



Maytag
Multiload Dryer
Microprocessor
User's Manual
Phase 8.1 / 8.2 / 8.3
***Rev 2.6 Coin* / Rev 3.2 Non-Coin**

Retain These Instructions
In A Safe Place For Future Reference

Whirlpool Corporation
Commercial Laundry
Benton Harbor, MI 49022
1-800-662-3587

General User Information

Coin Models

Cold Start (Initial / First Use)

Appliance is programmed at the factory as follows:

Dryer

6 min. dry time/quarter (coin 1)

\$.25 dry price

Warm Start (After Power Failure)

A few seconds after power is restored, if a cycle was in progress at the time of the power failure, the display will prompt "Select Cycle to Restart". This is to indicate the need for a fabric setting keypad to be pressed to restart dryer.

Pricing

After the door is opened following the completion of a cycle, the display indicates the cycle price (unless set for free operation). As coins or debit inputs arrive, the display will change to lead the user through the initiation of a cycle.

There are 3 types of pricing:

Fixed Cycle

A dryer set up for "Fixed Cycle" operation can only accept additional time accumulated by increments equal to the cycle price.

Top Off

A dryer set to offer "Top Off" capability will allow time to be added to an existing dry cycle in increments equal to the number of minutes of dry time per quarter (coin 1), up to 99 minutes, regardless of the cost required to start the machine. When the cycle price is not the same as the denomination of coin 1, credit in escrow will be applied at a maximum of the cycle price per keypad press. When the cycle price is equal to coin 1, all credit in escrow will be applied with a single keypad press (Accumulator Mode).

NOTE: A maximum of 99 minutes may be purchased; no additional credit is given when 99 minutes is in the display.

Free Cycles

This is established by setting the cycle price to zero. When this happens "SELECT CYCLE" will appear rather than a cycle price. When the cycle price is set to zero, only one cycle time is allowed to run. Multiple keypad presses will not add time and a free cycle will not automatically terminate when the door is opened.

Introduction to Programming

The keypad, along with the digital display, is used to setup the dryer control.

Entering and Exiting Service Mode

Entering:

Coin / Debit Models

Use service key to activate service mode.

Exiting:

The ENTER (**NORMAL**) keypad must be depressed to save any changes that have been made.

Coin / Debit Models

Return service key back to its normal position.

How to use the Keypad to Program Controls

Coin / Debit Controllers

The **HEAVY DUTY** keypad is used to increase numbers and scan through menu locations.

The **NORMAL** keypad will enter program locations and save changes made.

The **DELICATE** keypad is used to decrease numbers and scan through menu locations.

To back out of a program location hold the **DELICATE** keypad press **NORMAL**.

Programming

Coin / Debit Models

Example Changing

"Time for Amount to Start"

Below are instructions explaining how to change the time allotted for the start price on coin machines for all temperatures. This is meant to be an example as there are many options and ways to program this controller. All programming parameters and options are explained in the following section "programming selections".

1. Use the service key to transition the keypad switch.

NOTE: Be sure the computer has no credit or time existing before performing this action.

2. Press the **DELICATE** keypad once to highlight "Program Setup" and then press the **NORMAL** keypad to select.
3. Press the **DELICATE** keypad five times to highlight "VENDING OPTIONS keypad settings" and then press the **NORMAL** keypad to select.
4. Press the **NORMAL** button to select "REGULAR CYCLE TIME".
5. Use the **DELICATE** or **HEAVY DUTY** buttons to raise or lower the amount of minutes shown in the screen to the desired amount and then press the **NORMAL** keypad to save your change.
6. Press the **DELICATE** keypad once to highlight "REGULAR CYCLE PRICE" then press the **NORMAL** keypad to select.
7. Use the **DELICATE** or **HEAVY DUTY** buttons to raise or lower the price shown in the screen for the amount of minutes determined in step 5 to the desired amount and then press the **NORMAL** keypad to save your change.
8. Transition the key switch back to the normal position and remove key.

Quick Reference Programming Menu for Coin / Debit / Free Models

MACHINE INFO

MONEY
REG CYCLE
SPEC CYCLE
SERIAL NUMBER
SOFTWARE REV

PROGRAM SETUP

CONTROL SETTINGS

LANGUAGE (ENGLISH, FRENCH, SPANISH)
TEMP SCALE (°F, °C)
DECIMAL POINT (DECIMAL, NO DECIMAL)
TOP BACK LIGHT (0-200)
BOTTOM BACK LIGHT (0-200)

MACHINE SETTINGS

MODEL (REVERSING / NON-REVERSING)
LINT CLEANING FREQUENCY (0-3 Hours)
AXIAL MAX TEMP (100-180 F / 38-82 C)

HEAVY DUTY

DRY TEMP (100-160 F / 38-71 C)
COOL TIME (2-9 Minutes)*
REVERSING MODE (OFF / ON)

NORMAL

DRY TEMP (100-160 F / 38-71 C)
COOL TIME (2-9 Minutes)*
REVERSING MODE (OFF / ON)

DELICATE

DRY TEMP (100-160 F / 38-71 C)
COOL TIME (2-9 Minutes)*
REVERSING MODE (OFF / ON)

VENDING OPTIONS

REG CYCLE TIME (1-99 MIN)
REG CYCLE PRICE (0-9.95)
SPECIAL PRICING (OFF / ON)
SPEC CYCLE TIME (1-99 MIN)
SPEC CYCLE PRICE (0-9.95)
VENDING MODE (TOP OFF / FIXED CYCLE)
COIN 1 (0.5 - 9.95)
COIN 2 / TOP OFF (0.5 - 9.95)
ADD COINS MODE (OFF / ON)
PRICE SUPPRESS (OFF / ON)
PAYMENT MODE (COIN & DEBIT / COIN / DEBIT / ENHANCED DEBIT)
CLEAR ESCROW (OFF / ON)
PENNY INCREMENT (0-4)

COUNT SETTINGS

CYCLE COUNT OPT (OFF / NON RESETTABLE)
CYCLE COUNT (REG CYCLE / SPECIAL CYCLE)
MONEY COUNT OPT (OFF / NON RESETTABLE)
MONEY COUNT (VAULT / RESET)
VAULT VIEWING (OFF / ON)

CLOCK SETTINGS

CURRENT HOURS (0-23)
CURRENT MINUTES (0-59)
CURRENT DAY (SUNDAY-SATURDAY)
VIEW CLOCK (TIME / DAY)
SPECIAL START (0-23)
SPECIAL STOP (0-23)
SPECIAL DAY (SUNDAY-SATURDAY)

* NOTE for MLG52XXXX and MDG52XXXX, COOL TIME (3-9 Minutes)

DIAGNOSTIC MODE

FAULT RECORDING
DIAGNOSTIC CYCLE
HELP MODE
FACTORY SETTINGS

KEY FUNCTIONS

DELICATE

Scroll down / decrease value

HEAVY DUTY

Scroll up / increase value

NORMAL

Accept selection

Hold DELICATE, then press
NORMAL to back out of a
location.

Programming Selections

Coin / Debit Models

MAIN MENU

When service mode is first entered, the control will enter the SERVICE MODE main menu. This main menu will serve as the gateway to all of the service mode features. The features include MACHINE INFO, PROGRAM SETUP, and DIAGNOSTIC MODE.

NOTE: If a fault occurs while in normal operation, and the faults were not cleared, then these faults will be displayed in the upper display when the SERVICE SWITCH has been transitioned. Pressing the NORMAL keypad will enable the user to enter into service mode.

SERVICE MODE
1: MACHINE INFO
2: PROGRAM SETUP
3: DIAGNOSTIC MODE

The HEAVY DUTY/UP ARROW and the DELICATE/DOWN ARROW keypads will enable the user to scroll through all the menu items.

Each menu in service mode will contain a list of selectable items. The use of the HEAVY DUTY/UP ARROW and the DELICATE/DOWN ARROW keypads on the keypad will enable the currently selected item to change. The currently selected menu item will appear with a box around it.

If the menu contains a list of items that will lead to a sub-menu, then the items will be listed in ascending numbered order starting at one (1). Once the item is selected and entered, the controls will go to the sub-menu.

If the menu item does not lead to a sub-menu, the items will only be listed and not numbered. When the item is selected and entered, the selected item will become highlighted.

Some of these items without a sub-menu do contain selectable parameters. These parameters will be viewed to the right of the item. Once the item is highlighted, the parameter can be changed.

1: MACHINE INFORMATION

Machine information will display the MONEY, REGULAR CYCLES, SPECIAL CYCLES, SERIAL NUMBER, and the SOFTWARE REV. All of the items on the MACHINE INFORMATION SCREEN will be read only.

MACHINE INFO

MACHINE INFORMATION	
MONEY:	XX.XX
REG CYCLES:	XXXXXX
SPEC CYCLES:	XXXXXX
SERIAL NUMBER:	123456
SOFTWARE REV:	105

NOTE: The serial number displayed here may not be accurate if changes have been made to the dryer. Always check the serial plate located on the back of the dryer when ordering parts or requesting service.

Actual listing will be as follows:

MONEY:	XX.XX	Money Amount of coin accumulated since last cleared.
REG CYCLES:	XXXXXX	Regular cycles Total amount of regular cycle run.
SPEC CYCLES:	XXXXXX	Special cycles Total amount of special cycles run.
SERIAL NUMBER:	XXXXXX	Serial number The 6 digit serial number entered by the factory.
SOFTWARE REV:	XXX	Software revision The software revision loaded on the control board.

NOTE: If money count option is off, the MONEY location will have a value of 0. Similarly, if cycle count is off, the REG CYCLES and SPEC CYCLES locations will have a value of 0.

2: COIN MODEL PROGRAM SETUP

While the control is displaying "SERVICE MODE" and PROGRAM SETUP is highlighted, press the NORMAL keypad to enter this menu.

NOTE: All default settings are illustrated in underlined bold italics.

1: CONTROL SETTINGS

CONTROL SETTINGS
1: LANGUAGE
2: TEMP SCALE
3: DECIMAL POINT
4: (TOP) BACKLIGHT
5: BOTTOM BACKLIGHT*

1: LANGUAGE

1 MULTILANGUAGE OFF / ON

2 LANGUAGE 1 ENGLISH
FRENCH
SPANISH

3 LANGUAGE 2 ENGLISH
FRENCH
SPANISH

2: TEMP SCALE – will display temperatures as degrees Fahrenheit or Celsius.
°F / °C

3: DECIMAL POINT – changes type of symbol displayed with amounts of money displayed.
DECIMAL or NO DECIMAL

4: TOP BACKLIGHT – adjusts brightness of top display.
0 (adjustable from 0 to 200 where 0 = brightest and 200 is dimmest)

5: *BOTTOM BACKLIGHT – adjusts brightness of bottom display.
0 (adjustable from 0 to 200 where 0 = brightest and 200 is dimmest)

* Only on stack dryers.

2: MACHINE SETTINGS

1: MODEL – Reversing / **NON-REVERSING**

2: LINT CLEAN FREQ. – adjusts time between prompts to clean lint.
2 (adjustable between 0-3 hours)

NOTE: When the lint frequency is set to 0, the request to clean lint will occur at the end of each cycle run.

3: AXIAL MAX TEMP – adjusts axial probes set temperature
180 (adjustable between 100 - 180° F / 38 - 82° C)

3: HEAVY DUTY

1: DRY TEMP
160 (100 - 160° F / 38 - 71° C)

2: COOL TIME
2 (2 - 9 minutes)*

3: REVERSING
OFF/ON

4: NORMAL

1: DRY TEMP
130 (100 - 160° F / 38 - 71° C)

2: COOL TIME
2 (2 - 9 minutes)*

3: REVERSING
OFF/ON

5: DELICATE

1: DRY TEMP
120 (100 - 160° F / 38 - 71° C)

2: COOL TIME
2 (2 - 9 minutes)*

3: REVERSING
OFF/ON

* NOTE for MLG52XXXXX and MDG52XXXXX, COOL TIME
3 (3 - 9 minutes)

6: VENDING OPTIONS

1: REG. CYCLE TIME – adjusts number of minutes per regular cycle price.
6 (1 - 99 minutes)

2: REG. CYCLE PRICE – adjusts the amount required to start a cycle.
.25 (0.00 - 9.95) this number will increment in 5 cent intervals.

NOTE: When the cycle price is set to 0, only one (1) cycle time is allowed to run. Multiple keypad presses will not add time and opening the main door will clear all remaining time.

3: SPECIAL PRICING **OFF/ON**

4: SPECIAL CYCLE TIME – adjusts number of minutes per special cycle price.
6 (1-99 minutes)

5: SPECIAL CYCLE PRICE – adjusts the amount required to start a cycle for special cycles.
.25 (0.00 - 9.95) this number will increment in 5 cent intervals.

NOTE: When the cycle price is set to 0, only one (1) cycle time is allowed to run. Multiple keypad presses will not add time and opening the main door will clear all remaining time.

6: VENDING MODE – refer to general user information for explanation.
TOP OFF / FIXED CYCLE

7: COIN 1 – adjusts the numerical value of coin input 1.
.25 (0.00 - 9.95) this number will increment in 5 cent intervals.

8: COIN 2 / TOP OFF – adjusts the numerical value of coin input 2 unless computer is set to enhanced debit, then the number will be the top off amount.
1.00 (0.00 - 9.95) this number will increment in 5 cent intervals.

9: ADD COINS MODE – when ON is selected, display will view number of coins required rather than their numerical value.
OFF/ON

10: PRICE SUPPRESS – when ON is selected, display will show “available” or “add” rather than the numerical value of the money to be added.
OFF/ON

11: PAYMENT MODE
COIN AND DEBIT
COIN ONLY
DEBIT ONLY
ENHANCED DEBIT

NOTE: When a Gen 2 debit card system is connected to the control, this option will automatically change to ENHANCED DEBIT.

12: CLEAR ESCROW – when ON, money will be held in escrow for 30 minutes and without further escrow or cycle activity will be cleared.
OFF/ON

13: PENNY INCREMENT
0 (0 - 4)

This menu item will only be available if the payment mode is set for debit card systems.

7: COUNT SETTINGS

1: CYCLE COUNT OPT
OFF
NON RESETTABLE

Once this item is turned to NON RESETTABLE, it can not be shut off!

- 2: CYCLE COUNT
REGULAR CYCLES -XXXXXX
SPEC CYCLES -XXXXXX
- 3: MONEY COUNT OPT
OFF
ON
NON RESETTABLE
Once this item is turned to NON RESETTABLE, it can not be turned on or shut off!
- 4: MONEY COUNT
VAULT XXXXXX
(If money count option is off,
this value will equal 0)
RESET
NO / YES
- 5: VAULT VIEWING
OFF / ON
- 8: CLOCK SETTINGS
- 1: CURRENT HOUR
00 - 23 (Hour) (After the time is set, the RAM
setting will be used as default)
- 2: CURRENT MINUTES
00 - 59 (Minute) (After the time is set, the RAM
setting will be used as default)
- 3: CURRENT DAY
SUNDAY (After the day is set, the RAM
setting will be used as default)

MONDAY
TUESDAY
WEDNESDAY
THURSDAY
FRIDAY
SATURDAY
- 4: VIEW CLOCK
HOUR: MINUTES: SECONDS (In Military Time)
CURRENT DAY
- NOTE:** Time setting will not progress when power is disconnected. The time clock will continue running, only if optional battery is connected.
- 5: SPECIAL START
00 - 23 (Hour)
- 6: SPECIAL STOP
00 - 23 (Hour)
- 7: SPECIAL DAY
Once a special day has been turned on, that day will now be highlighted once this menu is viewed.
- 1: SUNDAY OFF / ON
2: MONDAY OFF / ON
3: TUESDAY OFF / ON
4: WEDNESDAY OFF / ON
5: THURSDAY OFF / ON
6: FRIDAY OFF / ON
7: SATURDAY OFF / ON

Diagnostic Cycle Coin / Debit

Diagnostic mode enables the user to run the dryer(s) and access items to troubleshoot a problem with the dryer.

When the diagnostic menu is first selected, the controls will prompt the user to start a cycle as seen below. This prompt will be seen on both displays.

DIAGNOSTIC MODE
SELECT CYCLE

NOTE: Once a cycle is selected, the control will clear the fault condition so that dryer can be started. This will also clear all credit in escrow and any cycle time remaining on both pockets.

When the dryer is still in an idle state, one of the three cycles must be selected. Once a cycle is selected on one of the pockets, that pocket will enter into running mode. The time of the selected cycle will be equal to the value entered as the "regular cycle time" under "vending parameters". The cycle's temperature will correspond to the selected cycle's parameter settings under SETUP mode.

Once a cycle has been selected the temperature keys will now enable the user to access different features.

- Pressing the "HEAVY DUTY" keypad will add time to current running cycle. (1 minute at a time)
- Pressing the "NORMAL" keypad will pause the current running cycle.
- Pressing the "DELICATE" keypad will access the HELP MENU.

NOTE: If the service switch is toggled while a diagnostic cycle is running and no diagnostic codes are being reported, the current diagnostic cycle will continue to run in the normal Customer Mode.

When a cycle is running, the control will display DIAGNOSTIC MODE at the top of the display.

If a fault occurs during diagnostic mode, the control will enter into a fault cool down and the occurring fault will be displayed. The fault can be cleared by reentering the diagnostic cycle.

The help menu allows the user to view the status of different parts of the dryer. When a feature is highlighted, the center section will list that feature and its current status. The items in the help menu will refer to the current running cycle that was selected in diagnostic mode.

EXH	AXL	RPM 0
MIN		CODES
SAIL SWITCH		T1
ON		H1
		C1
B F	D L	S V

Pressing the HEAVY DUTY keypad will allow the user to move the highlighted bar around the help menu screen. The screen shot above shows "S" highlighted. Highlighting "S" will show the status of the sail switch.

Pressing the DELICATE keypad will return the controls to diagnostic mode.

The table below shows the standard features available and the symbol they correlate with.

Pressing the DELICATE keypad will return the controls to diagnostic mode.

Codes can be cleared by pressing NORMAL while “codes” are selected or by selecting Reset Under Events - Fault Recording.

FEATURE SYMBOL	FEATURE TEXT (1st line of 2nd section)	FEATURE	FEATURE INFORMATION (2nd line of 2nd section)
B	BLOWER	Fan output	ON - OFF
F	FORWARD	Forward drive output	ON - OFF
D	DOOR	Main Door	OPEN - CLOSED
L	LINT	Lint Door	OPEN - CLOSED
AXL	AXIAL TEMP PROBE	Axial Thermistor Probe	In Deg. °F or °C
CODE	HELP CODE MENU	Help Menu Code	See Help Code Chart Below
RPM	TUMBLER ROTATION SPEED	Tumbler Speed in Revolutions Per Minute	Revolutions per Minute
EXH	EXHAUST TEMP PROBE	Exhaust Temperature Probe	In Deg. °F or °C
S	SAIL SWITCH	Sail Switch	OPEN - CLOSED
T1	THERMOSTAT BURNER 1	Thermostat (Heat Output Burner 1)	ON - OFF
H1	HEAT RETURN BURNER 1	Heat Return Burner 1	ON - OFF
C1	HEAT RELAY 1 CONTACTS	Heat relay 1 contacts	OPEN - CLOSED
V	VAULT SWITCH	Vault Switch	OPEN - CLOSED

If the help menu feature “CODE” is selected, the center section will present “help codes”, and “events”. All of the items in the code menu will automatically scroll up and continue to scroll until HEAVY DUTY is pressed to select a new help menu feature.

All CODES starting with an “H” represent some condition that could interfere with the proper functioning of the dryer. This would include communications problems between the control board and a debit card reader. There could be up to 3 “H” codes listed within the HELP MENU.

- H1 represents the last failure recorded.
- H2 represents the second to last failure recorded.
- H3 represents the third to last failure recorded.

Each help code will be followed by a two (2) digit code. This (2) digit code will reflect a particular issue.

HELP CODE	CODE DESCRIPTION
71	Card balance message received from Gen 2 card reader at improper time.
74	Remaining balance message received from Gen 2 card reader at improper time.
75	Cycle selected polling message received from Gen 2 card reader at improper time.
81*	Lower Exhaust Probe Fault
86	(Upper) Exhaust Probe Fault
87	(Upper) Axial Probe Fault
82*	Lower Axial Probe Fault
89	(Upper) Sail Switch Open Fault
88	(Upper) Sail Switch Closed Fault
84*	Lower Sail Switch Open Fault
83*	Lower Sail Switch Closed Fault

* Only on stack dryers.

Screen Layout

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EXH 160    AXL 180    RPM 45
MIN 12                                CODES
CODES      H 1.01      T1
            H 2.01      H1
            R 0:00      C1
B F        D L        S V

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If a fault occurs while in help mode, the fault will be displayed as a Help Code or event code.

- Pressing DELICATE will return you to the HELP MODE screen.
- Pressing and holding DELICATE and NORMAL for 3 or more seconds will clear the fault and return you to the Diagnostic Cycle start up screen.

The last item listed in the code menu will identify the revision of the software that is being used on the control board.

Faults

(D17 Upper or Single) (D6 Lower)* Exhaust Probe

An exhaust probe fault occurs when the control detects that the exhaust temperature transducer is reading a temperature that is out of the probe’s normal operating temperature range for more than 3-seconds. There is an automatic fault clearing feature for this fault. If the fault condition no longer exists, the control will clear the fault condition and return to READY Mode.

**(D18 Upper or Single)
(D2 Lower)* Axial Probe**

An axial thermistor probe fault occurs when the control detects that the axial thermistor is reading a temperature that is out of the probe's normal operating temperature range for more than 30-seconds, usually an open or shorted probe condition. There is an automatic fault clearing feature for this fault. If the fault condition no longer exists, the control will clear the fault condition and return to READY Mode.

**(D21 Upper or Single)
(D7 Lower)* Sail Switch Closed**

A sail switch closed fault occurs when a cycle is starting up from either READY Mode, PAUSE Mode or any other idle state. Once a temperature/cycle is selected the control will start the time and verify the sail switch is open, if it is not, the control will display on the screen that the control is "STARTING" and will not turn on the FAN, DRIVE or HEAT. The control will allow the sail switch 10-seconds to open before the control faults out with a SAIL SWITCH CLOSED FAULT. Once a SAIL SWITCH CLOSED FAULT is detected the control will log the fault and will not allow the cycle to continue. The control will display "SAIL SWITCH CLOSED FAULT, SELECT CYCLE TO RESTART, when the fault is detected.

**(D20 Upper or Single)
(D4 Lower)* Sail Switch Open**

A sail switch open fault occurs when a cycle is starting from either READY Mode, PAUSE Mode or any other idle state. If the sail switch does not close within the allotted 10-seconds the control will log the fault and will not allow the cycle to continue. The control will display "SAIL SWITCH OPEN FAULT, CHECK MAIN DOOR AND LINT ACCESS AND SELECT CYCLE TO RESTART". A sail switch open fault can also occur once a cycle is in process. If the control detects that the sail switch has opened, the heat will immediately turn off and if the sail switch fails to close within the allotted 30-seconds, the control will fault and display "SAIL SWITCH OPEN FAULT, CHECK MAIN DOOR AND LINT ACCESS AND SELECT CYCLE TO RESTART".

**(D22 Upper or Single)
(D8 Lower)* Latched Heat Relay**

A latched heat relay fault occurs when the control detects that the heat relay contacts are closed when the heat output should be off. In the event the control detects that the relay is closed and the heat signal should be off, the control will immediately shut down and will open the interposing relay.

**(D23 Upper or Single)
(D15 Lower)* Burner Return Voltage**

A burner return voltage fault occurs when the control detects that the burner return signal is active but the heat relay contacts are open and the heat output should be off. In the event the control detects that the signal is active and the heat signal should be off, the control will immediately shut down and will open the interposing relay.

**(D14 Upper or Single)
(D12 Lower)* Rotation Sensor Fault**

A rotation sensor fault occurs when the control is in a cycle and does not detect any rotation sensor pulses in more than 10-seconds.

**(D19 Upper or Single)
(D3 Lower)* Exhaust High Temp Fault**

An exhaust high temperature fault occurs when the exhaust probe is detecting a tumbler temperature that is 20° F above the maximum dryer temperature set point for more than 10-seconds.

**(D5 Coin 1)
(D13 Coin 2) Blocked Coin Drop**

This fault occurs if the control senses a blockage in the coin input. If the coin input is blocked for more than 8-seconds the control will go to out of order and will not allow the control to start a cycle. This fault has both automatic and manual fault clearing. If the condition is corrected the control will recover from out of order immediately after the blockage is no longer seen.

**(D16) Gen 2 Card Reader
Communication Fault**

This fault occurs when the control has not received a health check function from the Gen 2 debit card reader in 30-seconds. If this fault occurs in Ready or Vending Modes, the control will log the fault and display "OUT OF ORDER". Once the control enters READY Mode and the fault has not been corrected or cleared, the control will display "OUT OF ORDER". The fault is self clearing; therefore, once communication is reestablished, the control will clear the OUT OF ORDER condition and allow full dryer functionality again.

* Only on stack dryers.

Events Coin / Debit

**(E1 Upper or Single)
(E4 Lower)* Radiant Sensor Fault Count**

A radiant sensor fault count will occur when a gas model dryer attempts to turn on the burner system and never receives a 120V return signal within a predefined time.

**(E2 Upper or Single)
(E5 Lower)* Burner Igniter Fault Count**

A burner ignition fault count will occur when a gas model dryer attempts to turn on the burner system and receives a 120V on the burner return signal but it does not transition to a 0V return signal within a predefined time.

**(E3 Upper or Single)
(E6 Lower)* Exhaust High Limit**

This location is a count of the times that the exhaust high limit has been sensed in the open position.

**(E7 Coin 1)
(E8 Coin 2) Bad Coin Count**

This location is a count of all the bad coin occurrences that were detected from the coin input.

* Only on stack dryers.

**(E9 Upper or Single)
(EB Lower)* Forward Rotation Sensor Fault**

A forward rotation fault pertains only to reversing machines. The way this fault works is if the dryer is reversing and is running a cycle that has the reversing option enabled, if a rotation sensor fault condition is detected, the drive output would be shut off. Then the dryer will transition to a reversing drive output. If the dryer continues to run without an issue, the machine will continue to run with the forward drive output disabled until the next cycle is started. If the Reversing Mode also fails the control will enter a ROTATION SENSOR FAULT disabling the machine. The next cycle should operate with both drive outputs, that way, if the issue still exists the control will fault out again disabling the fault drive output.

**(EA Upper or Single)
(EC Lower)* Reverse Rotation Sensor Fault**

REVERSE ROTATION SENSOR FAULT is identical to FORWARD ROTATION FAULT, however it pertains to the reversing drive output instead of the forward drive output.

* Only on stack dryers.

NOTES _____

**General User Information
Non-Coin Models
“OPL Dry Mode”**

Cold Start (Initial / First Use)

This appliance has 20 preset cycles, which are ready for use. To start the unit, use the UP (↑) and DOWN (↓) ARROW keypads to scroll through the preset cycles, until the desired cycle is highlighted, then press the START/ENTER (✓) keypad. A detailed description of the preset cycles is on a chart on page 13. While a cycle is running you can press the STOP (X) button once to pause the cycle or twice to clear it completely.

Hot Keys

Clear Current Drying Cycle

While machine is idle displaying “CYCLE PAUSED RESTART CYCLE” OR “PRESS PAUSE TO CLEAR”, press the STOP (X) keypad and the cycle will be terminated.

Clear Fault Message

While machine is displaying any fault message press and hold the STOP (X) keypad for 3-seconds.

Introduction to Programming

The keypad, along with the digital display, is used to setup the dryer control.

Entering and Exiting Service Mode

Entering:

Non-Coin (OPL) Models

To enter the Program Mode you must hold the STOP (X) keypad and the UP ARROW (↑) keypad down.

Exiting:

The ENTER (✓) keypad must be depressed to save any changes that have been made.

Non-Coin (OPL) Models

Exit Service Mode by pressing the STOP (X) keypad.

How to use the Keypad to Program Controls

Non-Coin (OPL) Controllers

The UP ARROW (↑) is used to increase numbers and scan through menu locations.

The DOWN ARROW (↓) is used to decrease numbers and scan through menu locations.

The START/ENTER (✓) keypad will enter program locations and save changes made.

To back out of a menu location hit the STOP/PAUSE (X) keypad.

Before proceeding it is worth noting that, it is not required to do any programming to use. The controls are preset.

Quick Reference Programming Menu for Non-Coin (OPL) Models

MACHINE INFO

HOURS
SERIAL NUMBER
SOFTWARE

PROGRAM SETUP

KEYPAD FUNCTIONS

DOWN ARROW (↓)
Scroll down / decrease value

UP ARROW (↑)
Scroll up / increase value

ENTER (✓)
Accept selection

PAUSE / STOP (X)
Back out of a location

CONTROL SETTINGS

LANGUAGE MULTI LANGUAGE (LANGUAGE 1, LANGUAGE 2)
TEMP SCALE (°F, °C)
BUZZER SETTINGS (END OF CYCLE, BEEP COUNT)
BACKLIGHT (0-200)

MACHINE SETTINGS

LINT CLEANING FREQUENCY (0-3 HOURS)
AXIAL MAX TEMP (100° - 180° F / 38° - 82° C)
BURNER SETUP ONE BURNER / TWO BURNERS
AUTO ADJUST (1-255)
SEARCH PERIOD (1-255)

VENDING OPTIONS

DEBIT CARD SETUP (OFF, GEN 1, GEN 2)

DIAGNOSTIC MODE

FAULT RECORDING
DIAGNOSTIC CYCLE
HELP MENU

MACHINE SETUP

Note: this location is password protected (password is enter [✓] keypad four times).

MODEL

GAS NON-REVERSING, ELECTRIC NON-REVERSING,
STEAM NON-REVERSING,
GAS REVERSING, ELECTRIC REVERSING, STEAM REVERSING

DRYER TYPE

COIN / FREE
OPL

FACTORY SETTINGS

Note: this location is password protected (contact factory if information is necessary)

DRYER CYCLES

DENIM
HEAVY
TOWELS
HAND TOWELS
HEAVY DUTY
SHEETS
COTTONS
DELICATE
EXTRA DELICATE
WRINKLE REMOVAL
TOUCH UP
CASUAL
DUVET
HAND WASH
SILK
WOOLENS
AIR
NEW CYCLE 1
MOP HEADS

Choosing Cycle to Program

Non-Coin (OPL) Factory Preset Programs / Parameters

The following are the default cycle descriptions:

Cycle	Name	Cycle Type Auto / Manual	Dryness			Cool Down (Manual Only)		Reversing		
			Time Manual Only	Level Auto Only	Temp 100° F - 160° F 38° C - 71° C	Time 2-99 min.	Temp 70° F - 100° F 21° C - 38° C	Mode Off / On	Spin 120-240 sec.	Stop 5-10 sec.
1	DENIM	AUTO	50	DRY	160° F / 71° C	4	100° F / 38° C	ON	240	5
2	HEAVY	AUTO	50	DRY	155° F / 68° C	4	100° F / 38° C	OFF	240	5
3	TOWELS	AUTO	40	XDRY	160° F / 71° C	2*	100° F / 38° C	ON	240	5
4	HAND TOWELS	AUTO	40	DRY	155° F / 68° C	2*	100° F / 38° C	OFF	240	5
5	HEAVY DUTY	AUTO	40	XDRY	155° F / 68° C	2*	100° F / 38° C	OFF	240	5
6	HEAVY DUTY	AUTO	40	DRY	145° F / 63° C	2*	100° F / 38° C	ON	240	5
7	SHEETS	AUTO	40	DRY	141° F / 61° C	2*	100° F / 38° C	ON	60	5
8	COTTONS	AUTO	40	FIN	140° F / 60° C	2*	100° F / 38° C	OFF	240	5
9	DELICATE	AUTO	40	FIN	130° F / 54° C	2*	70° F / 21° C	OFF	240	5
10	EXTRA DELICATE	AUTO	40	FIN	100° F / 38° C	2*	70° F / 21° C	OFF	240	5
11	WRINKLE REMOVAL	MANUAL	5	DRY	160° F / 71° C	2*	70° F / 21° C	OFF	240	5
12	TOUCH UP	MANUAL	15	DRY	155° F / 68° C	2*	100° F / 38° C	OFF	240	5
13	CASUAL	MANUAL	40	DRY	150° F / 66° C	2*	100° F / 38° C	OFF	240	5
14	DUVET	MANUAL	50	DRY	125° F / 52° C	4	70° F / 21° C	ON	120	5
15	HAND WASH	MANUAL	20	DRY	125° F / 52° C	4	70° F / 21° C	ON	240	5
16	SILK	MANUAL	20	DRY	125° F / 52° C	10	70° F / 21° C	ON	240	5
17	WOOLENS	MANUAL	30	DRY	100° F / 38° C	10	70° F / 21° C	ON	240	5
18	AIR	MANUAL	0	DRY	100° F / 38° C	20	70° F / 21° C	ON	240	5
19	NEW CYCLE 1	MANUAL	99	DRY	160° F / 71° C	2*	100° F / 38° C	ON	60	5
20	MOP HEADS	MANUAL	30	DRY	110° F / 43° C	10	100° F / 38° C	OFF	240	5

* Note for MDG52XXXX, Cool Down Time 3 (Minutes)

Programming Selections Non-Coin (OPL) Cycles

Main Menu

When SERVICE Mode is first entered, the control will enter the SERVICE Mode main menu. This main menu will serve as the gateway to all of the SERVICE Mode features. The features include: MACHINE INFO, PROGRAM SETUP, DIAGNOSTIC MODE, MACHINE SETUP, FACTORY SETTINGS and DRYER CYCLES.

NOTE: If a fault occurs while in normal operation, and the faults were not cleared, then these faults will be displayed in Service Mode. Pressing the MED/ENTER (↵) keypad will enable the user to enter into Service Mode.

SERVICE MODE
1: MACHINE INFO
2: PROGRAM SETUP
3: DIAGNOSTIC MODE
4: MACHINE SETUP
5: FACTORY SETTINGS
6: DRYER CYCLE

The LOW/DOWN ARROW (⏴) keypad will enable the user to scroll through all the menu items.

Each menu in Service Mode will contain a list of selectable items. The use of the HI or UP ARROW (⏶) keypad and the LOW or DOWN ARROW (⏴) keypad on the keypad will enable the currently selected item to change. The currently selected menu item will appear with a box around it.

If the menu contains a list of items that will lead to a sub-menu, then the items will be listed in ascending numbered order starting at one. Once the item is selected and entered, the controls will go to the sub-menu.

If the menu item does not lead to a sub-menu, the items will only be listed and not numbered. When the item is selected and entered, the selected item will become highlighted.

Some of these items without a sub-menu do contain selectable parameters. These parameters will be viewed to the right of the item. Once the item is highlighted, the parameter can be changed.

1: MACHINE INFORMATION

Machine information will display the SOFTWARE REV. This item on the MACHINE INFORMATION SCREEN is read only.

Actual listing is shown as follows:

SOFTWARE REV: XXX The software revision loaded on the control board.

2: PROGRAM SETUP

While the control is displaying "SERVICE MODE" and PROGRAM SETUP is highlighted, press the ENTER (✓) keypad to open this menu.

NOTE: All default settings are illustrated in **bold italics**.

1: CONTROL SETTINGS

1: LANGUAGE

1: *MULTI LANGUAGE*
ON / **OFF**

2: **LANGUAGE 1** – allows the user to change the language shown on the display.

ENGLISH
FRENCH
SPANISH
ITALIAN
DUTCH
JAPANESE
GERMAN

3: **LANGUAGE 2** – allows the user to change the second language on the display if multi language is set to “ON”.

ENGLISH
FRENCH
SPANISH
ITALIAN
DUTCH
JAPANESE
GERMAN

2: **TEMP SCALE** – will display temperatures as degrees Fahrenheit or Celsius.

F / °C

3: **BUZZER SETTINGS**

1. **END OF CYCLE** – controls audible beep
OFF / **ON**

2. **BEEP COUNT** – adjusts number of beeps (duration) (adjustable between 1-10 beeps)
5

4: **BACKLIGHT** – adjusts brightness of display.
0 (adjustable from 0 to 200
0 = brightest and 200 = dimmest)

5: **READY PROMPT** (not applicable)

2: MACHINE SETTINGS

1: **LINT CLEAN FREQ.** – adjusts time between prompts to clean lint.
3 (adjustable between 0 - 3 hours,
0 being off)

2: **AXIAL MAX TEMP** – adjusts axial probes set maximum temperature
180 (adjustable between
100° - 180° F / 38° - 82° C)

3: **BURNER SETUP**
One burner / Two burner

NOTE: 20 to 35 lb capacity must be set as one and 50 and 75 lb capacity must be set as two.

4: **AUTO ADJUST** – for auto cycle adjustment
Z (adjustable from 1 - 255)

NOTE: 20 lb capacity should be set as 4.
30 to 50 lb capacity should be set as 7.
75 lb capacity should be set as 3.

5: **SEARCH PERIOD** – for auto cycle adjustment
120 (adjustable from 1 - 255)

3: **HI KEYPAD SETTINGS** (not applicable)

4: **MED KEYPAD SETTINGS** (not applicable)

5: **LOW KEYPAD SETTINGS** (not applicable)

6: **VENDING OPTIONS** (not applicable)

3: DIAGNOSTIC MODE NON-COIN (OPL)

1: FAULT RECORDING

1: DRYER FAULTS

When a fault is recorded, it can be viewed in this location. If no fault(s) has been recorded, then “NO FAULTS” will be displayed.

1: (Description of fault)

2: (Description of fault)

3: (Description of fault)

4: (Description of fault)

5: (Description of fault)

2: EVENTS

E1:XX
E2:XX
E3:XX
E4:XX
E5:XX
E6:XX
E7:XX
E8:XX
E9:XX
EA:XX
ED:XX
RESET

This will reset all of the event counts to 0.

All CODES starting with an “E” represent an event. An event failure is one that would still allow the dryer to run in a safe condition. The number after the “E” code indicates the amount of times that event failure occurred.

Events Non-Coin (OPL) _____

NOTE: Not all events in the list above are active in non-coin (OPL) mode. Only the active codes are listed here.

E1 Radiant Sensor Fault Count

A radiant sensor fault count will occur when a gas model dryer attempts to turn on the burner system and never receives a 120V return signal within a predefined time.

E2 Burner Igniter Fault Count

A burner ignition fault count will occur when a gas model dryer attempts to turn on the burner system and receives a 120V on the burner return signal but it does not transition to a 0V return signal within a predefined time.

E3 Exhaust High Limit

This location is a count of the times that the exhaust high limit has been sensed in the open position.

E9 Forward Rotation Sensor Fault

A forward rotation fault pertains only to reversing machines. The way this fault works is if the dryer is reversing and is running a cycle that has the reversing option enabled, if a rotation sensor fault condition is detected, the drive output would be shut off. Then the dryer will transition to a reversing drive output. If the dryer continues to run without an issue, the machine will continue to run with the forward drive output disabled until the next cycle is started. If the Reversing Mode also fails the control will enter a ROTATION SENSOR FAULT disabling the machine. The next cycle should operate with both drive outputs, that way, if the issue still exists the control will fault out again disabling the fault drive output.

EA Reverse Rotation Sensor Fault

REVERSE ROTATION SENSOR FAULT is identical to FORWARD ROTATION FAULT, however it pertains to the reversing drive output instead of the forward drive output.

ED S.A.F.E. Disabled – Water Not Connected

This event pertains only to dryers with a fire detection system. If the control senses a lack of water pressure, this event will appear.

2: DIAGNOSTIC CYCLE

Diagnostic Mode enables the user to run the dryer and access items to troubleshoot a problem with the dryer.

When the diagnostic menu is first selected, the controls will prompt the user to start one of the defined cycles.

DIAGNOSTIC MODE

DENIM
HEAVY
TOWELS

NOTE: Once a cycle is selected, the control will clear the fault condition so that dryer can be started. This will also clear all credit in escrow and any cycle time remaining on both pockets.

When the dryer is still in an idle state, a cycle must be selected. Once a cycle is selected, the unit will enter into Running Mode. The cycle's time and temperature will correspond to the selected cycle's parameter settings under SETUP Mode.

Once a cycle has been selected the keys will now enable the user to access different features.

- Pressing the HI/UP ARROW (↑) keypad will increase the time of the current running cycle. (1 minute at a time.)
- Pressing the LOW/DOWN ARROW (↓) keypad will decrease the time of the current running cycle. (1 minute at a time.)
- Pressing the PAUSE/STOP (X) keypad will pause the current running cycle.
- Pressing the MED/ENTER (✓) keypad will access the HELP MENU.

When a cycle is running, the control will display DIAGNOSTIC MODE at the top of the display.

If a fault occurs during Diagnostic Mode, the control will enter into a fault cool down and the occurring fault will be displayed. The fault can be cleared by reentering the diagnostic cycle.

3: HELP MENU

The help menu allows the user to view the status of different parts of the dryer. When a feature is highlighted, the center section will list that feature and its current status. The items in the help menu will refer to the current running cycle that was selected in Diagnostic Mode.

Pressing the HI/UP ARROW (↑) keypad will allow the user to move the highlighted bar around the help menu screen. For example, highlighting "S" will show the status of the sail switch.

Pressing the PAUSE/STOP (X) keypad will return the controls to Diagnostic Mode.

The table below shows the standard features available and the feature symbol they correlate with.

FEATURE SYMBOL	FEATURE TEXT	FEATURE	FEATURE INFORMATION
EXH	EXHAUST TEMP PROBE	Exhaust Temperature Probe	(in Deg. F or C)
AXL	AXIAL TEMP PROBE	Axial Thermistor Probe	(in Deg. F or C)
RPM	TUMBLER ROTATION SPEED	Tumbler Speed Revolutions/Minute	R.P.M.
MIN	TIME REMAINING	Time remaining in the diag. cycle	0 to 99 (in minutes)
CODE	HELP CODE MENU	Help Menu Code	Help Codes
T1	THERMOSTAT BURNER 1	Thermostat (Heat Output Burner 1)	ON - OFF
T2*	THERMOSTAT BURNER 2	Thermostat (Heat Output Burner 2)	ON - OFF
H1	HEAT RETURN BURNER 1	Heat Return Burner 1	ON - OFF
H2*	HEAT RETURN BURNER 2	Heat Return Burner 2	ON - OFF
C1	HEAT RELAY 1 CONTACTS	Heat relay 1 contacts	OPEN - CLOSED
C2*	HEAT RELAY 2 CONTACTS	Heat relay 2 contacts	OPEN - CLOSED
B	BLOWER	Fan output	ON - OFF
F	FORWARD	Forward drive output	ON - OFF
R	REVERSE	Shows reversing relay is on	ON - OFF
D	DOOR	Main Door	OPEN - CLOSED
L	LINT	Lint Door	OPEN - CLOSED
P	WATER PRESSURE	H ₂ O Input	ON - OFF
S	SAIL SWITCH	Sail Switch	OPEN - CLOSED
V	VAULT SWITCH	Vault Switch	OPEN - CLOSED
W	WATER OUTPUT	S.A.F.E. output	ON - OFF

* Indicating that two burners are being used.

If the help menu feature "CODE" is selected, the center section will present "Help Codes" and "Events". All of the items in the code menu will automatically scroll up and continue to scroll until the LOW/DOWN ARROW (↓) keypad is pressed to select a new help menu feature.

All CODES starting with an “H” represent some condition that could interfere with the proper functioning of the dryer. There could be up to 3 “H” codes listed within the HELP MENU.

- H1 represents the last failure recorded.
- H2 represents the second to last failure recorded.
- H3 represents the third to last failure recorded.

Each Help Code (H1, H2, or H3) will be followed by a two digit code. This two digit code will reflect a particular issue. See table below for Help Code Descriptions.

HELP CODE	CODE DESCRIPTION
86	Exhaust Probe Fault
87	Axial Probe Fault
89	Sail Switch Open Fault
88	Sail Switch Closed Fault
90	Rotation Sensor Fault
92	Gen 2 Card Reader Communication Fault
E1	Radiant Sensor fault count
E2	Burner Ignitor fault count
E3	Exhaust High Limit
E9	Forward rotation sensor fault count
EA	Reverse rotation sensor fault count
ED	S.A.F.E. DISABLED – Water not connected

If a fault occurs while in Help Mode, the fault will be displayed as a Help Code or Event Code.

Codes can be cleared by pressing and holding the PAUSE/ STOP (X) keypad for 3-seconds.

The last item listed in the code menu will identify the revision of the software that is being used on the control board.

Faults

D17 Exhaust Probe

An exhaust probe fault occurs when the control detects that the exhaust temperature transducer is reading a temperature that is out of the probe's normal operating temperature range for more than 3-seconds. There is an automatic fault clearing feature for this fault. If the fault condition no longer exists, the control will clear the fault condition and return to READY Mode.

D18 Axial Probe

An axial thermistor probe fault occurs when the control detects that the axial thermistor is reading a temperature that is out of the probe's normal operating temperature range for more than 30-seconds, usually an open or shorted probe condition. There is an automatic fault clearing feature for this fault. If the fault condition no longer exists, the control will clear the fault condition and return to READY Mode.

D21 Sail Switch Closed

A sail switch closed fault occurs when a cycle is starting up from either READY Mode, PAUSE Mode or any other idle state. Once a temperature/cycle is selected the control will start the time and verify the sail switch is open, if it is not, the control will display on the screen that the control is “STARTING” and will not turn on the FAN, DRIVE or HEAT. The control will allow the sail switch 10-seconds to open before the control faults out with a SAIL SWITCH CLOSED FAULT. Once a SAIL SWITCH CLOSED FAULT is detected the control will log the fault and will not allow the cycle to continue. The control will display “SAIL SWITCH CLOSED FAULT, SELECT CYCLE TO RESTART, when the fault is detected.

D20 Sail Switch Open

A sail switch open fault occurs when a cycle is starting from either READY Mode, PAUSE Mode or any other idle state. If the sail switch does not close within the allotted 10-seconds the control will log the fault and will not allow the cycle to continue. The control will display “SAIL SWITCH OPEN FAULT, CHECK MAIN DOOR AND LINT ACCESS AND SELECT CYCLE TO RESTART”. A sail switch open fault can also occur once a cycle is in process. If the control detects that the sail switch has opened, the heat will immediately turn off and if the sail switch fails to close within the allotted 30-seconds, the control will fault and display “SAIL SWITCH OPEN FAULT, CHECK MAIN DOOR AND LINT ACCESS AND SELECT CYCLE TO RESTART”.

D22 Latched Heat Relay

A latched heat relay fault occurs when the control detects that the heat relay contacts are closed when the heat output should be off. In the event the control detects that the relay is closed and the heat signal should be off, the control will immediately shut down and will open the interposing relay.

D23 Burner Return Voltage

A burner return voltage fault occurs when the control detects that the burner return signal is active but the heat relay contacts are open and the heat output should be off. In the event the control detects that the signal is active and the heat signal should be off, the control will immediately shut down and will open the interposing relay.

D14 Rotation Sensor Fault

A rotation sensor fault occurs when the control is in a cycle and does not detect any rotation sensor pulses in more than 10-seconds.

D19 Exhaust High Temp Fault

An exhaust high temperature fault occurs when the exhaust probe is detecting a tumbler temperature that is 20° F above the maximum dryer temperature set point for more than 10-seconds.