display	Description	Default Value	Value Range
m	5 P I 18	Special Vend 1 Coin 1 Topoff Time Seconds	0	0-59 (NOTE: Mini- mum 10 seconds total topoff time if minutes is set to 0.)
n	5 P I 19	Special Vend 1 Coin 2 Topoff Time Minutes	1	0-99
0	5 P I 20	Special Vend 1 Coin 2 Topoff Time Seconds	0	0-59 (NOTE: Mini- mum 10 seconds total topoff time if minutes is set to 0.)
р	5 P I 2 I	Special Vend Payment System Topoff Vend Price	1	0-65535
q	5 P I 22	Special Vend Payment System Topoff Minutes	1	0-99
r	5 P I 23	Special Vend Payment System Topoff Seconds	0	0-59 (NOTE: Mini- mum 10 seconds total topoff time if minutes is set to 0.)
24	5P2	Special Vend 2 Days Enable (On/Off)	oFF	on/oFF
25	rEu-	Reversing Parameters	-	-
a	rEu l	Rotate Time (seconds)	30	30-540 seconds
b (Designs 3 and 5)	rEu 2	Stop Time (seconds)	6	6-10 seconds
b (Design 6)	rEu Z	Stop Time (seconds)	3 (30, T30, T45, 55) 6 (50, 75)	3-7 seconds (30, T30, T45, 55) 6-10 seconds (50, 75)
с	rEu 3	Global Enable (On/Off)	on	on/oFF
26	IFA En	IR Access (On/Off)	on	on/oFF
27	rAPdEn	Manual Rapid Advance	on	on/oFF/Disabled (oFF refers to passcode pro- tected, disabled refers to off completely)
28	d iR9En	Manual Diagnostics	on	on/oFF/Disabled (oFF refers to passcode pro- tected, disabled refers to off completely)
29	Ft En	Factory Test Cycle	on	on/oFF

Option Number	Option Display	Description	Default Value	Value Range
30	HE dP	Heat Indicator Decimal Point (On/Off)	oFF	on/oFF
31	AF2 90	Vend Price Display Override	oFF	on/oFF
32	oPL -	OPL Parameters	-	-
a	oPL I	OPL Mode Enable (On/Off)	oFF	on/oFF
b	oPL 3	OPL Display Power Save (On/Off)	on	on/oFF
33	oUE	Out of Order (On/Off)	oFF	on/oFF



Figure 4

#### **Programming Control**



Figure 5



Figure 6



Figure 7





## Heat Vend Price RES 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*.
- Press the LOW TEMP (A) or the DELICATES (V) keypad until *Prog* appears in the display. Press the START (enter) keypad and *RE5 H* will appear in the display.
- 3. *AL5 H* will appear in the display. Press the START (enter) keypad.
- 4. Press the LOW TEMP ( $\Lambda$ ) or the DELICATES (V) keypad to increase or decrease the value of the fifth digit.

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

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

### Cycle Time [Y[L-

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*.
- Press the LOW TEMP (A) or the DELICATES (V) keypad until *Prog* appears in the display. Press the START (enter) keypad and *RE5 H* will appear in the display.
- Press the LOW TEMP (A) or the DELICATES (V) keypad to scroll through the programmable options until *LYLL* - appears in the display.
- 4. When *LYLL* appears in the display, press the START (enter) keypad. There are two programmable cycle time options. Refer to *Table 1*.

Display	Cycle Time Options
נאנד ו	Heat Cycle Time Minutes (1-99)
CACF 5	Heat Cycle Time Seconds (0-59)

Table 1

5. Press the LOW TEMP ( $\Lambda$ ) or the DELICATES (V) keypad to select the desired cycle time option.

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

## NOTE: The default value in minutes is 5 and the default value for seconds is 0.

- 6. Press the START (enter) keypad when the correct option appears in the display.
- Press the LOW TEMP (Λ) or the DELICATES (V) 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 LoP-

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*.
- Press the LOW TEMP (A) or the DELICATES (V) keypad until Prog appears in the display. Press the START (enter) keypad and RE5 H will appear in the display.
- Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable options until *L* □*P* - appears in the display.
- 4. When *LoP* appears in the display, press the START (enter) keypad. There are five programmable top-off options. Refer to *Table 2*.

Display	Top-Off Options
EoP I	Top-Off ON/OFF
EoP 2	Coin 1 Top-Off Time Mi- nutes (0-99)
EoP 3	Coin 1 Top-Off Time Seconds (0-59)
ЕОР Ч	Coin 2 Top-Off Time Mi- nutes (0-99)
EoP 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 ( $\Lambda$ ) or the DELICATES (V) keypad to select the desired top-off option.
- 6. Press the START (enter) keypad when the correct option appears in the display.
- Press the LOW TEMP (Λ) or the DELICATES (V) 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 for top-off is 0 seconds. The minimum amount of time for a cycle is 1 minute.

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 = 0
- Coin 2 Top-Off Time Minutes = 20
- Coin 2 Top-Off TimeSeconds = 0

#### Programming Control

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 RE5 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*.
- Press the LOW TEMP (A) or the DELICATES (V) keypad until *Prog* appears in the display. Press the START (enter) keypad and *RE5 H* will appear in the display.
- 3. Press the LOW TEMP ( $\Lambda$ ) or the DELICATES (V) keypad to scroll through the programmable options until *RL***5** *dP* appears in the display.
- When *RE5 dP* appears in the display, press the START (enter) keypad.
- 5. Press the LOW TEMP ( $\Lambda$ ) or the DELICATES (V) 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 ( $\Lambda$ ) or the DELICATES (V) 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 be 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*.
- Press the LOW TEMP (A) or the DELICATES (V) keypad until Prog appears in the display. Press the START (enter) keypad and RE5 H will appear in the display.
- Press the LOW TEMP (A) or the DELICATES (V) keypad to scroll through the programmable options until *dEn l* appears in the display.
- 4. When *dEn l* appears in the display, press the START (enter) keypad.

5. Press the LOW TEMP ( $\Lambda$ ) or the DELICATES (V) keypad to increase or decrease the value of the fifth digit.

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

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

- Press the LOW TEMP (Λ) or the DELICATES (V) keypad to increase or decrease the value of the active digit and the START (enter) keypad to enter the value of the digit and advance to the next digit.
- 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*.
- Press the LOW TEMP (A) or the DELICATES (V) keypad until Prog appears in the display. Press the START (enter) keypad and RE5 H will appear in the display.
- 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 ( $\Lambda$ ) or the DELICATES (V) keypad to increase or decrease the value of the fifth digit.

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

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

- Press the LOW TEMP (Λ) or the DELICATES (V) keypad to increase or decrease the value of the active digit and the START (enter) keypad to enter the value of the digit and advance to the next digit.
- 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 PULSE

Programming Control

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*.
- Press the LOW TEMP (A) or the DELICATES (V) keypad until Prog appears in the display. Press the START (enter) keypad and RE5 H will appear in the display.
- Press the LOW TEMP (Λ) or the DELICATES (V) keypad to scroll through the programmable options until *PL 5E* appears in the display.
- 4. When *PL5E* appears in the display, press the START (enter) keypad.
- 5. Press the LOW TEMP ( $\Lambda$ ) or the DELICATES (V) keypad to increase or decrease the value of the fifth digit.

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

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

- Press the LOW TEMP (Λ) or the DELICATES (V) keypad to increase or decrease the value of the active digit and the START (enter) keypad to enter the value of the digit and advance to the next digit.
- 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 PL5Nod

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*.
- Press the LOW TEMP (A) or the DELICATES (V) keypad until Prog appears in the display. Press the START (enter) keypad and RE5 H will appear in the display.
- Press the LOW TEMP (Λ) or the DELICATES (V) keypad to scroll through the programmable options until *PL 5Π<sub>o</sub>d* appears in the display.
- When *PL5nod* 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.

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 ( $\Lambda$ ) or the DELICATES (V) 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 REYPE

This option allows the owner to program when the control provides a programmable output for card and central pay systems to show when the machine is available.

- 1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
- Press the LOW TEMP (A) or the DELICATES (V) keypad until Prog appears in the display. Press the START (enter) keypad and RE5 H will appear in the display.
- Press the LOW TEMP (A) or the DELICATES (V) keypad to scroll through the programmable options until *RL YPE* appears in the display.
- 4. When *REYPE* appears in the display, press the START (enter) keypad. A number will appear in the display. This number corresponds to the current Programmable Output Type Value.
- Press the LOW TEMP (A) or the DELICATES (V) keypad to increase or decrease the current number to the desired number selected from *Table 4*.

Programmable Out- put Type Value	Mode(s) in Which Programmable Out- put Signal is Active
0	Ready Mode only
1 - Available at Start	Ready Mode, Start Mode

Programmable Out- put Type Value	Mode(s) in Which Programmable Out- put Signal is Active
2 - Available with End of Cycle	Ready Mode, End of Cy- cle Mode
3 - Available with Start and End of Cycle	Ready Mode, End of Cy- cle Mode, Start Mode
4 - Vend is not satisfied	Ready Mode, Partial Vend Mode
5 - Vend is not satisfied with End of Cycle	Ready Mode, Partial Vend Mode, End of Cycle Mode
6 - Available with Vend	Ready Mode, Start Mode
7 - Available with Vend and End of Cycle	Ready Mode, End of Cy- cle Mode, Partial Vend Mode, Start Mode
8 - Machine is In Use	Run Mode
9 - Cycle is Complete	End of Cycle Mode
10 - Lucky Cycle	For 10 seconds when Start Mode is entered
12 - End of Cycle is En- tered	For 3 seconds when End of Cycle Mode is entered
13 - Motor Running	Whenever motor is run- ning

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 dFEEYE

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*.
- Press the LOW TEMP (A) or the DELICATES (V) keypad until Prog appears in the display. Press the START (enter) keypad and RE5 H will appear in the display.
- Press the LOW TEMP (Λ) or the DELICATES (V) keypad to scroll through the programmable options until *dFELYL* appears in the display.

- When *dFECUE* 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*.
- Press the LOW TEMP (A) or the DELICATES (V) 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.

Default Cycle Value	СусІе Туре
1	HIGH TEMP
2	LOW TEMP
4	MED TEMP
5	DELICATES

Table 5

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

### Card Reader Display Control [Rrd

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.

- 1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
- Press the LOW TEMP (Λ) or the DELICATES (V) keypad until Prog appears in the display. Press the START (enter) keypad and RE5 H will appear in the display.
- Press the LOW TEMP (Λ) or the DELICATES (V) keypad to scroll through the programmable options until *LRr d* appears in the display.
- 4. When *LRrd* appears in the display, press the START (enter) keypad. The current Card Reader Display Control status will appear in the display. *Dr* = Card Reader controls display *DFF* = Machine Electronic Control controls display

#### NOTE: The default value is oFF.

- 5. Press the LOW TEMP ( $\Lambda$ ) or the DELICATES (V) 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 RUd 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*.

- Press the LOW TEMP (A) or the DELICATES (V) keypad until Prog appears in the display. Press the START (enter) keypad and RE5 H will appear in the display.
- Press the LOW TEMP (A) or the DELICATES (V) keypad to scroll through the programmable options until *RUd io* appears in the display.
- 4. When *AUd* appears in the display press the START (enter) keypad. A number will appear in the display. This number corresponds to the current Audio Signal Programming Value.
- 5. Locate the desired number in the first column of *Table 1*.
- 6. Press the LOW TEMP ( $\Lambda$ ) or the DELICATES (V) keypad to increase or decrease the current number until correct.

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

7. Press the START (enter) keypad when the correct number appears in the display. The 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 **an** and **aFF** 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 In- put	End of Cycle	Key Pressed
0	OFF	OFF	OFF	OFF	OFF
1	OFF	OFF	OFF	OFF	ON
2	OFF	OFF	OFF	ON	OFF
3	OFF	OFF	OFF	ON	ON
4	OFF	OFF	ON	OFF	OFF
5	OFF	OFF	ON	OFF	ON

Programming Control

Signal Value	Start Mode	Serial/ Network Command	Coin/Card In- put	End of Cycle	Key Pressed
6	OFF	OFF	ON	ON	OFF
7	OFF	OFF	ON	ON	ON
8	OFF	ON	OFF	OFF	OFF
9	OFF	ON	OFF	OFF	ON
10	OFF	ON	OFF	ON	OFF
11	OFF	ON	OFF	ON	ON
12	OFF	ON	ON	OFF	OFF
13	OFF	ON	ON	OFF	ON
14	OFF	ON	ON	ON	OFF
15	OFF	ON	ON	ON	ON
16	ON	OFF	OFF	OFF	OFF
17	ON	OFF	OFF	OFF	ON
18	ON	OFF	OFF	ON	OFF
19	ON	OFF	OFF	ON	ON
20	ON	OFF	ON	OFF	OFF
21	ON	OFF	ON	OFF	ON
22	ON	OFF	ON	ON	OFF
23	ON	OFF	ON	ON	ON
24	ON	ON	OFF	OFF	OFF
25	ON	ON	OFF	OFF	ON
26	ON	ON	OFF	ON	OFF
27	ON	ON	OFF	ON	ON
28	ON	ON	ON	OFF	OFF
29	ON	ON	ON	OFF	ON
30	ON	ON	ON	ON	OFF
31	ON	ON	ON	ON	ON

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*.
- Press the LOW TEMP (A) or the DELICATES (V) keypad until *Prog* appears in the display. Press the START (enter) keypad and *RE5 H* will appear in the display.
- Press the LOW TEMP (Λ) or the DELICATES (V) 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 ( $\Lambda$ ) or the DELICATES (V) 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*.
- Press the LOW TEMP (A) or the DELICATES (V) keypad until Prog appears in the display. Press the START (enter) keypad and RE5 H will appear in the display.
- Press the LOW TEMP (Λ) or the DELICATES (V) keypad to scroll through the programmable options until *Error* - appears in the display.
- When Error appears in the display, press the START (enter) keypad. The control will display *Err* -. Press the START (enter) keypad. The control will display *Err* 1.

Display	Coin Error Parameters	
[Err-	[Err	Coin Error On/Off – Deter- mines if display will show error.
	[Err 2	Coin Error Pen- alty On/Off – If enabled, coin error will erase previous coins entered and re- set the vend price.
	[Err]	Vend Header Present Error On/Off - If ena- bled and vend header is un- plugged, control ignores coin in- puts.
Е ЦП 1Е		Limit Cycles Display On/Off
E FFLN		False Flame Er- ror Display
ELrErr		Clear Error On/Off

Table 7

- 5. Press the LOW TEMP ( $\Lambda$ ) or the DELICATES (V) 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.
- *GFF* indicates the option is disabled. *Gn* indicates the option is enabled. Press the LOW TEMP (Λ) or the DELICATES (V) keypad to change the status.

#### NOTE: The default values for Coin Error and Coin Drops Header are an. The default value for Coin Error Penalty is aFF.

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.

### Cool Down Time [dt -

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

Programming Control

- 1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
- Press the LOW TEMP (A) or the DELICATES (V) keypad until Prog appears in the display. Press the START (enter) keypad and RE5 H will appear in the display.
- Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable options until *LdL* appears in the display.
- When *LdL* appears in the display, press the START (enter) keypad. There are four programmable cool down time options. Refer to *Table 8*.

Display	Cool Down Time Options
Cdt I	High Temp Cool Down Time (1-15)
[4F 5	Medium Temp Cool Down Time (1-15)
[dł ]	Low Temp Cool Down Time (1-15)
Cdt 4	Delicates Cool Down Time (1-15)

Table 8

5. Press the LOW TEMP ( $\Lambda$ ) or the DELICATES (V) keypad to select the desired cool down time option.

# NOTE: Cool down time can be set from one (1) to 15 minutes, with the default value for each option being 2 minutes.

- 6. Press the START (enter) keypad when the correct option appears in the display.
- Press the LOW TEMP (Λ) or the DELICATES (V) 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 E 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*.
- Press the LOW TEMP (∧) or the DELICATES (∨) keypad until *Prog* appears in the display. Press the START (enter) keypad and *RE5 H* will appear in the display.
- Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable options until *L d F* appears in the display.

 When *E 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 to $\Pi\Pi$ (minutes only) or $\Pi\Pi55$ (minutes and seconds). The default format is $\Pi\Pi$ .

- 5. Press the LOW TEMP ( $\Lambda$ ) or the DELICATES (V) 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 *EENP*-

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*.
- Press the LOW TEMP (A) or the DELICATES (V) keypad until Prog appears in the display. Press the START (enter) keypad and RE5 H will appear in the display.
- Press the LOW TEMP (A) or the DELICATES (V) keypad to scroll through the programmable options until *LENP* - appears in the display.
- When *EENP* appears in the display, press the START (enter) keypad. There are four programmable temperature options. Refer to *Table 9*.

Display	Temperature Op- tions
EENP I	High Temperature
EENP 2	Medium Temperature
ЕЕПР Э	Low Temperature
ЕЕПР Ч	Delicates Temperature

Table 9

- 5. Press the LOW TEMP ( $\Lambda$ ) or the DELICATES (V) 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]
105°F [41°C]
110°F [43°C]

Temperature Options
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]
165°F [74°C]
170°F [77°C]
175°F [79°C]
180°F [82°C]
185°F [85°C]
190°F [88°C]

Table 10

#### NOTE: The default values are as follows:

High Temperature =  $190^{\circ}$ F [88°C]

Medium Temperature =  $180^{\circ}$ F [ $82^{\circ}$ C]

Low Temperature =  $160^{\circ}$ F [71°C]

Delicates Temperature =  $130^{\circ}$ F [54°C]

- Press the LOW TEMP (Λ) or the DELICATES (V) 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)** *LP F*

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*.

- Press the LOW TEMP (∧) or the DELICATES (∨) keypad until *Prog* appears in the display. Press the START (enter) keypad and *RE5 H* will appear in the display.
- Press the LOW TEMP (Λ) or the DELICATES (V) keypad to scroll through the programmable options until *LP* F *L* appears in the display.
- 4. When *LP F L* 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.

- Press the LOW TEMP (Λ) or the DELICATES (V) 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.

### Auto-Ignite Retry R .9

This option allows the owner to enable or disable the auto-ignite retry feature.

- 1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
- Press the LOW TEMP (A) or the DELICATES (V) keypad until Prog appears in the display. Press the START (enter) keypad and RE5 H will appear in the display.
- Press the LOW TEMP (A) or the DELICATES (V) keypad to scroll through the programmable options until *R* .*g* appears in the display.
- 4. When *R iG* appears in the display, press the START (enter) keypad. A number will appear in the display. This number (found below) corresponds to the number of attempts the machine will automatically reset a lockout alarm and try to ignite.

Display	Enable/Disable
0	Disable
1-255	Enable

Table 11

#### NOTE: The default value is 3.

- Press the LOW TEMP (Λ) or the DELICATES (V) 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.

## Extended Tumble Enable ELEn

This option allows the owner to enable or disable the extended tumble option.



## WARNING

Disabling this feature may lead to overheating of clothes, which may lead to spontaneous combustion and fire. By disabling this feature, you hereby release and hold harmless Alliance Laundry Systems LLC of any damages caused by fire, including but not limited to, property damage, personal injury or death, and agree to indemnity Alliance Laundry Systems LLC from in any proceeding or cause of action related to such action.

W960

- 1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
- Press the LOW TEMP (A) or the DELICATES (V) keypad until Prog appears in the display. Press the START (enter) keypad and RE5 H will appear in the display.
- Press the LOW TEMP (A) or the DELICATES (V) keypad to scroll through the programmable options until *EEEn* appears in the display.
- When EEEn appears in the display, press the START (enter) keypad. The current Extended Tumble status will appear in the display. on = Option Enabled oFF = Option Disabled

NOTE: The default value is on.

- 5. Press the LOW TEMP ( $\Lambda$ ) or the DELICATES (V) 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.

## Set Real-Time Clock - LE -

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*.
- Press the LOW TEMP (A) or the DELICATES (V) keypad until Prog appears in the display. Press the START (enter) keypad and RE5 H will appear in the display.
- Press the LOW TEMP (A) or the DELICATES (V) keypad to scroll through the programmable options until rEL - appears in the display. Press the START keypad and rEL I will appear in the display.
- 4. Press the LOW TEMP (Λ) or the DELICATES (V) keypad to scroll through the programmable options. Refer to *Table 12*.

Display	Real Time Clock Options
rE[	Programs Minutes
r£[ 2	Programs Hours
r£[ ]	Programs Day of Week
r£[ 4	Programs Date of Month
r£[ 5	Programs Month
r£[ 6	Programs Year

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 ( $\Lambda$ ) or the DELICATES (V) 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 DD, the year 2001 is D / 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.

## Daylight Savings Time Parameters dL5-

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*.
- Press the LOW TEMP (A) or the DELICATES (V) keypad until Prog appears in the display. Press the START (enter) keypad and RE5 H will appear in the display.
- Press the LOW TEMP (A) or the DELICATES (V) keypad to scroll through the programmable options until *dL*5 - appears in the display. Press the START keypad and *dL*5 *I* will appear in the display.
- 4. Press the LOW TEMP (Λ) or the DELICATES (V) keypad to scroll through the programmable options. Refer to *Table 13*.

Display	Daylight Savings Options
dLS I	Daylight Savings (On/ Off)
dL5 2	Start Month

Display	Daylight Savings Options
dL5 3	Start Day of Week
dL5 4	Start Week of Month
dL5 5	Start Hour
dL5 6	End Month
dL5 7	End Day of Week
dL5 8	End Week of Month
dL5 9	End Hour

Table 13

- 5. When the desired option appears in the display, press the START (enter) keypad. The current value will appear in the display.
- Press the LOW TEMP (A) or the DELICATES (V) 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  $\square$ , the year 2001 is  $\square$  / 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 5P 1-

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 5P |

- 1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
- Press the LOW TEMP (A) or the DELICATES (V) keypad until Prog appears in the display. Press the START (enter) keypad and RE5 H will appear in the display.
- Press the LOW TEMP (Λ) or the DELICATES (V) keypad to scroll through the programmable options until 5P 1- appears in the display. Press the START (enter) keypad and 5P 1 1 will appear in the display.
- 4. When **5P** *I* 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 14* on the following pages.
- 6. Press the LOW TEMP ( $\Lambda$ ) or the DELICATES (V) keypad to increase or decrease the current number until correct.
- 7. Press the START (enter) keypad when the correct number appears in the display. The 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  $D\Pi$  and DFF 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.

SPE- CIAL 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

NOTE: The default value is 0.

SPE- CIAL VEND VALUE	SAT	FRI	THUR	WED	TUE	MON	SUN	ON/OFF
7	OFF	OFF	OFF	OFF	OFF	ON	ON	ON
9	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON
11	OFF	OFF	OFF	OFF	ON	OFF	ON	ON
13	OFF	OFF	OFF	OFF	ON	ON	OFF	ON
15	OFF	OFF	OFF	OFF	ON	ON	ON	ON
17	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON
19	OFF	OFF	OFF	ON	OFF	OFF	ON	ON
21	OFF	OFF	OFF	ON	OFF	ON	OFF	ON
23	OFF	OFF	OFF	ON	OFF	ON	ON	ON
25	OFF	OFF	OFF	ON	ON	OFF	OFF	ON
27	OFF	OFF	OFF	ON	ON	OFF	ON	ON
29	OFF	OFF	OFF	ON	ON	ON	OFF	ON
31	OFF	OFF	OFF	ON	ON	ON	ON	ON
33	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON
35	OFF	OFF	ON	OFF	OFF	OFF	ON	ON
37	OFF	OFF	ON	OFF	OFF	ON	OFF	ON
39	OFF	OFF	ON	OFF	OFF	ON	ON	ON
41	OFF	OFF	ON	OFF	ON	OFF	OFF	ON
43	OFF	OFF	ON	OFF	ON	OFF	ON	ON
45	OFF	OFF	ON	OFF	ON	ON	OFF	ON
47	OFF	OFF	ON	OFF	ON	ON	ON	ON
49	OFF	OFF	ON	ON	OFF	OFF	OFF	ON
51	OFF	OFF	ON	ON	OFF	OFF	ON	ON
53	OFF	OFF	ON	ON	OFF	ON	OFF	ON
55	OFF	OFF	ON	ON	OFF	ON	ON	ON
57	OFF	OFF	ON	ON	ON	OFF	OFF	ON

SPE- CIAL VEND VALUE	SAT	FRI	THUR	WED	TUE	MON	SUN	ON/OFF
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
115	OFF	ON	ON	ON	OFF	OFF	ON	ON

SPE- CIAL VEND VALUE	SAT	FRI	THUR	WED	TUE	MON	SUN	ON/OFF
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

SPE- CIAL VEND VALUE	SAT	FRI	THUR	WED	TUE	MON	SUN	ON/OFF
177	ON	OFF	ON	ON	OFF	OFF	OFF	ON
179	ON	OFF	ON	ON	OFF	OFF	ON	ON
181	ON	OFF	ON	ON	OFF	ON	OFF	ON
183	ON	OFF	ON	ON	OFF	ON	ON	ON
185	ON	OFF	ON	ON	ON	OFF	OFF	ON
187	ON	OFF	ON	ON	ON	OFF	ON	ON
189	ON	OFF	ON	ON	ON	ON	OFF	ON
191	ON	OFF	ON	ON	ON	ON	ON	ON
193	ON	ON	OFF	OFF	OFF	OFF	OFF	ON
195	ON	ON	OFF	OFF	OFF	OFF	ON	ON
197	ON	ON	OFF	OFF	OFF	ON	OFF	ON
199	ON	ON	OFF	OFF	OFF	ON	ON	ON
201	ON	ON	OFF	OFF	ON	OFF	OFF	ON
203	ON	ON	OFF	OFF	ON	OFF	ON	ON
205	ON	ON	OFF	OFF	ON	ON	OFF	ON
207	ON	ON	OFF	OFF	ON	ON	ON	ON
209	ON	ON	OFF	ON	OFF	OFF	OFF	ON
211	ON	ON	OFF	ON	OFF	OFF	ON	ON
213	ON	ON	OFF	ON	OFF	ON	OFF	ON
215	ON	ON	OFF	ON	OFF	ON	ON	ON
217	ON	ON	OFF	ON	ON	OFF	OFF	ON
219	ON	ON	OFF	ON	ON	OFF	ON	ON
221	ON	ON	OFF	ON	ON	ON	OFF	ON
223	ON	ON	OFF	ON	ON	ON	ON	ON
225	ON	ON	ON	OFF	OFF	OFF	OFF	ON
227	ON	ON	ON	OFF	OFF	OFF	ON	ON
229	ON	ON	ON	OFF	OFF	ON	OFF	ON
231	ON	ON	ON	OFF	OFF	ON	ON	ON
233	ON	ON	ON	OFF	ON	OFF	OFF	ON
235	ON	ON	ON	OFF	ON	OFF	ON	ON

SPE- CIAL VEND VALUE	SAT	FRI	THUR	WED	TUE	MON	SUN	ON/OFF
237	ON	ON	ON	OFF	ON	ON	OFF	ON
239	ON	ON	ON	OFF	ON	ON	ON	ON
241	ON	ON	ON	ON	OFF	OFF	OFF	ON
243	ON	ON	ON	ON	OFF	OFF	ON	ON
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 14

## How to Program Special Vend 1 Start Minute 5P / 2

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

- Press the LOW TEMP (A) or the DELICATES (V) keypad to scroll through the programmable Special Vend 1 options until 5P I 2 appears in the display.
- 2. When **5***P I* **2** appears in the display, press the START (enter) keypad. The current start minute will appear in the display.
- 3. Press the LOW TEMP ( $\Lambda$ ) or the DELICATES (V) keypad to increase or decrease the start minute to the desired minute.

## NOTE: The value can be set from 0-59. The default value is 0.

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, 5P 1 3, will appear in the display.

#### How to Program Special Vend 1 Start Hour 5P / 3

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

- Press the LOW TEMP (A) or the DELICATES (V) keypad to scroll through the programmable Special Vend 1 options until 5P I 3 appears in the display.
- 2. When **5***P I* **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 ( $\Lambda$ ) or the DELICATES (V) keypad to increase or decrease the start hour to the desired hour.

## NOTE: The value can be set from 0-23 hours. The default value is 0.

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, 5P I 4, will appear in the display.

#### How to Program Special Vend 1 Start Date 5P / 4

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

- Press the LOW TEMP (A) or the DELICATES (V) keypad to scroll through the programmable Special Vend 1 options until 5P I 4 appears in the display.
- 2. When **5***P I* **4** appears in the display, press the START (enter) keypad. The current start date will appear in the display.
- Press the LOW TEMP (Λ) or the DELICATES (V) keypad to increase or decrease the current start date to the desired start date.

If **D** 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.

 Press the START (enter) keypad when the correct start date appears in the display. The new value is saved and the next Special Vend 1 option, 5P 1 5, will appear in the display.

## How to Program Special Vend 1 Start Month 5P / 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 14*.

- Press the LOW TEMP (A) or the DELICATES (V) keypad to scroll through the programmable Special Vend 1 options until 5P I 5 appears in the display.
- 2. When **5***P I* **5** appears in the display, press the START (enter) keypad. The current start month will appear in the display.
- 3. Press the LOW TEMP ( $\Lambda$ ) or the DELICATES (V) keypad to increase or decrease the start month to the desired month.

If **D** 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.

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

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, 5P 1 7, will appear in the display.

## How to Program Special Vend 1 Length in Hours 5P / 7

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

- Press the LOW TEMP (A) or the DELICATES (V) keypad to scroll through the programmable Special Vend 1 options until 5P I 7 appears in the display.
- 2. When **5***P I* **7** appears in the display, press the START (enter) keypad. The current length in hours will appear in the display.
- Press the LOW TEMP (Λ) or the DELICATES (V) keypad to increase or decrease the length in hours to the desired length in hours.

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

 Press the START (enter) keypad when the correct length in hours appears in the display. The new value is saved and the next Special Vend 1 option, 5P / B, will appear in the display.

#### How to Program Special Vend 1 End Date 5P / B

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

- Press the LOW TEMP (A) or the DELICATES (V) keypad to scroll through the programmable Special Vend 1 options until 5P I B appears in the display.
- 2. When **5***P I* **B** appears in the display, press the START (enter) keypad. The current end date will appear in the display.
- 3. Press the LOW TEMP ( $\Lambda$ ) or the DELICATES (V) keypad to increase or decrease the end date to the desired date.

If **D** is selected and Special Vend 1 is on, Special Vend 1 will occur at the time and day of week selected, regardless of the date.

## 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 date appears in the display. The new value is saved and the next Special Vend 1 option, *5P I 9*, will appear in the display.

#### How to Program Special Vend 1 End Month 5P / 9

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

- Press the LOW TEMP (A) or the DELICATES (V) keypad to scroll through the programmable Special Vend 1 options until 5P I 9 appears in the display.
- 2. When **5***P I* **9** appears in the display, press the START (enter) keypad. The current end month will appear in the display.
- 3. Press the LOW TEMP ( $\Lambda$ ) or the DELICATES (V) keypad to increase or decrease the end month to the desired month.

If D 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.

## 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, **5***P I I I*, will appear in the display.

## How to Program Special Vend 1 Heat Cycle Vend Price 5P / //

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

- Press the LOW TEMP (A) or the DELICATES (V) keypad to scroll through the programmable Special Vend 1 options until 5P I I appears in the display.
- 2. When **5P** *I I I* 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 ( $\Lambda$ ) or the DELICATES (V) keypad to increase or decrease the value of the fifth digit.

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

 Press the LOW TEMP (Λ) or the DELICATES (V) keypad to increase or decrease the value of the active digit and the START (enter) keypad to enter the value of the digit and advance to the next digit. Programming Control

Press the START (enter) keypad with the last active digit. The new value is saved and the next Special Vend 1 option, 5P 1
*I2*, will appear in the display.

## How to Program Special Vend 1 Heat Cycle Time Minutes 5P / 12

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

- Press the LOW TEMP (A) or the DELICATES (V) keypad to scroll through the programmable Special Vend 1 options until 5P 1 12 appears in the display.
- 2. When **5P** *i i***2** appears in the display, press the START (enter) keypad.
- Press the LOW TEMP (A) or the DELICATES (V) keypad to increase or decrease the current number to the desired number of minutes.

## NOTE: The value can be set from 1-99 minutes. The default value is 1.

 Press the START (enter) keypad when the correct number of minutes is displayed. The new value is saved and the next Special Vend 1 option, 5P / 13, will appear in the display.

#### NOTE: To go back to the current programmable Special Vend 1 option without changing the value, press the MED TEMP (<) keypad.

## How to Program Special Vend 1 Heat Cycle Time Seconds 5P / /3

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

- Press the LOW TEMP (A) or the DELICATES (V) keypad to scroll through the programmable Special Vend 1 options until 5P 1 13 appears in the display.
- 2. When **5***P I I***3** appears in the display, press the START (enter) keypad.
- Press the LOW TEMP (A) or the DELICATES (V) keypad to increase or decrease the current number to the desired number of seconds.

#### NOTE: The value can be set from 0 to 59 seconds. The default value is 0.

 Press the START (enter) keypad when the correct number of seconds is displayed. The new value is saved and the next Special Vend 1 option, 5P 1 17, will appear in the display.

#### NOTE: To go back to the current programmable Special Vend 1 option without changing the value, press the MED TEMP (<) keypad.

## How to Program Special Vend 1 Coin Topoff Time Minutes 5P / /7

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

- Press the LOW TEMP (A) or the DELICATES (V) keypad to scroll through the programmable Special Vend 1 options until 5P 1 17 appears in the display.
- 2. When **5P** *I* **17** appears in the display, press the START (enter) keypad.
- Press the LOW TEMP (A) or the DELICATES (V) keypad to increase or decrease the current number to the desired number of minutes.

## NOTE: The value can be set from 0-99 minutes. The default value is 1.

 Press the START (enter) keypad when the correct number of minutes is displayed. The new value is saved and the next Special Vend 1 option, 5P 1 1B, will appear in the display.

#### NOTE: To go back to the current programmable Special Vend 1 option without changing the value, press the MED TEMP (<) keypad.

#### How to Program Special Vend 1 Coin 1 Topoff Time Seconds 5P / IB

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

- Press the LOW TEMP (A) or the DELICATES (V) keypad to scroll through the programmable Special Vend 1 options until 5P I IB appears in the display.
- 2. When **5P** *I* **IB** appears in the display, press the START (enter) keypad.
- Press the LOW TEMP (A) or the DELICATES (V) keypad to increase or decrease the current number to the desired number of seconds.

## NOTE: The value can be set from 0-59 seconds. The default value is 0.

 Press the START (enter) keypad when the correct number of seconds is displayed. The new value is saved and the next Special Vend 1 option, 5P 1 19, will appear in the display.

#### NOTE: To go back to the current programmable Special Vend 1 option without changing the value, press the MED TEMP (<) keypad.

#### How to Program Special Vend 1 Coin 2 Topoff Time Minutes 5P / 19

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

- Press the LOW TEMP (A) or the DELICATES (V) keypad to scroll through the programmable Special Vend 1 options until 5P I 19 appears in the display.
- 2. When **5P** *I* **19** appears in the display, press the START (enter) keypad.
- Press the LOW TEMP (A) or the DELICATES (V) keypad to increase or decrease the current number to the desired number of minutes.

## NOTE: The value can be set from 0-99 minutes. The default value is 1.

 Press the START (enter) keypad when the correct number of minutes is displayed. The new value is saved and the next Special Vend 1 option, 5P / 20, will appear in the display.

#### NOTE: To go back to the current programmable Special Vend 1 option without changing the value, press the MED TEMP (<) keypad.

#### How to Program Special Vend 1 Coin 2 Topoff Time Seconds 5P / 20

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

- Press the LOW TEMP (A) or the DELICATES (V) keypad to scroll through the programmable Special Vend 1 options until 5P 1 2D appears in the display.
- 2. When **5P** *I* **2D** appears in the display, press the START (enter) keypad.
- Press the LOW TEMP (A) or the DELICATES (V) keypad to increase or decrease the current number to the desired number of seconds.

## NOTE: The value can be set from 0-59 seconds. The default value is 0.

 Press the START (enter) keypad when the correct number of seconds is displayed. The new value is saved and the next Special Vend 1 option, 5P 1 21, will appear in the display.

#### NOTE: To go back to the current programmable Special Vend 1 option without changing the value, press the MED TEMP (<) keypad.

#### How to Program Special Vend Payment System Topoff Vend Price 5P / 2 /

This option allows the owner to set the vend price for the payment system topoff in Special Vend 1.

- Press the LOW TEMP (A) or the DELICATES (V) keypad to scroll through the programmable Special Vend 1 options until 5P 1 2 1 appears in the display.
- 2. When **5P** *I* **2** *I* appears in the display, press the START (enter) keypad. There are five digits in the Special Vend Topoff Vend Price.
- 3. Press the LOW TEMP ( $\Lambda$ ) or the DELICATES (V) keypad to increase or decrease the value of the fifth digit.

## NOTE: The vend price can be set from 0-65,535. 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 ( $\Lambda$ ) or the DELICATES (V) keypad to increase or decrese the value of the active digit and the START (enter) keypad to enter the value of the digit and advance to the next digit.

Press the START (enter) keypad with the last active digit. The new value is saved and the next Special Vend 1 option, 5P 1 22, will appear in the display.

## How to Program Special Vend Payment System Topoff Minutes 5P / 22

This option allows the owner to set the minutes for the payment system topoff in Special Vend 1.

- Press the LOW TEMP (A) or the DELICATES (V) keypad to scroll through the programmable Special Vend 1 options until 5P 1 22 appears in the display.
- 2. When **5P** *i* **22** appears in the display, press the START (enter) keypad.
- Press the LOW TEMP (A) or the DELICATES (V) keypad to increase or decrease the current number to the desired number of minutes.

## NOTE: The value can be set from 0-99 minutes. The default value is 1.

 Press the START (enter) keypad when the correct number of minutes is displayed. The new value is saved and the next Special Vend 1 option, 5P 1 23, will appear in the display.

#### NOTE: To go back to the current programmable Special Vend 1 option without changing the value, press the MED TEMP (<) keypad.

#### How to Program Special Vend Payment System Topoff Seconds 5P / 23

This option allows the owner to set the seconds for the payment system topoff in Special Vend 1.

- Press the LOW TEMP (A) or the DELICATES (V) keypad to scroll through the programmable Special Vend 1 options until 5P 1 23 appears in the display.
- 2. When **5P** *I* **23** appears in the display, press the START (enter) keypad.
- Press the LOW TEMP (A) or the DELICATES (V) keypad to increase or decrease the current number to the desired number of seconds.

## NOTE: The value can be set from 0-59 seconds. The default value is 0.

4. Press the START (enter) keypad when the correct number of seconds is displayed. The new value is saved and the next Special Vend 2 option will appear in the display.

#### NOTE: To go back to the current programmable Special Vend 1 option without changing the value, press the MED TEMP (<) keypad.

# How to Program Special Vend 2 Days Enable 5P2

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

#### Programming Control

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*.
- Press the LOW TEMP (A) or the DELICATES (V) keypad until *Prog* appears in the display. Press the START (enter) keypad and *RE5 H* will appear in the display.
- Press the LOW TEMP (A) or the DELICATES (V) keypad to scroll through the programmable options until *SP2* appears in the display.
- 4. When **5***P2* appears in the display, press the START (enter) keypad. The control displays **on** or **o***FF* for this parameter.
  - **NOTE:** The default value is  $_{o}FF$ .
- Press the LOW TEMP (Λ) or the DELICATES (V) keypad to select on or oFF.
- Press the START (enter) keypad when the desired status appears in the display. The new value is saved and the next option, *rEu-*, will appear in the display.

### Reversing Parameters rEu-

This option allows the owner to change rotate and stop times and enable or disable reversing action for the cylinder.

#### NOTE: Only available on reversing machines.

- 1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
- Press the LOW TEMP (Λ) or the DELICATES (V) keypad until Prog appears in the display. Press the START (enter) keypad and RE5 H will appear in the display.
- 3. Press the LOW TEMP ( $\Lambda$ ) or the DELICATES ( $\vee$ ) keypad to scroll through the programmable options until rEu appears in the display.
- When rEu appears in the display, press the START (enter) keypad. There are three programmable reversing options. Refer to *Table 15*.

Display	Reversing Parame- ters
rEu l	30-540 seconds
<b>rEu 2</b> (Designs 3 and 5)	6-10 seconds
rEu 2 (Design 6)	3-7 seconds (30, T30, T45, 55) 6-10 seconds (50, 75)
rEu 3	on/oFF

Table 15

5. Press the LOW TEMP (Λ) or the DELICATES (V) keypad to select the desired reversing parameter.

#### NOTE: The default value for rotate time is 30 seconds and the default value for stop time is as follows: Designs 3 and 5, 6 seconds; Design 6, 3 seconds (30, T30, T45, 55) or 6 seconds (50, 75).

- 6. Press the START (enter) keypad when the correct option appears in the display.
- 7. Press the LOW TEMP ( $\Lambda$ ) or the DELICATES (V) keypad to change the value of the parameter.
- 8. Press the START (enter) keypad when the correct value appears in the display. The new value is saved and the next option will appear in the display.

## IR Access (On/Off) IF 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*.
- Press the LOW TEMP (A) or the DELICATES (V) keypad until Prog appears in the display. Press the START (enter) keypad and RE5 H will appear in the display.
- Press the LOW TEMP (Λ) or the DELICATES (V) keypad to scroll through the programmable options until *ι* ¬*R* ∈ ¬ appears in the display.
- 4. When IFR 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 an.

- 5. Press the LOW TEMP ( $\Lambda$ ) or the DELICATES (V) 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 - RPdEn

This option allows the owner to enable or disable the rapid advance feature. The three options are on, off with a passcode or off with no passcode (disabled). Refer to Rapid Advance Feature section for more information.

- 1. Control must be in Manual Mode. Refer to *Entering the Manual Mode*.
- Press the LOW TEMP (A) or the DELICATES (V) keypad until Prog appears in the display. Press the START (enter) keypad and RE5 H will appear in the display.
- Press the LOW TEMP (Λ) or the DELICATES (V) keypad to scroll through the programmable options until *r RPdEn* appears in the display.
- 4. When *¬ RPdE ¬* appears in the display, press the START (enter) keypad. The current Manual Rapid Advance status will

appear in the display.  $\Box n$  = Option Enabled  $\Box FF$  = Option Disabled

#### NOTE: The default value is on.

- 5. Press the LOW TEMP ( $\Lambda$ ) or the DELICATES (V) 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 d IR9En

This option allows the owner to enable or disable the manual diagnostics option. The three options are on, off with a passcode or off with no passcode (disabled). 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*.
- Press the LOW TEMP (A) or the DELICATES (V) keypad until Prog appears in the display. Press the START (enter) keypad and RE5 H will appear in the display.
- Press the LOW TEMP (Λ) or the DELICATES (V) keypad to scroll through the programmable options until *d iRGEn* appears in the display.
- When *d iRgEn* 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 pr.

- 5. Press the LOW TEMP ( $\Lambda$ ) or the DELICATES (V) 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) FE En

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*.
- Press the LOW TEMP (A) or the DELICATES (V) keypad until *Prog* appears in the display. Press the START (enter) keypad and *RE5 H* will appear in the display.
- Press the LOW TEMP (A) or the DELICATES (V) keypad to scroll through the programmable options until *FL En* appears in the display.
- When FE 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 ( $\Lambda$ ) or the DELICATES (V) 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.

### Heating Indicator Decimal Point HE 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*.
- Press the LOW TEMP (A) or the DELICATES (V) keypad until Prog appears in the display. Press the START (enter) keypad and RE5 H will appear in the display.
- Press the LOW TEMP (A) or the DELICATES (V) keypad to scroll through the programmable options until *HL dP* appears in the display.
- 4. When *HE dP* appears in the display, press the START (enter) keypad. The current Heating Indicator Decimal Point Enable/ Disable status will appear in the display. *an* = Option Enabled *aFF* = Option Disabled

#### NOTE: The default value is <code>oFF</code>.

- 5. Press the LOW TEMP ( $\Lambda$ ) or the DELICATES (V) 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 RE5 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*.
- Press the LOW TEMP (Λ) or the DELICATES (V) keypad until Prog appears in the display. Press the START (enter) keypad and RE5 H will appear in the display.
- Press the LOW TEMP (Λ) or the DELICATES (V) keypad to scroll through the programmable options until *RL*5 *d* appears in the display.
- When *RE5 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 ( $\Lambda$ ) or the DELICATES (V) 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 \_PL -

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*.
- Press the LOW TEMP (A) or the DELICATES (V) keypad until Prog appears in the display. Press the START (enter) keypad and RE5 H will appear in the display.
- Press the LOW TEMP (A) or the DELICATES (V) keypad to scroll through the programmable options until *oPL* appears in the display.
- When *DPL* appears in the display, press the START (enter) keypad. There are two programmable OPL Parameter options. Refer to *Table 16*.

Display	OPL Parameter Op- tions
oPL I	OPL Mode Enable (On/ Off)
oPL 3	OPL Display Power Save On/Off

Table 16

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

- 5. Press the LOW TEMP ( $\Lambda$ ) or the DELICATES (V) 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*.
- Press the LOW TEMP (A) or the DELICATES (V) keypad until Prog appears in the display. Press the START (enter) keypad and RE5 H will appear in the display.
- Press the LOW TEMP (∧) or the DELICATES (∨) keypad to scroll through the programmable options until *oUE* appears in the display.
- When *aUL* appears in the display, press the START (enter) keypad. The current Out of Order (On/Off) Status will appear in the display. *an* = Option Enabled *aFF* = Option Disabled

#### NOTE: The default value is *oFF*.

- 5. Press the LOW TEMP ( $\Lambda$ ) or the DELICATES (V) 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.

# **Collecting Audit Information**

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

### 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 *RUd ıE* appears.
- 3. Press the START keypad. **LYLLE5** 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 ( $\Lambda$ ) or the DELICATES (V) keypad to scroll through the various options until the desired option is shown in the display. Refer to the Audit Options List, *Table 17*, for an explanation of the audit options available.

Audit Options List	
Display	Description
CYCLE5	Total # of machine cycles
Eom I	Total # of coins #1
Eoin 2	Total # of coins #2
PUL SE	Total # of start pulses
£0 [	Total # of coin 1 top-offs
£o [2	Total # of coin 2 top-offs
to PLS	Total # of start pulse/card reader top-offs

Table 17 continues...

Audit Options List	
r APE YE	Total # of rapid advance cycles
rUnHr5	Total # of run hours
r[o in l	Total # of resettable coin #1 counts
ר[ס יח2	Total # of resettable coin #2 counts
rCYCLE	Total # of resettable ma- chine cycle counts

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 audit value.
- 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.

NOTE: Opening the coin vault resets the resettable counters.

### 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.

## **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*.
- Press the LOW TEMP (A) or the DELICATES (V) keypad until *rE5EL* appears.
- Press the START (enter) keypad. The display will show no. Use the LOW TEMP (Λ) or the DELICATES (V) keypad to change to *YE5*. If START (enter) keypad is pressed while *YE5* is selected, the control will reset the programming parameters to the factory default values and then display *d iR9*. If no is selected, no change to programming will be made.

## 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 Version Number
- Drive Software Version Number
- Fan Software Version Number (Designs 3 and 5 only)
- Ignition Control Software Version Number (gas models only)
- 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 TemperatureTest
- Door Switch Input Test
- Lint Door Switch Test
- Temperature Sensor Display Test
- 12.5VDC Voltage Test
- 24VDC Voltage Test
- AC Mains Voltage 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
- ICM Alarm Status (gas models only)
- ICM Reset Test (gas models only)
- Heat Interlock Test (Cabinet Limit Thermostat, Stove Limit Thermostat 1, Stove Limit Thermostat 2, Manual Reset Limit Thermostat)

Diagnostic (Testing) Mode – Quick Reference Chart

- Air Flow Switch Test
- Fan Motor Test
- Damper Motor Test (steam models only)
- Drive Motor 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 *Clearing the 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 iR***9** appears.
- 4. Press the START (enter) keypad. Display will change to *d i* indicating the control software version number test.
- 5. Press the LOW TEMP ( $\Lambda$ ) or the DELICATES (V) 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.

Test Number	Diagnostic Mode	Display
d I	Control Software Version Number	5 ннн
d 2	Input/Output Board Software Number	оЬ ННН
d 3	Drive Software Version Number	арнннн
d 4	Fan Software Version Number (Designs 3 and 5 only)	<i>Ғ</i> ЬНН,НН

Diagnostic (Testing) Mode – Quick Reference Chart			
d 5	Ignition Control Software Version Num- ber	Г НН	
d 8	Service Door Opening Test	5 oP or 5 CL	
d 9	Coin Vault Opening Test	u oP or u CL	
d 10	Coin Drop #1 Input Test	сінн	
d	Coin Drop #2 Input Test	С2 НН	
d 12	Vend Header Present Input Test	EH DP or EH EL	
d 13	Start Pulse Test	SE HH	
а н	Dryer On Temperature Test	HHHF or HHHE	
d 15	Door Switch Input Test	dr oPordr [L	
d 16	Lint Door Switch Test	L INTOP OR L INTEL	
d 19	Temperature Sensor Display Test (Heat- er/Temp Sensor only)	HHHF or HHHE (Shart, oPEn)	
d 20	12.5VDC Voltage Test	нннн	
9 51	24VDC Voltage Test	нннн	
d 20	AC Mains Voltage Test	ннн	
d 29	Machine Configuration Display #1 Test	Я ННН	
d 30	Machine Configuration Display #2 Test	ь ннн	
1 E b	Machine Configuration Display #3 Test	с ннн	
5E b	Machine Configuration Display #4 Test	а ннн	
d 33	Machine Configuration Display #5 Test	ЕННН	
d 34	ICM Alarm Status	IAL on Or IALOFF	
d 35	ICM Reset Test	rESEL	
d 36	Heat Interlock Test	-	
-	Cabinet Limit Thermostat	EAB DP or EAB EL	
-	Stove Limit Thermostat 1	5L / oP or 5L / CL	
-	Stove Limit Thermostat 2	5L2 oP or 5L2 CL	
-	Manual Reset Limit Thermostat	nrl pornrl CL	

#### Diagnostic (Testing) Mode – Quick Reference Chart

d 37	Air Flow Switch Test	AF oP or AF EL
d 38	Fan Motor Test	FRn
d 39	Damper Motor Test	dRNPEr
d 40	Drive Motor Test	Frd ,PRUSE ,rEu

Table 18



Figure 9

### **Diagnostic Test Descriptions**

#### **Control Software Version Number Test**

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

To enter, press the START (enter) keypad. The display will show **5** *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 *ab 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.

#### **Drive Software Version Number Test**

This option displays the current drive 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 *dbHHHH* where *HHHH* 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.

## Fan Software Version Number Test (Designs 3 and 5 only)

This option displays the current fan 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 *FbHHHH* where *HHHH* 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.

## Ignition Control Software Version Number Test (gas models only)

This option displays the current ignition 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 L *HH* 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 **5** *oP* when the service door switch is open and **5** *LL* 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  $u = \rho$  when the coin vault switch is open and u = L 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 L I HH. 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 E2 HH. 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 Input 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 *LH LL* if jumper is present and *LH oP* 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 **5***L HH*. 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.

#### **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 when the Start LED is flashing. The machine will run until it has reached the selected cycle temperature. The display will show *HHHF* for degrees in Fahrenheit or *HHHL* for degrees in Celsius. The *HHH* will show the degrees. During cool down, the control will display the time remaining as  $\Pi\Pi$  (minutes) or  $\Pi\Pi$  **55** (minutes and seconds).

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 (enter) keypad. The display will show  $dr \circ P$  if loading door is open or  $dr \in L$  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.

#### Lint Door Switch Test

This option tests the lint 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 *L inEaP* when the lint door switch is open and *L inEEL* when the lint door switch is closed.

The lint door switch has to be closed or open for at least one second for the control to register the switch as closed or open.

## NOTE: Loading door must be closed while testing lint door.

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

#### **Temperature Sensor Display Test**

This option displays the temperature sensed at the thermistor in 1°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 *HHHE*. The *F* will show Fahrenheit, the *L* will show Celsius and the *HHH* will show degrees. If control senses a shorted thermistor, the display will show *5Hort*. If the control senses an open thermistor, the display will show *oPEn*.

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

#### 12.5VDC Voltage Test

This test displays the value of the 12.5VDC supply.

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 *HHHH* where *HHHH* is the voltage.

To exit the test, press the MED TEMP ( $\leq$ ) keypad. The control will return to the testing mode.

#### 24VDC Voltage Test

This test displays the value of the 24VDC supply.

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 *HHHH* where *HHHH* is the voltage.

To exit the test, press the MED TEMP ( $\leq$ ) keypad. The control will return to the testing mode.

#### **AC Mains Voltage Test**

This test displays the value of the curent AC Mains Voltage.

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 *HHH* where *HHH* is the voltage.

To exit the 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  $\mathbf{R}$  HHH, with HHH a number corresponding to whether or not coin drops are connected or serial card reader is 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	VEND CONNECTION PRESENT	COIN DROP #2 PRESENT	COIN DROP #1 PRESENT
0	NO	NO	NO
5	YES	NO	YES
6	YES	YES	NO
7	YES	YES	YES

Table 19

#### Machine Configuration Display #2 Test

This option shows the machine configuration values for the machine type.

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 *HHH*, with *HHH* the number corresponding to the machine capacity. Refer to *Table 20*.

Value	Description
0	Invalid
1	25 Pound Tumble Dryer
2	30 Pound Tumble Dryer
3	35 Pound Tumble Dryer
4	T30 Pound Stack Tumble Dryer
5	T45 Pound Stack Tumble Dryer

Table 20 continues...

Value	Description
6	50 Pound Tumble Dryer
7	55 Pound Tumble Dryer
8	Invalid
9	75 Pound Tumble Dryer
11	Invalid
12	Invalid
13	Invalid
14	Invalid
15	Invalid
16	Invalid

#### Table 20

To exit Machine Configuration Display #2 Test, press the MED TEMP (<) keypad. The control will return to the testing mode.

### Machine Configuration Display #3 Test

This option shows the machine configuration values for the machine capacity.

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 *L* HHH, with HHH representing the machine capacity. Refer to *Table 21*.

To exit Machine Configuration Display #3 Test, press the MED TEMP (<) keypad. The control will return to the testing mode.

Value	Description	
30	All Tumble Dryers	
31	25 Pound Tumble Dryer	
32	30 Pound Tumble Dryer	
33	30 Pound Stack Tumble Dry- er	
34	30 Pound Stack Tumble Dry- er – Lower Pocket	
35	30 Pound Stack Tumble Dry- er – Upper Pocket	
36	35 Pound Tumble Dryer	
37	45 Pound Stack Tumble Dry- er	
38	45 Pound Stack Tumble Dry- er – Lower Pocket	
39	45 Pound Stack Tumble Dry- er – Upper Pocket	
40	50 Pound Tumble Dryer	
41	55 Pound Tumble Dryer	
42	75 Pound Tumble Dryer	

#### Table 21

#### 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  $\square$  *HHH*, with *HHH* representing the machine capacity. Refer to *Table 22*.

Config Value	Heat Type	Payment System	120VAC Supply
0	Non-CE Gas	NO	120VAC
1	Non-CE Gas	NO	240VAC
4	Non-CE Gas	YES	120VAC
5	Non-CE Gas	YES	240VAC
64	Electric	NO	120VAC
65	Electric	NO	240VAC
68	Electric	YES	120VAC
69	Electric	YES	240VAC
128	CE Gas	NO	120VAC
129	CE Gas	NO	240VAC
132	CE Gas	YES	120VAC
133	CE Gas	YES	240VAC
192	Steam	NO	120VAC
193	Steam	NO	240VAC
196	Steam	YES	120VAC
197	Steam	YES	240VAC

Table 22

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 shows the machine configuration values for the voltage.

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 *E HHH*, with *HHH* representing the voltage. Refer to *Table 23*.

Config Value	Adjust Fan Speed for Heat Type	480V Motor Drives (1 for Yes, 0 for No)
2	Gas/Steam	0

Config Value	Adjust Fan Speed for Heat Type	480V Motor Drives (1 for Yes, 0 for No)
3	Gas/Steam	1
4	Electric	0
5	Electric	1
6	Eco Gas	0
7	Eco Gas	1
8	Eco Electric	0
9	Eco Electric	1
10	Low kW Electric	0
11	Low kW Electric	1

Table	23
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To exit Machine Configuration Display #5 Test, press the MED TEMP (<) keypad. The control will return to the testing mode.

#### ICM Alarm Status (gas models only)

This option shows the status of the ICM (Ignition Control Module) Alarm.

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 keypad. The display will show *AL* on if the alarm is active for at least one second or *AL* oFF if the alarm is not active for one second.

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

#### ICM Reset Test (gas models only)

The ICM Reset Test can be used to clear/reset an active alarm. When the test is entered, the display will show rE5EE. Press START (enter). When this test is started, the ICM reset will become active. If the reset signal is active for a long enough period of time (3.5 seconds) the ICM Lockout input will become inactive (3.5 seconds) and then stop the ICM Reset Test.

#### **Heater Interlock Test**

While this test is running, the control will show the status of the following inputs for two seconds each. The control will continue scrolling through the input status displays until the test is aborted.

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 Start. Refer to four sections below for more details on individual statuses.

## NOTE: These switches are tested in sequence. If one switch is sensed open, the rest will be open as well.

To exit the test, press the MED TEMP ( $\leq$ ) keypad. The control will return to the testing mode.

#### **Cabinet Limit Thermostat**

The display will show **[Rb oP** if sensed open for at least 1.5 seconds and **[Rb [L**] if sensed closed for at least one second.

#### **Stove Limit Thermostat 1**

The display will show 5L /  $_{o}P$  if sensed open for at least 1.6 seconds and 5L / LL if sensed closed for at least one second.

#### **Stove Limit Thermostat 2**

The display will show **5L2 oP** if sensed open for at least 1.7 seconds and **5L2 CL** if sensed closed for at least one second.

#### Manual Reset Limit Thermostat

The display will show  $\Pi_{rL}$   $\sigma_{P}$  if the switch is sensed open for at least 3.0 seconds and  $\Pi_{rL}$   $\Gamma_{L}$  if the switch is sensed closed for at least one second.

#### **Airflow Switch Test**

This option shows the current state of the airflow 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 keypad. The display will show *RF* **o***P* or *RF* **L**, with *RF* **o***P* being open and *RF* **L** being closed.

Switch has to be closed for at least one second or open for at least one second for a valid change.

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

#### **Fan Motor Test**

This option shows the fan motor running.

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 keypad. The display will show  $FR_n$  to indicate the fan motor is going to run.

#### NOTE: This test does not count towards the total machine run time operation.

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

#### Damper Motor Test (steam models only)

This option shows the damper motor running.

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 keypad. The display will show *dRIPEr* to indicate the damper motor is going to run.

#### NOTE: This test does not count towards the total machine run time operation.

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

#### **Drive Motor Test**

## NOTE: For nonreversing models, the display will show *Frd* indefinitely.

This option shows the drive motor running. The test will turn the cylinder forward for 30 seconds, pause for 6 seconds, rotate in the reverse direction for 30 seconds and pause for 6 seconds.

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 keypad. The display will show F r d when spinning in forward direction, *PRUSE* when the cylinder is paused and r E u when spinning in the reverse direction.

#### NOTE: This test does not count towards the total machine run time operation.

Factory Test Cycle Quick Reference Table

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

### **Factory Test Cycle**

#### **To Enter Factory Test Cycle**

- 1. Be certain control is in Ready Mode, and service door or coin vault is open.
- 2. While pressing and holding the HIGH TEMP keypad with one hand, press the LOW TEMP keypad with the other hand.
- When the control enters the Factory Test Cycle, it will first display *Ed* for product type (tumble 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 24* for all tests in the Factory Test Cycle.

#### To Exit Factory Test Cycle

The control must be powered down to end the test.

Display	Test Mode	Comments		
Ed	Machine Type	<i>Ed</i> is the machine type (tumble dryer).		
<i>SHHH</i>	Software Version	HHH is the software version number.		
HH (skipped if 0)	Software Subversion	<i>HH</i> is the software subversion.		
оЬНН	Output Board Version Number	<i>HH</i> is the output board version number.		
HH (skipped if 0)	Output Board Subversion Number	<i>HH</i> is the output board subversion number.		
авнн	Drive Software Version Number	<i>HH</i> is the drive software version number.		
<b>F</b> ЬHH (Designs 3 and 5 only)	Fan Drive Software Version Number	<i>HH</i> is the fan drive software version number.		
<i>cHH</i> (skipped if electric or steam machine)	ICM Software Version	<i>HH</i> is the ICM software version number.		
ЯН	Control Type	<i>H</i> is the feature level of the control.		
нн	DipSwitch Configuration	<i>HH</i> is the machine type. <b>DD</b> is 120V and <b>D</b> <i>I</i> is 240V.		
ннн	Machine Size	<i>HHH</i> is the configured machine size. <i>EHH</i> is for stack machines and <i>FHH</i> is for fast dry.		

Factory Test Cycle Quick Reference Table			
Display	Test Mode	Comments	
РЯЈ от РЯНН	Keypad Test	When a key is pressed, the control will display the number assigned to the keypad (1 - HIGH TEMP, 2 - LOW TEMP, 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 and sound the audio.	
СНСН	Coin Drop Test	<i>H</i> 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.	
LCSU	Card Reader Test	<i>LLSU</i> is displayed to indicate a program- ming/setup card is needed. <i>SU</i> is displayed to indicate a programming/setup card was successful. <i>LRrd</i> is displayed to indicate that a card reader is connected but not driving the display.	
υ οΡοτυ ΕL	Coin Vault Switch Test	<b><i>P</i></b> signifies the coin vault switch is open or <i>L</i> signifies the coin vault switch is closed.	
S oP or S CL	Service Door Switch Test	<b>P</b> signifies the service door switch is open or <b>CL</b> signifies the service door switch is closed.	
droP or dr[L	Loading Door Test	<b>•</b> <i>P</i> signifies the loading door is open or <i>LL</i> signifies the loading door is closed.	
LtoP or LtCL	Lint Door Test	<b>•</b> <i>P</i> signifies the lint door is open or <i>LL</i> signifies the lint door is closed.	
HHHF or HHHE	Thermistor Temperature Test	The temperature will be displayed in either Fahrenheit or Celsius, depending on ma- chine's configuration (refer to <i>Temperature</i> <i>(Fahrenheit/Celsius) tP F C)</i> . If control senses a shorted thermistor, <b>5</b> <i>H</i> will be dis- played. If control senses an open thermis- tor, <b><i>p</i></b> <i>P</i> will be displayed.	

Factory Test Cycle Quick Reference Table			
Display	Test Mode	Comments	
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 flash- ing, the control will display <b>door</b> 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 24

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

Following is a list of possible error codes for an electronic control. Errors beginning with E, refer to external device Infra-red

communication errors. Errors beginning with *EL* refer to card reader errors. All other errors refer to machine errors.

Display	Description	Cause/ Corrective Action
Eo in,Error	Coin Error	Invalid coin pulse or inoperative coin sen- sor. Check coin drop area and remove ob- structions. If error persists, tampering may have occurred. Evaluate security proce- dures.
E RF	Airflow Switch Bounces	Inspect lint screen, ductwork and make-up air. Cycle power to machine (power down, then power up).
Ε Γο	SCI Communications Error	Communication failure. Power down, power up, check connections and try again. If error persists, replace control or output board.
Е d5	Brownout/Voltage Configuration	Unexpected supply voltage. Check wiring at input of machine to make sure the cor- rect input voltage is supplied to the ma- chine. Check the harness connections be- tween the user control and the output board. If the user control was replaced, set dipswitch #1 to the same setting as the pre- vious 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.
E HERL	Machine Did Not Reach Expected Tem- perature	The ignition control has power, but a flame was not sensed after the programmed amount of retries. Be sure that gas and gas valve are turned on. If problem persists, troubleshoot the ignition circuit. (Igniter, Cable, Ignition Control Module.) For elec- tric machines, check wiring to auxiliary switch on electric contactors and make sure contactors work properly.
Eıd	Board ID Error	Incorrect replacement control. The display will show <b>aUEPUE</b> . Replace user control or output board with correct part. The board ID error will also be set if the wrong drive motor, fan motor or ignition control are connected. The display will show <b>dr uE</b> , <b>FAn</b> or <b>iEN</b> . Check machine con- figurations and connect correct drive mo- tor, fan motor or ignition control.

Display	Description	Cause/ Corrective Action
Enr	Drive/Output Board Not Ready	Hardware failure. Replace output board.
E oP	Open Thermistor Error	Remove any lint build-up around thermis- tor and check wire connection. If problem persists, replace control or thermistor.
Е 5Н	Shorted Thermistor Error	Remove any lint build-up around thermis- tor. If problem persists, replace control or thermistor.
ERF I	Airflow Switch Failed to Open	Inspect lint screen and ductwork. Wipe clean and completely dry off the airflow switch vane as well as the mating material. Once error is cleared, control will go back to previous mode of operation.
ERF2	Airflow Switch Failed to Close	If machine is newly installed, make sure shipping tie has been removed from air- flow switch. Inspect lint screen and duct- work. Cycle power to machine (power down, then power up).
EC	No Card Reader Initialization	Communication is valid, but there is no card reader initialization. Power down, power up and try again.
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.
ЕСЯЬ	Cabinet Limit Cycles	Remove any lint build-up around thermo- stat. If problem persists, replace control or thermostat. Check thermistor function. Er- ror can also be caused by running no load or a small load.
E[odru,E[oFAn	Drive and Fan Communication Error	Communication failure. Power down for at
<i>E dL</i> , <i>E FL</i> (Factory Test only appears as 4-digit display)		tions between I/O board and Drive/Fan and try again. If error persists, replace tumbler I/O board or motor with which the error occurred (Fan or Drive).
בה יבח ב יב (Factory Test only appears as 4- digit display)	ICM Communication Error	Communication failure. Power down, power up, check connections and try again. If error persists, replace tumbler I/O board or ignition control.
EFAnO I, Ed O I (Design 6)	Communication Error	Check wiring between I/O board and in- verter.

Display	Description	Cause/ Corrective Action
EFAnD2,Ed D2	Fan or Cylinder Motor High DC Bus Error	Voltage to fan/cylinder is too high. Un- power machine to clear error. Check volt- age input and check wiring to machine. Replace fan/cylinder motor if error per- sists.
<b>EFAnO3</b> , <b>Ed 03</b> (Design 6)	Motor Not Connected Error	Check motor wiring.
EFAnO4,Ed O4	Fan or Cylinder Motor Stall Error	Check that fan or cylinder turns freely, make sure machine is not overloaded. Er- ror can be cleared by any key press.
<b>EFRn05</b> , <b>Ed 05</b> (Designs 3 and 5)	Fan or Cylinder Motor Coherence Check Error	Check that fan wheel spins freely. Cylinder error can be caused by an unbalanced load. Try to redistribute the load and lengthen the reversing pause time if reversing is en- abled. Error can be cleared by any key press.
EFAn05, Ed 05 (Design 6)	Back EMF Error	Check motor wiring.
EFAn06,Ed 06	Fan or Cylinder Motor IPM Overtemp Er- ror	IPM temperature is detected too high. Check that heat sink on the motor(s) is clear of lint or any other obstruction and check that cylinder spins freely when emp- ty. Design 6, clean inverter drive compart- ment. Replace motor(s) or inverter drive if error persists.
EFAnD7, Ed D7 (Design 6)	Drive Enable Error	Check the inverter drive enable wiring be- tween H6 header on I/O board and inverter drive.
EFAnDB, Ed DB (Designs 3 and 5 only)	Fan or Cylinder Motor Current Limit Error	Check that fan/cylinder turns freely, make sure machine is not overloaded. Replace fan/cylinder motor if error persists.
EFRn09, Ed 09 (Designs 3 and 5 only)	Fan or Cylinder Motor 460V Drive Over- current	Check that fan/cylinder turns freely, make sure machine is not overloaded. Replace fan/cylinder motor if error persists.
EFAn 10, Ed 10	Fan or Cylinder Motor Low DC Bus Error	Voltage to motor(s) or inverter drive is too low. For 120V machines, make sure wire harness jumper is connected which con- nects pins 1 and 2 of the 5-pin connector on the motor. Check voltage input and check wiring to machine. Replace motor(s) or inverter drive if error persists.
EFAnII,Ed II	Fan or Cylinder Motor Overload Error	Check that fan or cylinder turns freely, make sure machine is not overloaded. Er- ror can be cleared by any key press.

Display	Description	Cause/ Corrective Action
EFAn 12, Ed 12 (Designs 3 and 5)	Fan or Cylinder Motor Microcontroller Fault	Try to power down and power up the ma- chine to clear the error. If error persists, re- place fan/cylinder motor.
EFAn 12, Ed 12 (Design 6)	Motor System Fail	Check that correct inverter drive is instal- led. Check for correct configuration of front end control.
Ed 13 (Designs 3 and 5)	Cylinder Motor Hall Sensor Failure	Power down machine to clear error.
EFAn I3, Ed I3 (Design 6)	Setup Compatibility Failure	Check that correct inverter drive is instal- led. Check for correct configuration of front end control.
EFAn I4, Ed I4 (Design 6)	Power Fail Dangerous Error	Check voltage to machine and voltage to inverter drive.
EFRn 15, Ed 15 (Design 6)	Open Phase Error	Check motor wiring. Replace motor if error persists.
EFAn IB, Ed IB (Design 6)	Power Fail NO Dangerous Error	Check voltage to machine and voltage to inverter drive.
EFRn IB, Ed IB (Design 6)	Fatal IPM Over Current Shunt Error	Check motor wiring. Replace motor if error persists.
EFAn 19, Ed 19 (Design 6)	Fatal Hardware I2T Over Current Error	Check for motor overload or blocking con- dition which could be caused from lint buildup or blocked fan, overwet load or mechanical issues causing cylinder stick- ing.
EFAn2 I, Ed 2 I (Design 6)	Speed Limitation Error	Check that machine is configured to the correct machine size.
EFAn22, Ed 22 (Design 6)	Inrush Pin Hardware On/Off Fail	Cycle power to machine. Replace inverter drive if error persists.
EFRn23, Ed 23 (Design 6)	Fatal IPM Temperature Acquisition Error (NTC is in short circuit or open)	Cycle power to machine. Replace inverter drive if error persists.
EFRn24, Ed 24 (Design 6)	ADC Current Acquisition Fail	Cycle power to machine. Replace inverter drive if error persists.
EFRn25, Ed 25 (Design 6)	VBUS Acquisition Fail	Cycle power to machine. Replace inverter drive if error persists.
EFAn25, Ed 26 (Design 6)	Fault IPM Circuit Fail	Cycle power to machine. Replace inverter drive if error persists.
EFLEDI	Optional Heat Output Shorted	Check wiring to valve/motor connected to
<i>EFL I</i> (Factory Test only appears as 4-digit display)		output, replace valve/motor.

Display	Description	Cause/ Corrective Action
<b>EFLED2</b> <b>EFL2</b> (Factory Test only appears as 4-digit display)	Motor Relay Enable Output Shorted	Check motor power relay connected be- tween, if error persists replace relay.
<b>EFLED3</b> <b>EFE3</b> (Factory Test only appears as 4- digit display)	Spare Relay Enable Ouptut Shorted	Check relay powered by KM2 output, if error persists replace relay.
<i>EFLED</i> 4 <i>EFL</i> 4 (Factory Test only appears as 4- digit display)	Auxiliary Relay 1 Ouput Shorted Error	Check relay powered by Aux 1 output, if error persists replace relay.
<i>EFLED5</i> <i>EFE5</i> (Factory Test only appears as 4- digit display)	Run Relay Output Shorted Error	Check Relay powered by the Run output, if error persists replace relay.
<b>EFLED5</b> <b>EFE5</b> (Factory Test only appears as 4- digit display)	Gas Valve 1 Output Shorted Error	Check gas valve 1, if error persists replace valve.
<b>EFLED7</b> <b>EFE7</b> (Factory Test only appears as 4-digit display)	Gas Valve 2 Output Shorted Error	Check gas valve 2, if error persists replace valve.
E 10 1	Transmission Failure	Communication failure. Re-aim external device and try again.
E .02	Device Time-Out	Communication failure. Re-aim external device and try again.
E ,D3	Invalid Command Code	Incorrect machine type. Before download- ing, ensure data is for current machine type.
E 104	Command Packet Time Out	Communication failure. Re-aim external device and try again.
E .05	Invalid or Out-of-Range Data	Incorrect machine type. Before download- ing, ensure data is for current machine type and values entered are within the min- imum and maximum limits.
E ,09	CRC-16 Error	Communication failure. Re-aim external device and try again.
E ,DA	Framing Error	Communication failure. Re-aim external device and try again.
E ,0C	Time-Out Exceeded	Communication failure. Re-aim external device and try again.

Display	Description	Cause/ Corrective Action
E ,DE	Encryption Error	Incorrect machine type. Before download- ing, ensure data is for current machine type.
E .OF	Invalid Wake-up or Infra-red Disabled	Communication failure or infra-red is disa- bled. Manually enable infra-red on control or re-aim external device and try again.
ΕιΣΠ	ICM Lockout Alarm Active	Check that the gas is turned on and that the ignition circuit functions. Also check that the gas valve is operational. This error needs to be manually reset. To reset, open service door and press start button. After 5 seconds error should be cleared.
E ובחם ו בפם ו (Factory Test only appears as 4- digit display)	ICM False Flame Error	Press any key, open the loading door or cy- cle power to machine.
<i>E ובחםב</i> <i>E 902</i> (Factory Test only appears as 4- digit display)	ICM Alarm Reset Shorted Error	Check wiring between the I/O board and the ignition control. Power down and pow- er up machine to clear the error.
E , E ND J E 9D J (Factory Test only appears as 4- digit display)	ICM Hardware Failure Error	Ignition control has detected a hardware fault. Power down and power machine to clear error. Replace ignition control if error persists.
E 10 05	I/O Board 24VDC Supply Over Voltage Error	Check machine input voltage. Power down and power up the machine to clear error. If error persists, replace I/O board.
E 10 06	I/O Board 24VDC Supply Under Voltage Error	Check machine input voltage. Check for pinched control wires. Clear any debris or lint from the I/O board. Power down and power up the machine to clear error. If er- ror persists, replace I/O board.
רס ם: E	Heat Output Shorted Error	Power down machine to clear error, power up machine, try heating again. If error per- sists, replace I/O board.
E o 32	Mosfet Enabled Shorted Error	Power down machine to clear error, power up machine, try running a cycle. If error persists, replace I/O board.

Display	Description	Cause/ Corrective Action
ENrL	Manual Reset Limit Error	Inspect tumble dryers venting/ventwork to ensure that the ventwork is adequate and that there are no blockages. Be sure to clean and inspect lint screen. Remove any lint buildup around the thermostat. Check thermistor and cabinet limit function. Lim- it needs to be manually reset and machine needs to be powered down to clear the er- ror. If problem persists, replace thermostat.
EnHH	Machine ID Chip Error	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.
ESL I	Stove Limit 1 Cycle	Inspect tumble dryers venting/ventwork to ensure that the ventwork is adequate and that there are no blockages. Be sure to clean and inspect lint screen. Remove any lint buildup around the thermostat. Check make-up air and gas pressure. If problem persists, replace thermostat.
ESLZ	Stove Limit 2 Cycle	Inspect tumble dryers venting/ventwork to ensure that the ventwork is adequate and that there are no blockages. Be sure to clean and inspect lint screen. Remove any lint buildup around the thermostat. Check make-up air and gas pressure. If problem persists, replace thermostat.
Right most decimal point Lit	Network Communication Error	Communication problem. Wait for 1.5 mi- nutes for error to clear. If error doesn't clear, power-down and power-up the ma- chine. Check all network connections. If error persists, replace control or network board.

Table 25

## **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 ( $\wedge$ ) or the DELICATES ( $\vee$ ) keypad until  $\neg PP \neg d$  appears in the display.
- 3. Press the START (enter) keypad. The display will show *PU5H* then *5ERrE* 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 *r RP 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.

### **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

- 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.

### **Power Fail Recovery**

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

If the power failure lasted less than 5 seconds and the door is closed, the cycle will resume without requiring the user to press the START (enter) keypad to restart.

If the power failure lasted longer than 5 seconds, the START (enter) keypad will flash until it is pressed and the cycle will restart from the point it left off.

If the power failure lasted longer than 5 seconds, the START (enter) keypad will flash one second on and one second off until it is pressed. The cycle will restart from the point it left off when START (enter) is pressed.

### **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 -L - 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).

# 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.