

Tumble Dryer

OPL Electronic Control

Refer to Page 3 for Model Identification

— Programming —

Keep These Instructions for Future Reference.

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

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Introduction

Model Identification

	Gas			Steam/Thermal Oil		Electric	
25 Pound	GA025L	KU025L	PT025L	GT025S	LU025S	GT025E	LU025E
	GA025N	KU025N	PT025N	GU025S	PT025S	GU025E	PT025E
	GT025L	LA025L	PU025L	KT025S	PU025S	KT025E	PU025E
	GT025N	LA025N	PU025N	KU025S	YT025S	KU025E	YT025E
	GU025L	LT025L	YT025L	LT025S	YU025S	LT025E	YU025E
	GU025N	LT025N	YT025N				
	KA025L	LU025L	YU025L				
	KA025N	LU025N	YU025N				
	KT025L	PA025L					
	KT025N	PA025N					
30 Pound	GA030L	KU030L	PT030L	GT030S	LU030S	GT030E	LU030E
	GA030N	KU030N	PT030N	GU030S	PT030S	GU030E	PT030E
	GT030L	LA030L	PU030L	KT030S	PU030S	KT030E	PU030E
	GT030N	LA030N	PU030N	KU030S	YT030S	KU030E	YT030E
	GU030L	LT030L	YT030L	LT030S	YU030S	LT030E	YU030E
	GU030N	LT030N	YT030N				
	KA030L	LU030L	YU030L				
	KA030N	LU030N	YU030N				
	KT030L	PA030L					
	KT030N	PA030N					
T30 Stacked	GAT30L	KTT30L	LUT30L	GTT30S	LTT30S	GTT30E	LTT30E
	GAT30N	KTT30N	LUT30N	GUT30S	LUT30S	GUT30E	LUT30E
	GTT30L	KUT30L	PAT30L	KTT30S	PTT30S	KTT30E	PTT30E
	GTT30N	KUT30N	PAT30N	KUT30S	PUT30S	KUT30E	PUT30E
	GUT30L	LAT30L	PTT30L				
	GUT30N	LAT30N	PTT30N				
	KAT30L	LTT30L	PUT30L				
	KAT30N	LTT30N	PUT30N				
35 Pound	GA035L	KU035L	PT035L	GT035S	LU035S	GT035E	LU035E
	GA035N	KU035N	PT035N	GU035S	PT035S	GU035E	PT035E
	GT035L	LA035L	PU035L	KT035S	PU035S	KT035E	PU035E
	GT035N	LA035N	PU035N	KU035S	YT035S	KU035E	YT035E
	GU035L	LT035L	YT035L	LT035S	YU035S	LT035E	YU035E
	GU035N	LT035N	YT035N				
	KA035L	LU035L	YU035L				
	KA035N	LU035N	YU035N				
	KT035L	PA035L					
	KT035N	PA035N					
T45 Stacked	GAT45L	KAT45L		Not Applicable		Not Applicable	
	GAT45N	KAT45N					
	GTT45L	KTT45L					
	GTT45N	KTT45N					
	GUT45L	KUT45L					
	GUT45N	KUT45N					

(continued)

Introduction

(continued)

	Gas			Steam/Thermal Oil		Electric	
50 Pound	GA050L	KU050L	PT050L	GT050S	LU050S	GT050E	LU050E
	GA050N	KU050N	PT050N	GT050T	LU050T	GU050E	PT050E
	GT050L	LA050L	PU050L	GU050S	PT050S	KT050E	PU050E
	GT050N	LA050N	PU050N	GU050T	PT050T	KU050E	YT050E
	GU050L	LT050L	YT050L	KT050S	PU050S	LT050E	YU050E
	GU050N	LT050N	YT050N	KT050T	PU050T		
	KA050L	LU050L	YU050L	KU050S	YT050S		
	KA050N	LU050N	YU050N	KU050T	YT050T		
	KT050L	PA050L		LT050S	YU050S		
	KT050N	PA050N		LT050T	YU050T		
55 Pound	GA055L	GU055L	KT055L	Not Applicable		GT055E	KT055E
	GA055N	GU055N	KT055N			GU055E	KU055E
	GT055L	KA055L	KU055L				
	GT055N	KA055N	KU055N				
75 Pound	GA075L	KU075L	PT075L	GT075S	LU075S	GT075E	LU075E
	GA075N	KU075N	PT075N	GT075T	LU075T	GU075E	PT075E
	GT075L	LA075L	PU075L	GU075S	PT075S	KT075E	PU075E
	GT075N	LA075N	PU075N	GU075T	PT075T	KU075E	YT075E
	GU075L	LT075L	YT075L	KT075S	PU075S	LT075E	YU075E
	GU075N	LT075N	YT075N	KT075T	PU075T		
	KA075L	LU075L	YU075L	KU075S	YT075S		
	KA075N	LU075N	YU075N	KU075T	YT075T		
	KT075L	PA075L		LT075S	YU075S		
	KT075N	PA075N		LT075T	YU075T		
120 Pound	GA120L	KU120L	PT120L	GT120S	LU120S	GT120E	LU120E
	GA120N	KU120N	PT120N	GT120T	LU120T	GU120E	PT120E
	GT120L	LA120L	PU120L	GU120S	PT120S	KT120E	PU120E
	GT120N	LA120N	PU120N	GU120T	PT120T	KU120E	YT120E
	GU120L	LT120L	YT120L	KT120S	PU120S	LT120E	YU120E
	GU120N	LT120N	YT120N	KT120T	PU120T		
	KA120L	LU120L	YU120L	KU120S	YT120S		
	KA120N	LU120N	YU120N	KU120T	YT120T		
	KT120L	PA120L		LT120S	YU120S		
	KT120N	PA120N		LT120T	YU120T		
170 Pound	GA170L	KU170L	PT170L	GT170S	LU170S	Not Applicable	
	GA170N	KU170N	PT170N	GT170T	LU170T		
	GT170L	LA170L	PU170L	GU170S	PT170S		
	GT170N	LA170N	PU170N	GU170T	PT170T		
	GU170L	LT170L	YT170L	KT170S	PU170S		
	GU170N	LT170N	YT170N	KT170T	PU170T		
	KA170L	LU170L	YU170L	KU170S	YT170S		
	KA170N	LU170N	YU170N	KU170T	YT170T		
	KT170L	PA170L		LT170S	YU170S		
	KT170N	PA170N		LT170T	YU170T		
200 Pound	LA200L	LU200L	PT200L	LT200S	PT200S	Not Applicable	
	LA200N	LU200N	PT200N	LT200T	PT200T		
	LT200L	PA200L	PU200L	LU200S	PU200S		
	LT200N	PA200N	PU200N	LU200T	PU200T		

Includes models with the following control suffixes:

EO – OPL electronic
RE – reversing OPL electronic

Nameplate Location

The nameplate is located on the back of the machine and is programmed in the Control.

Preliminary Information

About the Control

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

The control allows the owner to program custom cycles, run diagnostic cycles, and retrieve audit and error information.

Tumble dryers shipped from the factory have default cycles and other settings built in. The owner can change the default cycle or any cycle.

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

DIP Switch Configuration

Make sure DIP switches are configured properly for the machine. Refer to *Figure 1* below.

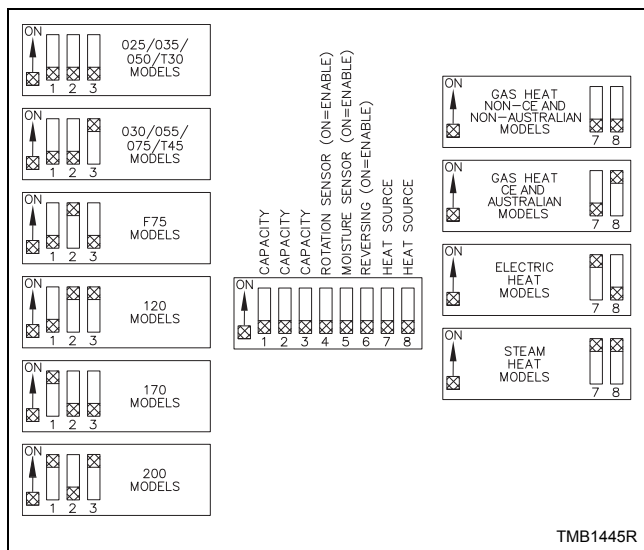


Figure 1

Power Failure Recovery

If a cycle is in progress when the power fails, and if the power outage lasts three or more seconds, the cycle is lost and cannot be resumed when power recovers. If the power outage lasts less than three seconds, the control will resume the cycle when the power recovers.

Restore to Factory Defaults

When the user resets to factory default, the control resets all of the default values. The control also resets Machine Cycles #1 through #20. The control will also reset the following to factory-defaults:

Default Global Settings

Ignition Retries = 3

Temperature Units = Fahrenheit (°F)

High (H) Temperature = 190 (°F)

Medium (M) Temperature = 160 (°F)

Low (L) Temperature = 140 (°F)

Very Low (VL) Temperature = 120 (°F)

Cool Down Temperature = 100 (°F)

Cool Down Time = 2 minutes

Rapid Advance = Disabled

Multi-Segment Cycles = Disabled

Daylight Saving = Enabled

Manual Diagnostics = Enabled

Clean Lint Screen Reminder = Off

Display Limit Errors = Disabled

*Reverse Cylinder Rotate Time = 120 (seconds)

*Reverse Cylinder Stop Time = 6 (seconds)

*Advanced Reversing = OFF

**Advanced Options for Moisture Dry = Disabled

Key Pad Audio = Enabled

End of Cycle Audio = Enabled

End of Cycle Duration = 5 (seconds)

End of Cycle External Signal = Enabled (5 seconds)

**Display Moisture Sensor Error = Disabled

*Only available on units equipped with reversing feature.

**Only available on units equipped with moisture sensing feature.

Refer to Factory Defaults, Menu section for information on Restoring Factory Defaults.

Entering Program Mode

1. Press and hold Stop, then Back (←), then Up (↑) to enter the programming options.

Control Identification

Operational Keypad

The control includes five keypads. These functions are available to the operator and are intended to control and manage operation of the tumble dryer. Refer to *Figure 2* and *Table 1*.

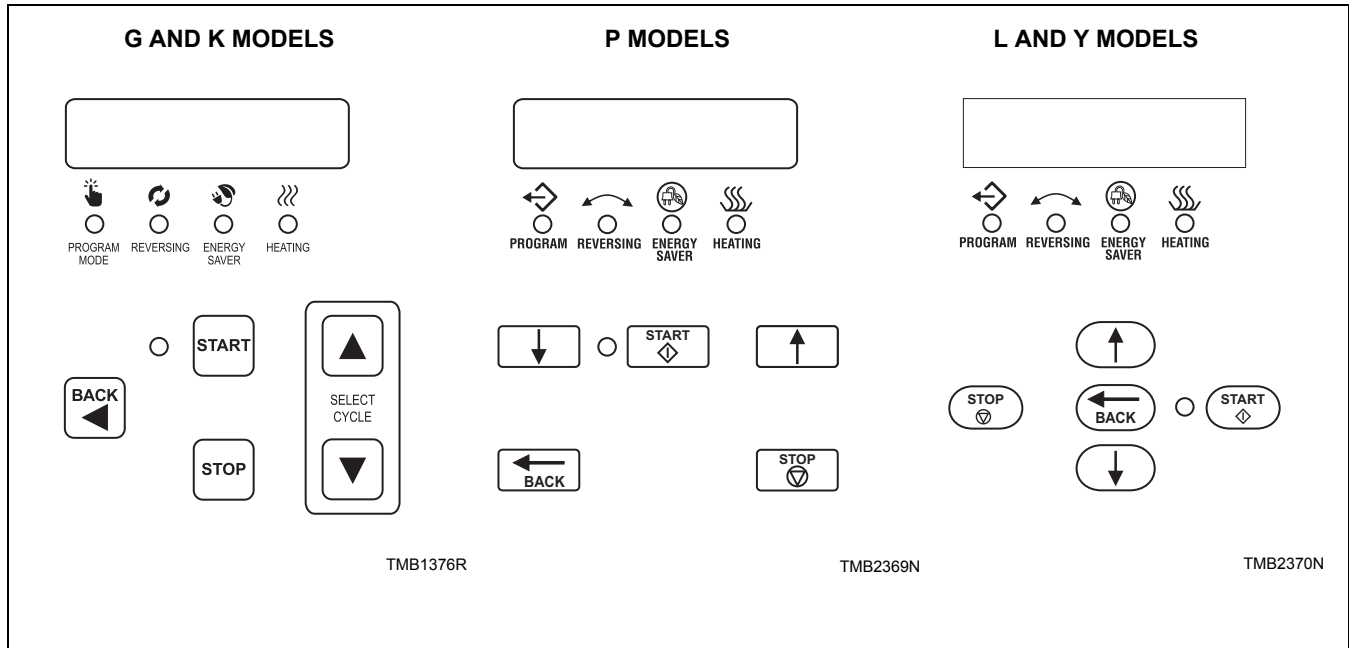


Figure 2

NOTE: The reversing feature is not available on all models.









Keypad		Description
UP ARROW	↑	Press to scroll through menu options and edit parameter values.
DOWN ARROW	↓	Press to scroll through menu options and edit parameter values.
BACK ARROW	←	Press to go to the list of parameters without saving the value when adjusting the value of a programming parameter. Also, press to go to the previous menu when the control displays a parameter, return to Idle Mode when the control displays the main menu or clear an error message from the display.
STOP		Press to pause a cycle while in Run Mode or abort a cycle if the control is in Pause Mode.
START		Press to start the selected cycle, select an option when in the menu or save a value when editing a parameter.
PROGRAM MODE	 / 	LED will light up if the control is in Manual Programming Mode or if a cycle is being modified.
REVERSING	 / 	LED will light up when cylinder is reversing.
ENERGY SAVER	 / 	LED will light up when a moisture dry or auto dry cycle is running.
HEATING	 / 	LED will light up when the machine is in the heat portion of the cycle.

Table 1

Operation Modes

General Modes of Operation

In each mode of operation, the user may press keypads or communicate with the control to change the displayed menu.

Power-up Mode

The control enters this mode at power-up. When power is applied to the tumble dryer, the control becomes active and will display its software version as “5HH” (“HH” is the version number) for one second and then the subversion as “HH” (if subversion isn’t zero) for one second. If the control was not powered down during a running cycle, it will enter the Idle Mode. After the control completes operation in the Power-up Mode it will enter Idle Mode.

Idle Mode

The control is ready for operation in Idle Mode. Control can display different menus depending on user input (keypad press or opening or closing the loading door). If there is no user input for 10 minutes, display will turn off.

While in Idle Mode the control will display the active cycles. Anytime the control returns to Idle Mode after a cycle has been run, the control will display the last run cycle (except the first time the control is powered up it will show the first cycle).

Press the up arrow (↑) to increment the cycle number. Press the down arrow (↓) to decrease the cycle number. If the Start keypad is pressed and either the loading door or lint door is open the control will show “door” for five seconds or until door is closed.

If the control is in Idle Mode, Cycle Menu is displayed, loading and lint door closed, and the Start keypad is pressed, control will enter Run Mode.

Run Mode

The Control enters Run Mode during a cycle. Loading and lint doors are closed during Run Mode.

While in Run Mode, any programmed value can be changed for the currently running cycle. Press the Up (↑) or Down (↓) keypads to scroll through the displays. Press the Back (←) keypad to select a parameter and press Up (↑) or Down (↓) to change the value. Once the cycle is complete, the control will go back to the original programmed parameters. Refer to the Tables below for each cycle type’s displays.

Press Stop (⏻) keypad to stop cycle and enter Pause Mode. Control enters Pause Mode if loading or lint door opens. Press Start (⏻/↩) to Rapid Advance..

Time Dry Cycle Display	6 Digit Display	Description
Display 1	“HHH HH”	Cycle Time Remaining in Minutes and Seconds (HH)
Display 2	“LHH SY” or “LHH LD”	Cycle Number (HH) and Segment Number (Y) or Cycle Number (HH) and Segment Cooldown
Display 3	“A HHHF” or “A HHHL”	Actual Temperature
Display 4	“P HHHF” or “P HHHL”	Programmed Temperature
Display 5	“SAVE”	Custom Save Mode Display

Control Identification

Moisture Dry Cycle Display	6 Digit Display	Description
Display 1	“ HH”	Actual Moisture Level
Display 2	“HH SY” or “HH CD”	Cycle Number (HH) and Segment Number (Y) or Cycle Number (HH) and Segment Cooldown
Display 3	“A HHHF” or “A HHHC”	Actual Temperature
Display 4	“P HHHF” or “P HHHC”	Programmed Temperature
Display 5	“PnHH”	Programmed Moisture Level
Display 6	“SAVE”	Custom Save Mode Display

Auto Dry Cycle Display	6 Digit Display	Description
Display 1	“HHH HH”	Elapsed Time in Minutes and Seconds (HH)
Display 2	“HH SY” or “HH CD”	Cycle Number (HH) and Segment Number (Y) or Cycle Number (HH) and Segment Cooldown
Display 3	“A HHHF” or “A HHHC”	Actual Temperature
Display 4	“P HHHF” or “P HHHC”	Programmed Temperature
Display 5	“P HH”	Programmed Target Level

Pause Mode

If Stop keypad is pressed or the loading or lint door is opened while in Run Mode, control enters Pause Mode.

If the door was opened to enter Pause Mode, the control will show “door” until the door is closed or Pause Mode is exited. If the door is closed, the control will show “PUSH” for one second followed by “Start” for one second as well as flash the Start keypad LED one second on/one second off.

If the Stop keypad was pressed to enter Pause Mode and the loading door is closed, the control will show “PAUSE” until Pause Mode is exited.

Any time “PAUSE” is shown on the control, the Start keypad LED will flash one second on/one second off to prompt the user to restart the cycle.

Error Mode

This mode will be entered to display all fatal machine errors.

Cool Down Mode

The control enters the Cool Down Mode after the heat segment of the cycle is completed. The control turns the heater off and for steam heated units turns the damper motor on. The cool down segment will end once the cool down temperature has been reached or the programmed cool down time expires, whichever happens first.

End of Cycle Mode

The control enters End of Cycle Mode after the cool down segment is finished. The display will toggle between “Load” and “Ready” for one second each until End of Cycle Mode is exited. If the door has not been opened or a keypad has not been pressed after two minutes, the machine will enter Extended Tumble Mode. This mode is exited when the door is opened or Stop keypad is pressed. The control will then return to Idle Mode.

Extended Tumble Mode

The Extended Tumble Mode has two portions. The Anti-Wrinkle Tumble is entered two minutes after the cycle has ended if the door is not opened. The cylinder will tumble for 30 seconds every two minutes for up to one hour.

If the door hasn't been opened and no keys have been pressed one hour after the Anti-Wrinkle Tumble has ended, the control increments the Anti-Wrinkle Time Exceeded audit counter and enters the Delayed Tumble. The cylinder will tumble for two minutes every 60 minutes for up to 18 hours.

Reversing Mode (reversing models only)

Models equipped with the reversing feature will rotate in the forward direction, pause, rotate in the reverse direction and then pause for programmable times and segments of the cycle. Factory default rotate time is 120 seconds and reversing stop time is 6 seconds for all cycles with reversing enabled.

Entering Diagnostic Mode From Idle Mode

When entered from the Idle Mode, the control will be running a test selected by the user via keypad presses.

Displaying Temperature Mode

The temperature can be displayed during an active cycle by pressing the up arrow (↑) or down arrow (↓) to scroll through the menu. Select A:(Temp Value) to see the actual or current temperature. Select P:(Temp Value) to see the programmed temperature.

Machine Cycle Definition and Operation

There are 20 machine cycles that can be selected and run. Machine cycles can be modified or made “unavailable” by manually editing them in Modify Cycle Menu. Machine cycles cannot be deleted, but can be made “unavailable” so that they are not visible from the Cycle Menu. New machine cycles cannot be created, but existing machine cycles that have been edited to be “unavailable” may be re-edited to be available again.

Machine Cycle Operation

When a cycle is run, the control runs the cycle segment by segment in a sequence. First the control examines the Cycle Type chosen to determine if it is a Time Dry, Auto-Dry or Moisture Dry (if equipped) cycle type. Then the first segment is examined to see if it is programmed to “ON” or “OFF”. If the segment is programmed to “OFF”, control skips to the next segment.

At the start of some machine cycles, the control displays a Total Remaining Cycle time. This time is taken from the machine cycles as they are programmed. The Total Remaining Cycle Time begins to count down as soon as the cycle is started.

Time Dry Cycle

In this type of cycle, the control will regulate the temperature and time duration as programmed for the cycle chosen.

Auto-Dry Cycle

If this type of cycle is selected, the control determines the cycle time based on the temperature and dryness level programmed for the cycle chosen.

Moisture Dry Cycle (if equipped)

In this type of cycle, the control checks the programmed material type, programmed target moisture content, programmed temperature and the data received from the moisture sensing system to achieve the desired results.

Rotation Sensor Equipped Machines

On machines equipped with a rotation sensor, the control monitors the rotation sensor to verify the cylinder is rotating. The control calculates the cylinder’s RPM. If the RPM drops to zero while the cylinder is supposed to be rotating, the control will advance to the Cool Down segment of the cycle and an error message will be displayed.

To Start a Cycle

1. Press the Up (↑) or Down (↓) keypad to change cycles.
2. Press Start to start selected cycle.

NOTE: If door is not closed when the Start keypad is pressed, display will show “door”.

Entering the Manual Mode

For programming, testing, and retrieving information from the control, it is often necessary to enter the Manual Mode by following the steps below.

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

How to Enter the Manual Mode

1. Control must be in Idle Mode.
2. Press and hold the Stop keypad, then press and hold the Back (←) keypad, then press the Up (↑) keypad.
3. The display will show “Pr Ⓜ”.
4. Press the Up (↑) or the Down (↓) keypad to scroll through the options until the desired option appears in the display.
5. Press the Start keypad to enter the displayed mode.
6. To exit, press the Back keypad. The control will revert back to Idle Mode.

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

Manual Programming (Pr Ⓜ)

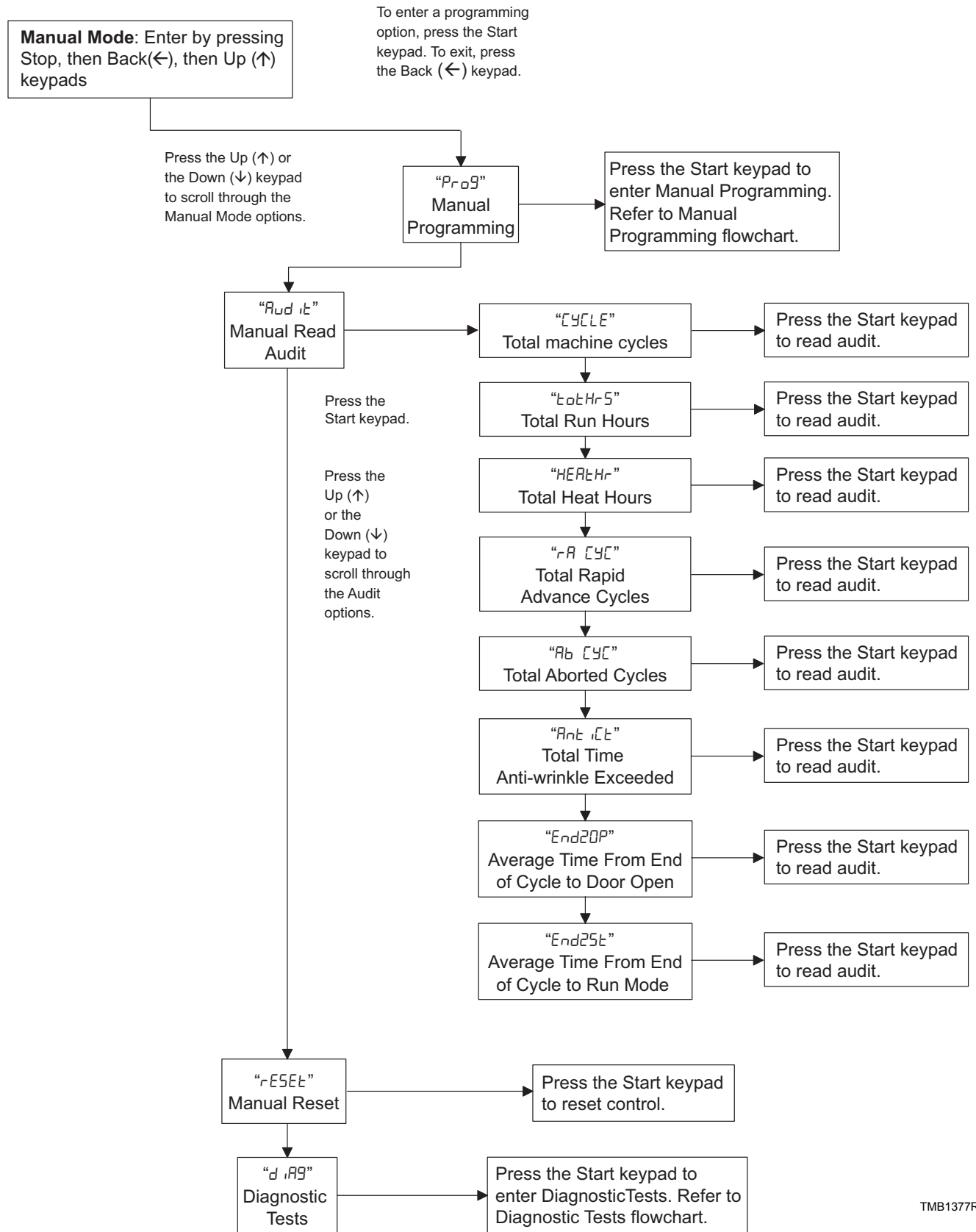
Manual Read Audit (Rud Ⓜ)

Manual Reset (rESEt)

Diagnostic Tests (d Ⓜ)

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

Entering the Manual Mode



TMB1377R

Programming Control

What Can Be Programmed?

This feature allows the owner to program cycle parameters and other features by using the keypads. Refer to this section when programming the control.

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

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

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

How to Program a Cycle

1. Press the Up (↑) or Down (↓) keypad to scroll through the option list.
2. Press Start to select an option to program.
3. Press the Up (↑) or Down (↓) keypad to change the value of that option.
4. Press Start to save the change.

NOTE: Press the Back (←) keypad to leave the option without saving any change.

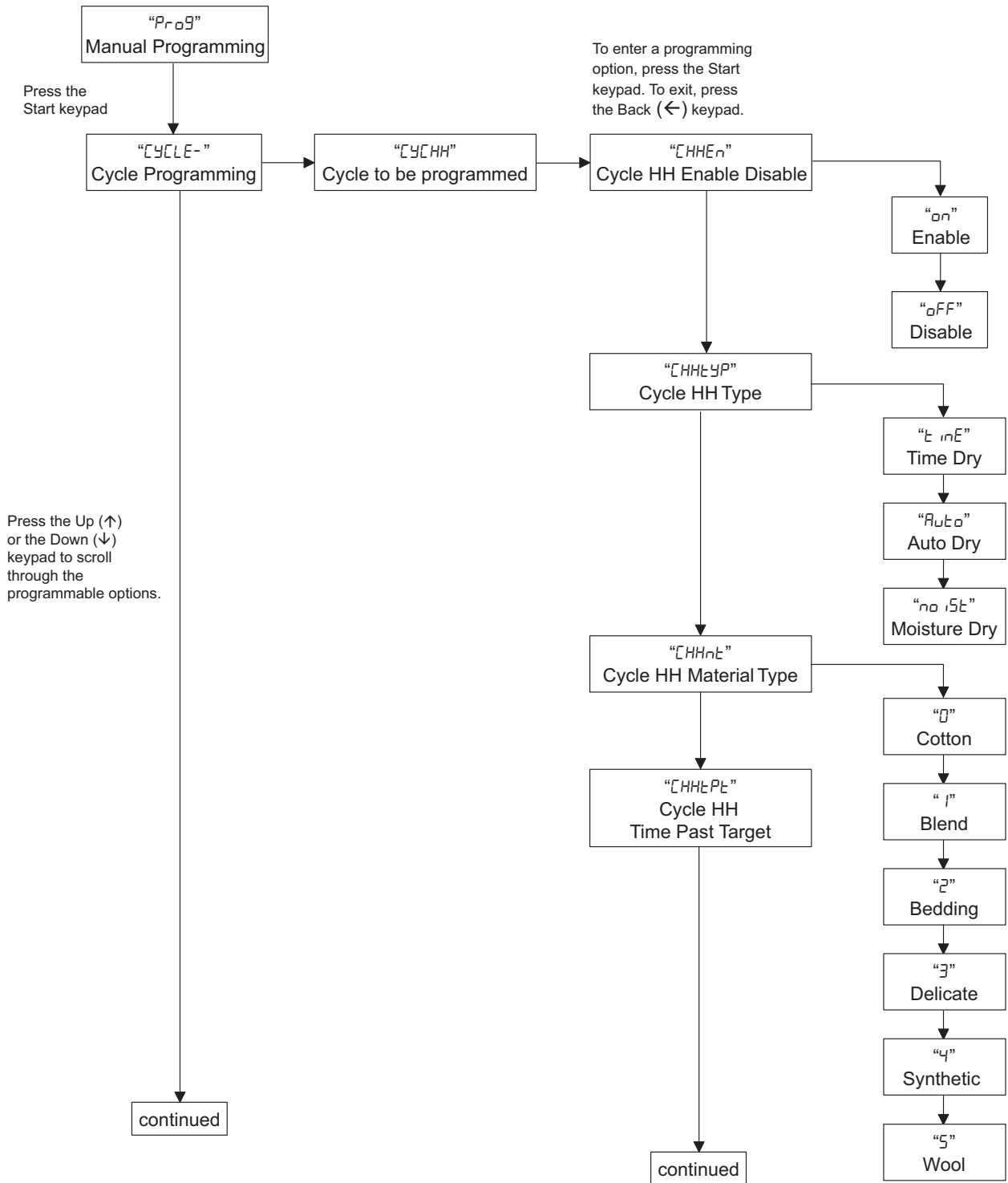
5. After pressing Start, control will go to the next option in the list.
6. Press Back keypad to go to Idle Mode.

Programmable Options Available

Option Number	Option Display	Description	Default Value	Value Range
1	“CYCLE-”	Cycle Programming	-	-
a	“CYHH-”	Cycle HH (HH represents cycles 1-20)	-	-
1	“CHHE-”	Cycle HH Enable Disable	-	on/oFF
2	“CHHETP”	Cycle HH Type	-	tinE (Time Dry), Auto (Auto Dry), moist (Moisture Dry)
3	“CHHnE”	Cycle HH Material Type	-	0 (Cotton), 1 dips witch (Blend), 2 (Bedding), 3 (Delicate), 4 (Synthetic), 5 (Wool)
4	“CHHETP”	Cycle HH Time Past Target (minutes)	-	0-15
5	“CHHS 1-”	Segment 1	-	CHHS11 (Segment 1 Enable/Disable), CHHS12 (Segment 1 Time), CHHS13 (Segment 1 Temperature), CHHS14 (Segment 1 Auto Dry Target Level), CHHS15 (Segment 1 Moisture Dry Target Moisture)
6	“CHHCd-”	Cool Down	-	CHHCd1 (Cool Down Temperature), CHHCd2 (Cool Down Time)
2	“Cd-”	Global Cool Down	-	-
a	“Cd 1”	Cool Down Temperature	100°F/38°C	70°-110°F/21°-43°C
b	“Cd 2”	Cool Down Time (minutes)	2	1-15
3	“rEu-”	Global Reversing Parameters	-	-
a	“rEu 1”	Rotate Time (seconds)	7 (120)	3-9 (30-540 seconds)
b	“rEu 2”	Stop Time (seconds)	0 (6)	0-4 (6-10 seconds)
c	“rEu 3”	Advanced Reversing	0	0 (oFF), 1 (on)

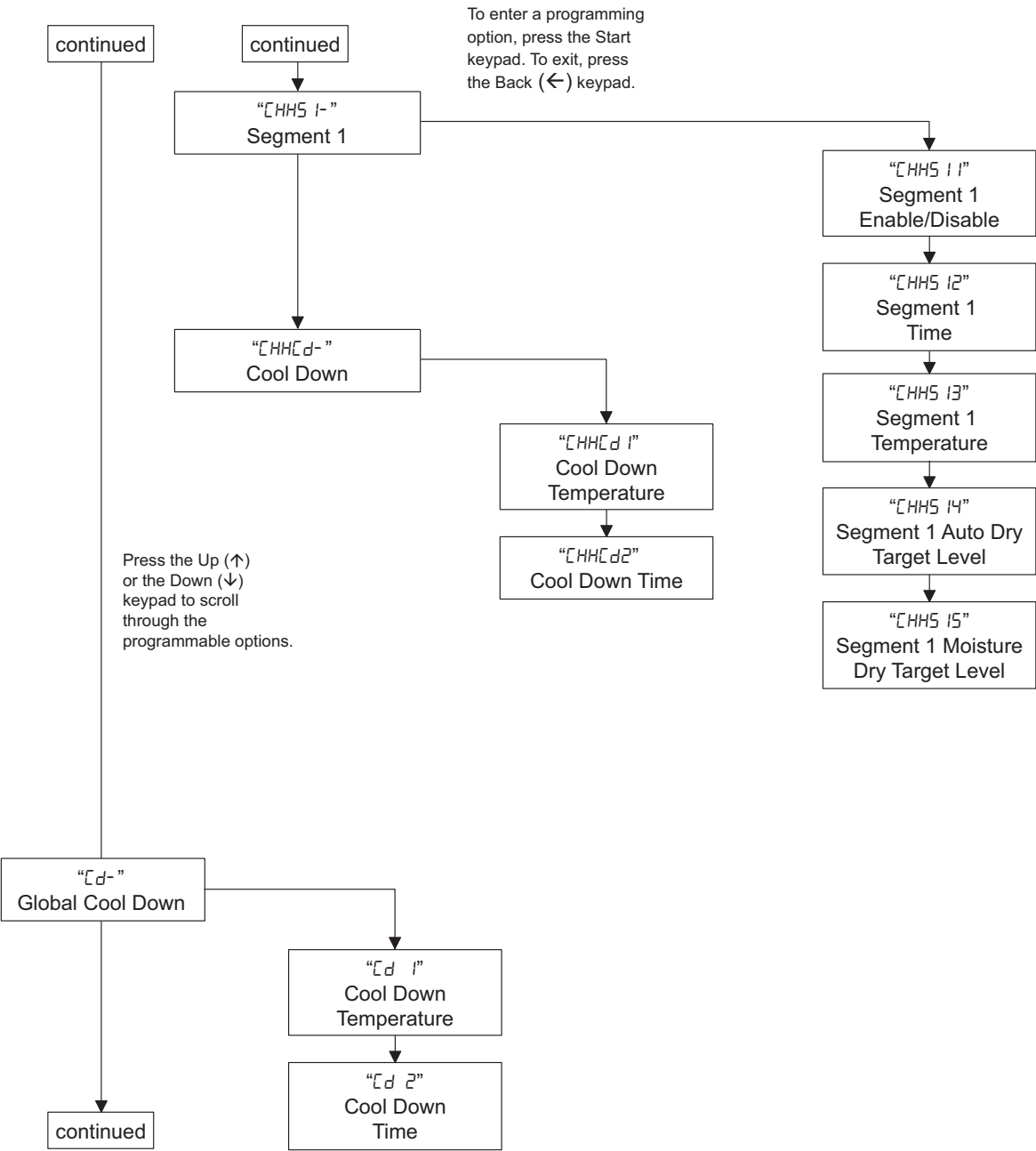
Programming Control

Option Number	Option Display	Description	Default Value	Value Range
4	“tEnP-”	Global Temperatures	-	-
a	“tEnP 1”	Global Very Low Temperature	120°F/49°C	100°-120°F/38°-49°C
b	“tEnP 2”	Global Low Temperature	140°F/60°C	120°-140°F/49°-60°C (50, 75, 120, 170, 200 Pound Models), 105°-145°F/41°-63°C (25, 30, T30 Pound Models), 125°-155°F/52°-68°C (35, T45, 55 Pound Models)
c	“tEnP 3”	Global Medium Temperature	160°F/71°C	140°-160°F/60°-71°C (50, 75, 120, 170, 200 Pound Models), 135°-160°F/57°-71°C (25, 30, T30 Pound Models), 145°-165°F/63°-74°C (35, T45, 55 Pound Models)
d	“tEnP 4”	Global High Temperature	190°F/88°C	160°-190°F/71°-88°C (35, T45, 55, 50, 75, 120, 170, 200 Pound Models), 155°-190°F/68°-88°C (25, 30, T30 Pound Models)
5	“Aud io-”	Global Audio Signal	-	-
a	“Aud 1”	End of Cycle	1	0 (oFF), 1 (on)
b	“Aud 2”	End of Cycle Duration (seconds)	5	1-120
c	“Aud 3”	Keypad Feedback	1	0 (oFF), 1 (on)
6	“ES iB-”	External Signal	-	-
a	“ES iB 1”	External Signal End of Cycle	1	0 (oFF), 1 (on)
b	“ES iB 2”	External Signal End Of Cycle Duration (seconds)	5	1-120
7	“nuLSE9”	Multi-Segment Cycles	0	1 (Enable), 0 (Disable)
8	“ndrYOP”	Advanced Moisture Dry Options	0	1 (Enable), 0 (Disable)
9	“Error-”	Error Displays	-	-
a	“L in iE5”	Display Limit Errors	0	1 (Enable), 0 (Disable)
b	“no iSt ”	Display Moisture Sensor Error	1	1 (Enable), 0 (Disable)
10	“t FL”	Temperature	0	0 (Fahrenheit), 1 (Celsius)
11	“AI 9”	Auto Ignite Retry	3	0-5
12	“L int”	Clean Lint Reminder	0	0 (off)-255
13	“rEL-”	Real Time Clock	-	-
a	“rEL 1”	Minutes	-	0-59
b	“rEL 2”	Hours	-	0-23
c	“rEL 3”	Day	-	1-7
d	“rEL 4”	Date	-	1-31
e	“rEL 5”	Month	-	1-12
f	“rEL 6”	Year	-	0-99
g	“rEL 7”	Daylight Saving	1	1 (Enable), 0 (Disable)
14	“rAPdEn”	Manual Rapid Advance	0	1 (Enable), 0 (Disable)
15	“d iAGEn”	Manual Diagnostics	1	1 (Enable), 0 (Disable)

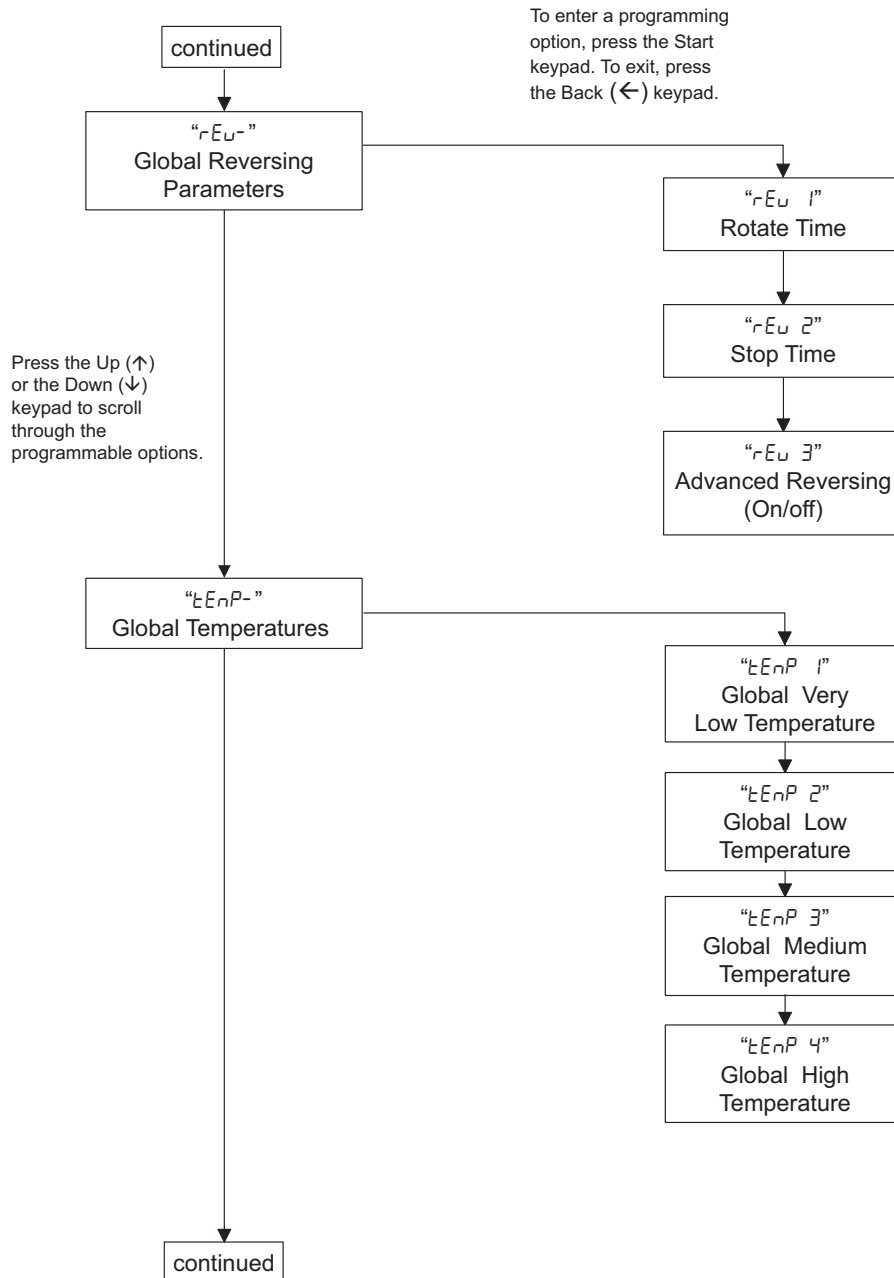


TMB1378R-a

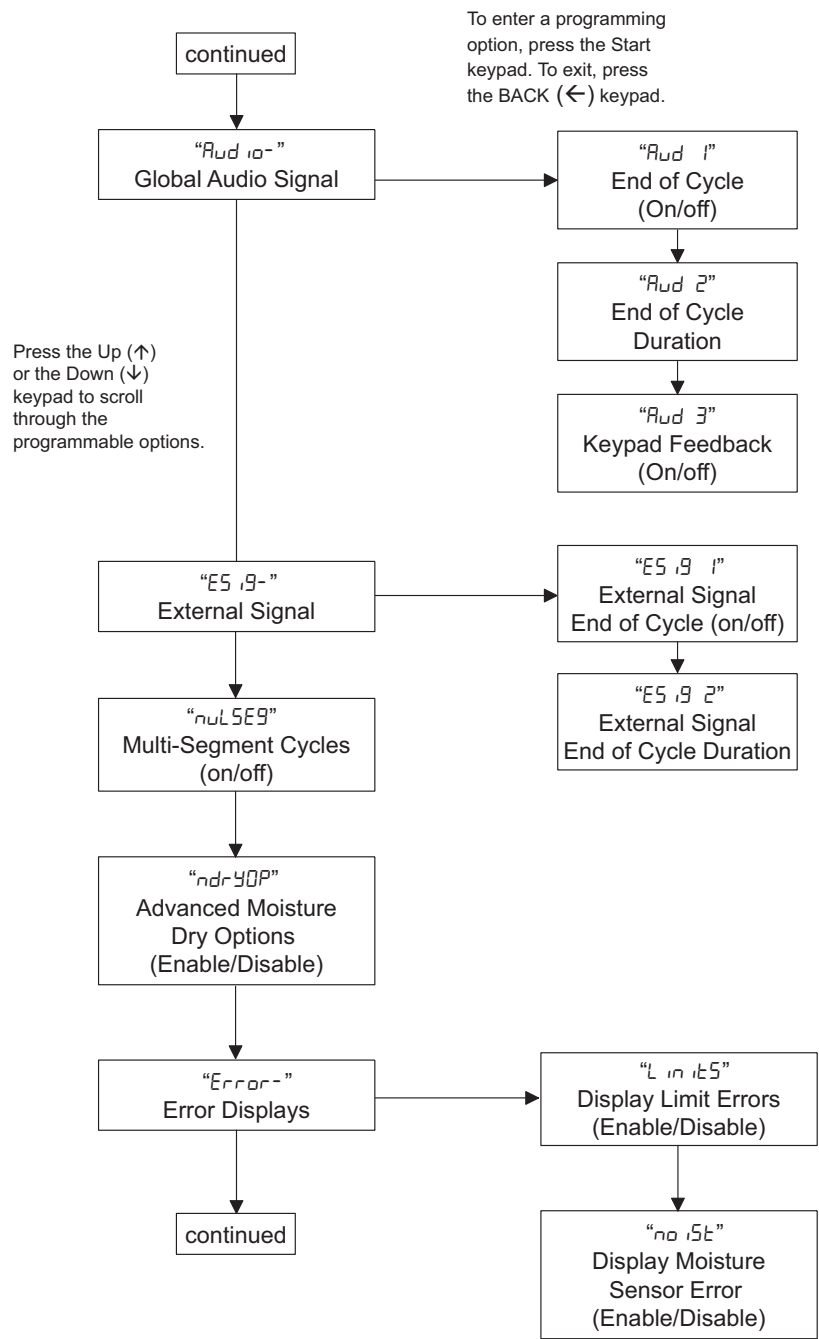
Programming Control



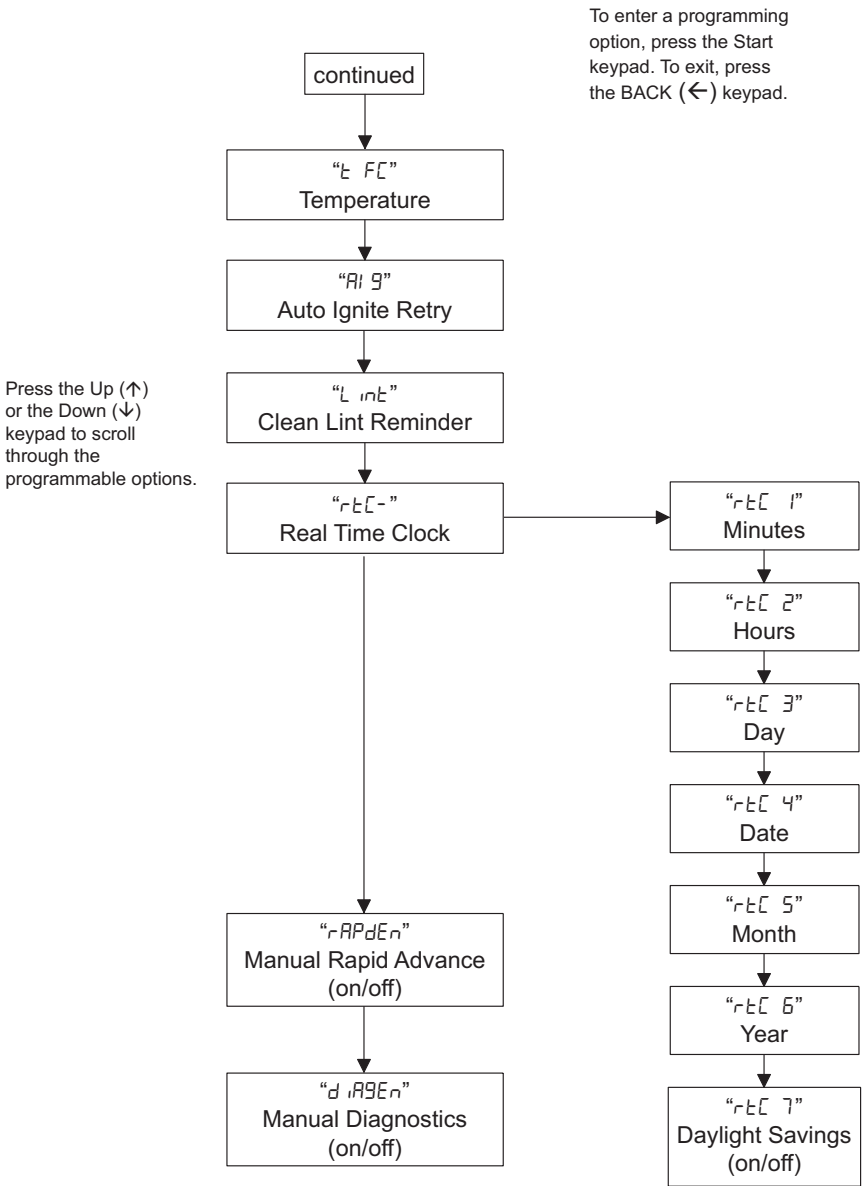
TMB1378R-b



TMB1458R



TMB1436R



TMB1378R-e

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 on this page.

How to Enter Audit Feature

1. Control must be in Manual Mode to start. Refer to *Entering the Manual Mode*.
2. Press the Up (↑) or the Down (↓) keypad until “Aud it” appears.
3. Press the Start keypad. “CYCLE” will appear.

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

How to Read Audit Data

1. Use the Up (↑) or the Down (↓) keypad to scroll through various options until the desired option is shown in the display. Refer to the Audit Options List, *Table 2*, for an explanation of the audit options available.

2. Once the desired option appears in the display, press the Start keypad **once** to start the audit count.
3. Press the Start 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 – 3.

How to Exit Audit Feature

Press the Back (←) keypad until the control returns to Idle Mode.

Audit Options List	
Display	Description
CYCLE	Total # of Machine Cycles
totHrs	Total # of Run Hours
HEAtHr	Total # of Heat Hours
rA CYC	Total # of Rapid Advance Cycles
Ab CYC	Total # of Aborted Cycles
Ant iLt	Total # of Times Anti-Wrinkle Exceeded
End20P	Average Time from End of Cycle to Door Open (Last 25 Cycles)
End25t	Average Time from End of Cycle to Run Mode (Last 25 Cycles)

Table 2

Manual Reset

This feature allows the owner to reset the tumble 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 Tumble Dryer Settings*.

How to Enter Manual Reset

1. Control must be in Manual Mode to start.
Refer to *Entering the Manual Mode*.
2. Press the Up (↑) or the Down (↓) keypad until "rESEt" appears.
3. Press the Start keypad. The control will be blank until the programming is complete. Once the program has been reset, the control will revert back to the Manual Mode, displaying "d 199".

Custom Save

This feature allows the owner to save a current cycle. For time dry cycles, the custom save will reprogram the cycle time to the time that has elapsed in the current cycle. For moisture dry cycles, the custom save feature will save the current moisture level as the target moisture level for the current cycle.

How to Enter Custom Save

1. While a cycle is running, press the Back (←) and Start (⏏/↶) keypads.
2. Display will change to “5FluE” and Start keypad will flash.
3. Press the Start (⏏/↶) keypad.

Testing Machine and Electronic Control Functions

This feature allows the owner to run diagnostic tests on various tumble dryer operations without servicing the tumble dryer. The tests that are available are shown in *Table 3*.

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

How to Enter Testing Feature

1. Enter Manual Mode. Refer to *Entering the Manual Mode*.
2. Press the Up (↑) or the Down (↓) keypad until “d iAG” appears.

3. Press the Start keypad. Display will change to “d5oFt” indicating the control software version number test.
4. Press the Up (↑) or the Down (↓) keypad to scroll through the diagnostic test options.

How to Start Tests

To start a diagnostic test, refer to the quick reference chart below (*Table 3*). Press the Start keypad when the desired test is displayed. For detailed information on each test, read the appropriate description.

How to Exit Testing Feature

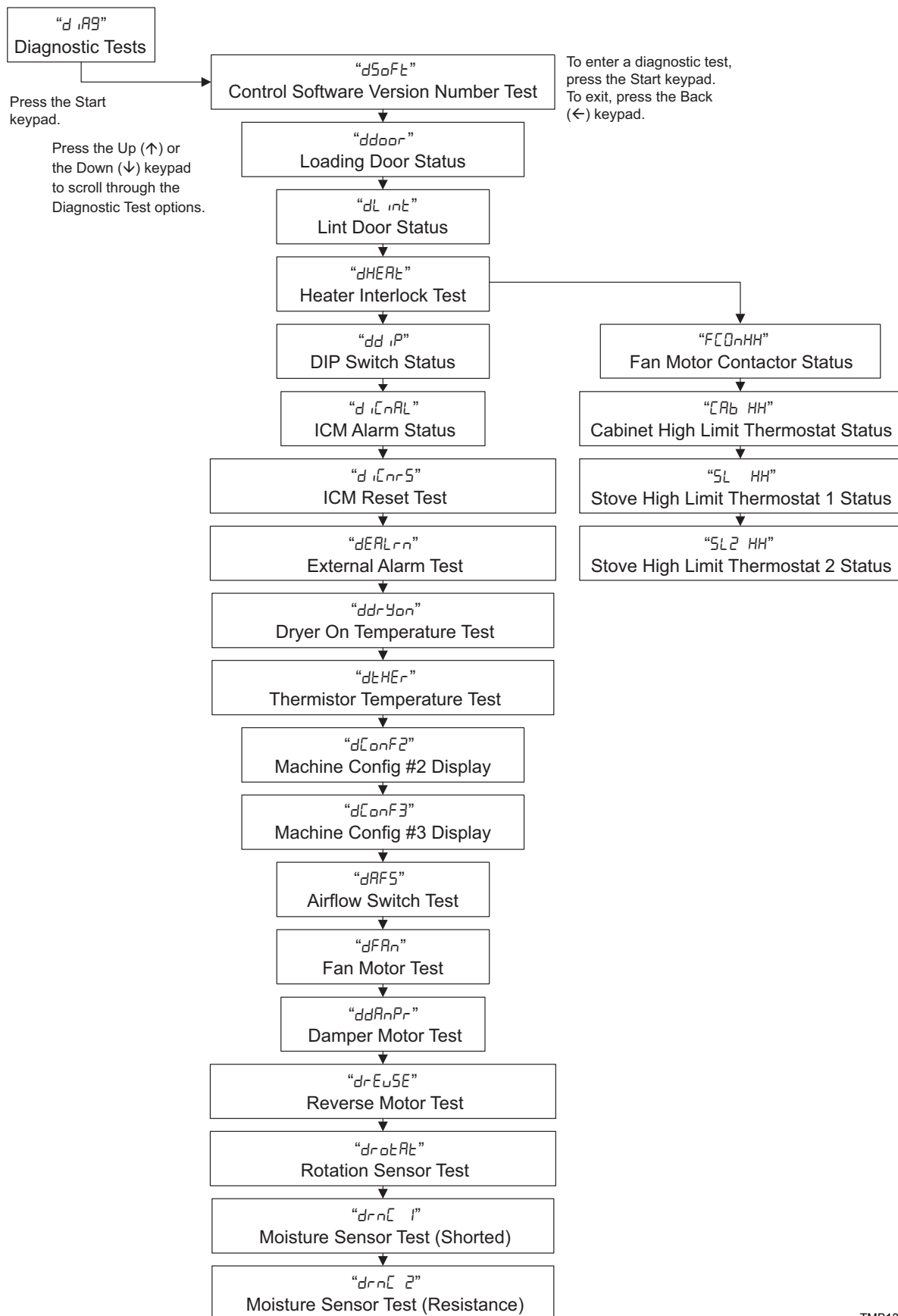
Press the Back (←) keypad. The display will return to Idle Mode.

Diagnostic (Testing) Mode - Quick Reference Chart	
Display	Diagnostic Mode
“d5oFt”	Control Software Version
“ddoor”	Loading Door Status
“dL int”	Lint Door Status
“dHEAL”	Heater Interlock Test
“FECOnHH”	Fan Motor Contactor Status
“FncSHH”	Fan Motor Centrifugal Switch Status
“CAB HH”	Cabinet High Limit Thermostat Status
“SL HH”	Stove High Limit Thermostat 1 Status
“SL2 HH”	Stove High Limit Thermostat 2 Status
“dd iP”	DIP Switch Status
“d iCAL”	ICM Alarm Status
“d iCRS”	ICM Reset Test
“dEALrn”	External Alarm Test
“ddrYon”	Dryer On Temperature Test
“dtHER”	Thermistor Temperature Test
“dConF2”	Machine Config #2 Display
“dConF3”	Machine Config #3 Display
“dAFS”	Airflow Switch Test
“dFAn”	Fan Motor Test
“ddAnPr”	Damper Motor Test*
“drEUSE”	Reverse Motor Test*
“drotAL”	Rotation Sensor Test*
“drnC i”	Moisture Sensor Test (Shorted test jumper)*
“drnC c”	Moisture Sensor Test (Resistance test jumper)*

* = Tests only shown if enabled by the DIP switch configuration.

Table 3

Testing Machine and Electronic Control Functions



TMB1379R

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 keypad. The display will show “5 HH” where “HH” is the software version number.

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

Loading Door Test

This option tests the loading 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 keypad. The display will show “door OP” when the loading door switch is open and “door CL” when the loading door switch is closed.

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

To exit the Loading Door Test, press the Back (←) keypad. The control will return to the testing mode.

Lint Door 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 keypad. The display will show “Lnt OP” when the lint door switch is open and “Lnt CL” 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 Back (←) keypad. The control will return to the testing mode.

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 five 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. For example, if the fan motor contactor switch is open, all of the switches will be open.

To exit the test, press the Back (←) keypad. The control will return to the testing mode.

Fan Motor Contactor Switch

The display will show “FCL OP” if the switch is sensed open and “FCL CL” if the switch is sensed closed.

Fan Motor Centrifugal Switch

The display will show “FCL5 OP” if the switch is sensed open and “FCL5 CL” if the switch is sensed closed.

Cabinet High Limit Thermostat

The display will show “CLb OP” if sensed open for at least 1.5 seconds and “CLb CL” if sensed closed for at least one second.

Stove High Limit Thermostat 1

The display will show “SL OP” if sensed open for at least 1.5 seconds and “SL CL” if sensed closed for at least one second.

Stove High Limit Thermostat 2

The display will show “SL2 OP” if sensed open for at least 1.5 seconds and “SL2 CL” if sensed closed for at least one second.

Dip Switch Status

The control will show the displays in *Table 4* according to the DIP switch configuration. The control will show which switches are in the ON position.

DS8	DS7	DS6	DS5	DS4	DS3	DS2	DS1	Display
OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	d5C000
OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	d5C001
OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	d5C002
OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	d5C004
OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	d5C008
OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	d5C016
OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	d5C032
OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	d5C064
ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	d5C128

Table 4

ICM Alarm Status

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 “*ICM ON*” if the alarm is active for at least one second or “*ICM OFF*” if the alarm is not active for one second.

To exit the test, press the Back (←) keypad. The control will return to the testing mode.

ICM Reset Test

The ICM Reset Test can be used to both activate the ICM alarm signal and reset the ICM alarm. When this test is started, the ICM reset will become active. If the reset signal is active for a long enough period of time (4 seconds) the ICM Lockout input will become active. To reset the ICM, stop the ICM Reset Test and then start the test again until the ICM Lockout input becomes inactive (4 seconds) and then stop the ICM Reset Test. If “*ICM Reset*” shows on the display, ICM Reset output is active.

External Alarm Test

This option tests whether the external alarm is working.

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 “*External Alarm*” and the external alarm will sound until the test is exited.

To exit this test, press the Back (←) keypad. The control will return to the testing mode.

Tumble 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 keypad. The display will show “P HHHF” (Fahrenheit) or “P HHH℃” (Celsius). Use the Up (↑) or the Down (↓) keypad to select desired temperature. Press the Start keypad to begin cycle. While the test is running the control will display the temperature estimated in the cylinder (“HHH F ” or “HHH ℃ ”). Once the cylinder temperature stabilizes at the target temperature, the heater is turned off and there is a two minute cool down period. During cool down, the control will display the time remaining as “m 55”.

NOTE: This test does not increment the Total # of Cycles audit counter.

To exit the test, press the Back (←) keypad. The control will return to the testing mode.

Thermistor Temperature Test

This option displays the temperature sensed at the thermistor in 5°F (3°C) 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 keypad. The display will show “ HHHF” or “ HHH℃”. The “F” will show Fahrenheit, the “℃” will show Celsius and the “HHH” will show degrees. If control senses a shorted thermistor, the display will show “ 5H ”. If the control senses an open thermistor, the display will show “ OP ”.

To exit this test, press the Back (←) keypad. The control will return to the testing mode.

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 keypad. The display will show “℃ HHH”, with “HHH” the number corresponding to the machine capacity. Refer to *Table 5*.

Value	Description
2	25, 30 Pound Tumble Dryer
5	35, 55 Pound Tumble Dryer
12	50, 75, 120, 170, 200 Pound Tumble Dryer

Table 5

To exit Machine Configuration Display #2 Test, press the Back (←) 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 keypad. The display will show “d HHH”, with “HHH” representing the machine capacity. Refer to *Table 6*.

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

Value	Description
0	Tumble Dryer
17	25 Pound Tumble Dryer
18	30 Pound Tumble Dryer
22	35 Pound Tumble Dryer
26	50 Pound Tumble Dryer
27	55 Pound Tumble Dryer
28	75 Pound Tumble Dryer
29	120 Pound Tumble Dryer
30	170 Pound Tumble Dryer
31	200 Pound Tumble Dryer

Table 6

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 “AF OP” or “AF CL”, with “AF OP” being open and “AF CL” 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 Back (←) 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 “FAN” to indicate the fan motor is going to run.

The test must run for at least six seconds before it can be exited and off for six seconds before the test can be run again.

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

To exit Fan Motor Test, press the Back (←) keypad. The control will return to the testing mode.

Damper Motor Test

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 “DAMPEN” to indicate the damper motor is going to run.

The test must run for at least six seconds before it can be exited and off for six seconds before the test can be run again.

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

To exit Damper Motor Test, press the Back (←) keypad. The control will return to the testing mode.

Reverse Motor Test

This option shows the reverse 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 “REVERSE” to indicate the reverse motor is going to run.

The test must run for at least six seconds before it can be exited and off for six seconds before the test can be run again.

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

To exit Reverse Motor Test, press the Back (←) keypad. The control will return to the testing mode.

Rotation Sensor Test

This option shows the RPM of the tumble dryer cylinder.

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 “rPnHHH”. The display is updated every ten seconds. The test must run for at least six seconds before it can be exited and off for six seconds before the test can be run again.

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

To exit Rotation Sensor Test, press the Back (←) keypad. The control will return to the testing mode.

Moisture Sensor Test (Shorted Test Jumper)

This step is skipped if the control is not configured for Moisture Sensing. When entering this test, the control will show “r n l” while flashing the Start LED one second on/one second off, allowing the user to short the cylinder to the baffle (orange jumper). When the Start key is pressed, this test step energizes the Fan Motor Contactor and Forward Motor Contactor and the control will show “ HH”. The moisture sensor test is 30 seconds. During this 30 second period, the control is continually monitoring the moisture sensor input for the expected short circuit. If an intermittent signal or high resistance is sensed before the 30 seconds expire, the test is terminated and the control will show “OPEn”, indicating that the test has failed. At this time the user has the option to press the Back (←) keypad to return and run the test again. If the control ran the whole test reading the expected moisture sensor level and without an intermittent signal or high resistance, “PASS” will be shown. If either the loading or lint doors are opened during the test, the control will reset the test step and allow it to be run again. When the test is complete and result is displayed, the control sounds a 5 second audio signal. Press a key to advance to the next test step. If the Up (↑) or Down (↓) keypad is pressed while the test is in progress the control will toggle between displays “ HH”, “r n l HH” and “SnrHHH”. If the display is left on “r n l HH” or “SnrHHH” for 5 seconds the control will revert to showing “r n l”.

Moisture Sensor Test (Resistance Test Jumper)

This step is skipped if the control is not configured for Moisture Sensing. When entering this test, the control will show “r n l” while flashing the Start key LED one second on/one second off, allowing the user to place the 510k Ohm resistor between the cylinder and the baffle (black jumper) which simulates an expected moisture sensor level. When the Start keypad is pressed, this step energizes the Fan Motor Contactor and Forward Motor Contactor and the control will show “ HH”. The moisture sensor test is 30 seconds. During this 30 second period, the control is continually monitoring the moisture sensor input for the expected moisture sensor level. If an intermittent signal or unexpected resistance is sensed before the time expires, the test is terminated and the control will show “OPEn”, indicating that the test has failed. At this time, the user has the option to press the Back (←) keypad to return and run the test again. If the control ran the test reading the expected moisture sensor level and without an intermittent signal or unexpected resistance, “PASS” will be shown. If either the loading or lint doors are opened during the test, the control will reset the test step and allow it to be run again. When the test is complete and result is displayed, the control sounds a 5 second audio signal. Press a key to advance to the next test step. If the Up (↑) or Down (↓) keypad is pressed while the test is in progress the control will toggle between “ HH”, “r n l HH” and “SnrHHH”. If the display is left on “r n l HH” or “SnrHHH” for 5 seconds the control will revert to showing “r n l”.

Production Test Cycle

To Enter Production Test Cycle

1. Be certain control is in Idle Mode.
2. While pressing and holding the Down (↓) keypad with one hand, press the Back (←) keypad with the other hand.
3. When the control enters the Production Test Cycle, it will first display “5 HH” with the “HH” showing the software version of the control.

4. The control will advance through the sequence of test steps whenever any keypad is pressed, with the exception of the Keypad Test. Refer to *Table 7* for all tests in the Production Test Cycle.

To Exit Production Test Cycle

The test will be exited when the time reaches “00” on the control in the 10 Minute Test Cycle. Otherwise, the control must be powered down to end the test.

Production Test Cycle Quick Reference Table		
Display	Test Mode	Comments
“5 HH”	Software Version	XX is the software version number.
“EE HHH”	Control Type	2, 3, 4, 5 or 6, depending on brand.
“PAd ”	Keypad Test	When a key is pressed, the control will display the number assigned to the keypad. As each keypad is pressed, the control will display the number assigned to it in the last digit of the display until the next key is pressed (example, if Key 1 is pressed the control will show “PAd 1”). When all keypads have been pressed, the control will advance to next step after a one second delay.
“doorOP” or “doorEL”	Loading Door Test	The control will display the status of the loading door: “doorOP” if door is open or “doorEL” if door is closed.
“L intOP” or “L intEL”	Lint Door Test	The control will display the status of the lint door: “L intOP” if door is open or “L intEL” if door is closed. Loading door must be closed.
All LEDs and display segments will light	Show Entire Display Mode	The audio signal is turned off. Control will stay in this mode until any key is pressed.
“E HH”	Machine Configuration #2 Display	HH is the configuration byte value. The control will remain in this mode until any key is pressed.
—	DIP Switch Configuration	The control will show the sum of all switches in the 0n position. The control will remain in this mode until any key is pressed.
Degrees in 5°F (3°C) increments, “SH ”, “OP ”	Thermistor Temperature Test	The temperature will be displayed in either Fahrenheit or Celsius, depending on machine’s configuration (refer to Programming Control). If control senses a shorted thermistor, SH will be displayed. If control senses an open thermistor, OP will be displayed.
—	Moisture Sensor 1 Test (Shorted)	Refer to Diagnostic Test Descriptions . Production test cycle lasts for 15 seconds.
—	Moisture Sensor 2 Test (Resistance)	Refer to Diagnostic Test Descriptions . Production test cycle lasts for 15 seconds.
“00 55”	10 Minute Test Cycle	Determines if tumble dryer can function in a cycle for 10 minutes. Start pad will flash one second on and one second off. The Start pad can be used to decrease time remaining. If Start pad is not pressed within 4.25 minutes, the control will return to Idle Mode.

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

Table 7

Machine Errors

Open Thermistor Error

Any time the control senses a temperature less than 0°F (-18°C) after the first three minutes of an active cycle, the control will go to Cool Down, display this error message, and then turn on the audio signal. The control will continue to display the error message until any of the keypads are pressed, the Cool Down portion of the cycle has ended, and the temperature reading is greater than 0°F (-18°C). Press any keypad to stop audio signal. Once all three occur, the control will return to the Idle Mode.

Shorted Thermistor Error

Any time the control senses a temperature greater than 210 + 4°F (99°C + 16°C) during an active cycle, the control will enter the Cool Down portion of the cycle, display this error message, and turn on the audio signal. The control will continue to display the error message until any of the keypads are pressed, the Cool Down portion of the cycle has ended, and the temperature reading is less than 210°F (99°C). Press any keypad to stop audio signal. Once all three occur, the control will return to the Idle Mode.

Stove and Cabinet Limit Errors

There are up to two Stove Limit thermostats and one Cabinet Limit thermostat on the machine. While the heat relay is on, if the stove temperature or cabinet temperature reaches the high temperature for the particular limit thermostat, the heater will turn off automatically and the control will continue the cycle with no heat until the limit thermostat resets. Once the control reaches the End of Cycle the control will display the appropriate error message, if programmed to do so, and sound the audio signal. The control will continue displaying the error message until the control returns to Idle mode.

NOTE: On some models the stove and cabinet limit thermostats need to be manually reset. The remainder of the cycle will be run with no heat. On these models, the thermostat(s) must be reset prior to cycling power or the control will return back to Error Mode.

Auto Ignition Retry (Gas Models Only)

If the Ignition Control Module (ICM) fails to ignite the gas valve the ICM will send an ICM Lockout Alarm to the control. When the control receives the ICM Lockout Alarm it will increment the ICM Lockout Alarm audit counter.

If the ICM needs to be manually reset, when the control receives the ICM Lockout Alarm it will display the Cycle Stopped Menu with text prompting the user to press the Start keypad to reset the ICM. The user can continue to reset the ICM until there are no more programmable retry attempts (factory default is 3) or the gas ignites. On machines equipped with an ICM that does not need to be manually reset, when the control receives the ICM Lockout Alarm it will turn the heat relay off for twenty (20) seconds and then turn it back on to try and ignite the gas. The control will continue to try and ignite the gas until there are no more programmable retry attempts (factory default is 3) or the gas ignites. If the ICM fails to ignite the gas on the last attempt the control will start the Cool Down portion of the cycle, display the heat error message and sound the audio signal. When the Cool Down portion of the cycle ends the control will continue to display the error message until power is cycled to the machine or a user presses the Back (←) keypad.

Air Flow Switch Errors

The control will flag an Airflow Switch Error under several conditions. Airflow Switch Errors will be processed differently depending upon what state the machine was in when the error was detected.

Airflow Switch Sensed Closed While Not In Run Mode

If an airflow switch is sensed closed 30 seconds after entering Idle Mode, Pause Mode or End of Cycle Mode, the control will display an error message until power is cycled or the error clears. The cycle will not start and all user inputs will be ignored. If the error does clear, the control will go back to its previous mode of operation.

Airflow Switch Does Not Close After Cycle Started

If the airflow switch does not close within 5 seconds of the start/re-start of a cycle, the control will go to the Cool Down portion of the cycle, display an error message and sound the audio alarm. Once the Cool Down portion of the cycle ends, the control will continue to display the error message until the power is cycled to the machine or the Back (←) keypad is pressed.

Airflow Switch Bounces During A Running Cycle

If the airflow switch is open for at least one second, the heat will be turned off and will remain off until the switch is observed closed for at least 5 seconds (it is flagged as an airflow switch bounce). If there are 5 airflow switch bounces within 5 minutes the control will go to the Cool Down portion of the cycle, display an error message and sound the audio signal. When the Cool Down portion of the cycle ends, the control will continue displaying the error message until power is cycled or a user presses the Back (←) keypad.

Rotation Sensor Error

If the machine is equipped with a rotation sensor, the control will constantly monitor the input and calculate the cylinder's rpm. If the rpm drops to zero while the cylinder is supposed to be spinning, the control will go to the Cool Down portion of the cycle. The control will display an error message and sound the audio signal. Once the Cool Down portion ends, the control will continue to display the error message until power is cycled to the machine.

Fan Motor Contactor Error

If the control attempts to turn on the heater relay and the control does not sense that the Fan Motor Contactor is closed, the control will go to the Cool Down portion of the cycle, display an error message and turn on the audio signal. Once the Cool Down portion of the cycle ends, the control will continue displaying the error message until power is cycled or the Back (←) keypad is pressed.

Fan Motor Centrifugal Switch Error

If the control attempts to turn on the fan motor and the fan motor contactor is sensed closed but the Fan Motor Centrifugal Switch fails to close, the control will go into the Cool Down portion of the cycle, display an error message and turn on the audio signal. Once the Cool Down portion of the cycle ends, the control will continue displaying the error message until power is cycled or the Back (←) keypad is pressed.

DIP Switch/Harness Index Mismatch Error

On power up the control reads the Temperature Index Harness value and compares that with the value of switch 1, switch 2 and switch 3 on the DIP switch configuration. If the result is an invalid setup the control will not enter Idle mode and instead enter Error Mode. The control will ignore all user inputs and display an error message. The machine must be powered down and the correct temperature index harness must be installed and/or the DIP switch configuration must be corrected.

Moisture Sensor Error

When in Idle Mode, the control will begin to monitor the moisture sensor input. If the moisture sensor circuitry detects a load present signal read consistently (every second) for a ten minute period without user input, the control will declare a load sensed. If at any time during this sensing period, user input is detected or the control determines that there is no load present, it resets the load detected counter. After this ten minute period with a consistent load sensed, the control queues the “is dryer empty” (display “15”, “drYEr”, “EmPtY” each for two seconds) prompting the user to answer whether the machine is currently empty, pressing the Up (↑) or Down (↓) keypads will toggle between yes and no. If the operator selects “no” (display “nO”), the control returns to the Idle Mode display. If the operator selects “yes” (display “YEs”) the control will increment the Moisture Sensor Error counter and record the error in the queue of the last eight machine errors and display the Moisture Sensor Error (display “EmO 15t”), pressing the Back (←) keypad will clear the error. The “is dryer empty” prompt will only appear once a day unless machine power is cycled.

Error Codes

Following is a list of possible error codes for an electronic control. All errors refer to machine errors.

Display	Description	Cause/ Corrective Action
<i>ESH</i>	Shorted Thermistor Error	Remove any lint build-up around thermistor. If problem persists, replace control or thermistor.
<i>EOP</i>	Open Thermistor Error	Remove any lint build-up around thermistor. If problem persists, replace control or thermistor.
<i>E AF 1</i>	Airflow Switch Error (Switch Fails to Open At End of Cycle)	Inspect lint screen and ductwork. Once error is cleared, control will go back to previous mode of operation.
<i>E AF2</i>	Airflow Switch Error (Switch Does Not Close After Cycle Starts)	Inspect lint screen and ductwork. Cycle power to machine (power down, then power up) or push Back (←) keypad.
<i>E AF</i>	Airflow Switch Error (Switch Bounces During Cycle)	Inspect lint screen and ductwork. Cycle power to machine (power down, then power up) or push Back (←) keypad.
<i>E HEAL</i>	Machine Did Not Reach Expected Temperature	Check heating connections, cycle power to machine.
<i>E SL</i>	Stove Limit 1 Error	Remove any lint build-up around thermostat. If problem persists, replace control or thermostat.
<i>E SL2</i>	Stove Limit 2 Error	Remove any lint build-up around thermostat. If problem persists, replace control or thermostat.
<i>E CAB</i>	Cabinet Limit Error	Remove any lint build-up around thermostat. If problem persists, replace control or thermostat.
<i>E ICM</i>	ICM Lockout Alarm Active	Check that gas is turned on and that ignition cable is connected securely. If problem persists, replace control.
<i>E rot</i>	Rotation Sensor Error	Check for broken or worn belts. Make sure machine is not over loaded and check if rotation sensor is working. If problem persists, replace rotation sensor or control.
<i>ESEtUP</i>	DIP Switch Configuration Size Mismatch Error	Check temperature index harness and dipswitch settings. If problem persists, replace temperature index harness or control.
<i>E FCDn</i>	Fan Motor Contactor Error	Check signal to control. If problem persists, replace fan motor or control.
<i>E FmCS</i>	Fan Motor Centrifugal Switch Error	Check signal to control. If problem persists, replace fan motor or control.
<i>Eno iSt</i>	Moisture Sensor Error	Push Back (←) keypad to clear the error.

Table 8

Cycle Charts

Cycle No	Cycle Name	Cycle Type	Material Type	Reversing	Temperature	Target Moisture or Time
1	Towels	Moisture	Cotton	OFF	190°F/88°C	1%
2	Sheets Blend	Moisture	Bedding	ON	160°F/71°C	5%
3	Sheets Cotton	Moisture	Bedding	ON	190°F/88°C	5%
4	Sheets Blend Iron	Moisture	Bedding	ON	160°F/71°C	20%
5	Sheets Cotton Iron	Moisture	Bedding	ON	190°F/88°C	20%
6	Duvet Cotton	Moisture	Bedding	ON	190°F/88°C	5%
7	Duvet Blend	Moisture	Bedding	ON	160°F/71°C	5%
8	Napkins Synthetic	Moisture	Synthetic	OFF	140°F/60°C	3%
9	Napkins Blend	Moisture	Blend	OFF	160°F/71°C	3%
10	Napkins Synthetic Iron	Moisture	Synthetic	OFF	140°F/60°C	20%
11	Napkins Blend Iron	Moisture	Blend	OFF	160°F/71°C	20%
12	Napkins Cotton Iron	Moisture	Cotton	OFF	190°F/88°C	20%
13	30 Min High	Time Dry	Not Applicable	OFF	190°F/88°C	30 minutes
14	30 Min Med	Time Dry	Not Applicable	OFF	160°F/71°C	30 minutes
15	30 Min Low	Time Dry	Not Applicable	OFF	140°F/60°C	30 minutes
16	30 Min No Heat	Time Dry	Not Applicable	OFF	Not Applicable	30 minutes
17	15 Min High	Time Dry	Not Applicable	OFF	190°F/88°C	15 minutes
18	15 Min Med	Time Dry	Not Applicable	OFF	160°F/71°C	15 minutes
19	15 Min Low	Time Dry	Not Applicable	OFF	140°F/60°C	15 minutes
20	15 Min No Heat	Time Dry	Not Applicable	OFF	Not Applicable	15 minutes

- All cycles include a 2 minute, 100°F (38°C) cool down.
- All cycles with reversing on rotate for 120 seconds and pause for 6 seconds.
- Cool down and reversing settings can be changed from what is pre-programmed from the factory.
- If machine does not have the moisture sensing option, the moisture sensing cycles in the table above are automatically changed to auto-dry with moisture level 0 (zero).

