

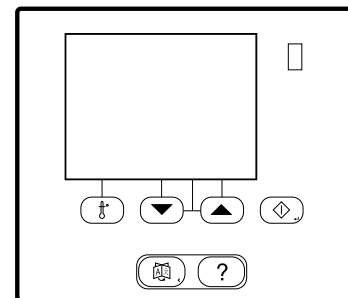
Dryer

Speed Queen

Quantum Platinum Control

Refer to Page 9 for Model Identification

Programming



DRY639R_SVG

Original Instructions

Keep These Instructions for Future Reference.

CAUTION: Read the instructions before using the machine.

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

	WARNING
Failure to install, maintain, and/or operate this machine according to the manufacturer's instructions may result in conditions which can produce bodily injury and/or property damage. W030	

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

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

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Safety Information

Explanation of Safety Messages

Precautionary statements (“DANGER,” “WARNING,” and “CAUTION”), followed by specific instructions, are found in this manual and on machine decals. These precautions are intended for the personal safety of the operator, user, servicer, and those maintaining the machine.

	DANGER
Indicates an imminently hazardous situation that, if not avoided, will cause severe personal injury or death.	
	WARNING
Indicates a hazardous situation that, if not avoided, could cause severe personal injury or death.	
	CAUTION
Indicates a hazardous situation that, if not avoided, may cause minor or moderate personal injury or property damage.	

Additional precautionary statements (“IMPORTANT” and “NOTE”) are followed by specific instructions.

IMPORTANT: The word “IMPORTANT” is used to inform the reader of specific procedures where minor machine damage will occur if the procedure is not followed.

NOTE: The word “NOTE” is used to communicate installation, operation, maintenance or servicing information that is important but not hazard related.

Important Safety Instructions (Tumble Dryer)

Save These Instructions

- Read all instructions before using the tumble dryer.
- Install the tumble dryer according to the INSTALLATION instructions. Refer to the EARTHING (grounding) instructions for the proper earthing (grounding) of the tumble dryer. All connections for electrical power, earthing (grounding) and gas supply must comply with local codes and be made by licensed personnel when required. It is recommended that the machine be installed by qualified technicians.
- Do not install or store the tumble dryer where it will be exposed to water and/or weather. The tumble dryer cannot be used in a closed room where the air supply is insufficient. If necessary, ventilation grids must be installed in the doors or the windows.
- This tumble dryer must not be activated without lint screen filter.
- When you perceive a gas odor, immediately shut off the gas supply and ventilate the room. Do not power on electrical appliances and do not pull electrical switches. Do not use matches or lighters. Do not use a phone in the building. Warn the installer, and if so desired, the gas company, as soon as possible.
- To avoid fire and explosion, keep surrounding areas free of flammable and combustible products. Regularly clean the cylinder and exhaust tube should be cleaned periodically by competent maintenance personnel. Daily remove debris from lint screen filter and inside of filter compartment.
- Do not use or store flammable materials near this appliance.
- Do not place into tumble dryer articles that have been previously cleaned in, washed in, soaked in or spotted with gasoline or machine oils, vegetable or cooking oils, cleaning waxes or chemicals, dry-cleaning solvents, thinner or other flammable or explosive substances as they give off vapors that could ignite, explode or cause fabric to catch on fire by itself.
- Do not spray aerosols in the vicinity of this appliance while it is in operation.
- Items such as foam rubber (latex foam), shower caps, waterproof textiles, rubber backed articles and clothes or pillows filled with foam rubber pads should not be dried in the tumble dryer. Do not use the appliance to dry materials with a low melting temperature (PVC, rubber, etc.).
- Do not tumble fiberglass curtains and draperies unless the label says it can be done. If they are dried, wipe out the cylinder with a damp cloth to remove particles of fiberglass.
- Do not allow children to play on or in the dryer. Close supervision of children is necessary when the dryer is used near children. This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning the use of the appliance by a person responsible for their safety. This is a safety rule for all appliances.
- Cleaning and user maintenance shall not be made by children without supervision.
- Children less than three years should be kept away unless continuously supervised.
- Models with electronic control: Remove and immediately recycle or dispose of used controls according to local regulations and keep away from children. Do NOT dispose of controls in the trash or incinerate. Do not attempt to remove the batteries. Even used batteries may cause severe injury or death. Call a local poison control center for treatment information. Non-rechargeable batteries are not to be recharged. Do not force discharge, recharge, disassemble, heat above

158°F [70°C] or incinerate. Doing so may result in injury due to venting, leakage or explosion resulting in chemical burns.

- Do not reach into the tumble dryer if the cylinder is revolving.
- Use tumble dryer only for its intended purpose, drying fabrics. Always follow the fabric care instructions supplied by the textile manufacturer and only use the dryer to dry textiles that have been washed in water. Only insert spin-dried linen in the dryer to avoid damage to dryer.
- Always read and follow manufacturer's instructions on packages of laundry and cleaning aids. Follow all warnings or precautions. To reduce the risk of poisoning or chemical burns, keep them out of the reach of children at all times (preferably in a locked cabinet).
- Do not use fabric softeners or products to eliminate static unless recommended by the manufacturer of the fabric softener or product.
- Remove laundry immediately after tumble dryer stops.
- DO NOT operate the tumble dryer if it is smoking, grinding or has missing or broken parts or removed guards or panels. DO NOT tamper with the controls or bypass any safety devices.
- Tumble dryer will not operate with the loading door open. DO NOT bypass the door safety switch to permit the tumble dryer to operate with the door open. The tumble dryer will stop rotating when the door is opened. Do not use the tumble dryer if it does not stop rotating when the door is opened or starts tumbling without pressing the START mechanism. Remove the tumble dryer from use and call for service.
- Tumble dryer will not operate with lint panel open. DO NOT bypass lint panel door safety switch to permit the tumble dryer to operate with the lint panel door open.
- Do not alter this tumble dryer from factory construction except as otherwise described in the technical instructions.
- Always clean the lint filter daily. Keep area around the exhaust opening and adjacent surrounding area free from the accumulation of lint, dust and dirt. The interior of the tumble dryer and the exhaust duct should be cleaned periodically by qualified service personnel.
- Solvent vapors from dry-cleaning machines create acids when drawn through the heater of the drying unit. These acids are corrosive to the tumble dryer as well as the laundry load being dried. Be sure make-up air is free of solvent vapors.
- At the end of each working day, close off all main supplies of gas, steam and electricity.

IMPORTANT: For fire suppression equipped tumble dryers, electricity and water should NOT be turned off.

- Do not repair or replace any part of the tumble dryer, or attempt any servicing unless specifically recommended in the user-maintenance instructions or in published user-repair instructions that the user understands and has the skills to carry out. ALWAYS disconnect and lockout the electrical power to the tumble dryer before servicing. Disconnect power by shutting off appropriate breaker or fuse.
- Activation of the emergency stop switch stops all tumble dryer control circuit functions, but DOES NOT remove all electrical power from tumble dryer.
- Exhaust ductwork should be examined and cleaned annually after installation.
- Before the tumble dryer is removed from service or discarded, remove the door to the drying compartment and the door to the lint compartment.
- Failure to install, maintain, and/or operate this tumble dryer according to the manufacturer's instructions may result in conditions which can produce bodily injury and/or property damage.

NOTE: The WARNINGS and IMPORTANT SAFETY INSTRUCTIONS appearing in this manual are not meant to cover all possible conditions and situations that may occur. Observe and be aware of other labels and precautions that are located on the machine. They are intended to provide instruction for safe use of the machine. Common sense, caution and care must be exercised when installing, maintaining, or operating the tumble dryer.

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

NOTE: All appliances are produced according to the EMC-directive (Electro-Magnetic-Compatibility). They can be used in restricted surroundings only (comply minimally with class A requirements). For safety reasons there must be kept the necessary precaution distances with sensitive electrical or electronic device(s). These machines are not intended for domestic use by private consumers in the home environment.

Introduction

Model Identification

Information in this manual is applicable to these dryer models:

SDEDCAGS173TN01	SDEDYRGS173CW01	SDGYAGS113CW01	SSGDYAGS113TW01
SDEDCAGS173TW01	SDEDYRGS173TW01	SSEDCAGS133TW01	SSGDYAGW093CW01
SDEDCRGS153TW02	SDEYYAGS133TW01	SSEDCAGS173TW01	SSGDYAGW113TW01
SDEDCRGS173TW02	SDEYYAGS153CW01	SSEDCAGW133TW01	STEDCASP173TW01
SDEDCRGS173TW07	SDEYYAGS153TW01	SSEDCAGW173TW01	STEDCASP175TW01
SDEDEAGS153CW01	SDEYYAGS173CW01	SSEDEAGW283CW01	STEDEASP285CW01
SDEDEAGS173CW01	SDEYYAGS173TW01	SSEDEAGW293CW01	STEDEASP295CW01
SDEDERGS153CW02	SDGDCAGS113TN01	SSEDXAGW173TW01	STEDXASP175TW01
SDEDERGS173CW02	SDGDCAGS113TW01	SSEDXAGW283CW01	STEDXASP285CW01
SDEDXAGS153CW01	SDGDCRGS113TW02	SSEDXAGW293CW01	STEDXASP295CW01
SDEDXAGS173CW01	SDGDCRGS113TW07	SSEDYAGS133TW01	STEDYASP175TW01
SDEDXRGS153CW02	SDGDEAGS113CW01	SSEDYAGS173TW01	STEDYASP285CW01
SDEDXRGS173CW02	SDGDERGS113CW02	SSEDYAGW173TW01	STEDYASP295CW01
SDEDXRGS173TW02	SDGDXAGS113CW01	SSEDYAGW283CW01	STEYXASP175TW01
SDEDXRGS173TW07	SDGDXRGS113CW02	SSEDYAGW293CW01	STEYXASP285CW01
SDEDYAGS133TW01	SDGDXRGS113JW01	SSEYYAGS173TW01	STEYXASP295CW01
SDEDYAGS153TW01	SDGDXRGS113TW02	SSEYYAGW173TW01	STGDCASP115TW01
SDEDYAGS173TN01	SDGDXRGS113TW07	SSGDCAGS113TN01	STGDEASP095CW01
SDEDYAGS173TW01	SDGDYAGS113TN01	SSGDCAGS113TW01	STGDXASP095CW01
SDEDYBGS173CW01	SDGDYAGS113TW01	SSGDCAGW113TW01	STGDXASP115TW01
SDEDYBGS173TW01	SDGDYBGS113CW01	SSGDEAGW093CW01	STGDYASP095CW01
SDEDYRGS133TW01	SDGDYBGS113TW01	SSGDXAGW093CW01	STGDYASP115TW01
SDEDYRGS153CW01	SDGDYRGS113CW01	SSGDXAGW113TW01	STGYXASP095CW01
SDEDYRGS153TW01	SDGDYRGS113TW01	SSGDYAGS113TN01	STGYXASP115TW01

Replacement Parts

If literature or replacement parts are required, contact the source from which the machine was purchased or contact Alliance Laundry Systems at +1 (920) 748-3950 for the name and address of the nearest authorized parts distributor.

If literature or replacement parts are required, contact the source from which the machine was purchased or contact the nearest authorized parts distributor.

Customer Service

If literature or replacement parts are required, contact the source from whom the machine was purchased or contact Alliance Laundry Systems at (920) 748-3121 for the name and address of the nearest authorized parts distributor.

For technical assistance, call (920) 748-3121.

Preliminary Information

About the Control

The control on the machine is an advanced, graphical, programmable computer that lets the owner control most machine features by interacting with the control.

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

Machines shipped from the factory have default cycles built in. The owner can change the default cycles or any cycle.

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

Power Failure Recovery

If a cycle is in progress when the power fails, and if the power outage lasts five (5) or more seconds, the cycle is lost and cannot be resumed when power recovers. If the power outage lasts less than five (5) seconds, the control will resume the cycle when the power recovers.

IR Communications

The control has the ability to communicate with a PDA or PC with an IrDA device running the control software. Devices such as PDAs and PCs that are IrDA capable (able to transmit information to machine) that have been tested and approved for use with the control software can be used as a tool for managing the machine.

IR Communications Error



Figure 1

The IR Communications Error Menu displays after the control had an error communicating with a PC/PDA. The control will return to previous page.

IR Communications Menu



Figure 2

The IR Communications Menu displays while the control is communicating with a PC/PDA. The control will jump back to the previous page when the communication is complete.

Network Communications

For certain models, the control has the ability to communicate through a network. The network link allows the user to program, collect data, and run diagnostics on any machine in the network from a central location.

Audit Information

The control collects and stores audit information which can be accessed with key presses, IR and USB communication or through the network. Refer to *Audit Data Menu* for a list of available audit information.

Control Identification

Operational Keypad

available to the operator to control and manage operation of the machine. Refer to *Figure 3* and *Table 1*.

The control includes six (6) keypads. These functions are

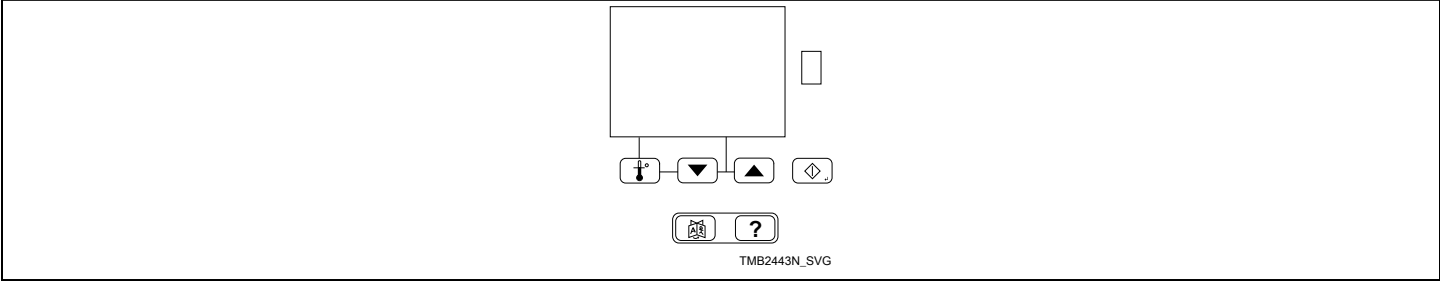


Figure 3

Keypad		Description
TEMPERATURE		Press to select the cycle temperature options or to select screen prompts, depending on the displayed menu.
DOWN ARROW		Press to select screen prompts, depending on the displayed menu. Also, press to move the cursor down on the display, to scroll down through menu options or edit programming values.
UP ARROW		Press to select screen prompts, depending on the displayed menu. Also, press to move the cursor up on the display, to scroll up through menu options or to edit programming values.
LANGUAGE		Press to enter the <i>Language Selection Menu</i> and scroll through language options from the <i>Cycle Selection Menu</i> . Also, press to move the cursor left on the display, to scroll left through menu options or edit programming values.
START/ENTER		Press to start a cycle or press and hold to rapid advance a machine cycle during <i>Rapid Advance Mode</i> . Also, press to select menu items and save edited programming values when used in programming menus.
HELP/INFO		Press to enter the <i>Operating Instructions Menu</i> from the <i>Cycle Selection Menu</i> , the Modifier Help/Info from the Modifier Prompts Menus and to show the QR screen from the <i>Audit Data Menu</i> . Also, press to move the cursor right on the display, to scroll right through menu options or edit programming values.

Table 1

Additional keypad functions:

- To start the Factory Test (refer to *Factory Test Menu*), press and hold the and keypads.
- To Clear Vend, simultaneously press the and keypads.
- To enter Manual Mode (refer to *System Menu*), simultaneously press the and keypads.
- To cancel a Drop Off Cycle (refer to *Drop-Off Mode*), simultaneously press the and keypads.
- To cancel an OPL Cycle (refer to *OPL Mode*), simultaneously press the and keypads.

- To clear a Fatal Error, simultaneously press the and keypads.
- To activate Network Node display, simultaneously press the and keypads.

Help Menu

Pressing the Help/Info keypad will display user help related to cycle selection.

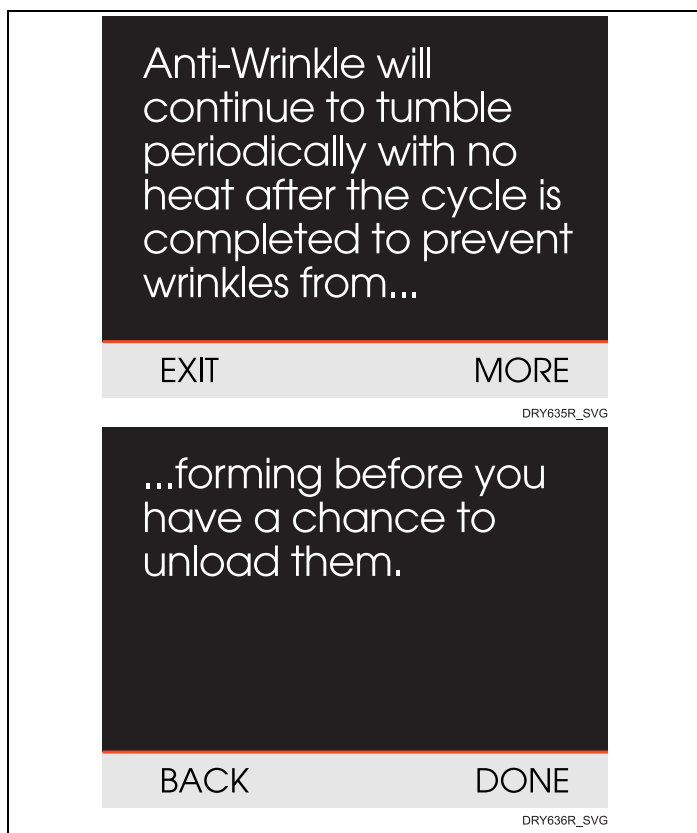


Figure 4

Press ↗ Keypad	Information Displayed
Cycle Selection Menu	The current temperature selection is shown on the left and can be changed by pressing the key below its setting. The cycle time shown on the right can be changed by pressing the up or down arrow keys below its setting. Information for the current selections is shown at the top.

Table 2

Operation Modes

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. After the control completes operation in Power-Up Mode it will enter *Ready Mode*.

System Check Mode

The front end control enters this mode after Power-Up Mode.

System Check Mode acts as an extension to Power-Up Mode and during this mode, the control will check if the correct drive motor, fan motor and ignition control (for gas machines only) are connected to the machine. If the motor type checks have successfully been completed or if the door is not closed prior to the five (5) second timer expiring, the front end control will continue to the next mode. The mode that is entered after System Check Mode completes is determined in Power-Up Mode. If the door was not closed and the motor type check was not completed, this check will be done the next time the motor drive contactor is enabled. If the test detects an incorrect drive motor, fan motor or ignition control, a Board ID Error will be set

Ready Mode

The control is ready for operation in Ready Mode. The control displays different menus depending on user input (keypad press, opening or closing the loading door, or IR communication). If there is no user input for 4.25 minutes, the control goes to Idle Mode and the LCD backlight turns to Inactive Critical or Non-Critical programmed brightness (refer to *Globals Menu*).

If *Advertisement Display Mode* is active, advertising images will be displayed after 4.25 minutes of no user input.

Language Selection Mode

The control is in this mode when in the *Language Selection Menu*. The user can select a language from the *Language Selection Menu*. The control exits this mode and all displays change to selected language. The control exits this mode after 3 seconds if no language is selected.

Partial Vend Mode

The control is in this mode when part of the vend price is entered, but the full current vend price is not yet satisfied. The display shows the *Cycle Selection Menu*. If the user presses the ◊ keypad before satisfying the vend, the display shows and

If the user enters additional vend or selects a different cycle with a vend price less than or equal to the vend entered, the control enters *Start Mode* and the remaining funds, if any, is reallocated to Top-off times or an extra vend.

Additional Vend Mode

The control enters Additional Vend Mode if the user selects a different cycle/modifier with a vend price greater than the vend entered and prior to the first five minutes expiring. The display shows the *Cycle Selection Menu* with the added time and additional vend required. If no action is taken within sixty (60) seconds, the control reverts back to the original cycle and the previous mode. The sixty (60) second timer resets if the user enters additional vend. Satisfying the additional vend price or pressing the ◊ keypad reverts the control back to the original cycle/modifier selection and immediately resumes the cycle.

OPL Mode

Through the *Globals Menu* or via IrDA or network communications, the owner can enable and disable the machine to run cycles without vend. Press the $\diamond$ keypad to start the machine cycle. The owner can enable the use of Rapid Advance (refer to *Globals Menu*) in OPL Mode.

Advertisement Display Mode

In Advertisement Display Mode, the control cycles through a series of advertisement images at a determined rate (refer to the Advertisement Image Index Rate in *Globals Menu*). While in *Ready Mode*, after 4.25 minutes of no user input, every other display shows an advertisement. Between each advertisement, the display shows the coin denomination slide and/or programmed payment methods. Any keypress changes the display to the . The advertisement shows on only half the screen while in and *End of Cycle Mode*. The owner must load advertisement images via network communications.

Drop-Off Mode

If enabled (refer to *Globals Menu*), Drop-Off Mode allows the owner to limit machine use to an attendant without requiring vend. The control displays and . All coin and start pulse inputs are ignored. The control can communicate with the Network, the IR, or Card Reader and any time while in Drop-Off Mode. If enabled by the owner (refer to *Globals Menu*), the attendant can access *Audit Information* and *Rapid Advance* in Drop-Off Mode.

When any valid keypad is pressed the Passcode Menu will be shown. The user will be able to enter the passcode. If the passcode is entered correctly, the control will enter Start Mode. If the passcode is entered incorrectly, the control will remain in Drop-Off Mode and revert to showing the display.

The control remains in Drop-Off Mode until canceled (refer to *Operational Keypad*).

Start Mode

The control enters this mode when the full vend price is satisfied, the vend price is zero (0), or the correct Drop-off key sequence is entered.

In this mode, press the $\diamond$ keypad to put the control in Run Mode and save the hour and minute of the day the cycle was started. It can also be entered when Rapid Advancing from Ready Mode. The control cycles the audio signal (1 second on/off) for the first ten (10) seconds of the Start Mode if this option is enabled.

Any cycle selection key or the Home key will change the display to the Cycle Selection Menu. The Start key will start the selected cycle or show the Close Door Menu. All other key presses are invalid. If the control is in OPL Mode and any of the Default Cycles are reprogrammed, the cycle selection will immediately be set to the default cycle. If the control is not in OPL Mode, the default cycle selection will not be loaded until the next time Start Mode is entered. If the control is in OPL Mode and the cycles programming parameters are updated, the

updated cycles will be loaded immediately. If the control is not in OPL Mode, the cycle programming parameters will not be updated unless the current cycle key is pressed. If the control is in OPL Mode and the OPL Programming Parameter is disabled, the control will revert back to Start Mode.

Run Mode

The control enters Run Mode during a cycle. The display shows the *Run Menu*. The loading door is closed and locked during Run Mode. The control enters *Error Display Mode* if the loading door unlocks or opens.

If a selection keypad is pressed, the *Cycle Selection Menu* will appear over the *Run Menu*. It will display the currently running cycle.

The cycle can be changed in the first 5 minutes of running any cycle, as long as the cycle chosen is less than or equal to the original cycle's price. To switch to a more expensive cycle in the first 5 minutes, refer to *Additional Vend Mode*. The *Run Menu* will return after 60 seconds or the $\diamond$ keypad is pressed.

End of Cycle Mode

The control enters this mode when a cycle is complete. The display shows "Cycle Complete" and time since completion. If programmed, the display shows an advertisement image on half of the screen. The control enters Ready Mode when loading door is opened or a key is pressed. If vend is entered, the control will change to Partial Vend or Start Mode depending on the vend price for the default cycle and temperature. If enough time elapses during End of Cycle Mode, the control will enter Anti-Wrinkle Mode, if enabled, and then Extended Tumble Mode.

Factory Test Mode

The user can enter this mode via the keypad (if enabled, refer to *Globals Menu*) or the IrDA device from *Ready Mode*, *Start Mode* or *Partial Vend Mode*, or through manual diagnostics.

While in Factory Test Mode the machine cycles through test steps and displays. Refer to *Factory Test Menu* for more information.

Machine Error Mode

The control enters this mode when an error is set and displays all alarms and machine errors.

Communication Mode

The control enters this mode while IR communication is in progress. The display shows the *IR Communications Menu*.

Manual Mode

Manual Mode allows the user to manually program, audit, and access diagnostic functions rather than requiring the use of IR or other communication source. When in Manual Mode, the control displays the *System Menu*.

The owner can program the control (refer to *Globals Menu*) to

require users to enter a passcode to access Manual Mode. The passcode can only be set with an external device or network.

Rapid Advance Mode

The user can enter Rapid Advance Mode via network or IR device from *Ready Mode*, *OPL Mode* or *Start Mode*.

If enabled (refer to *Globals Menu*), the user can access Manual Rapid Advance (refer to *Rapid Advance*) via the keypad through the *System Menu*.

When in Manual Rapid Advance, press the $\diamond$ keypad to advance to the next step for moisture dry or auto-dry cycles. For time dry cycles, each press of the $\diamond$ keypad will subtract one minute of time. If $\diamond$ keypad is pressed and held, time will decrement four minutes per second.

Manual Diagnostic Mode

Manual Diagnostic Mode allows the user to manually access diagnostic functions rather than requiring the use of IR or other communication source. When in Manual Diagnostic Mode, the control displays the *Diagnostics Menu*.

Out of Order Mode

The owner can activate and deactivate Out of Order Mode through the *Globals Menu* or via IrDA or network communications while the control is in *Ready Mode*, *Start Mode* or *Partial Vend Mode*. The display shows and . The machine will not accept vend or run cycles in this mode.

Error Display Mode

If the control detects a machine error, it enters Error Display Mode and displays the error. Only one (1) error displays at a time if there are multiple errors. Once the highest priority error is cleared, the control displays the next highest priority error if multiple errors exist. See *Machine Errors* for more details on error descriptions, error displays and priorities.

Anti-Wrinkle Mode

The cycle will enter Anti-Wrinkle Mode two (2) minutes after the cycle has ended. The display will show "Anti-Wrinkle". Upon entering Anti-Wrinkle Mode, the control will increment the Total Number of Extended Tumble Cycles audit counter. The control will continue to show the End of Cycle Mode display. During the Anti-Wrinkle portion, the control, if enabled will sound an audio warning prior to turning on the motor for 30 seconds every two (2) minutes.

The dryer will remain in this mode for up to 1 hour, or until the

door is opened, a key is pressed, a coin is entered, a vend payment is received (network or payment system), or a start pulse is received. When the Anti-Wrinkle Mode timer expires the control increments the Anti-Wrinkle Exceeded audit counter and enters Extended Tumble Mode. If the door is opened, a key is pressed, a coin is entered, a vend payment is received (network or payment system), or a start pulse is received before Anti-Wrinkle Mode expires, the control will enter Ready Mode, Partial Vend Mode or Start Mode if a free Special Vend is active. Anti-Wrinkle Mode is not included in the Total Operating Minutes counter.

The dryer will remain in this mode for up to 1 hour, or until the door is opened, a key is pressed or a start pulse is received.

When the Anti-Wrinkle Mode timer expires the control increments the Anti-Wrinkle Exceeded audit counter and enters Extended Tumble Mode. If the door is opened, a key is pressed or a start pulse is received before Anti-Wrinkle Mode expires, the control will enter Ready Mode. Anti-Wrinkle Mode is not included in the Total Operating Minutes counter.

Extended Tumble Mode

Extended Tumble Mode is entered after Anti-Wrinkle Mode has finished. The display will show "Extended Tumble". During the Extended Tumble, the control will turn on the motor for 2 minutes every 1 hour. If the extended tumble audio option is enabled, the control will beep for five seconds and then stay solid for five seconds prior to turning on the motor.

The control will remain in this mode for up to 18 hours, or until the door is opened, a key is pressed, a coin is entered, a vend payment is received (network or payment system), or a start pulse is received. When the Extended Tumble timer expires the control will remain in Extended Tumble Mode. If the door is opened, a key is pressed, a coin is entered, a vend payment is received (network or payment system), or a start pulse is received before Extended Tumble Mode expires, the control will enter Ready Mode, Partial Vend Mode or Start Mode. Extended Tumble Mode is not included in the Total Operating Minutes counter.

The control will remain in this mode for up to 18 hours, or until the door is opened, a key is pressed or a start pulse is received. When the Extended Tumble timer expires the control will remain in Extended Tumble Mode. If the door is opened, a key is pressed or a start pulse is received before Extended Tumble Mode expires, the control will enter Ready Mode or Start Mode. Extended Tumble Mode is not included in the Total Operating Minutes counter.

Special Features

Lucky Cycle

The Lucky Cycle option allows the owner to program the machine to provide a free or reduced vend cycle to users after a certain number of machine cycles have occurred or on certain dates and times. Refer to *Globals Menu* for manual programming or use an IRDA device or Network. Refer to *Lucky Cycle Menu*.

Break-In Alarm Error

If a machine cycle is in operation when the Break-In Alarm occurs and the fatal alarm is enabled, the control will wait until the completion of the machine cycle before it enters the error state. The machine will power down once it hits the end of the machine cycle. The machine will stay in a power down state until power has been cycled. This error has the highest priority over every other error. The hour, date and error code of the event are saved.

When a non-fatal break in is detected, the control will display for 15 seconds and increment the Break-In Alarm Error audit counter. The Machine Error Tone will also be turned on for 15 seconds. After this 15 second error time, the control will return to its previous state. The hour, date and error code of the event are saved. This error is programmable on or off.

Special Vend

The Special Vend option allows the owner to set a special vend price or free vend between specific times of day, days of week, dates, months and years. The owner can program the control for up to eight Special Vends periods. The owner can manually program Special Vend 1 and can only enable or disable Special Vends 2-8. Full programming of all Special Vends requires the use of an IRDA device or Network. Refer to *Globals Menu* for manual programming.

Machine Cycle Definition and Operation

The control comes programmed with 5 machine cycles. Machine cycles cannot be deleted and new machine cycles cannot be created.

Machine Cycle Operation

When a cycle is run, the control will regulate the temperature and time duration as programmed for the cycle chosen.

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.

Machine Setup Sequence

Upon the first startup, after a factory reset (refer to *Reset Menu*) or if the default language value is set to zero (0) (refer to *Globals Menu*), the control automatically enters the Machine Setup Sequence. The Machine Setup Sequence allows the programmer to set the default language for all menus. The default language can be changed at any time (refer to *Globals Menu*). The user can select a language from the *Language Selection Menu*.

1. Press the ▲ and ▼ keypads to highlight .

NOTE: If is selected, the control exits the Machine Setup Sequence and all menus will show in English. The control will enter the Machine Setup Sequence again upon the next power-up.

2. Press the ◇ keypad to show language options.
3. Press the ⬅ and ➡ keypads to highlight the desired language.
4. Press the ◇ keypad to select.
5. The control displays the *Save Changes Menu*. Press the ▲ and ▼ keypads to highlight to set the selected defaults or to exit the Machine Setup Sequence without selecting defaults.
6. Once the Machine Setup Sequence is exited, the control displays the *Cycle Selection Menu*.

Cycle Selection Menu

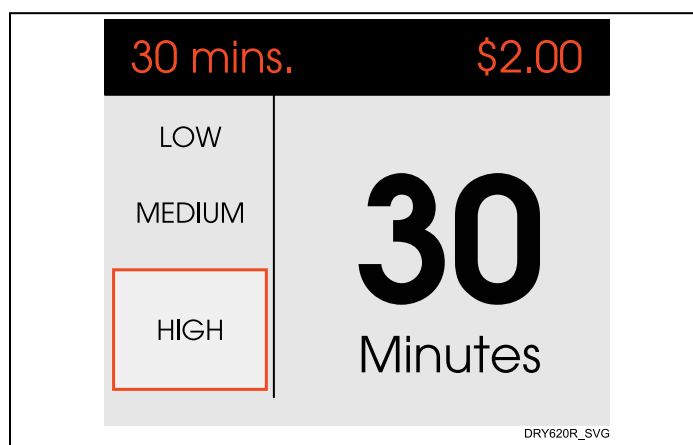


Figure 5

Upon power-up, the control automatically enters the Cycle Selection Menu. The Cycle Selection Menu allows the user to select one (1) of the five (5) machine cycles. The display shows the default cycle, Medium.

Cycle Selection Options

Press the Cycle Selection keypad to scroll through Temperature Options. Refer to *Table 3* for the list of options available. Press the ◇ keypad to select the cycle.

†
NO HEAT
DELICATE
LOW
MEDIUM
HIGH

Table 3

Use Instruction Menus

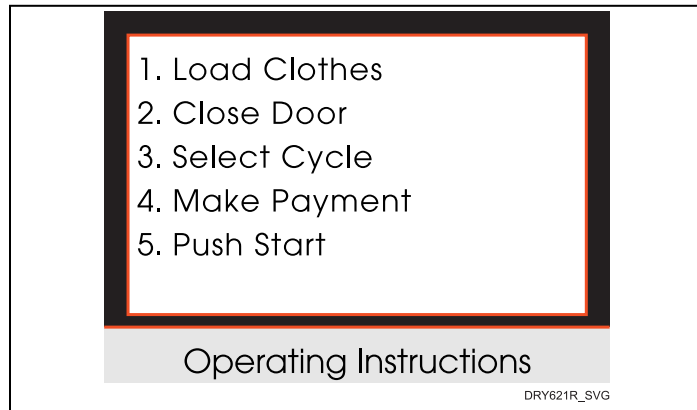


Figure 6

Press the **?** keypad to enter the Operating Instructions Menu from the *Cycle Selection Menu*. The Operating Instructions Menu displays a list of user instructions for starting a cycle. Press any keypad to return to the *Cycle Selection Menu*.

Language Selection Menu



Figure 7

The Language Selection Menu allows the user to set the control to display all screens in a language selected from the list. Press the **?** keypad to enter the Language Selection Menu and to scroll through the list of languages. Press the **◇** keypad to select a language or scroll to the desired language and after three seconds the language will be selected. The control will then return to the *Cycle Selection Menu*.

Start a Cycle

1. While in *Ready Mode*, press the **†** keypad to scroll through and highlight the desired cycle temperature.
2. Press the **◇** keypad to select the highlighted cycle options or enter vend.
3. If not in *OPL Mode* or in a Lucky Cycle, satisfy the vend.
4. Press the **◇** keypad to start the cycle.

NOTE: If door is not closed when the **◇ keypad is pressed, the display shows the *Close Door Menu*.**

Perform additional keypad presses to access optional menus:

- Simultaneously press the **▲** and **▼** keypads with the Service Door open to enter the *System Menu*.
- Press the **?** keypad to enter the *Operating Instructions Menu*.
- Press the keypad to enter the *Language Selection Menu*.
- Press the **◇** keypad with the Coin Vault open and the Service Door closed to enter the *Audit Data Menu*.

Run Menu

The Run Menu displays "Drying" if in the heat portion of a heat cycle or "Cooldown" if in the cooldown portion of a heat cycle or running a no heat cycle. The display will also show remaining cycle time while the machine is operating. Refer to *Figure 8*.

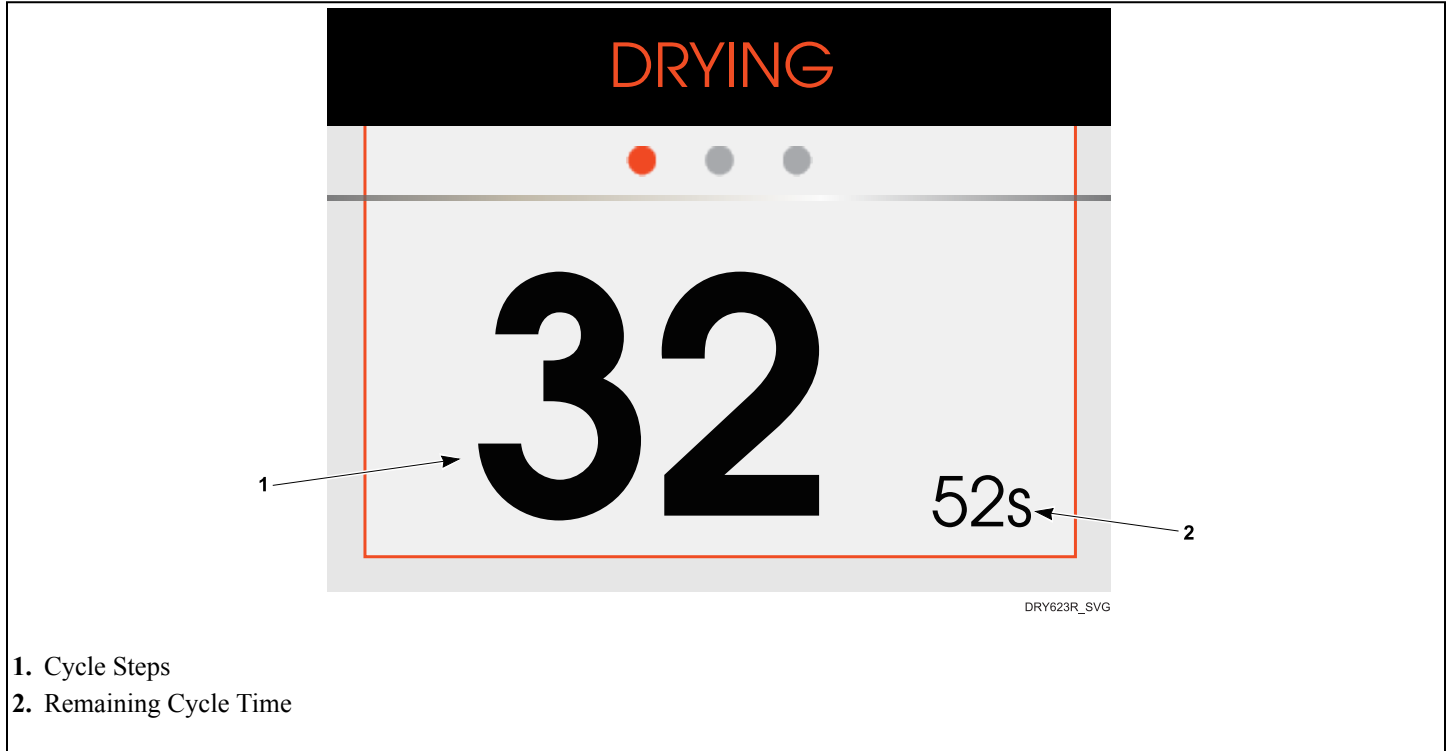


Figure 8

If enabled (refer to *Globals Menu*) and running a cycle in *OPL Mode*, press the $\diamond$ keypad to advance the cycle one (1) step or

press and hold to advance within a step.

Close Door Menu

The control displays the Close Door Menu when entering *Start Mode* or *Pause Mode* with the loading door open. Close the door and press the ◊ keypad to start or resume the cycle.

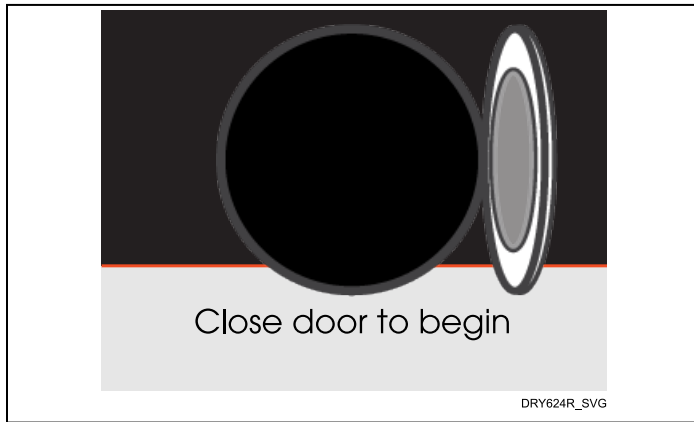


Figure 9

Lucky Cycle Menu

Once the control runs the programmed number of cycles on a programmed date and time (refer to *Globals Menu*) the next

cycle will be a Lucky Cycle and the Lucky Cycle counter resets. The Lucky Cycle takes priority over Special Vends and Standard Vend pricing. If the user selects a different cycle within the machine's allotted time for a cycle change, the control runs the newly selected cycle. If equipped with a serial payment system, it is up to the payment system to honor or ignore the Lucky Cycle.



Figure 10

When the control displays a Lucky Cycle, press the ◊ keypad to start the selected cycle.

Menu Navigation

Refer to the following charts for maps of the display menus.

Display Screen Maps

Cycle Menu Navigation

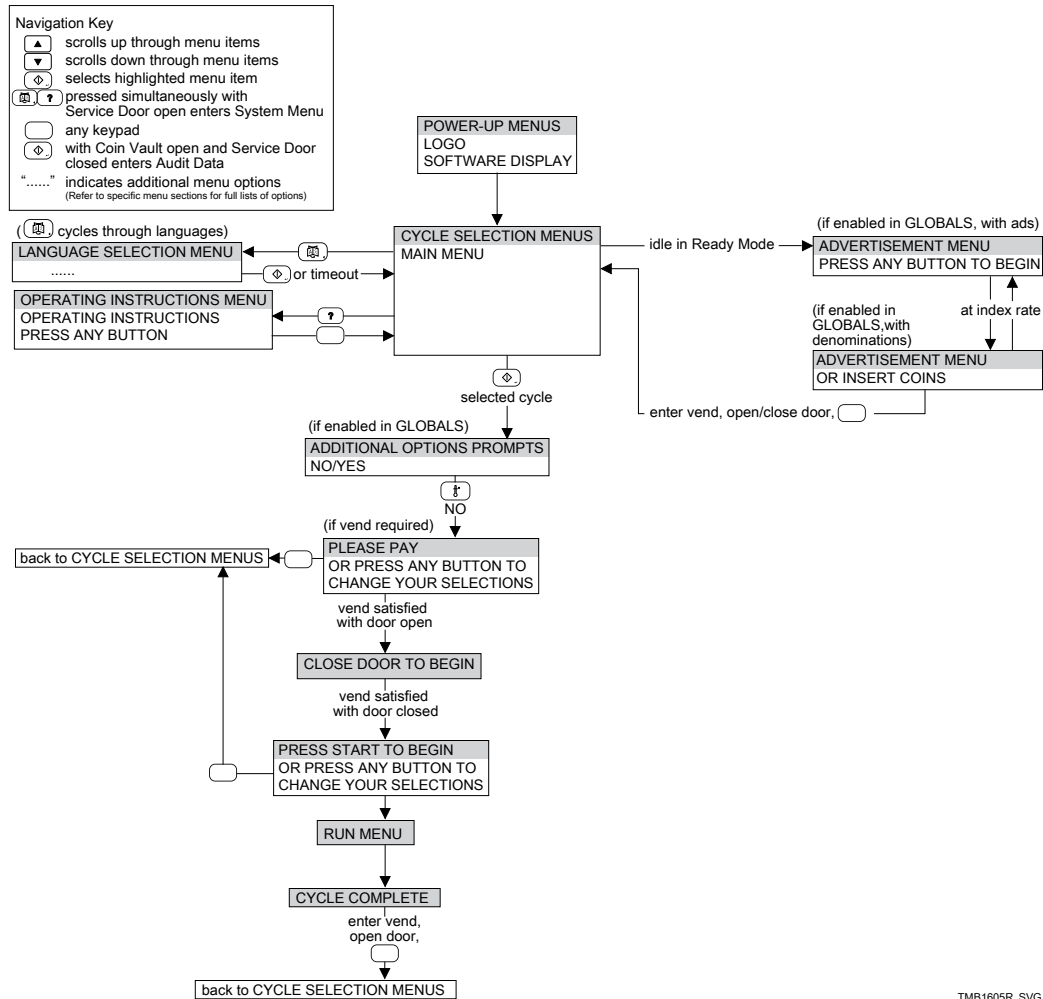


Figure 11

System Menu Navigation

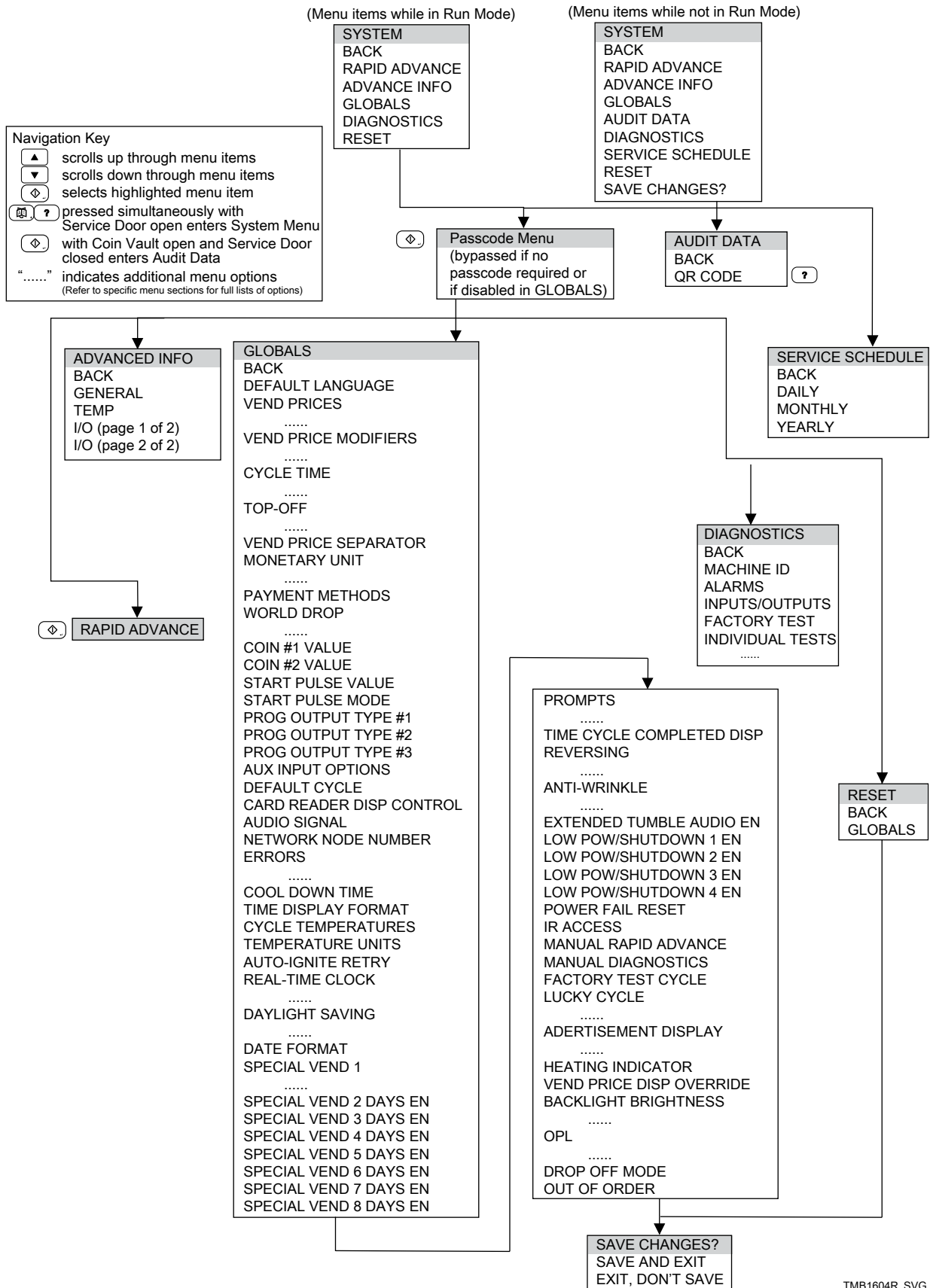


Figure 12

Opening Service Door

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

Models through Serial No. 1810000001

Manual programming requires the user to open and close the service door. Opening and closing the service door trips a switch allowing access to various programming options, diagnostics, and audit capabilities. On coin models, the coin vault switch must be closed to enter Manual Mode.

Models starting Serial No. 1810000001

Manual programming requires the user to unplug the bullet connector located between the “white/black” and “red/blue” wires. Reconnect the connector for normal operation.

After opening and closing the service door or unplugging the bullet connector, the programmer has 4.25 minutes to begin programming.

Refer to *Figure 13* for locating the service door.

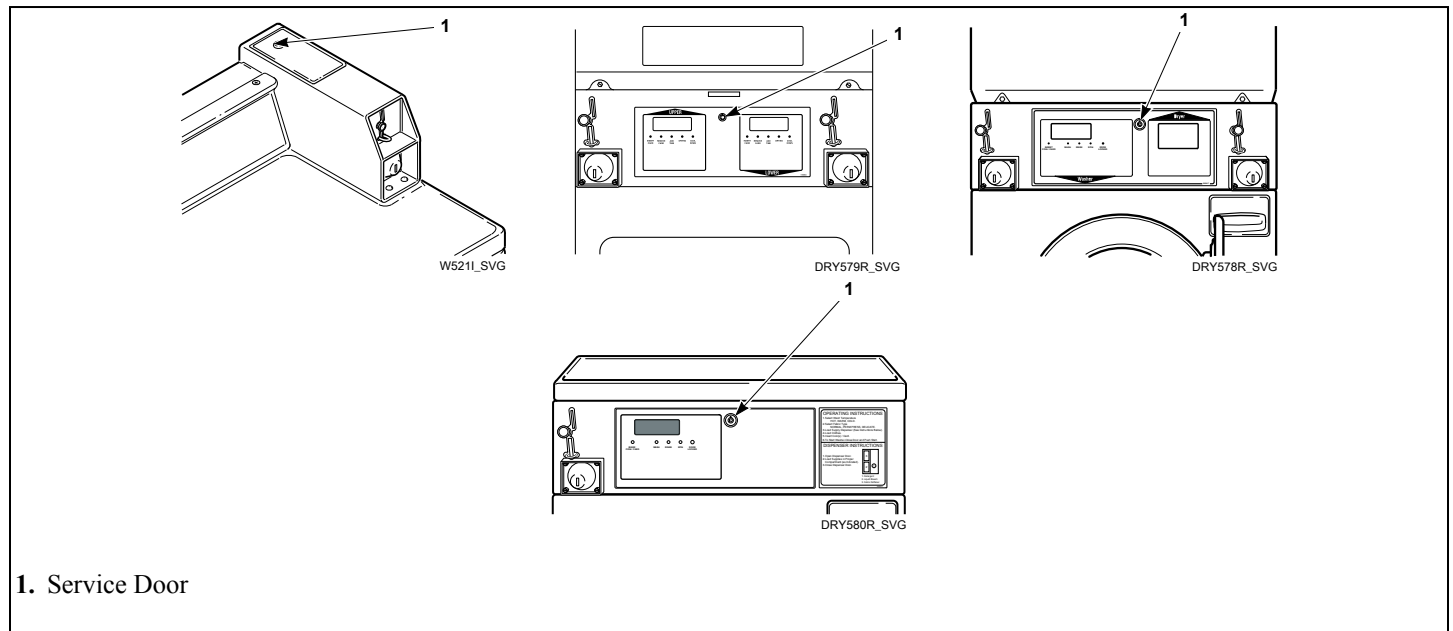


Figure 13

Programming Control

System Menu

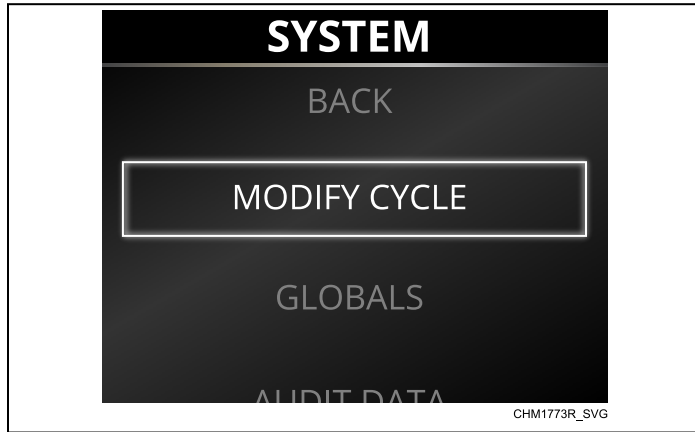


Figure 14

The Systems Menu allows the user to access Rapid Advance (*Rapid Advance Mode*), Advanced Info (*Advanced Info Menu*), Reset Bearing Timer (*Reset Bearing Timer*), Modify Cycle (*Modify Cycle Menu*), Globals (*Globals Menu*), Audit Data (*Audit Data Menu*), Diagnostics (*Diagnostics Menu*), Service Schedule (*Service Schedule Menu*) and Reset (*Reset Menu*).

To access, simultaneously press the ▲ and ▼ keypads with Ser-

vice Door open and the Coin Vault closed .

Globals Menu

The Global Setup Menu allows the user to make changes to global properties of the machine.

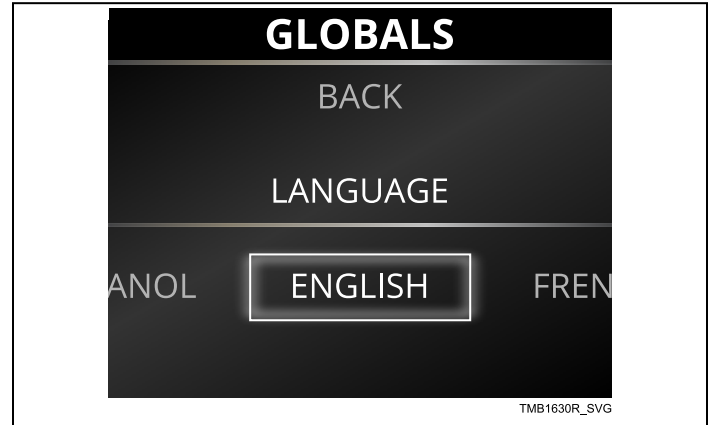


Figure 15

1. To access, press the ⚙ keypad to enter the *System Menu*.
2. Press the ▲ or ▼ keypads to highlight Globals.
3. Press the ◇ keypad to enter the Globals Menu.

Global Menu List Options		
Display	Description	Default
BACK	Return to previous menu	
DEFAULT LANGUAGE	This option will set the language that appears on the display by default. The user-selected language will revert back to the default language after 4.25 minutes in <i>Ready Mode Start Mode</i> .	English
VEND PRICES		
BACK	Return to previous menu	
HEAT CYCLE	0-65535	150
NO HEAT CYCLE	0-65535	150
VEND PRICE MODIFIERS		
BACK	Return to previous menu	
ANTI-WRINKLE	This option allows the owner to program vend price for an anti-wrinkle cycle modifiers, from 0 - 65535.	25

Table 4

continues...

Global Menu List Options		
Display	Description	Default
CYCLE TIME		
BACK	Return to previous menu	
HEAT CYCLE TIME MIN	1-99	45
HEAT CYCLE TIME SEC	0-59	0
NO HEAT CYCLE TIME MIN	1-99	45
NO HEAT CYCLE TIME SEC	0-59	0
TOP-OFF		
BACK	Return to previous menu	
ENABLE	ENABLE/DISABLE	ENABLE
TIME ADJUSTMENT	ENABLE/DISABLE	ENABLE
COIN #1 MINUTES	0-99	15
COIN #1 SECONDS	0-59	0
COIN #2 MINUTES	0-99	60
COIN #2 SECONDS	0-59	0
VEND PRICE SEPARATOR	This option allows the owner to program the type and placement of the vend price decimal mark.	xxx.xx
MONETARY UNIT		
BACK	Return to previous menu	

continues...

Table 4

Global Menu List Options		
Display	Description	Default
UNIT	0 = No Symbol 1 = \$ Dollar 2 = £ Pound 3 = ¥ Yen 4 = ₩ Won 5 = € Euro 6 = ₹ Rupee 7 = ₺ Turkish Lira 8 = Ruble 9 = Ft Forint 10 = Kč Koruna 11 = Kr Krona 12 = Kn Kuna 13 = R Rand 14 = R\$ Real 15 = Tk Token 16 = Zł Zloty	1
PLACEMENT	0 = Before currency 1 = After currency	0
PAYMENT METHODS	0 - 63	0
WORLD DROP		
BACK	Return to previous menu	
NUMBER OF COINS	1 = 1 Coin 2 = 2 Coins 3 = 3 Coins 4 = 4 Coins 5 = 5 Coins	2
DENOMINATION VALUES		
BACK	Return to previous menu	
COIN #1	0 - 65535*	25
COIN #2	0 - 65535*	100
COIN #3	0 - 65535*	0
COIN #4	0 - 65535*	0
COIN #1 VALUE	1 - 65535	25

continues...

Table 4

Global Menu List Options		
Display	Description	Default
COIN #2 VALUE	1 - 65535	100
START PULSE VALUE	1 - 65535	25
START PULSE MODE	0 = Off, Single Pulse 128 = On, Single Pulse 192 = On, Multiple Pulses	128
PROG OUTPUT TYPE # 1-3	This option allows the owner to program when the control provides an output that can be used for variety of reasons.	Available (<i>Ready Mode Start Mode</i> only)
DEFAULT CYCLE	The owner has the option to choose what cycle appears on the display by default: High (1), Low (2), No Heat (3), Medium (4), Delicates (5)	4
AUDIO SIGNAL	The audio signal can be programmed on or off for key presses and end-of-cycle.	
NETWORK NODE NUMBER	Identification number for networked machine	
ERRORS	Allows some error displays to be turned on/off	
BACK	Return to previous menu	
COIN ERROR	If enabled, this error will display when invalid coin pulses are recorded.	ENABLE
BACK	Return to previous menu	
ENABLE	ENABLE/DISABLE	ENABLE
PENALTY	If enabled, all previous coin entries are erased.	DISABLE
VEND HEADER PRESENT ERR	This option is used to ignore coin pulses triggered when attaching and detaching a coin drop.	ENABLE
ALLOW ERROR CLEARING	ENABLE/DISABLE	ENABLE
COOL DOWN TIME		
BACK	Return to previous menu	
HIGH TEMP TIME	1-15	5 (models with G or T in the second digit)
MEDIUM TEMP TIME	1-15	5 (models with G or T in the second digit)
LOW TEMP TIME	1-15	5 (models with G or T in the second digit)
DELICATES TEMP TIME	1-15	3 (models with G or T in the second digit)

continues...

Table 4

Global Menu List Options		
Display	Description	Default
TIME DISPLAY FORMAT	Format options to display time: minutes only (1) or minutes and seconds (0)	1
CYCLE TEMPERATURES	Global cycle temperature parameters	
BACK	Return to previous menu	
HIGH	38°C [100°F] - 71°C [160°F]	71°C [160°F]
MEDIUM	38°C [100°F] - 72°C [160°F]	68°C [155°F]
LOW	38°C [100°F] - 72°C [160°F]	63°C [145°F]
DELICATES	38°C [100°F] - 72°C [160°F]	46°C [115°F]
TEMPERATURE UNITS	Fahrenheit (°F) or Celsius (°C)	°F
REAL-TIME CLOCK		
BACK	Return to previous menu	
SET CLOCK MINUTES	00 - 59	
SET CLOCK HOURS	00 - 23	
SET CLOCK DAY	01 - 07	
SET CLOCK DATE	01 - 31	
SET CLOCK MONTH	01 - 12	
SET CLOCK YEAR	00 - 99	
DAYLIGHT SAVING		
BACK	Return to previous menu	
DAYLIGHT SAVING ENABLE	ENABLE/DISABLE	ENABLE
START MONTH	1 - 12	3 (March)
START DAY OF WEEK	1 - 7	1 (Sunday)
START WEEK OF MONTH	1 - 4 (1st week, 2nd week, 3rd week, last week)	2 (2nd week of month)
START HOUR	0 - 23	2 (2:00 a.m.)
END MONTH	1 - 12	11 (November)
END DAY OF WEEK	1 - 7	1 (Sunday)
END WEEK OF MONTH	1 - 4 (1st week, 2nd week, 3rd week, last week)	1 (1st week of month)
END HOUR	0 - 23	2 (2:00 a.m.)

continues...

Table 4

Global Menu List Options		
Display	Description	Default
DATE FORMAT	0 - 2 0 = MM/DD/YYYY 1 = DD/MM/YYYY 2 = YYYY/MM/DD	0
SPECIAL VEND 1		
BACK	Return to previous menu	
DAY(S) OF WEEK ENABLE	Refer to <i>Table 1</i> to determine the days enable values.	DISABLE
START MINUTE	0 - 59	0
START HOUR	0 - 23	0
START DATE	0 - 31	0
START MONTH	0 - 12	0
START YEAR	0 - 99	0
LENGTH IN HOURS	0 - 24	0
END DATE	0 - 31	0
END MONTH	0 - 12	0
END YEAR	0 - 99	0
HEAT CYCLE VEND PRICE	0 - 65,535	25
HEAT CYCLE TIME MINUTES	1 - 99	5
HEAT CYCLE TIME SECONDS	0 - 59	0
NO HEAT CYCLE VEND PRICE	0 - 65,535	25
NO HEAT CYCLE TIME MIN	1 - 99	5
NO HEAT CYCLE TIME SEC	0 - 59	0
COIN 1 TOPOFF TIME MIN	0 - 99	5
COIN 1 TOPOFF TIME SEC	0 - 59	0
COIN 2 TOPOFF TIME MIN	0 - 99	20
COIN 2 TOPOFF TIME SEC	0 - 59	0
CYC MOD ANTI-WRINK PRICE	0 - 65535	25
SPECIAL VEND 2-8 DAYS EN	Same values as Special Vend 1	
CYCLE MODIFIER PROG		
BACK	Return to previous menu	

continues...

Table 4

Global Menu List Options		
Display	Description	Default
ANTI-WRINKLE	ENABLE/DISABLE	ENABLE
TIME CYCLE COMPLETED DISP	ENABLE/DISABLE	ENABLE
ANTI-WRINKLE		
BACK	Return to previous menu	
ENABLE	ON/OFF	ON
AUDIO ENABLE	ON/OFF	OFF
EXTENDED TUMBLE AUDIO EN	ENABLE/DISABLE	DISABLE
LOW POW/SHUTDOWN 1-4 EN	ENABLE/DISABLE	DISABLE
POWER FAIL RESET	This sets the power outage duration from 0-120 minutes before resetting.	10
IR ACCESS	ENABLE/DISABLE	ENABLE
MANUAL RAPID ADVANCE	ENABLE/DISABLE	ENABLE
MANUAL DIAGNOSTICS	ENABLE/DISABLE	ENABLE
FACTORY TEST CYCLE	ENABLE/DISABLE	ENABLE
LUCKY CYCLE		
BACK	Return to previous menu	
DAY(S) OF WEEK ENABLE	0 - 7	0 (option disabled)
NUMBER OF CYCLES	0 - 255	50
DISPLAY OPTION	ENABLE/DISABLE	DISABLE
ADVERTISEMENT DISPLAY		
BACK	Return to previous menu	
READY MODE	ENABLE/DISABLE	ENABLE
RUN MODE	ENABLE/DISABLE	ENABLE
END-OF-CYCLE MODE	ENABLE/DISABLE	ENABLE
INDEX RATE	1 - 255 seconds	10 seconds
HEATING INDICATOR	ENABLE/DISABLE	DISABLE
VEND PRICE DISP OVERRIDE	Allows a card reader to control the displayed vend price. ENABLE/DISABLE	DISABLE
POCKET INDICATOR	Stacked Models Only This is used to indicate which pocket is controlled by each control. ENABLE/DISABLE	OFF

continues...

Table 4

Global Menu List Options		
Display	Description	Default
BACKLIGHT BRIGHTNESS		
BACK	Return to previous menu	
ACTIVE	50 - 100	90
INACTIVE CRITICAL	50 - 100	75
INACTIVE NON-CRITICAL	50 - 100	50
OPL		
BACK	Return to previous menu	
OPL MODE ENABLE	ENABLE/DISABLE	DISABLE
OPL DISPLAY POWER SAVE	ENABLE/DISABLE	DISABLE
DROP OFF MODE	ENABLE/DISABLE	DISABLE
OUT OF ORDER	ENABLE/DISABLE	DISABLE

Table 4

How to Read Audio Signal Table

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

Each column of options contains a unique combination of the

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

The default value programmed at the factory is 29.

Signal Value	Start Mode	Serial or Network Vending Command Signal	Coin/Card Input	End of Cycle	Key Pressed
0	OFF	OFF	OFF	OFF	OFF
1	OFF	OFF	OFF	OFF	ON
2	OFF	OFF	OFF	ON	OFF
3	OFF	OFF	OFF	ON	ON
4	OFF	OFF	ON	OFF	OFF
5	OFF	OFF	ON	OFF	ON
6	OFF	OFF	ON	ON	OFF

continues...

Table 5

Signal Value	Start Mode	Serial or Network Vending Command Signal	Coin/Card Input	End of Cycle	Key Pressed
7	OFF	OFF	ON	ON	ON
8	OFF	ON	OFF	OFF	OFF
9	OFF	ON	OFF	OFF	ON
10	OFF	ON	OFF	ON	OFF
11	OFF	ON	OFF	ON	ON
12	OFF	ON	ON	OFF	OFF
13	OFF	ON	ON	OFF	ON
14	OFF	ON	ON	ON	OFF
15	OFF	ON	ON	ON	ON
16	ON	OFF	OFF	OFF	OFF
17	ON	OFF	OFF	OFF	ON
18	ON	OFF	OFF	ON	OFF
19	ON	OFF	OFF	ON	ON
20	ON	OFF	ON	OFF	OFF
21	ON	OFF	ON	OFF	ON
22	ON	OFF	ON	ON	OFF
23	ON	OFF	ON	ON	ON
24	ON	ON	OFF	OFF	OFF
25	ON	ON	OFF	OFF	ON
26	ON	ON	OFF	ON	OFF
27	ON	ON	OFF	ON	ON

Table 5

continues...

Signal Value	Start Mode	Serial or Network Vending Command Signal	Coin/Card Input	End of Cycle	Key Pressed
28	ON	ON	ON	OFF	OFF
29*	ON	ON	ON	OFF	ON
30	ON	ON	ON	ON	OFF
31	ON	ON	ON	ON	ON
* Factory default setting.					

Table 5

Save Changes Menu



Figure 16

The Save Changes Menu is used to confirm programming changes when modifying a cycle, changing the parameters in the *Globals Menu* or using the *Reset Menu*.

Select to revert to the previous menu level without saving changes. Select to save changes and revert to the previous menu level.

Rapid Advance

If enabled (refer to *Globals Menu*), the user is able to rapid advance through a running cycle via the keypads rather than using infrared or network communications.

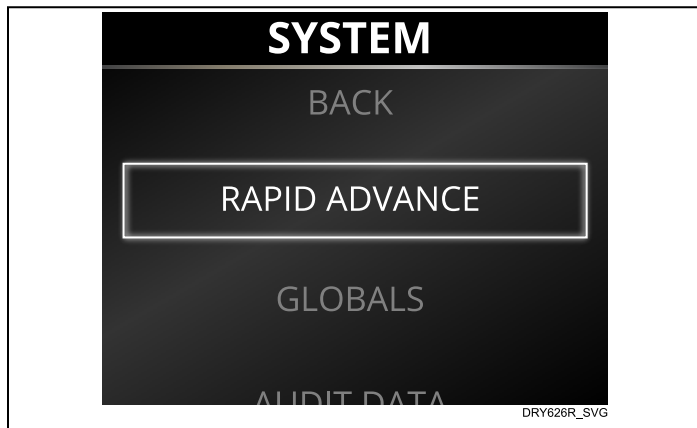


Figure 17

1. To access, simultaneously press the ▲ and ▼ keypads with the Service Door open and the Coin Vault closed to enter the *System Menu*.
2. Press the ▲ and ▼ keypads to highlight Rapid Advance.
3. Press the ◇ keypad to enter the *Rapid Advance Mode*.

When in Manual Rapid Advance, press the ◇ keypad to advance to the next step or press and hold to advance within a step.

Advanced Info Menu

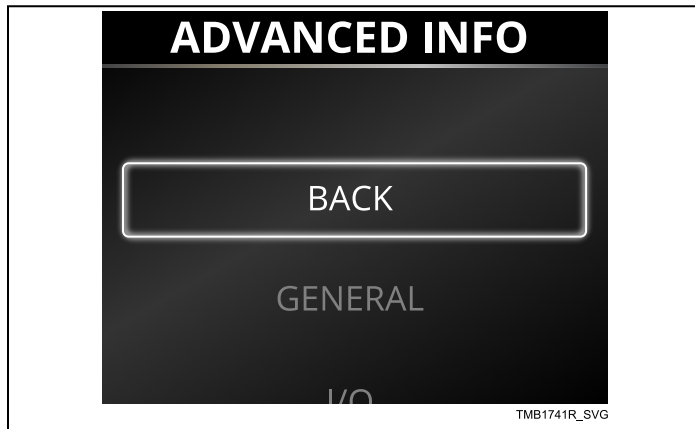


Figure 18

The Advanced Info Menu includes Back, General (*General Information*) and I/O (*I/O Menu*).

1. Simultaneously press the ▲ and ▼ keypads with Service Door open to enter *System Menu*.
2. Press the ▲ and ▼ keypads to highlight Advanced Info Menu.
3. Press the ◇ keypad to select.

General Information

General Information displays the info and status of the running cycle.



1. Temperature
2. Cycle Time Remaining

Figure 19

1. To access from the *Advanced Info Menu*, press the ▲ or ▼ keypad to scroll through the *Advanced Info Menu* list until is highlighted.
2. Press ◇ keypad to display General Information.

I/O Menu

The I/O Menu in the *Advanced Info Menu* shows the current state of all control outputs. To manipulate machine outputs, the user must access the *Inputs/Outputs Menu* from the *Diagnostics Menu*.

1. To access from the *Advanced Info Menu*, press the ▲ or ▼ keypad to scroll through the *Advanced Info Menu* list until is highlighted.
2. Press ◇ keypad to display Inputs Outputs Menu.

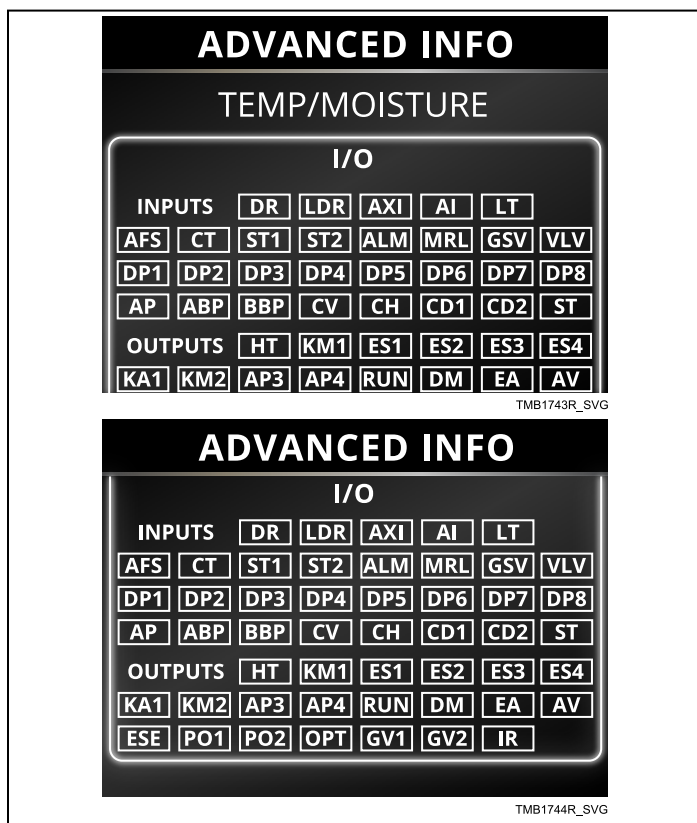


Figure 20

Audit Data Menu

The Audit Data Menu allows the user to read audit data via the keypads rather than using infrared or network communications.

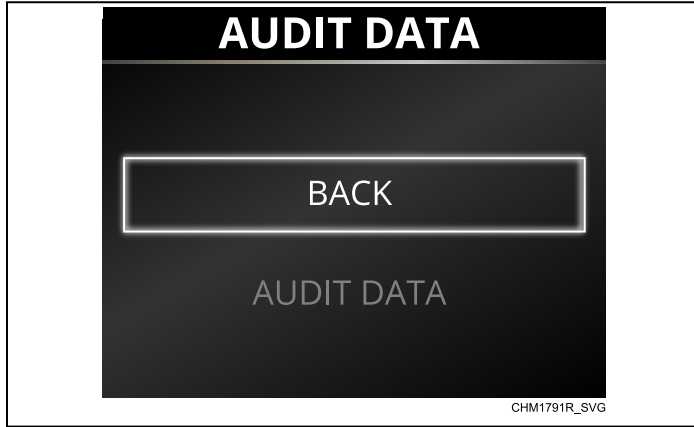


Figure 21

1. To access, simultaneously press the ▲ and ▼ keypads with Service Door open and the Coin Vault closed to enter.
2. Press the ▲ or ▼ keypads to highlight Audit Data.
3. Press the ◇ keypad to enter the Audit Data Menu.

Alternatively, press the ◇ keypad with the Coin Vault Door open and the Service Door Closed.

View Audit Data on the Display

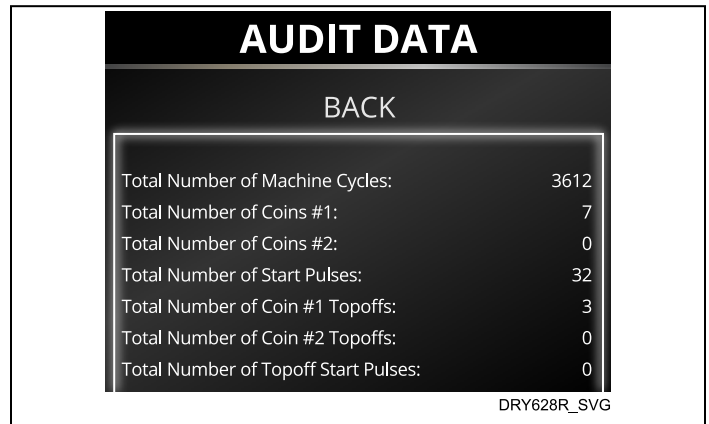


Figure 22

1. From the Audit Data Menu, press the ▼ keypad to highlight Audit Data.
2. Press the ◇ keypad to enter Manual Read Audit Data Mode. The display will show the following audit parameters:
 - Total number of machine cycles
 - Total number of coins #1
 - Total number of coins #2
 - Total number of start pulses
 - Total number of coin #1 topoffs
 - Total number of coin #2 topoffs
 - Total number of topoff start pulses
 - Total number of rapid advance cycles
 - Total number of run hours
 - Resettable coin #1 count
 - Resettable coin #2 count
 - Resettable machine cycle count
 - Individual cycle counts 1-5

Diagnostics Menu

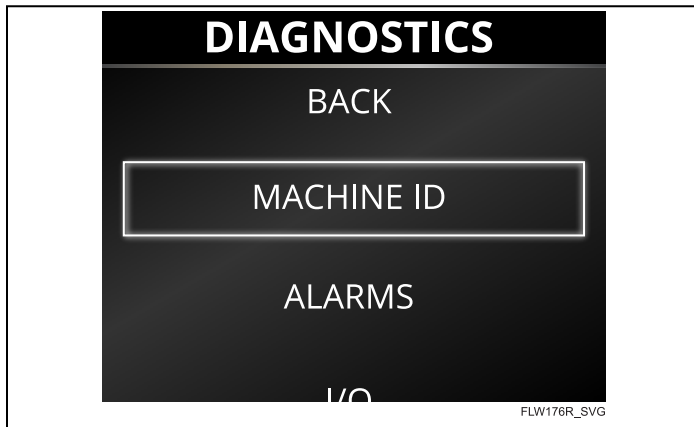


Figure 23

1. To access, simultaneously press the ▲ and ▼ keypads with Service Door open and the Coin Vault closed to enter.
2. Press the ▲ and ▼ keypads to highlight Diagnostics.
3. Press the ◇ keypad to enter the Diagnostics Menu.

NOTE: To enter menu items, press the ▲ and ▼ keypads to highlight the desired item and press the ◇ keypad to select.

NOTE: To exit menu items, press the ▲ and ▼ keypads to highlight BACK, then press the ◇ keypad while BACK is selected.

Machine ID Menu

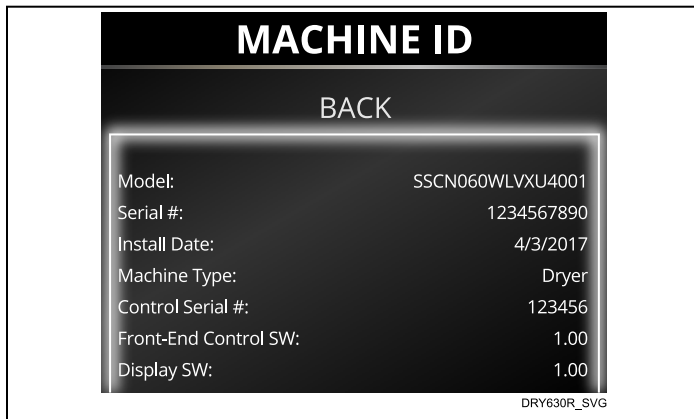


Figure 24

The Machine ID Menu displays the following information.

- Model
- Serial Number
- Install Date
- Machine Type

- Control Serial Number
- Front-end Control SW
- Display SW
- I/O Board SW
- Network Node

Alarms Menu

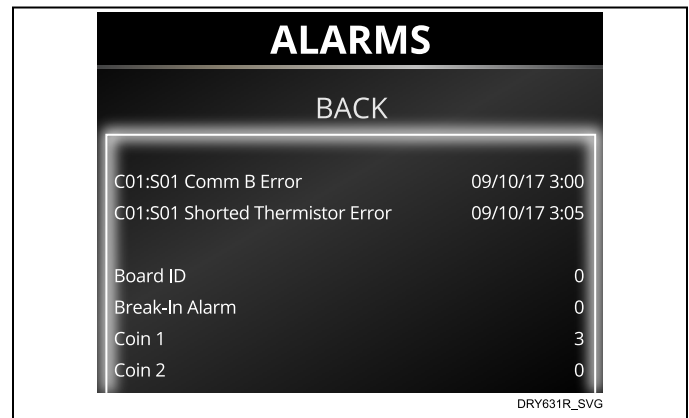


Figure 25

The Alarms Menu displays a list of the last 25 errors, starting from the most recent, at the top of the screen. Below the list of recent errors is a list of individual error audit counts showing the type of error and how many times a specific error has occurred.

Inputs/Outputs Menu

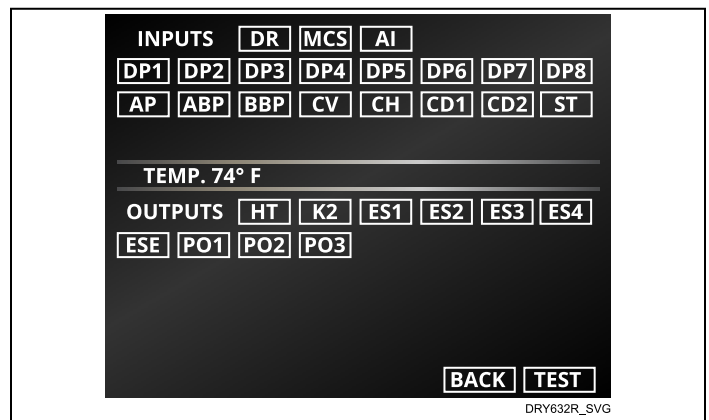


Figure 26

The Inputs and Outputs Menu gives a user the ability to manipulate machine outputs and monitor the current state of all control inputs. Refer to *Table 6* for code definitions.

1. Press the arrow keypads to move the flashing output selector.

Diagnostics Menu

2. Press the the ◇ keypad to select an output.
3. After selecting desired outputs, navigate to and press the ◇ keypad. changes to and all currently selected outputs change to the active state.
4. Press the ◇ keypad again to terminate the currently running test.
5. Select BACK to exit.

Inputs	
ABP	Network Board Present
AI	Auxiliary Input
AP	Access Panel
BBP	USB/Reprogram Board Present
CD1	Coin Drop 1
CD2	Coin Drop 2
CH	Vend Connection Header Present
CV	Coin Vault
DP1	DIP Switch 1
DP2	DIP Switch 2
DP3	DIP Switch 3
DP4	DIP Switch 4
DP5	DIP Switch 5
DP6	DIP Switch 6
DP7	DIP Switch 7
DP8	DIP Switch 8
DR	Door
DL	Door Lock

Table 6

continues...

Inputs	
ST	Start Pulse Input

Table 6

Factory Test Menu



Figure 27

If enabled (refer to *Globals Menu*), the Factory Test Menu allows the user to run a diagnostic test cycle. The control must be in *Ready Mode*.

At the start of the factory test cycle, the control enters *Factory Test Mode*. The command message at the bottom of the Factory Test Menu display will show the remaining step time or prompt the user for input throughout the test cycle. Refer to *Table 7* for test sequence.

When in *Factory Test Mode* the $\diamond$ keypad advances the control to the next test step unless otherwise noted.

Step	Test Cycle Step	Display	Description
S0	Machine Type	"Dryer"	Dryer
S1	Control Software Version	"XXX.YY"	XXX is the control software version number and YY is the control software subversion number.
S2	Display Software Version	"XXX.YY"	XXX is the display cargo version number and YY is the display cargo subversion number.
S3	I/O Board Software Version	I/O Board Software Version and "XXX.YY"	XXX is the control software version number, and YY is the control software subversion number.
S4	Control Level	"MXXX"	XXX is the control level.

Table 7

continues...

Step	Test Cycle Step	Display	Description
S5	Dipswitch	Dipswitch diagram is displayed	Switches that are up and green are ON and switches that are down and red are OFF.
S6	Keypad	An active keypad diagram is displayed	Unpressed keypads will have black fill, pressed keypads will have white fill.
S7	Display	This test will display a sequence of different screen colors and patterns.	
S8	Coin Drop	"Coin 1: X", "Coin 2: Y"	"X" and "Y" are the number of pulses received for drop 1 and drop 2.
S10	Service Door Switch	"Open" or "Closed"	The control displays whether the switch is open or closed.
S11	Coin Vault Switch	"Open" or "Closed"	The control displays whether the switch is open or closed.
S12	Door Switch	"Open" or "Closed"	The control displays whether the door is open or closed.
S13	Heat Configuration	"Electric Heat" or "Gas Heat," followed by "XXF" or "XXC" current temperature.	Switches that are up and green are ON and switches that are down and red are OFF.
S14	10 Minute Test Cycle	"Drying"; "Time: 10:00"; "Temperature: XXF / XXC"	The control displays that the machine will run a drying cycle test for ten minutes at the stated temperature.

Table 7

Individual Diagnostic Tests Menu

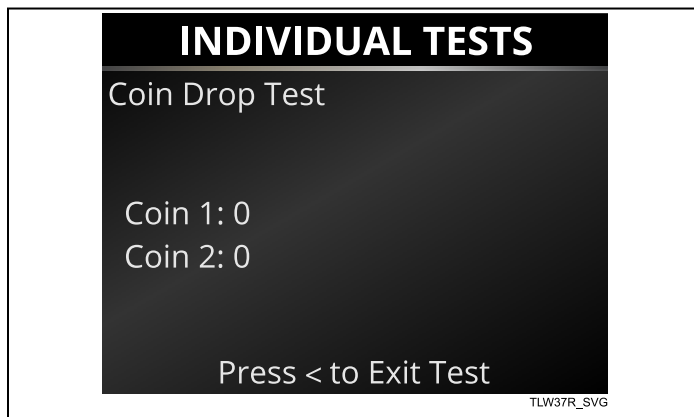


Figure 28

The Individual Test Menu allows the user to perform individual manual diagnostic tests.

To enter the desired test from the Individual Diagnostic Tests Menu, press the ▲ or ▼ keypads to highlight and press the ⬅ keypad to select. The display shows prompts and results of the corresponding test. Refer to *Table 8*.

To exit the test, press the ⏮ keypad.

Individual Diagnostic Tests		
Test Name	Display	Description
Coin Drop Test	Coin 1: XXX Coin 2: YYY	X and Y are the number of pulses received for drop #1 and drop #2. The control advances to the next test step when the  keypad is pressed.
Start Pulse Test	XXX	XXX is the number of start pulses received. This test verifies whether the control is capable of recognizing an electric pulse from a central card reader system. The central card reader system must provide an electric pulse.
Dryer on Temp Test	Temperature: XX ° F / XX ° C	XX is the current temperature (in fahrenheit or celsius depending upon selected programming parameters).
Machine Config Test #1	XXX	XXX is the Machine Configuration #1 byte. This test shows a decimal value whether or not coin drops and communication interfaces are connected. 1 means the item is present, 0 means the item is not present. <i>Refer to Machine Config Test #1 Chart for values.</i>
Machine Config Test #2	XXX	XXX is the Machine Configuration #2 byte.
Machine Config Test #3	XXX	XXX is the Machine Configuration #3 byte. This test shows a decimal value which indicates the presence of certain machine features. If a letter shows in the decimal value, the corresponding feature is present in the machine. If the letter is not shown, the feature is not present.

Table 8

continues...

Individual Diagnostic Tests		
Test Name	Display	Description
Machine Config Test #4	XXX	XXX is the Machine Configuration #4 byte. This test shows which dip switches are set. 1 means the switch is on, 0 means the switch is off . 0 = ON (120 VAC Supply)/OFF (240 VAC Supply) 2 = Unused 3 = ON (Payment System Present)/OFF (Payment System Not Present) 4 = Unused 5 = Unused
Machine Config Test #5	XXX	XXX is the Machine Configuration #5 byte. This is unused.

Table 8

Diagnostic Test Descriptions

Coin Drop Test

This option tests the coin drop.

To enter, press the ▲ or ▼ keypads in the Individual Diagnostic Tests Menu until Coin Drop Test is highlighted and then press the ◇ keypad. The machine will run until it has reached the selected cycle temperature. The display will show "X" for coin 1 and "Y" for coin 2.

To exit the test, press the ⏻ keypad.

Start Pulse Test

This option tests the Start Pulse.

To enter, press the ▲ or ▼ keypads in the Individual Diagnostic Tests Menu until Start Pulse Test is highlighted and then press the ◇ keypad. The machine will run until it has reached the selected cycle temperature. The display will show "St XX" where "XX" is the pulse value.

To exit the test, press the ⏻ keypad.

Dryer On Temp Test

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

To enter, press the ▲ or ▼ keypads in the Individual Diagnostic Tests Menu until Dryer On Temp Test is highlighted and then press the ◇ keypad. The machine will run until it has reached the selected cycle temperature. The display will show "XXXF" for degrees in Fahrenheit or "XXXC" for degrees in Celsius. The XXX will show the degrees.

To exit the test, press the ⏻ keypad. keypad will exit all tests.

Machine Config Test #1

This option shows whether coin drops and communication interfaces are connected.

To enter, press the ▲ or ▼ keypads in the Individual Diagnostic Tests Menu until Machine Config Test #1 is highlighted and then press the ◇ keypad. The display will show "XXX", with "XXX" a number corresponding to whether or not coin drops are connected, or serial card reader or network board are connected.

Refer to *Table 9* for test information.

To exit the test, press the ⏻ keypad. keypad will exit all tests.

CONFIGVALUE	NETWORK BOARD PRESENT	VEND CONNECTION PRESENT	COIN DROP #2 PRESENT	COIN DROP #1 PRESENT
0	0	0	0	0

continues...

Table 9

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

Table 9

Machine Config Test #2

This option is not used on this model. "0" will always be displayed.

Machine Config Test #3

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

To enter, press the ▲ or ▼ keypads in the Individual Diagnostic Tests Menu until Machine Config Test #3 is highlighted and then press the ◇ keypad. The display will show "XXX", with "XXX" representing the machine capacity. Refer to *Table 10*.

To exit test, press the ⏻ keypad. keypad will exit all tests.

Value	Description
0	Unprogrammed
1	Dryer Single Pocket
2	Dryer Stack
3	Dryer Stack Lower Pocket
4	Dryer Stack Upper Pocket

Table 10

Machine Config Test #4

This option shows which dipswitches are set on the control.

To enter, press the ▲ or ▼ keypads in the Individual Diagnostic Tests Menu until Machine Config Test #4 is highlighted and

then press the ◇ keypad. The display will show "XXX", with "XXX" representing the machine capacity. Refer to *Table 11*.

Config Value	Heat Type	Payment System	120VAC Supply
4	Non-IEC Gas	1	0
5	Non-IEC Gas	1	1
68	Electric	1	0
69	Electric	1	1
132	IEC Gas	1	0
133	IEC Gas	1	1
196	Steam	1	0
197	Steam	1	1

Table 11

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

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

To exit test, press the ⏻ keypad. keypad will exit all tests.

Machine Config Test #5

This option is not used on this model. "0" will always be displayed.

Machine Errors

The control displays and logs errors as they occur. When the control senses the error condition, the audit counter for that error increases by one. The control saves the time and date of the last 25 errors which have occurred.

For errors that sound the Machine Error Tone, it can be silenced early by pressing any keypad.

Heat Error (Auto-Ignite Retries Error)

Gas Models

On machines equipped with an ICM that does not need to be manually reset, the control will automatically clear the ICM lockout alarm and 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 advance to cool down with the display toggling between the remaining cycle time and “HEAT ERROR”. When the cycle is completed, the control will show “HEAT ERROR” until the error is cleared. The error can be cleared by any key press, opening the loading door or cycling power. When this error occurs, the heat error counter will be incremented and the error will be saved to the queue of the last 25 machine errors. Extended tumble will be allowed while the error is present.

Electric Models

If the control determines that the electric heat contactor is shorted, the control will terminate the cycle and enter machine error mode. Once the control enters machine error mode, it will show “HEAT ERROR” and turn on the Machine Error Tone, one second on/one second off for 2 minutes. After 2 minutes, the control will turn off the Machine Error Tone and continue to display the error display. If a key is pressed before 2 minutes has elapsed, the control will turn off the Machine Error Tone. To clear these errors, one of the following must occur: the machine must be powered down, the Clear Fatal Error Keys must be pressed or a Clear Fatal Error Network command must be sent. When this error occurs, the heat error counter will be incremented and the error will be saved to the queue of the last 25 machine errors. Extended tumble will not be allowed while the error is present.

Manual Reset Limit Error

While there is a call for heat, if the cabinet temperature caused the manual reset limit to open, the heater will be turned off and the control will advance to cool down with the cool down time set to fifteen (15) minutes. The display will toggle between “MANUAL RESET LIMIT ERROR” and the remaining cycle time (cycle time will continue to count down). When the cycle reaches End of Cycle Mode, the control will enter Machine Error Mode and the display will only show “MANUAL RESET LIMIT ERROR”. To clear these errors, one of the following must occur: the machine must be powered down, the Clear Fatal Error Keys must be pressed or a Clear Fatal error Network

command must be sent. The limit must be manually reset to prevent the error from occurring during the next cycle. When this error occurs, the manual reset limit error counter will be incremented and the error will also be saved to the queue of the last 25 machine errors. Extended tumble will not be allowed while the error is present.

Stove Limit Cycles

While there is a call for heat, if the stove temperature causes the stove limit 1 or 2 to open, the heater will be turned off and the control will continue the cycle with no heat until the limit thermostat resets. At the end of the cycle, the control will show the message menu with “STOVE LIMIT 1 CYCLE” or “STOVE LIMIT 2 CYCLE” if the Display Limit Cycles programming parameter is enabled. The control will continue displaying the error message until the error is cleared. The error can be cleared by any key press, opening the loading door or cycling power. Extended tumble will be allowed while the error is present in end of cycle mode. The control will increment the stove limit 1 or 2 cycle audit counter only once per cycle.

Cabinet Limit Cycle

While there is a call for heat, if the cabinet temperature causes the cabinet limit to open, the heater will be turned off and the control will continue the cycle with no heat until the limit thermostat resets. At the end of the cycle, the control will show the message menu with “CABINET LIMIT CYCLE” if the Display Limit Cycles programming parameter is enabled. The control will continue displaying the error message until the error is cleared. The error can be cleared by any key press, opening the loading door or cycling power. Extended tumble will be allowed while the error is present in End of Cycle mode. The control will increment the cabinet limit cycle audit counter only once per cycle.

ICM Errors

The ICM has the ability to serially communicate an error code to the tumble dryer output board. When the output board receives the error code from the ICM, it will then send the error code to the front end control. If the error received is a Lockout error, the front end control will increment the ICM lockout alarm audit counter. When this error occurs, the audit counter for the specific error number is incremented in the output board error section of the output board. Also the audit counter for the general ICM error is incremented in the machine error audit data section. These errors are added to the last 25 errors queue.

ICM Communication Error

If the tumble dryer output board ever fails to communicate with the ignition control module (ICM), the output board will set a communication error and send the error code to the con-

trol and the control will turn off all outputs and set this error. When this error is set, the control will allow the IO board to clear the error 3 times before entering Machine Error Mode. Once the control enters Machine Error Mode, it will display “ICM COMM ERROR” and turn on the Machine Error Tone for fifteen (15) seconds. After fifteen seconds, the control will turn off the Machine Error Tone and continue to display the error display. If a key is pressed before fifteen seconds have elapsed, the control will turn off the Machine Error Tone. To clear these errors one of the following must occur: the machine must be powered down, the Clear Fatal Error Keys must be pressed or a Clear Fatal Error Network command must be sent. When this error occurs, the audit counter for the error is incremented in the machine error audit data section. This error is added to the last 25 errors queue.

Air Flow Switch Errors

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

Air Flow Switch Failed to Open

If an air flow switch is sensed closed thirty (30) consecutive seconds one minute after entering Start Mode, Pause Mode or End of Cycle Mode, the control will show the message menu with “AIR FLOW 1 ERROR” until the air flow switch opens or power is cycled to the machine. When this error occurs, all user input will be ignored. If the error does clear, the control will go back to its previous mode of operation. When this error occurs, the air flow switch 1 error counter will be incremented and the error will also be saved to the queue of the last 25 machine errors.

Air Flow Switch Failed To Close

If the air flow switch fails to close five (5) seconds after the fan has reached 90% of its rated speed when a cycle has been started/restarted, the control will shut the cycle down and the control will toggle between the message menu with “AIR FLOW 2 ERROR” and the cycle time at one (1) second intervals for a total of thirty (30) seconds (the cycle time does not count down). The audio signal will also sound one (1) second on/one (1) second off (if enabled) for ten (10) seconds. After thirty (30) seconds the control returns to Start Mode so another attempt can be made to start the cycle. If the air flow switch does not close after three (3) attempts the control will go to the Cool Down portion of the cycle, toggle between the message-menu with “AIR FLOW 2 ERROR” and the cycle time and sound the error tone audio. Once the Cool Down portion of the cycle ends, the control will continue to display the error message until the error is cleared. The control will not start again until the error is cleared. The error can be cleared by any key press, opening the loading door or cycling power. When this error occurs, the air flow switch 2 error counter will be incremented and the error will also be saved to the queue of the last 25 machine errors. Extended tumble will be allowed while the error is present in End of Cycle Mode.

Air Flow Switch Bounces

If the air flow switch is open for one (1) second, the heat will be turned off and will remain off until the switch is observed closed for five (5) seconds (this will be known as an air flow switch bounce). In order to protect the electric heat contactors, for electric heat machines, a switch bounce will be determined differently. If the air flow switch has been open for 0.25 seconds, the heat will be turned off until it is observed closed for five (5) seconds. Each bounce increments the air flow switch bounce counter. If there are five (5) air flow switch bounces within five (5) minutes, the heat will be turned off and remain off for the duration of the cycle and display will toggle between the message menu with “AIR FLOW ERROR” and the remaining cycle time (cycle time will continue to count down). When the cycle reaches End of Cycle Mode the control will only show the message menu with “AIR FLOW ERROR”. The control will continue to show the error message until the error clears. The error can be cleared by any key press, opening the loading door or cycling power. When this error has occurred, the air flow switch bounce error counter will be incremented and the error will also be saved to the queue of the last 25 machine errors. Extended tumble will be allowed while the error is present in End of Cycle Mode.

Fan and Drive Motor Errors

The fan or drive motor will send an error code to the tumble dryer output board if an error condition exists. The motor will stop all movement and wait for a clear error signal to be sent via communications from the output board. When the error is received by the output board, the output board will then send the error code to the control. The control will check if any retry attempts are available and, if so, send the command to the output board to clear the error. The error can also be cleared by cycling power to the machine. If the maximum number of retry attempts has been reached during a single cycle or the error does not allow any retries, a general fan motor or drive motor error will be set on the control. When this error is set, the control will terminate the cycle and either enter Machine Error Mode or remain in End of Cycle Mode while displaying an error code on the display. If Machine Error Mode was entered, the control will turn on the Machine Error Tone for fifteen (15) seconds. After fifteen (15) seconds, the control will turn off the Machine Error Tone and continue to display the error display. If a key is pressed before fifteen (15) seconds have elapsed, the control will turn off the Machine Error Tone. The display will show the message menu with “FAN MOTOR ERROR (XXX)” or “DRIVE MOTOR ERROR (XXX)” where “XXX” is the specific error code. The audit counter for the general fan motor error is incremented in the machine error audit data section. These errors are added to the last 25 errors queue.

Drive and Fan Communication Error

If the tumble dryer output board ever fails to communicate with the fan, the output board will set a communication error and send the error code to the control. Then the control will turn off all outputs and set this error while sounding the fifteen (15) second audio tone and toggling the display between the

error display ("DRIVE COMM ERROR" for drive communication errors, "FAN COMM ERROR" for fan communication errors) and the remaining cycle time. The control will then pause the cycle for one (1) minute to allow the Fan/Drive to fully power down. Once the one (1) minute timer has expired, the control will try to reinitialize communication with the Fan/Drive. If the IO board is unable to establish communication after three (3) retry attempts, the control will then enter Machine Error Mode, display an error code on the display and turn on the Machine Error Tone for fifteen (15) seconds. After fifteen (15) seconds, the control will turn off the Machine Error Tone and continue to display the error display. If a key is pressed before fifteen (15) seconds have elapsed, the control will turn off the Machine Error Tone. To clear these errors one of the following must occur: the machine must be powered down, the Clear Fatal Error Keys must be pressed or a Clear Fatal Error Network command must be sent. When this error occurs, the audit counter for the error is incremented in the machine error audit data section. This error is added to the last 25 errors queue.

Communication B Errors

Communication B errors are errors that occur when there are communication errors between the control and a computer.

Shorted Output Error

If the output board detects a short it will turn off all outputs and send an error code to the control and the control will set this error. When this error is set, the control will enter *Machine Error Mode*, show the message menu with "SHORTED OUTPUT ERROR (XXX)" where "XXX" is the specific error code and turn on the Machine Error Tone, one second on/one second off for 2 minutes. After 2 minutes, the control will turn off the Machine Error Tone. If a key is pressed before 2 minutes has elapsed, the control will turn off the Machine Error Tone. To clear these errors one of the following must occur: the machine must be powered down, the Clear Fatal Error Keys must be pressed or a Clear Fatal Error Network command must be sent. When this error occurs, the audit counter for the error is incremented in the machine error audit data section. This error is added to the last 25 errors queue.

If the output board detects a short it will turn off all outputs and send an error code to the control and the control will set this error. When this error is set, the control will enter *Machine Error Mode*, show the message menu with "SHORTED OUTPUT ERROR (XXX)" where "XXX" is the specific error code and turn on the Machine Error Tone for fifteen (15) seconds. After fifteen (15) seconds, the control will turn off the Machine Error Tone. If a key is pressed before fifteen (15) seconds have elapsed, the control will turn off the Machine Error Tone. To clear these errors one of the following must occur: the machine must be powered down, the Clear Fatal Error Keys must be pressed or a Clear Fatal Error Network command must be sent. When this error occurs, the audit counter for the error is incremented in the machine error audit data section. This error is added to the last 25 errors queue.

Output Board Errors

If the control receives a Output Board Error signal from the Output Board, the control will enter Machine Error Mode. The control will turn off all outputs, turn on the Machine Error Tone for 15 seconds, and display "OUTPUT BOARD ERROR (XXX)" where "XXX" is the specific error code. When a Output Board Error occurs, the audit counter for the specific error number is incremented. The fatal Output Board Errors are added to the last 25 errors queue. The non-fatal errors are not. Refer to *Error Codes* for more information.

Shorted Thermistor Error

The output board will flag a shorted thermistor any time it senses a temperature greater than 210°F [99°C] and the motor is active. The control will enter Machine Error Mode, show the message menu with "SHORTED THERMISTOR ERROR" and turn on the Machine Error Tone for fifteen (15) seconds. After fifteen (15) seconds, the control will turn off the Machine Error Tone and continue to show the message menu with "SHORTED THERMISTOR ERROR" until any of the cycle selection pads are pressed and the temperature reading is less than 210°F [99°C]. If a key is pressed before fifteen (15) seconds has elapsed, the control will turn off the Machine Error Tone and continue showing the message menu with "SHORTED THERMISTOR ERROR". Once a temperature reading less than 210°F [99°C] is sensed by the control, and fifteen (15) seconds has elapsed, a cycle selection pad key press will clear the error and the control will return to Ready Mode. This error will cause the Shorted Thermistor Error Audit Counter to be incremented. The control will save the error type, and add the error to the last 25 errors queue.

Open Thermistor Error

The output board will flag an Open Thermistor Error any time it senses a temperature less than 0°F [-18°C] and the heater has been active for at least three (3) minutes. After fifteen (15) seconds, the control will turn off the Machine Error Tone and continue to show the message menu with "OPEN THERMISTOR ERROR" until any of the cycle selection pads are pressed and the temperature reading is greater than 0°F [-18°C]. If a cycle selection pad is pressed before fifteen (15) seconds has elapsed, the control will turn off the Machine Error Tone and continue showing "OPEN THERMISTOR ERROR" until the control senses a temperature reading greater than 0°F [-18°C]. Once a temperature reading greater than 0°F [-18°C] is sensed by the control and a cycle selection pad is pressed, the control will return to Ready Mode. This error will cause the Open Thermistor Error Audit Counter to be incremented. The control will save the error type and add the error to the last 25 errors queue.

SCI Comm Error

The SCI Communications Error error occurs when there is a problem with communications between the control and the output board. The control will turn off all outputs and display "SCI COMM ERROR" to indicate an SCI Communications

Error and turn on the Machine Error Tone for 15 seconds. It also increases the total SCI Communications Errors audit counter. SCI Communications Errors can also be caused by the output board detecting a System Integrity Error.

The control saves the error type and adds the error to the last 25 errors queue.

Network Communications Error

For models equipped with the network option, the Network Communications Error may occur during communication with the network. When a Network Communications Error occurs, the Total Bad Network Communications audit counter is increased, the hour and date of the event are saved, and the error code is saved. The only indication of a Network Communication error on the front end control will be the Error Status Indicator will be visible right after the error occurs and will stay visible until the next good network communication.

Machine ID Chip Error

If the control is not configured and cannot get configuration data from the Machine ID chip, a Machine ID Communication Error will occur. The control will display . "XXX" indicates an error code value. This display will be toggled with the rest of the start-up information.

This error is cleared when communication with the Machine ID chip has been restored. If the control has sufficient data in its non-volatile memory to operate the machine, but cannot communicate with the Machine ID chip, the Error Status Indicator will be visible immediately as the error occurs, to inform trained personnel of a problem with the Machine ID chip. If a Machine ID Error is set, the hour, date and error code of the event are saved.

IR Communications Error

This error may occur during IR communications. When this error occurs, the control shows the message menu with "IR COMM ERROR (XXX)", where "XXX" indicates the IR code value. The error display is automatically cleared after two (2) seconds. When an IR communication error occurs, the audit counter Total Bad IR Communications is incremented, the hour and date of the event are saved and the error code is saved.

Board Not Ready Error

The control will perform a check on the system input/output packet from the output board if communication is established with the output board. If the packet isn't set 30 seconds after communication has been established and there aren't any output board errors, the control will try resetting the output board up to three times. Thirty seconds after the last attempt, the control will display "BOARD NOT READY ERROR" and turn on the Machine Error Tone for 15 seconds.

Brownout/Voltage Configuration Error

If the control does not detect the correct dip switch configura-

tion for the current machine, the control will display . The control will save the error type. The machine must be powered down and the dip switch configuration must be fixed to clear this error.

Break-In Alarm Error

If a machine cycle is in operation when the Break-In Alarm occurs and the fatal alarm is enabled, the control will wait until the completion of the machine cycle before it enters the error state. The machine will power down once it hits the end of the machine cycle. The machine will stay in a power down state until power has been cycled. This error has the highest priority over every other error. The hour, date and error code of the event are saved.

When a non-fatal break in is detected, the control will display for 15 seconds and increment the Break-In Alarm Error audit counter. The Machine Error Tone will also be turned on for 15 seconds. After this 15 second error time, the control will return to its previous state. The hour, date and error code of the event are saved. This error is programmable on or off.

Board ID Error

The control will check the Board ID Packet from the drive/output board to ensure that it is the correct board. If it is not, the control will enter *Machine Error Mode*, display , and turn on the Machine Error Tone for 15 seconds. After 15 seconds, the control will turn off the Machine Error Tone and continue to show the error message. If a key is pressed before 15 seconds has elapsed, the control will turn off the Machine Error Tone. When power is restored, the control will return to the *Ready Mode*.

The control saves the error type and adds the error to the last 25 errors queue.

Coin Drops Error

If a coin input occurs that does not meet these signal requirements, the control will consider the input invalid. If the input pulse is too short the control will ignore the input. If the input is too long or too close to the previous input, a coin error will occur. The control will display and turn on the Machine Error Tone for five (5) seconds. The coin error #1 or #2 audit counters will be incremented. If during this period a valid coin is entered it will be accepted, and the error condition will be terminated. After the five (5) seconds, the control will return to the mode that it was in prior to the Coin Error. Any valid coins are still accounted for by the Total Coins Counters. Valid coins entered during the five (5) second error condition are accepted normally and will terminate the error condition.

If the coin error penalty parameter is enabled and the coin error is enabled, when a coin error occurs all previous coins entered are erased, the vend price is reset, and the control returns to *Ready Mode*.

Vend Header Present Input Error

If the coin drops header input is detected open indicating the

Machine Errors

coin drops header has been unplugged, the control will ignore all coin drop inputs. The control will display and turn on the Machine Error Tone for five (5) seconds. The control will continue to ignore the coin drops from deducting from the vend until the coin header input has been closed for one (1) minute, but will still add to the coin audit counters.

Payment System Communications Error

These errors may occur during communication with the Serial

Payment System. There are two (2) types of Payment System Communications errors. In the Event of a type 1 error, the display on the control will indicate a control generated Payment System Communications error by showing the message menu with where "XXX" indicates the communication error code for 2 seconds. In the Event of a type 2 error, error code 11, 18 or 19 will be displayed. The machine goes into *Machine Error Mode* and waits for the communications to be restored. Once communications are restored, the control returns to its previous state. The hour, date and error code of the event are saved.

Service Schedule Menu

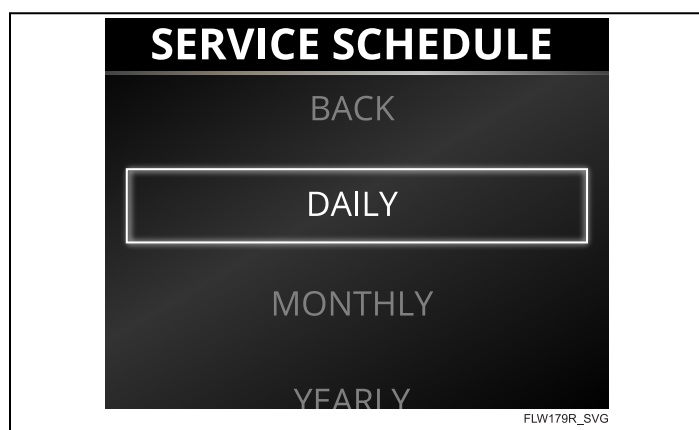


Figure 29

The Service Schedule Menu includes Back, Daily, Monthly and Yearly.

1. Simultaneously press the ▲ and ▼ keypads with Service Door open and the Coin Vault closed to enter *System Menu*.
2. Press the ▲ or ▼ keypads to highlight Service Schedule.
3. Press the ◇ keypad to enter the Service Schedule Menu.

NOTE: To enter menu items, press the ▲ or ▼ keypads to highlight the desired item and press the ◇ keypad to select.

NOTE: To exit menu items, press the ▲ or ▼ keypads to highlight BACK and press the ◇ keypad. By scrolling to bottom of list, the top of the box will return to listing.

Reset Menu

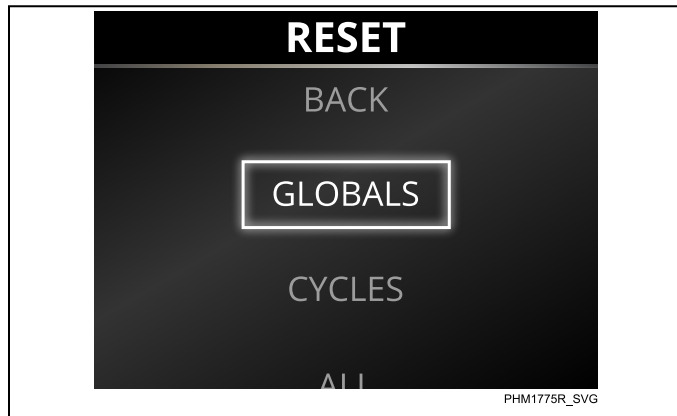


Figure 30

If enabled (refer to *Globals Menu*), the Reset Menu allows the user to reset the control's global and cycle programming data to the factory default setting. To enter Manual Reset Mode:

1. To access, simultaneously press the ▲ and ▼ keypads with Service Door open and Coin Vault closed to enter the *System Menu*.
2. Press the ▲ or ▼ keypads to highlight Reset.
3. Press the ◇ keypad to enter the Reset Menu.
4. Press the ▲ or ▼ keypads to highlight GLOBALS or and press ◇ keypad.
5. The Save Changes Menu will be displayed. Confirm reset by accepting or canceling change.

If resetting GLOBALS, the control resets the programming parameters to factory default. Refer to *Table 1*.