

AD-330 AD-320 PHASE 4 DMC (DUAL MICROPROCESSOR CONTROLLER) USER'S MANUAL

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ADC 112136

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Retain This Manual In A Safe Place For Future Reference

Please read this manual carefully to thoroughly familiarize yourself with the <u>Phase 4 Dual Microprocessor Controller</u> (<u>DMC</u>) computer system features, operational instructions, and programming characteristics. This manual contains important information on how to employ all the features of your new ADC dryer in the safest and most economical way.

American Dryer Corporation products embody advanced concepts in engineering, design, and safety. If this product is properly maintained, it will provide many years of safe, efficient, and trouble-free operation.

We have tried to make this manual as complete as possible and hope you will find it useful. ADC reserves the right to make changes from time to time, without notice or obligation, in prices, specifications, colors, and material and to change or discontinue models.

Replacement parts can be ordered from your distributor or the ADC factory. When ordering replacement parts from the factory, you can fax your order to ADC at (508) 678-9447 or telephone your orders directly to the ADC Parts Department at (508) 678-9010. Please specify the dryer model number and serial number in addition to the description and part number, so your order is processed accurately and promptly.

INSTRUCTIONS TO BE FOLLOWED IN THE EVENT THE USER SMELLS GAS MUST BE POSTED IN A PROMINENT LOCATION. THE INSTRUCTIONS TO BE POSTED SHALL BE OBTAINED FROM THE LOCAL GAS SUPPLIER.

FOR YOUR SAFETY

DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPORS AND LIQUIDS IN THE VICINITY OF THIS OR ANY OTHER APPLIANCE.

DO NOT DRY MOP HEADS IN THE DRYER.

DO NOT USE DRYER IN THE PRESENCE OF DRY CLEANING FUMES.

WARNING

CHILDREN SHOULD NOT BE ALLOWED TO PLAY ON OR IN THE DRYER(S).

CHILDREN SHOULD BE SUPERVISED IF NEAR DRYER(S) IN OPERATION.

CAUTION

DRYER(S) SHOULD NEVER BE LEFT UNATTENDED WHILE IN OPERATION.

IMPORTANT

Please observe all safety precautions displayed on the equipment and/or specified in the installation/operators manual included with the dryer.

Dryer(s) must not be installed or stored in an area where it will be exposed to water and/or weather.

The wiring diagram for the dryer is located in the front electrical control box area.

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SECTION I

Introduction

The Phase 4 Dual Microprocessor Controller (DMC) computer is a fully programmable, highly sophisticated dryer control system. The Phase 4 DMC computer has been designed to be the most versatile and reliable coin-op control system available.

In the continuous process of upgrading the product by introducing new technologies, (i.e., solid state relays), ADC has eliminated as many moving parts as possible. Programming is done through the membrane switch on the front of the control panel. This single, sealed switch (PS) eliminates the possibility of switch failure due to an accumulation of lint or moisture and keeps the procedure simple for the average user.

Phase 4 Dual Microprocessor Controller (DMC) Features

PROGRAMMABLE

Changes in programs for both top and bottom baskets (tumblers) are made on the front, using the twin keyboard, top or bottom keys. Their contents can be verified via the L.E.D. display where actual register values are shown. All program settings are done in one central area and therefore affect both top and bottom baskets(tumblers).

ADJUSTABLE TIME

The time dispensed is programmable from a minimum of 1 minute to a maximum of 99 minutes in one-minute increments.

COIN ACCEPTOR DENOMINATIONS

Values of the coin acceptors are programmable from a minimum of 1 to a maximum value of 9999 for any U.S. or foreign coin denomination.

AMOUNT TO START

The amount required to start the baskets (tumblers) is programmable from a minimum value of 1 to a maximum value of 9999 in increments of one (1).

ACCUMULATIVE TIME

This program yields a specific value of time for any coin entry made after the "Amount to Start" has been inserted.

ACCUMULATIVE COIN

This program selection requires that a specific value of coin(s) be inserted for additional time, programmable from any minimum amount.

COIN COUNT

The number of coins inserted, including a separate display program for optional dual coin acceptors, can be viewed through the L.E.D. display.

BAD COIN LOCKOUT

Each coin entry is monitored. Should someone tamper with the coin acceptor or attempt to insert a foreign object, the DMC computer will lock up the coin acceptor input and automatically reset after a 15 second delay.

TEMPERATURE CONVERSION STATUS

The temperature for each basket (tumbler) can be displayed in both °F (fahrenheit) or °C (celsius) scales. All registers that are affected change automatically to their equivalents for the respective scales. Programs affected are:

- 1. Temperature value for the temperature display mode for both the top basket (tumbler) and the bottom basket (tumbler).
- 2. All drying temperature selections.
- 3. All cool down temperature selections.
- 4. The value of the "A" register (Auto-Cycle, Slope).

DRYING TEMPERATURES

Any of the three (3) temperature selections (HI/PP/LO) are programmable from a minimum of 100°F to a maximum of 150°F in five-degree increments or from a minimum of 38°C to a maximum of 65°C in one-

degree increments. Actual values of the temperature registers are displayed in the programming mode for verification. The contents of these registers control the drying temperature of both the top basket (tumbler) and the bottom basket (tumbler) simultaneously.

COOL DOWN TIME

All three (3) temperature selections are programmable from a minimum of 0 minutes to a maximum of 9 minutes in one-minute increments for both baskets (tumblers).

COOL DOWN TEMPERATURES

In the Automatic or Free Dry modes of operation, the cool down cycle temperature at the end of the drying cycle can be programmed from a minimum of 100°F to a maximum of 150°F in five-degree increments or from a minimum of 38°C to a maximum of 65°C in one-degree increments.

AUTOMATIC MODE (ADC Patent No. 4,827,627)

This program will automatically halt the drying cycle when the preprogrammed dryness level (90 to 100) has been reached or when the maximum time (["Adrt"] [1 minute to 99 minutes]) has been reached, whichever comes first.

ANTI-WRINKLE

This program helps keep permanent press items wrinkle free when they are not removed from the basket(s) (tumbler[s]) promptly at the end of the drying and cooling cycles. The owner programs the basket (tumbler) to automatically restart in the cool down cycle if the clothes are not removed in a preprogrammed amount of time. Anti-Wrinkle program settings:

- 1. Guard Delay Time 1 to 99 minutes
- 2. Guard On Time -1 to 99 seconds
- 3. Active Guard Time 1 to 99 minutes

FREE DRY MODE

In this program mode, the Dual Microprocessor Controller (DMC) computer can be set to operate in both the "timed" mode or "automatic" operational mode. However, **no coins** are required to start the pockets (baskets/tumblers).

L.E.D. FLASH DISPLAY

Programmable to allow L.E.D. readout to display a choice of "FILL" (no cycle in progress), "Amount to Start" (i.e. $25\mathfrak{e}$), or, in the case of Free Dry, "FrEE". Programming also allows the L.E.D display to flash back and forth every two (2) seconds from "FILL" to "Amount to Start" or, in the case of Free Dry, from "FILL" to "FrEE".

AUDIBLE TONE

A tone will sound for each coin inserted, program entry, or at the end of the drying cycle and cooling cycle for a period of five (5) seconds to indicate that the cycle is complete. Additionally, when in the Anti-Wrinkle program, the tone will sound for five (5) seconds at the end of the Guard On Time.

TEMPERATURE DISPLAY

This program selection enables the temperature in the basket (tumbler) to be viewed in either °F (fahrenheit) or °C (celsius), either while the dryer is off or while the dryer is running. This service feature shows that the basket (tumbler) is maintaining the selected temperature.

DIAGNOSTICS

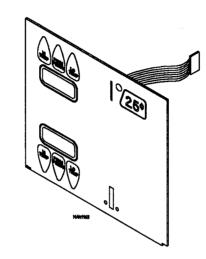
All major circuits, including door, micropressor temperature sensor, heat and motor circuits, are monitored.

BATTERY BACKUP (Optional)

This feature allows the Dual Microprocessor Controller (DMC) computer to maintain its operating status should a momentary power interruption occur while the dryer cycle is in progress.

SECTION II

L.E.D. Display and Codes



A Automatic Cycle (Slope Program Factor)

ACOn Accumulative Coin
Add Add More Coins

Adrt Maximum Auto Dryness Time
AFAt Amount for Additional Time
AGt Active Anti-Wrinkle Guard Time

AtIn Accumulative Time
AtSt Amount to Start

AUtO Automatic Mode (Patent No. 4,827,627)
b Automatic Cycle (Heat Loss [offset] Factor)

bCLO
 bCrS
 Bad Coin Lockout
 bUZ
 Buzzer (Tone)
 CEL
 Degree in Celsius
 CLCC
 Clear Left Coin Count

Coin Mode

CrCC Clear Right Coin Count

donE Drying and Cooling Cycles Complete

01

Dryer is in Anti-Wrinkle Cycle

door Door Circuit is Open

drYL Dryness Level

dSFL Dryer Sensor Circuit Failure

*FAr Degree in FahrenheitFILL No Cycle in Progress

FLS Flash Display Active

FrEE Free Dry Mode

GdLY Anti-Wrinkle Delay Time
Gont Anti-Wrinkle On Time

Grd Anti-Wrinkle Program Active

HICd High Cool Down LCC Left Coin Count

LCdE Left Coin Denomination

LOCdLow Cool DownnbUZNo Buzzer (Tone)nFLSNo Flash DisplaynGrdNo Anti-Wrinkle

OFF Dryer is "Off"

PdrY Dryness Level - Percent Dry

PL Program Location

PPCd Permanent Press Cool Down

PUSH Amount to Start has been Inserted

Make Temperature Selection

rCC Right Coin Count

rCdE Right Coin Denomination

tEnp Temperature tInE Timed Mode

tPLC Time Per Left Coin

SECTION III

Operating Instructions

NOTE: Unless otherwise specified at the time of ordering, the Dual Microprocessor Controller (DMC) computer has been preprogrammed by the factory with the parameters/programs shown on page 54. Should program changes be found necessary, please read this manual carefully to thoroughly familiarize yourself with the Dual Microprocessor Controller (DMC) computer programming characteristics.

A. TIMED MODE

- 1. When turning on power or when no cycle is in progress, the L.E.D. displays will read "FILL" and/or "Amount toStart."
- 2. Insert coin(s). Once the correct "Amount to Start" has been inserted, the display will read "PUSH tEnP".
- Select the temperature by pushing "HI-TEMP," "LO-TEMP," or "PERM-PRESS." The basket (tumbler) will start to rotate, and the L.E.D. display will read the temperature cycle selected and the drying time.
- 4. The basket (tumbler) will continue to rotate through the drying and cooling cycles, showing time counting downward.

NOTE: If the door is opened during a cycle, both the heat and motor will stop. However, the DMC computer will continue to count down in time. Continuation of the cycle will resume only after the door has been closed and any one of the three (3) temperature selection buttons is again depressed.

5. Upon completion of drying and cooling cycles, the buzzer (tone) will sound, and the L.E.D. display will read "donE" for five (5) seconds, at which time the basket (tumbler) will shut off.

NOTE: If the Anti-Wrinkle program is active, the L.E.D. display will continue reading "donE", and the DMC computer will proceed through the Anti-Wrinkle program until the maximum Guard On Time has expired or until the door is opened, whichever comes first. The L.E.D. display will read "FILL" and/or "Amount to Start."

NOTE: If the Anti-Wrinkle program is not active or in use, the L.E.D. display will read "FILL" and/or "Amount to Start."

B. <u>AUTOMATIC MODE</u> (Patent No. 4,827,627)

- 1. When turning on power or when no cycle is in progress, the L.E.D. displays will read "FILL" and/or "Amount to Start."
- 2. Insert coin(s). Once the correct "Amount to Start" has been inserted, the L.E.D. display will read "PUSH tEnP".
- 3. Select the temperature by pushing "HI-TEMP," "LO-TEMP," or "PERM-PRESS." The basket (tumbler) will start, the L.E.D. display will read the temperature cycle selected, and the drying time portion of the L.E.D. display will read "00" and count upward as the time elapses.

NOTE: If the door is opened during a cycle, both the heat and motor will stop. However, the DMC computer will continue to count upwards in time. Continuation of the cycle will resume only after the door has been closed and any one of the three (3) temperature selection buttons is again depressed.

4. Once the preprogrammed dryness level and cool down period have been reached or maximum automatic time has expired, whichever comes first, the buzzer (tone) will sound, and the L.E.D. display will read "donE" for five (5) seconds, at which time the basket (tumbler) will shut off.

NOTE: If the Anti-Wrinkle program is active, the L.E.D. display will continue reading "donE", and the DMC computer will proceed through the Anti-Wrinkle program until the maximum Guard On Time has expired or until the door is opened, whichever comes first. The L.E.D. display will read "FILL" and/or "Amount to Start."

NOTE: If the Anti-Wrinkle program is not active or in use, the L.E.D. display will read "FILL" and/or "Amount to Start."

C. FREE DRY MODE

- 1. When turning on power or when no cycle is in progress, the L.E.D. displays will read "FILL" and/or "FrEE".
- 2. Select temperature. The basket (tumbler) will start rotating, the L.E.D. display will read the temperature cycle selected, and the drying time portion of the L.E.D. display will read the value of "Adrt" (maximum time for automatic dry), counting downward as time elapses when in the <u>timed mode</u> and upward when in the <u>automatic mode</u>.

NOTE: If the door is opened during a cycle, both the heat and motor will stop. However, the Dual Microprocessor Controller (DMC) computer will continue to count upwards in time. Continuation of the cycle will resume only after the door has been closed, and one of the three (3) temperature selection buttons is again depressed.

3. Once the preprogrammed dryness level and cool down period has been reached or maximum automatic time has expired, whichever comes first, the buzzer (tone) will sound, and the L.E.D. display will read "donE" for five (5) seconds, at which time the basket (tumbler) will shut off. NOTE: If the Anti-Wrinkle program is active, the L.E.D. display will continue reading "donE", and the DMC computer will proceed through the Anti-Wrinkle program until the maximum Guard On Time has expired or until the door is opened, whichever comes first. The L.E.D. display will read "FILL" and/or "FrEE".

NOTE: If the Anti-Wrinkle program is not active or in use, the L.E.D. display will read "FILL" and/or "FrEE".

SECTION IV

Program Selections

NOTE: Programs are stored in the Dual Microprocessor Controller (DMC) computer memory and they are cataloged as Program Locations (PL).

TEMPERATURE DISPLAY MODE

By closing the Program Switch (PS), the L.E.D. displays will read the respective temperatures for both the top basket (tumbler) and the bottom basket (tumbler) in either °F (fahrenheit) or °C (celsius), depending on how the PL01 temperature conversion status is set. The temperature display mode can be activated while the baskets (tumblers) are in the operating cycle or off. While in the operating cycle, the circuit indicators are visible for troubleshooting purposes.

NOTE: The baskets (tumblers) <u>cannot</u> be started while the DMC computer program switch (PS) is closed unless the cycle was already in progress.

RIGHT COIN COUNT (rCC)

For models equipped with the optional dual coin acceptor, by closing the Program Switch (PS) and pushing the "HI-TEMP" keyboard (touchpad) selection button, the amount of coins inserted through the right coin slot of the coin acceptor can be viewed through the L.E.D. display. The DMC computer memory will retain a running count of up to 9999 coins and can be cleared ("CrCC") by following the procedure shown on page 25.

LEFT COIN COUNT (LCC)

The number of coins inserted for a single coin acceptor dryer or in the case of a dual coin acceptor, the left coin slot can be viewed through the L.E.D. display by closing the Program Switch (PS) and pushing the "LOTEMP" keyboard (touchpad) selection button. The DMC computer memory will retain a running count of up to 9999 coins and can be cleared ("CLCC") by following the procedure shown on page 26.

PL01 - TEMPERATURE CONVERSION STATUS

This program controls whether the temperature-related programs will be operated in °F (fahrenheit) or °C (celsius). Programs affected are:

- 1. Temperature Display Mode.
- 2. Selected Drying Temperatures.
- 3. Selected Cool Down Temperatures.

AUTOMATIC MODE (AUtO) (Patent No. 4,827,627)

When this program is selected ("AUtO"), the baskets (tumblers) will run for a preset level of dryness (PL17) or until the programmed automatic maximum time (PL14) has expired.

At the end of the drying cycle, the baskets (tumblers) will go into the cool down cycle for the time period programmed (PL04, PL06, or PL08) or until the temperature has dropped to the programmed cool down temperature (PL04, PL06, or PL08).

NOTE: Due to humidity, atmospheric pressure, percentage of extraction, etc., the desired dryness level may vary. It is suggested that the owner determine which level of dryness is best suited for his application by experimenting with a few test loads.

TIME MODE (tInE)

When this program is selected ("tInE") and the DMC computer has been activated by the insertion of a coin(s), the basket (tumbler) will continue to run until the preset time, including the cool down period (PL04, PL06, or PL08) has elapsed, at which time the basket (tumbler) will cycle off or go into the optional Anti-Wrinkle program.

ANTI-WRINKLE PROGRAM (Grd)

This feature can be used in conjunction with any of the three (3) operating modes - "Coin," "Automatic," or "Free Dry." In this program, when the drying and cooling cycles are completed, the basket (tumbler) will shut off, the tone will sound, and the L.E.D. display will read

"donE". If the door is not opened, the DMC computer will wait until the Guard Delay Time (PL15) has expired, at which time the clothes will be tumbled (without heat) for the programmed Guard On Time (PL15). The DMC computer will repeat this process until the programmed Active Guard Time (PL16) has expired or until the basket (tumbler) door is opened, at which time the L.E.D. display will read "FILL" and "Amount to Start," or "FILL" and "FrEE".

BUZ/TONE (bUZ)

When in the Anti-Wrinkle program, the option is available to have the buzzer/tone sound for a period of five (5) seconds at the end of each Guard On Time cycle.

FREE DRY MODE (FrEE)

The DMC computer can be programmed to run without the insertion of coins. When the DMC computer is programmed in the Free Dry mode, it can be set to run on timed ("tInE") or automatic ("AUtO") mode.

COIN MODE (Coin)

In this program status, coins are required to start the baskets (tumblers), even if the DMC computer is set in the automatic mode.

FLASH DISPLAY STATUS (FLS)

When the DMC computer is set in this program status, it allows the L.E.D. readout to display a choice of "FILL" (no cycle in progress), "Amount to Start" (PL12), or, in the case of Free Dry, "FrEE". Programming allows the L.E.D. readout to revert back and forth every two (2) seconds from "FILL" to "Amount to Start," or, in the case of Free Dry, from "FILL" to "FrEE".

BAD COIN LOCKOUT STATUS (bCLO)

In this program status, the Dual Microprocessor Controller (DMC) computer counts in milliseconds the amount of time required for a coin entry signal. If someone should tamper with he coin acceptor or attempt a foreign object entry, the DMC computer wil lock up the coin acceptor input. This condition will remain even if coins are inserted, until the program automatically resets itself at the end of a 15-second delay.

BAD COIN LOCKOUT RESET (bCrS)

When set in this program status, the Dual Microprocessor Controller (DMC) computer counts in milliseconds the amount of time required for a coin entry signal. If someone should tamper with the coin acceptor or attempt a foreign object entry, the DMC computer will not accept the entry and will automatically reset itself for the next entry.

ACCUMULATIVE TIME (AtIn)

Single Coin

In this program mode, each coin inserted has a specific value in time which is determined by the Time Per Left Coin ("tPLC") (PL11) program.

Example No. 1: If the baskets (tumblers) are equipped with 25¢ coin acceptors and if the desired time is 12 minutes, each additional coin inserted would yield 12 minutes.

Example No. 2: If the baskets (tumblers) are equipped with 25¢ coin acceptors and the Amount to Start ("AtSt") is 50¢ for 30 minutes, the insertion of each additional coin would yield 15 minutes. In this application, the Time Per Left Coin ("tPLC") is determined by dividing the Total Vend Time (30) by the Amount to Start ("AtSt") (i.e., 50¢) and then multiplying by the Left Coin Denomination ("LCdE").

Formula:
$$\frac{\text{Total Vend Time}}{\text{AtSt}} \times \text{LCdE} = \text{tPLC}$$

 $\frac{30}{50} \times 25 = 15 \text{ Minutes (tPLC)}$

NOTE: If the Total Vend Time cannot be divided evenly by the Amount to Start, the Time Per Left Coin must be rounded off.

Example:
$$\frac{30}{50} \times 10 = 6.36$$
 (round off to 6 minutes)

ACCUMULATIVE COIN (ACOn)

When this program mode is selected, additional time can only be achieved when the Amount for Additional Time (PL13) has been inserted.

Single Coin Acceptor

Example No. 1: Using a 25¢ coin acceptor with the desired Amount to Start ("AtSt") being 50¢ for 24 minutes, the DMC computer would yield more time (24 minutes) only when an additional 50¢ is inserted. For this application, the Time Per Left Coin (PL11) is determined as illustrated below.

Formula:
$$\frac{\text{Total Vend Time}}{\text{AtSt}} \times \text{LCdE} = \text{tPLC}$$

$$\frac{24}{50}$$
 x 25 = 12 Minutes (tPLC)

PL02 - DRYNESS LEVEL (drYL)

DISABLED, included for downward compatibility.

PL03 - HIGH TEMPERATURE (HI°F)

The high operating temperature is programmable from a minimum of 100°F to a maximum of 150°F in five-degree increments or from a minimum of 38°C to a maximum of 65°C in one-degree increments.

PL04 - HIGH COOL DOWN TEMPERATURE/TIME (HICd)

The first part of this program controls the cool down temperature when the Dual Microprocessor Controller (DMC) computer is used in the Automatic Mode or Free Dry Mode. The cool down temperature is programmable from a minimum of 100°F to a maximum of 150°F in five-degree increments or from a minimum of 38°C to a maximum of 65°C in one-degree increments.

The second part of this program controls the cool down time for both the automatic and timed modes. The cool down time can be programmed from a minimum of 0 (zero) minutes to a maximum of 9 minutes.

NOTE: When the computer is used in the automatic mode or free dry mode, at the end of the drying cycle, the DMC computer then starts the automatic cooling cycle for the cool down time programmed or until the temperature has dropped to the programmed cool down temperature, whichever of the two comes first.

PL05 - LOW TEMPERATURE (LO°F)

Same as PL03 but for Low Temperature program.

PL06 - LOW COOL DOWN TEMPERATURE / TIME (LOCd)

Same as PL04 but for Low Cool Down Temperature/Time.

PL07 - PERMANENT PRESS TEMPERATURE (PP°F)

Same as PL03 but for Permanent Press.

PL08 - PERM PRESS COOL DOWN TEMPERATURE/TIME (PPCd)

Same as PL04 but for Perm Press Cool Down Temperature/Time.

PL09 - LEFT COIN DENOMINATION (LCdE)

In the case of a single coin acceptor, this program setting is determined by the value of the coin acceptor (i.e., 25ϕ).

Program settings are from a minimum of 1 to a maximum of 9999.

PL10 - RIGHT COIN DENOMINATION (rCdE)

This program need only be set when a dual coin acceptor is used. The program setting is determined by the value of the right coin acceptor slot (higher value).

Program settings are from a minimum of 1 to a maximum of 9999.

When used in conjunction with the Left Coin Slot Denomination program, the DMC computer automatically calculates the ratios necessary for coin insertion time values.

PL11 - TIME PER LEFT COIN (tPLC)

This program sets a specific value in time for each coin inserted. In the case of a dual coin acceptor, the Time Per Right Coin is automatically calculated by the left coin slot and right coin slot denomination ratio.

PL12 - AMOUNT TO START (AtSt)

This program sets the amount needed to start the dryer and can be programmed from a minimum of 1 to a maximum of 9999.

PL13 - MINIMUM AMOUNT FOR MORE TIME (AFAt)

This program need only be set when the computer is set in the Coin Accumulation mode ("ACOn") (PL01). The value set for this program is what will have to be inserted for more time after the Amount to Start has been inserted.

Example No. 1: Amount to Start ("AtSt") is 50¢ for 30 minutes, and an additional 50¢ is required for more time.

In this example, PL13 should be set for 50¢.

PL14 - MAXIMUM TIME FOR AUTOMATIC DRY (Adrt)

This program is used only when the Dual Microprocessor Controller (DMC) computer is set in the Automatic Mode or Free Dry Mode. This program controls the maximum time the dryer will run even if the Dryness Level program (PL17) has not been reached.

PL15 - ANTI-WRINKLE TIMING

1. Guard Delay Time (GdLY)

This program controls the dwell (stop) time and activation of the Anti-Wrinkle Guard On Time. The dwell (stop) time can be programmed from a minimum of 1 minute to a maximum of 9 minutes in one-minute increments.

2. Guard On Time (Gont)

This setting controls the amount of time that the baskets (tumblers) will turn without heat when Anti-Wrinkle cycle is selected. The Guard On Time is programmable from a minimum of 10 seconds to a maximum of 99 seconds in one-second increments.

PL16 - ACTIVE GUARD TIME (AGt)

This program controls the maximum time that the Anti-Wrinkle cycle will be in progress and is programmable from a minimum of 1 minute to a maximum of 99 minutes in one-minute increments.

PL17 - DRYNESS LEVEL (PdrY)

When in the Automatic Mode or Free Mode, this program will automatically shut off the basket (tumbler) when the desired dryness level is reached or the maximum automatic drying time ("Adrt") has elapsed, whichever occurs first. Dryness level is expressed inpercent and is adjustable from 90 percent (90%) to 100 percent (100%) in one-percent (1%) (single-unit) increments.

PL18 - "A" and "B" FACTORS (for Automatic Cycle ONLY)

These registers contain the valves that the automatic cycle ("AUtO") program uses to calculate dryness through the cycle.

"A" - Slope is adjustable from 1 to 9 in single-unit increments.

"B" - Offset is adjustable from 1 to 99 in single-unit increments.

NOTE: Refer to Section VII - Factory Preset Parameters/ Programs on <u>page 54</u> - for actual settings on your Dual Microprocessor Controller (DMC) computer.

SECTION V

Introduction To Programming

All programming is done through the twin-keyboard (touchpad) selection buttons on the front of the control panel. To change programs or to put the Dual Microprocessor Controller (DMC) computer in the temperature or coin count display modes, the Program Switch (PS) located on the back side of the DMC computer must be put into the closed position (PSC).

The following instructions explain how to enter the program locations:

INITIAL CONDITIONS: The power is on, the dryer is idling, and no drying cycle is in progress

STEP	ACTION	TOP L.E.D. DISPLAY	BOTTOM L.E.D. DISPLAY	REMARKS
1.	-	FILL - 25	FILL - 25	Flashing
2.	CLOSE PS switch	72° F	72° F	Temperature Mode
3.	Press PERM-PRESS	PL01	Blank	Program Mode
4.	Press HI-TEMP	PL02	Blank	Location #2
5.	Press HI-TEMP	PL03	Blank	Location #3
6.	Press HI-TEMP	PL04	Blank	Location #4
7.	Press LO-TEMP	PL03	Blank	Location #3
8.	Press LO-TEMP	PL02	Blank	Location #2
9.	Press LO-TEMP	PL01	Blank	Location #1
10.	Press PERM-PRESS	PL01	°FAr	Temperature Scale

OBSERVATIONS: Once in program mode, program locations can be indexed upward with the aid of the "HI-TEMP" key and downward with the aid of the "LO-TEMP" key.

NOTE: Holding the "HI-TEMP" or "LO-TEMP" keys down continuously will automatically strobe/scroll through <u>ALL</u> the program locations available.

SECTION VI

Programming

This section is dedicated to the high-level programming features available on the Dual Microprocessor Controller (DMC) computer.

A. TEMPERATURE DISPLAY MODE

The temperature display mode is a feature available on the Dual Micro-processor Controller (DMC) computer which displays the temperature inside each basket (tumbler). This diagnostic feature can be very helpful when servicing the dryers.

INITIAL CONDITIONS: The power is on, the dryer is idling, and no drying cycles are in progress.

STEP	ACTION	TOP L.E.D. DISPLAY	BOTTOM L.E.D. DISPLAY	REMARKS
1.	-	FILL - 25	FILL - 25	Flashing
2.	CLOSE PS switch	72° F	72° F	Room Temperature

If the baskets (tumblers) were both running, the following sequence would take place:

STEP	ACTION	TOP L.E.D. DISPLAY	BOTTOM L.E.D. DISPLAY	REMARKS
1.	-	HI 20	HI 20	ALL dots on
2.	CLOSE PS switch	135° F	137° F	ALL dots on
3.	Open both doors	135° F	137° F	ALL dots off
4.	Close doors	134° F	136° F	ALL dots off
5.	<u>OPEN</u> PS switch	HI 15	HI 15	ALL dots off
6.	Press HI-TEMP	HI 15	HI 15	ALL dots on

OBSERVATIONS: Both baskets (tumblers) will continue their respective cycles until the end without any change.

B. RIGHT COIN COUNT (rCC)

The Right Coin Count feature available on the dual control is a function that displays the total number of coins sensed by the coin switch. The right coin count resides in the Dual Microprocessor Controller (DMC) computer memory and can be accessed and/or cleared as the following sequence outlines:

INITIAL CONDITIONS: The power is on, dryer is idling, and no drying cycles are in progress.

STEP	ACTION	TOP L.E.D. DISPLAY	BOTTOM L.E.D. DISPLAY	REMARKS
1.	-	FILL - 25	FILL - 25	Flashing
2.	CLOSE PS switch	72° F	72° F	Room Temperature
3.	Press HI-TEMP	rCC	56	56 Coins In
4.	Press PERM-PRESS	72° F	72° F	Room Temperature

To clear the right coin count register, <u>add</u> the following steps to the procedures outlined above:

STEP	ACTION	TOP L.E.D. DISPLAY	BOTTOM L.E.D. DISPLAY	REMARKS
5.	Press HI-TEMP	rCC	56	Room Temperature
6.	Press HI-TEMP	CrCC	56	56 Coins In
7.	Press PERM-PRESS	rCC	00	Room Temperature

OBSERVATIONS: On Step No. 7 above, pressing HI-TEMP instead of the PERM-PRESS key will abort the "CrCC" (Clear Right Coin Count) command and branch the program to Step No. 2, the temperature display.

NOTE: Open Program Switch (PS) to exit from the display mode.

C. LEFT COIN COUNT (LCC)

The Left Coin Count feature available on the Dual Microprocessor Controller (DMC) computer performs basically the same function as the Right Coin Count as shown on the preceding page (page 25). This function displays the total amount of coins that have been sensed by the coin-switch. The Left Coin Count resides in the DMC computer memory and can be accessed and/or cleared using the following procedure:

INITIAL CONDITIONS: The power is on, dryer is idling, and no drying cycles are in progress.

STEP	ACTION	TOP L.E.D. DISPLAY	BOTTOM L.E.D. DISPLAY	REMARKS
1.	-	FILL - 25	FILL - 25	Flashing
2.	CLOSE PS switch	72° F	72° F	Room Temperature
3.	Press LO-TEMP	LCC	108	108 Coins In
4.	Press PERM-PRESS	72° F	72° F	Room Temperature

To clear the left coin count register, <u>add</u> the following steps to the procedures outlined above:

STEP	ACTION	TOP L.E.D. DISPLAY	BOTTOM L.E.D. DISPLAY	REMARKS
5.	Press LO-TEMP	LCC	108	Room Temperature
6.	Press HI-TEMP	CLCC	108	56 Coins In
7.	Press PERM-PRESS	LCC	00	Room Temperature

OBSERVATIONS: On Step No. 7 above, pressing HI-TEMP instead of the PERM-PRESS key will abort the "CLCC" (Clear Left Coin Count) command and branch the program to Step No. 2, the temperature display.

NOTE: Open Program Switch (PS) to exit from the display mode.

STEP	ACTION	TOP L.E.D. DISPLAY	BOTTOM L.E.D. DISPLAY	REMARKS
1.	*	FILL - 25	FILL - 25	Flashing
2.	CLOSE PS switch	72° F	72° F	Room Temperature
3.	Press PERM-PRESS	PL01	Blank	Ready To Read
4.	Press PERM-PRESS	PL01	°FAr	Temperature Scale
5.	Press PERM-PRESS	PL01	tInE	Timed Mode
6.	Press PERM-PRESS	PL01	Grd	Guard Active
7.	Press PERM-PRESS	PL01	bUZ	Buzzer Active
8.	Press PERM-PRESS	PL01	Coin	Coin Mode
9.	Press PERM-PRESS	PL01	FLS	Flashing Mode
10.	Press PERM-PRESS	PL01	ьсLО	Bad Coin Lockout
11.	Press PERM-PRESS	PL01	AtIn	Accumulative Time

NOTE: All the settings under PL01 can be changed using either the LO-TEMP key or the HI-TEMP key on the twin keypad (touchpad) to toggle any register contents to its other available status.

Example: Changing the temperature scale from Fahrenheit (°FAr) to Celsius (°CEL).

STEP	ACTION	TOP L.E.D. DISPLAY	BOTTOM L.E.D. DISPLAY	REMARKS
1.	-	FILL - 25	FILL - 25	Flashing
2.	CLOSE PS switch	72 °F	72 °F	Temperature Display
3.	Press PERM-PRESS	PL01	Blank	Ready To Read
4.	Press PERM-PRESS	PL01	°FAr	Fahrenheit Scale
5.	Press LO-TEMP	PL01	°CEL	Celsius Scale
6.	OPEN PS switch	FILL - 25	FILL - 25	Operational Mode

OBSERVATIONS: Both baskets (tumblers) will continue their respective cycles until the end without any change.

NOTE: In the example above, as a result of the temperature scale, <u>ALL</u> applicable temperature registers will automatically be converted to their equivalent Celsius temperatures (i.e., PL03, PL04, PL05, PL06, PL07, and PL08).

D. PROGRAM LOCATION 01 (PL01)

Program Location 01 (PL01) contains most of the system parameters which control the operation of both baskets (tumblers).

STEP	ACTION	TOP L.E.D. DISPLAY	BOTTOM L.E.D. DISPLAY	REMARKS
1.	-	FILL - 25	FILL - 25	Flashing
2.	CLOSE PS switch	72° F	72° F	Room Temperature
3.	Press PERM-PRESS	PL01	Blank	Ready To Read
4.	Press PERM-PRESS	PL01	°FAr	Temperature Scale
5.	Press PERM-PRESS	PL01	tInE	Timed Mode
6.	Press PERM-PRESS	PL01	Grd	Guard Active
7.	Press PERM-PRESS	PL01	bUZ	Buzzer Active
8.	Press PERM-PRESS	PL01	Coin	Coin Mode
9.	Press PERM-PRESS	PL01	FLS	Flashing Mode
10.	Press PERM-PRESS	PL01	ьсLO	Bad Coin Lockout
11.	Press PERM-PRESS	PL01	AtIn	Accumulative Time

NOTE: All the settings under PL01 can be changed using either the LO-TEMP key or the HI-TEMP key on the twin keypad (touchpad) to toggle any register contents to its other available status.

Example: Changing the temperature scale from Fahrenheit (°FAr) to Celsius (°CEL).

STEP	ACTION	TOP L.E.D. DISPLAY	BOTTOM L.E.D. DISPLAY	REMARKS
1.	-	FILL - 25	FILL - 25	Flashing
2.	CLOSE PS switch	72 °F	72 °F	Temperature Display
3.	Press PERM-PRESS	PL01	Blank	Ready To Read
4.	Press PERM-PRESS	PL01	°FAr	Fahrenheit Scale
5.	Press LO-TEMP	PL01	°CEL	Celsius Scale
6.	OPEN PS switch	FILL - 25	FILL - 25	Operational Mode

OBSERVATIONS: All other registers within PL01 can be toggled using the same procedure as outlined above.

NOTE: In the example shown on the preceding page (page 28), as a result of the temperature scale, <u>ALL</u> applicable temperature registers will automatically be converted to their equivalent Celsius Temperatures (i.e., PL03, PL04, PL05, PL06, PL07, and PL08).

E. PROGRAM LOCATON 02 (PL02) Disabled

F. PROGRAM LOCATION 03 (PL03) HI-drY-tEnp

The HI-drY-tEnp register contains the drying temperature value that the Dual Microprocessor Controller (DMC) computer will seek upon selection for both the top basket (tumbler) or bottom basket (tumbler). This register can be accessed/changed using the following procedure:

STEP	ACTION	TOP L.E.D. DISPLAY	BOTTOM L.E.D. DISPLAY	REMARKS
1.	-	FILL - 25	FILL - 25	Flashing
2.	CLOSE PS switch	72 °F	72 °F	Room Temperature
3.	Press PERM-PRESS	PL01	Blank	Ready To Read
4.	Press HI-TEMP	PL02	Blank	Next Location
5.	Press HI-TEMP	PL03	Blank	Target Location
6.	Press PERM-PRESS	HI-drY-tEnp	140 °F	TEMP. SET-POINT

To change the temperature set-point while pointing at the HI-drY-tEnp register, <u>add</u> the following steps to the procedure listed above.

STEP	ACTION	TOP L.E.D. DISPLAY	BOTTOM L.E.D. DISPLAY	REMARKS
1.	-	HI-drY-tEnp	140 °F	TEMP. SET-POINT
2.	Press LO-TEMP	HI-drY-tEnp	135 °F	Decremented 5 °F
3.	Press LO-TEMP	HI-drY-tEnp	130 °F	Decremented 5 °F
4.	Press HI-TEMP	HI-drY-tEnp	135 °F	Incremented 5 °F
5.	Press PERM-PRESS	PL04	Blank	NEW SET-POINT

OBSERVATIONS: The new temperature set point (i.e., 135 °F) has been entered in the Dual Microprocessor Controller (DMC) computer non-volatile memory in <u>Step No. 5</u> above by pressing the PERM-PRESS key.

NOTE: In the programming mode, the PERM-PRESS key (within the upper set of keys or lower set of keys) functions as the "ENTER" key.

NOTE: HI-drY-tEnp is programmable from a minimum of 100 °F to a maximum of 150 °F in five-degree increments or from a minimum of 38 °C to a maximum of 65 °C in one-degree increments.

G. PROGRAM LOCATION 04 (PL04) HI-COOL-tEnp / HI-COOL-tInE

Program Location 04 (PL04) contains two (2) registers:

HI-COOL-tEnp and HI-COOL-tInE.

The HI-COOL-tEnp register contains the cool-down temperature valve that the Dual Microprocessor Controller (DMC) computer will seek upon completion of the heated portion of the drying cycle for both the top basket (tumbler) or bottom basket (tumbler). The HI-COOL-tInE register stores the amount of time for which the dryer will engage in cool-down for both baskets (tumblers).

The cool-down portion of the drying cycle is controlled exclusively by the time register when the DMC computer is in the TIME or FREE modes and by both the time and the temperature registers, whichever occurs first, in the Automatic Mode.

These registers can be accessed/changed using the following procedure:

STEP	ACTION	TOP L.E.D. DISPLAY	BOTTOM L.E.D. DISPLAY	REMARKS
1.	-	FILL - 25	FILL - 25	Flashing
2.	CLOSE PS switch	72 °F	72 °F	Room Temperature
3.	Press PERM-PRESS	PL01	Blank	Ready To Read
4.	Press HI-TEMP	PL02	Blank	Next Location
5.	Press HI-TEMP	PL03	Blank	Next Location
6.	Press HI-TEMP	PL04	Blank	Target Location
7.	Press PERM-PRESS	HI-COOL-tEnp	100 °F	TEMP. SET-POINT

The HI-COOL-tEnp or the HI-COOL-tInE values can be changed while pointing at these registers by <u>adding</u> the following steps (as listed on the following page [page 32]) to the procedure listed above.

STEP	ACTION	TOP L.E.D. DISPLAY	BOTTOM L.E.D. DISPLAY	REMARKS
1.	-	HI-COOL-tEnp	100 °F	TEMP. SET-POINT
2.	Press Hi-TEMP	HI-COOL-tEnp	105 °F	Incremented 5 °F
3.	Press HI-TEMP	HI-COOL-tEnp	110 °F	Incremented 5 °F
4.	Press LO-TEMP	HI-COOL-tEnp	105 °F	Decremented 5 °F
5.	Press PERM-PRESS	HI-COOL-tInE	2	COOL-DOWN-TIME
6.	Press HI-TEMP	HI-COOL-tinE	3	Incremented 1 minute
7.	Press PERM-PRESS	PL05	Blank	-
8.	Press PERM-PRESS	FILL - 25	FILL - 25	Operational Mode

OBSERVATIONS: The new temperature set-point (i.e., 105 °F) has been entered in the DMC computer non-volatile memory in Step No.6 above by pressing the PERM-PRESS key. The DMC computer will automatically step to the next register (i.e., HI-COOL-tIne). The new cooldown period (i.e., 3 minutes) has been entered in the DMC computer memory in a similar fashion in Step No.8 above.

NOTE: In the programming mode, the PERM-PRESS key (within the upper set of keys or lower set of keys) functions as the "ENTER" key.

HI-COOL-tEnp is programmable from a minimum of 100 °F to a maximum of 150 °F in five-degree increments or from a minimum of 38 °C to a maximum of 65 °C in one-degree increments.

HI-COOL-tInE is programmable from a minimum of 0 minutes to a maximum of 9 minutes in one-minute increments.

H. PROGRAM LOCATION 05 (PL05) LO-drY-tEnp

The LO-drY-tEnp register contains the drying temperature valve that the Dual Microprocessor Controller (DMC) computer will seek upon selection for both the top basket (tumbler) or bottom basket (tumbler). This register can be accessed/changed using the following procedure: (Refer to the following page [page 33].)

STEP	ACTION	TOP L.E.D. DISPLAY	BOTTOM L.E.D. DISPLAY	REMARKS
1.	-	FILL - 25	FILL - 25	Flashing
2.	CLOSE PS switch	72 °F	72 °F	Room Temperature
3.	Press PERM-PRESS	PL01	Blank	Ready To Read
4.	Press HI-TEMP	PL02	Blank	Next Location
5.	Press HI-TEMP	PL03	Blank	Next Location
6.	Press HI-TEMP	PL04	Blank	Next Location
7.	Press HI-TEMP	PL05	Blank	Target Location
8.	Press PERM-PRESS	LO-drY-tEnp	120 °F	TEMP. SET-POINT

To change the temperature set-point while pointing at the LO-drY-tEnp register, <u>add</u> the following steps to the procedure listed above.

STEP	ACTION	TOP L.E.D. DISPLAY	BOTTOM L.E.D. DISPLAY	REMARKS
1.	-	LO-drY-tEnp	120 °F	TEMP. SET-POINT
2.	Press LO-TEMP	LO-drY-tEnp	115 °F	Decremented 5 °F
3.	Press LO-TEMP	LO-drY-tEnp	110 °F	Decremented 5 °F
4.	Press HI-TEMP	LO-drY-tEnp	115 °F	Incremented 5 °F
5.	Press PERM-PRESS	PL06	Blank	NEW SET-POINT

OBSERVATIONS: The new temperature set point (i.e., 115 °F) has been entered in the Dual Microprocessor Controller (DMC) computer non-volatile memory in Step No. 5 above by pressing the PERM-PRESS key.

NOTE: In the programming mode, the PERM-PRESS key (within the upper set of keys or lower set of keys) functions as the "ENTER" key.

LO-drY-tEnp is programmable from a minimum of 100 °F to a maximum of 150 °F in five-degree increments or from a minimum of 38 °C to a maximum of 65 °C in one-degree increments.

I. PROGRAM LOCATION 06 (PL06) LO-COOL-tEnp / LO-COOL-tInE

Program Location 06 (PL06) contains two (2) registers:

LO-COOL-tInE.

The LO-COOL-tEnp register contains the cool-down temperature valve that the Dual Microprocessor Controller (DMC) computer will seek upon completion of the heated portion of the drying cycle for both the top basket (tumbler) or bottom basket (tumbler). The LO-COOL-tInE register stores the amount of time for which the dryer will engage in cool-down for both baskets (tumblers).

The cool-down portion of the drying cycle is controlled exclusively by the time register when the DMC computer is in the TIME or FREE modes and by both the time and the temperature registers, whichever occurs first, in the Automatic Mode.

These registers can be accessed/changed using the following procedure:

STEP	ACTION	TOP L.E.D. DISPLAY	BOTTOM L.E.D. DISPLAY	REMARKS
1.	-	FILL - 25	FILL - 25	Flashing
2.	<u>CLOSE</u> PS switch	72 °F	72 °F	Room Temperature
3.	Press PERM-PRESS	PL01	Blank	Ready To Read
4.	Press HI-TEMP	PL02	Blank	Next Location
5.	Press HI-TEMP	PL03	Blank	Next Location
6.	Press HI-TEMP	PL04	Blank	Next Location
7.	Press HI-TEMP	PL05	Blank	Next Location
8.	Press HI-TEMP	PL06	Blank	Target Location
9.	Press PERM-PRESS	LO-COOL-tEnp	100 °F	TEMP. SET-POINT

The LO-COOL-tEnp or the LO-COOL-tInE values can be changed while pointing at these registers by <u>adding</u> the following steps (as listed on the following page [page 35]) to the procedure listed above.

STEP	ACTION	TOP L.E.D. DISPLAY	BOTTOM L.E.D. DISPLAY	REMARKS
1.	-	LO-COOL-tEnp	100 °F	TEMP. SET-POINT
2.	Press HI-TEMP	LO-COOL-tEnp	105 °F	Incremented 5 °F
3.	Press HI-TEMP	LO-COOL-tEnp	110 °F	Incremented 5 °F
4.	Press LO-TEMP	LO-COOL-tEnp	105 °F	Decremented 5 °F
5.	Press PERM-PRESS	LO-COOL-tInE	2	COOL-DOWN-TIME
6.	Press HI-TEMP	LO-COOL-tInE	3	Incremented 1 minute
7.	Press PERM-PRESS	PL07	Blank	-
8.	OPEN PS switch	FILL - 25	FILL - 25	Operational Mode

OBSERVATIONS: The new temperature set point (i.e., 105 °F) has been entered in the Dual Microprocessor Controller (DMC) computer non-volatile memory in <u>Step No. 6</u> above by pressing the PERM-PRESS key. The DMC computer will automatically step to the next register (i.e., LO-COOL-tInE). The new cool-down time period (i.e., 3 minutes) has been entered in the DMC computer memory in a similar fashion in <u>Step No. 8</u> above

NOTE: In the programming mode, the PERM-PRESS key (within the upper set of keys or lower set of keys) functions as the "ENTER" key.

LO-COOL-tEnp is programmable from a minimum of 100 °F to a maximum of 150 °F in five-degree increments or from a minimum of 38 °C to a maximum of 65 °C in one-degree increments.

LO-COOL-tInE is programmable from a minimum of 0 minutes to a maximum of 9 minutes in one-minute increments.

J. PROGRAM LOCATION 07 (PL07) PP-drY-tEnp

The PP-drY-tEnp register contains the drying temperature valve that the Dual Microprocessor Controller (DMC) computer will seek upon selection for both the top basket (tumbler) or bottom basket (tumbler). This register can be accessed/changed using the following procedure: (Refer to the following page [page 36].)

STEP	ACTION	TOP L.E.D. DISPLAY	BOTTOM L.E.D. DISPLAY	REMARKS
1.	-	FILL - 25	FILL - 25	Flashing
2.	CLOSE PS switch	72 °F	72 °F	Room Temperature
3.	Press PERM-PRESS	PL01	Blank	Ready To Read
4.	Press HI-TEMP	PL02	Blank	Next Location
5.	Press HI-TEMP	PL03	Blank	Next Location
6.	Press HI-TEMP	PL04	Blank	Next Location
7.	Press HI-TEMP	PL05	Blank	Next Location
8.	Press HI-TEMP	PL06	Blank	Next Location
9.	Press HI-TEMP	PL07	Blank	Target Location
10.	Press PERM-PRESS	PP-drY-tEnp	150 °F	TEMP. SET-POINT

To change the temperature set-point while pointing at the PP-drY-tEnp register, <u>add</u> the following steps to the procedure listed above:

STEP	ACTION	TOP L.E.D. DISPLAY	BOTTOM L.E.D. DISPLAY	REMARKS
1.	-	PP-drY-tEnp	130 °F	TEMP. SET-POINT
2.	Press LO-TEMP	PP-drY-tEnp	125 °F	Decremented 5 °F
3.	Press LO-TEMP	PP-drY-tEnp	120 °F	Decremented 5 °F
4.	Press HI-TEMP	PP-drY-tEnp	125 °F	Incremented 5 °F
5.	Press PERM-PRESS	PL08	Blank	NEW SET-POINT

OBSERVATIONS: The new temperature set point (i.e., 125 °F) has been entered in the Dual Microprocessor Controller (DMC) computer non-volatile memory in <u>Step No. 5</u> above by pressing the PERM-PRESS key.

NOTE: In the programming mode, the PERM-PRESS key (within the upper set of keys or lower set of keys) functions as the "ENTER" key.

PP-drY-tEnp is programmable from a minimum of 100 °F to a maximum of 150 °F in five-degree increments or from a minimum of 38 °C to a maximum of 65 °C in one-degree increments.

K. PROGRAM LOCATION 08 (PL08) PP-COOL-tEnp and PP-COOL-tInE

Program Location 08 (PL08) contains two (2) registers:

PP-COOL-tEnp and PP-COOL-tInE.

The PP-COOL-tEnp register contains the cool-down temperature valve that the Dual Microprocessor Controller (DMC) computer will seek upon completion of the heated portion of the drying cycle for both the top basket (tumbler) or bottom basket (tumbler).

The PP-COOL-tInE register stores the amount of time for which the dryer will engage in cool-down for both baskets (tumblers).

The cool-down portion of the drying cycle is controlled exclusively by the time register when the DMC computer is in the TIME or FREE modes and by both the time and the temperature registers, whichever occurs first, in the Automatic Mode.

These registers can be accessed/changed using the following procedure:

STEP	ACTION	TOP L.E.D. DISPLAY	BOTTOM L.E.D. DISPLAY	REMARKS
1.	-	FILL - 25	FILL - 25	Flashing
2.	CLOSE PS switch	72 °F	72 °F	Room Temperature
3.	Press PERM-PRESS	PL01	Blank	Ready To Read
4.	Press HI-TEMP	PL02	Blank	Next Location
5.	Press HI-TEMP	PL03	Blank	Next Location
6.	Press HI-TEMP	PL04	Blank	Next Location
7.	Press HI-TEMP	PL05	Blank	Next Location
8.	Press HI-TEMP	PL06	Blank	Next Location
9.	Press HI-TEMP	PL07	Blank	Next Location
10.	Press HI-TEMP	PL08	Blank	Target Location
11.	Press PERM-PRESS	PP-COOL-tEnp	100 °F	TEMP. SET-POINT

The PP-COOL-tEnp or the PP-COOL-tInE values can be changed while pointing at these registers by <u>adding</u> the following steps (as listed on the following page [page 38]) to the procedure listed above.

STEP	ACTION	TOP L.E.D. DISPLAY	BOTTOM L.E.D. DISPLAY	REMARKS
1.	-	PP-COOL-tEnp	100 °F	TEMP. SET-POINT
2.	Press HI-TEMP	PP-COOL-tEnp	105 °F	Incremented 5 °F
3.	Press HI-TEMP	PP-COOL-tEnp	110 °F	Incremented 5 °F
4.	Press LO-TEMP	PP-COOL-tEnp	105 °F	Decremented 5 °F
5.	Press PERM-PRESS	PP-COOL-tInE	2	COOL-DOWN-TIME
6.	Press HI-TEMP	PP-COOL-tInE	3	Incremented 1 minute
7.	Press PERM-PRESS	PL09	Blank	-
8.	OPEN PS switch	FILL - 25	FILL - 25	Operational Mode

OBSERVATIONS: The new temperature set point (i.e., 105 °F) has been entered in the Dual Microprocessor Controller (DMC) computer non-volatile memory in Step No. 6 above by pressing the PERM-PRESS key. The DMC computer will automatically step to the next register (i.e., LO-COOL-tInE). The new cool-down time period (i.e., 3 minutes) has been entered in the DMC computer memory in a similar fashion in Step No. 8 above.

NOTE: In the programming mode, the PERM-PRESS key (within the upper set of keys or lower set of keys) functions as the "ENTER" key.

PP-COOL-tEnp is programmable from a minimum of 100 °F to a maximum of 150 °F in five-degree increments or from a minimum of 38 °C to a maximum of 65 °C in one-degree increments.

PP-COOL-tInE is programmable from a minimum of 0 minutes to a maximum of 9 minutes in one-minute increments.

L. PROGRAM LOCATION 09 (PL09) LCdE (Left Coin Denomination)

The LCdE register is another Program Location that holds the value used by the Dual Microprocessor Controller (DMC) computer for time vending calculations. This register can be accessed/changed using the following procedure: (Refer to the following page [page 39].)

STEP	ACTION	TOP L.E.D. DISPLAY	BOTTOM L.E.D. DISPLAY	REMARKS
1.	-	FILL - 25	FILL - 25	Flashing
2.	CLOSE PS switch	72 °F	72 °F	Room Temperature
3.	Press PERM-PRESS	PL01	Blank	Ready To Read
4.	Press HI-TEMP	PL02	Blank	Next Location
5.	Press HI-TEMP	PL03	Blank	Next Location
6.	Press HI-TEMP	PL04	Blank	Next Location
7.	Press HI-TEMP	PL05	Blank	Next Location
8.	Press HI-TEMP	PL06	Blank	Next Location
9.	Press HI-TEMP	PL07	Blank	Next Location
10.	Press HI-TEMP	PL08	Blank	Next Location
11.	Press HI-TEMP	PL09	Blank	Target Location
12.	Press PERM-PRESS	LCdE	25	Present Value

To change the currency value while pointing at the LCdE register, <u>add</u> the following steps to the procedure listed above:

STEP	ACTION	TOP L.E.D. DISPLAY	BOTTOM L.E.D. DISPLAY	REMARKS
1.	-	LCdE	25	Present Value
2.	Press HI-TEMP	LCdE	26	Incremented 1 cent
3.	Press HI-TEMP	LCdE	27	Incremented 1 cent
4.	Maintain HI-TEMP	LCdE	50	Incremented from 27 - 50
5.	Press PERM-PRESS	PL10	Blank	-
6.	OPEN PS switch	FILL - 25	FILL - 25	Operational Mode

OBSERVATIONS: The new LCdE value (i.e., 50¢) has been entered in the Dual Microprocessor Controller (DMC) computer non-volatile memory in Step No.5 above by pressing the PERM-PRESS key.

NOTE: In the programming mode, the PERM-PRESS key (within the upper set of keys or lower set of keys) functions as the "ENTER" key.

The LCdE register will change at a higher rate of speed by pressing and holding the LO-TEMP key or the HI-TEMP key continuously.

NOTE: LCdE is programmable from a minimum of 1 to a maximum of 9999 in single-unit increments.

M. PROGRAM LOCATION 10 (PL10) RCdE (Right Coin Denomination)

The RCdE register is another Program Location that holds the value used by the Dual Microprocessor Controller (DMC) computer for time vending calculations. This register can be accessed/changed using the following procedure:

STEP	ACTION	TOP L.E.D. DISPLAY	BOTTOM L.E.D. DISPLAY	REMARKS
1.	-	FILL - 25	FILL - 25	Flashing
2.	CLOSE PS switch	72 °F	72 °F	Room Temperature
3.	Press PERM-PRESS	PL01	Blank	Ready To Read
4.	Press HI-TEMP	PL02	Blank	Next Location
5.	Press HI-TEMP	PL03	Blank	Next Location
6.	Press HI-TEMP	PL04	Blank	Next Location
7.	Press HI-TEMP	PL05	Blank	Next Location
8.	Press HI-TEMP	PL06	Blank	Next Location
9.	Press HI-TEMP	PL07	Blank	Next Location
10.	Press HI-TEMP	PL08	Blank	Next Location
11.	Press HI-TEMP	PL09	Blank	Next Location
12.	Press HI-TEMP	PL10	Blank	Target Location
13.	Press PERM-PRESS	RCdE	25	Present Value

To change the currency value while pointing at the RCdE register, <u>add</u> the following steps to the procedure listed above:

STEP	ACTION	TOP L.E.D. DISPLAY	BOTTOM L.E.D. DISPLAY	REMARKS
1.	-	RCdE	25	Present Value
2.	Press LO-TEMP	RCdE	24	Decremented 1 cent
3.	Press LO-TEMP	RCdE	23	Decremented 1 cent
4.	Maintain LO-TEMP	RCdE	10	Decremented from 25 - 10
5.	Press PERM-PRESS	PL11	Blank	•
6.	OPEN PS switch	FILL - 25	FILL - 25	Operational Mode

OBSERVATIONS: The new RCdE value (i.e., 10¢) has been entered in the Dual Microprocessor Controller (DMC) computer non-volatile memory in Step No.5 by pressing the PERM-PRESS key. (Refer to the lower listing on the previous page [page 39].)

NOTE: In the programming mode, the PERM-PRESS key (within the upper set of keys or lower set of keys) functions as the "ENTER" key.

The RCdE register will change at a higher rate of speed by pressing and holding the LO-TEMP key or the HI-TEMP key continuously.

RCdE is programmable from a minimum of 1 to a maximum of 9999 in single-unit increments.

N. PROGRAM LOCATION 11 (PL11) tPLC (Time Per Left Coin)

The tPLC register is a Program Location that holds the value used by the Dual Microprocessor Controller (DMC) computer for time vending calculations. This register can be accessed/changed using the following procedure:

STEP	ACTION	TOP L.E.D. DISPLAY	BOTTOM L.E.D. DISPLAY	REMARKS
1.	-	FILL - 25	FILL - 25	Flashing
2.	CLOSE PS switch	72 °F	72 °F	Room Temperature
3.	Press PERM-PRESS	PL01	Blank	Ready To Read
4.	Press HI-TEMP	PL02	Blank	Next Location
5.	Press HI-TEMP	PL03	Blank	Next Location
6.	Press HI-TEMP	PL04	Blank	Next Location
7.	Press HI-TEMP	PL05	Blank	Next Location
8.	Press HI-TEMP	PL06	Blank	Next Location
9.	Press HI-TEMP	PL07	Blank	Next Location
10.	Press HI-TEMP	PL08	Blank	Next Location
11.	Press HI-TEMP	PL09	Blank	Next Location
12.	Press HI-TEMP	PL10	Blank	Next Location
13.	Press HI-TEMP	PL11	Blank	Target Location
14.	Press PERM-PRESS	tPLC	10	Present Value

To change the time dispensed for each coin entered while pointing at the tPLC register, add the following steps to the procedure listed on the preceding page (page 41).

STEP	ACTION	TOP L.E.D. DISPLAY	BOTTOM L.E.D. DISPLAY	REMARKS
1.	-	tPLC	10	Present Value
2.	Press LO-TEMP	tPLC	09	Decremented 1 minute
3.	Press LO-TEMP	tPLC	08	Decremented 1 minute
4.	Press PERM-PRESS	PL12	Blank	_
5.	OPEN PS switch	FILL - 25	FILL - 25	Operational Mode

OBSERVATIONS: The new tPLC value (i.e., 8 minutes) has been entered in the Dual Microprocessor Controller (DMC) computer non-volatile memory in <u>Step No. 4</u> above by pressing the PERM-PRESS key.

NOTE: In the programming mode, the PERM-PRESS key (within the upper set of keys or lower set of keys) functions as the "ENTER" key.

The tPLC register will change at a higher rate of speed by pressing and holding the LO-TEMP key or the HI-TEMP key continuously.

tPLC is programmable from a minimum of 1 to a maximum of 9999 in single-unit increments.

O. PROGRAM LOCATION 12 (PL12) AtSt (Amount to Start)

The AtSt register is a Program Location that contains the coin value necessary to be entered for the Dual Microprocessor Controller (DMC) computer to dispense drying time.

This register can be accessed/changed using the following procedure: (Refer to the following page [page 43].)

STEP	ACTION	TOP L.E.D. DISPLAY	BOTTOM L.E.D. DISPLAY	REMARKS
1.	-	FILL - 25	FILL - 25	Flashing
2.	CLOSE PS switch	72 °F	72 °F	Room Temperature
3.	Press PERM-PRESS	PL01	Blank	Ready To Read
4.	Press HI-TEMP	PL02	Blank	Next Location
5.	Press HI-TEMP	PL03	Blank	Next Location
6.	Press HI-TEMP	PL04	Blank	Next Location
7.	Press HI-TEMP	PL05	Blank	Next Location
8.	Press HI-TEMP	PL06	Blank	Next Location
9.	Press HI-TEMP	PL07	Blank	Next Location
10.	Press HI-TEMP	PL08	Blank	Next Location
11.	Press HI-TEMP	PL09	Blank	Next Location
12.	Press HI-TEMP	PL10	Blank	Next Location
13.	Press HI-TEMP	PL11	Blank	Next Location
14.	Press HI-TEMP	PL12	Blank	Target Location
15.	Press PERM-PRESS	ATST	25	Present Value

To change the time dispensed for each coin entered while pointing at the AtSt register, add the following steps to the above procedure:

STEP	ACTION	TOP L.E.D. DISPLAY	BOTTOM L.E.D. DISPLAY	REMARKS
1.	-	AtSt	25	Present Value
2.	Press HI-TEMP	AtSt	26	Incremented 1 cent
3.	Press HI-TEMP	AtSt	27	Incremented 1 cent
4.	Maintain HI-TEMP	AtSt	50	NEW AtSt Value
5.	Press PERM-PRESS	PL13	Blank	-
6.	OPEN PS switch	FILL - 50	FILL - 50	Operational Mode

OBSERVATIONS: The new AtSt value (i.e., 50¢) has been entered in the Dual Microprocessor Control (DMC) computer non-volatile memory in <u>Step No. 5</u> above by pressing the PERM-PRESS key.

NOTE: In the programming mode, the PERM-PRESS key (within the upper set of keys or lower set of keys) functions as the "ENTER" key.

NOTE: The AtSt register will change at a higher rate of speed by pressing and holding the LO-TEMP key or the HI-TEMP key continuously.

AtSt is programmable from a minimum of 1 to a maximum of 9999 in single-unit increments.

P. PROGRAM LOCATION 13 (PL13) AFAt

(Minimum Amount for More Time)

The AFAt register is a Program Location that contains the minimum coin value necessary to be entered for the Dual Microprocessor Controller (DMC) computer to dispense drying time. THIS REGISTER IS USED IN THE <u>COIN ACCUMULATIVE MODE</u>.

This register can be accessed/changed using the following procedure:

STEP	ACTION	TOP L.E.D. DISPLAY	BOTTOM L.E.D. DISPLAY	REMARKS
1.	-	FILL - 25	FILL - 25	Flashing
2.	CLOSE PS switch	72 °F	72 °F	Room Temperature
3.	Press PERM-PRESS	PL01	Blank	Ready To Read
4.	Press HI-TEMP	PL02	Blank	Next Location
5.	Press HI-TEMP	PL03	Blank	Next Location
6.	Press HI-TEMP	PL04	Blank	Next Location
7.	Press HI-TEMP	PL05	Blank	Next Location
8.	Press HI-TEMP	PL06	Blank	Next Location
9.	Press HI-TEMP	PL07	Blank	Next Location
10.	Press HI-TEMP	PL08	Blank	Next Location
11.	Press HI-TEMP	PL09	Blank	Next Location
12.	Press HI-TEMP	PL10	Blank	Next Location
13.	Press HI-TEMP	PL11	Blank	Next Location
14.	Press HI-TEMP	PL12	Blank	Next Location
15.	Press HI-TEMP	PL13	Blank	Target Location
16.	Press PERM-PRESS	AFAt	10	Present Value

To change the value of the Minimum Amount for More Time while pointing at the AFAt register, <u>add</u> the following steps (as listed on the following page [page 45]) to the procedure listed above.

STEP	ACTION	TOP L.E.D. DISPLAY	BOTTOM L.E.D. DISPLAY	REMARKS
1.	*	AFAt	10	Present Value
2.	Press HI-TEMP	AFAt	11	Incremented 1 cent
3.	Press HI-TEMP	AFAt	12	Incremented 1 cent
4.	Maintain HI-TEMP	AFAt	25	NEW AFAt Value
5.	Press PERM-PRESS	PL14	Blank	-
6.	OPEN PS switch	FILL - 25	FILL - 25	Operational Mode

OBSERVATIONS: The new AFAt value (i.e., 25¢) has been entered in the Dual Microprocessor Controller (DMC) computer non-volatile memory in Step No.5 above by pressing the PERM-PRESS key.

NOTE: In the programming mode, the PERM-PRESS key (within the upper set of keys or lower set of keys) functions as the "ENTER" key.

The AFAt register will change at a higher rate of speed by pressing and holding the LO-TEMP key or the HI-TEMP key continuously.

AFAt is programmable from a minimum of 1 to a maximum of 9999 in single-unit increments.

Q. PROGRAM LOCATION 14 (PL14) Adrt

(Maximum Time for Auto Dry)

The Adrt register is a Program Location that contains the maximum time value necessary that the dryer will run when in the Automatic Mode.

This register can be accessed/changed using the following procedure: (Refer to the following page [page 46].)

STEP	ACTION	TOP L.E.D. DISPLAY	BOTTOM L.E.D. DISPLAY	REMARKS
1.	-	FILL - 25	FILL - 25	Flashing
2.	CLOSE PS switch	72 °F	72 °F	Room Temperature
3.	Press PERM-PRESS	PL01	Blank	Ready To Read
4.	Press HI-TEMP	PL02	Blank	Next Location
5.	Press HI-TEMP	PL03	Blank	Next Location
6.	Press HI-TEMP	PL04	Blank	Next Location
7.	Press HI-TEMP	PL05	Blank	Next Location
8.	Press HI-TEMP	PL06	Blank	Next Location
9.	Press HI-TEMP	PL07	Blank	Next Location
10.	Press HI-TEMP	PL08	Blank	Next Location
11.	Press HI-TEMP	PL09	Blank	Next Location
12.	Press HI-TEMP	PL10	Blank	Next Location
13.	Press HI-TEMP	PL11	Blank	Next Location
14.	Press HI-TEMP	PL12	Blank	Next Location
15.	Press HI-TEMP	PL13	Blank	Next Location
16.	Press HI-TEMP	PL14	Blank	Target Location
17.	Press PERM-PRESS	Adrt	30	Present Value

To change the value of the Maximum Time Allowed in the Automatic Mode while pointing at the Adrt register, add the following steps to the procedure listed above.

STEP	ACTION	TOP L.E.D. DISPLAY	BOTTOM L.E.D. DISPLAY	REMARKS
1.	-	Adrt	30	Present Value
2.	Press LO-TEMP	Adrt	29	Decremented 1 minute
3.	Press LO-TEMP	Adrt	28	Decremented 1 minute
4.	Maintain LO-TEMP	Adrt	20	NEW Adrt Value
5.	Press PERM-PRESS	PL15	Blank	-
6.	OPEN PS switch	FILL - 25	FILL - 25	Operational Mode

OBSERVATIONS: The new Adrt value (i.e., 20 minutes) has been entered in the Dual Microprocessor Controller (DMC) computer non-volatile memory in <u>Step No. 5</u> above by pressing the PERM-PRESS key.

NOTE: In the programming mode, the PERM-PRESS key (within the upper set of keys or lower set of keys) functions as the "ENTER" key.

NOTE: The Adrt register will change at a higher rate of speed by pressing and holding the LO-TEMP key or the HI-TEMP key continuously.

Adrt is programmable from a minimum of 1 minute to a maximum of 99 minutes in one-minute increments.

R. PROGRAM LOCATION 15 (PL15) GdLY (Guard Delay Time) and Gont (Guard On Time)

Program Location 15 (PL15) contains two (2) registers:

GdLY (Guard Delay Time) and Gont (Guard On Time).

The GdLY register contains the time delay value used by the Dual Micro-processor Controller (DMC) computer to turn on the Anti-Wrinkle funtion at the end of the drying cycle.

The Gont register holds the time value for the guard-on portion of the Anti-Wrinkle funtion. This is the time period that the motor will be switched on at the end of the cycle.

These registers can be accessed/changed using the following procedure:

STEP	ACTION	TOP L.E.D. DISPLAY	BOTTOM L.E.D. DISPLAY	REMARKS
1.	-	FILL - 25	FILL - 25	Flashing
2.	CLOSE PS switch	72 °F	72 °F	Room Temperature
3.	Press PERM-PRESS	PL 01	Blank	Ready To Read
4.	Press HI-TEMP	PL02	Blank	Next Location
5.	Press HI-TEMP	PL03	Blank	Next Location
6.	Press HI-TEMP	PL04	Blank	Next Location
<i>7</i> .	Press HI-TEMP	PL05	Blank	Next Location
8.	Press HI-TEMP	PL06	Blank	Next Location
9.	Press HI-TEMP	PL07	Blank	Next Location
10.	Press HI-TEMP	PL08	Blank	Next Location
11.	Press HI-TEMP	PL09	Blank	Next Location
12.	Press HI-TEMP	PL10	Blank	Next Location
13.	Press HI-TEMP	PL11	Blank	Next Location
14.	Press HI-TEMP	PL12	Blank	Next Location
15.	Press HI-TEMP	PL13	Blank	Next Location
16.	Press HI-TEMP	PL14	Blank	Next Location
17.	Press HI-TEMP	PL15	Blank	Target Location
18.	Press PERM-PRESS	GdLY	2	Present Value

To change the value of the time delay to turn on the Anti-Wrinkle function or the time the motor is going to be switched on while pointing at the GdLY register or the Gont register, add the following steps to the procedure listed on the preceding page (page 47).

STEP	ACTION	TOP L.E.D. DISPLAY	BOTTOM L.E.D. DISPLAY	REMARKS
1.	•	GdLY	2	Present Value
2.	Press LO-TEMP	GdLY	1	Decremented 1 minute
3.	Press PERM-PRESS	Gont	20	Present Value
4.	Press HI-TEMP	Gont	21	Incremented 1 second
5.	Maintain HI-TEMP	Gont	30	NEW Gont Value
6.	Press PERM-PRESS	PL16	Blank	-
7.	OPEN PS switch	FILL - 25	FILL - 25	Operational Mode

OBSERVATIONS: The new GdLY value and the new Gont value (i.e., 1 minute and 30 seconds, respectively), have been entered in the Dual Microprocessor Controller (DMC) computer non-volatile memory in Step No. 6 above by pressing the PERM-PRESS key.

NOTE: In the programming mode, the PERM-PRESS key (within the upper set of keys or lower set of keys) functions as the "ENTER" key.

Both registers ("GdLY" and "Gont") will change at a higher rate of speed by pressing and holding the LOTEMP key or the HI-TEMP key continuously.

GdLY is programmable from a minimum of 1 minute to a maximum of 9 minutes in one-minute increments.

Gont is programmable from a minimum of 10 seconds to a maximum of 99 seconds in one-second increments.

S. PROGRAM LOCATION 16 (PL16)

AGt

(Maximum Active Anti-Wrinkle Time)

The AGt register is a Program Location that contains the maximum time value necessary for the **TOTAL** Anti-Wrinkle function to be active.

This register can be accessed/changed using the following procedure:

STEP	ACTION	TOP L.E.D. DISPLAY	BOTTOM L.E.D. DISPLAY	REMARKS
1.	-	FILL - 25	FILL - 25	Flashing
2.	CLOSE PS switch	72 °F	72 °F	Room Temperature
3.	Press PERM-PRESS	PL01	Blank	Ready To Read
4.	Press HI-TEMP	PL02	Blank	Next Location
5.	Press HI-TEMP	PL03	Blank	Next Location
6.	Press HI-TEMP	PL04	Blank	Next Location
7.	Press HI-TEMP	PL05	Blank	Next Location
8.	Press HI-TEMP	PL06	Blank	Next Location
9.	Press HI-TEMP	PL07	Blank	Next Location
10.	Press HI-TEMP	PL08	Blank	Next Location
11.	Press HI-TEMP	PL09	Blank	Next Location
12.	Press HI-TEMP	PL10	Blank	Next Location
13.	Press HI-TEMP	PL11	Blank	Next Location
14.	Press HI-TEMP	PL12	Blank	Next Location
15.	Press HI-TEMP	PL13	Blank	Next Location
16.	Press HI-TEMP	PL14	Blank	Next Location
17.	Press HI-TEMP	PL15	Blank	Next Location
18.	Press HI-TEMP	PL16	Blank	Target Location
19.	Press PERM-PRESS	AGt	02	Present Value

To change the value of the Maximum Time Allowed for the Anti-Wrinkle function to be active while pointing at the AGt register, <u>add</u> the following steps to the procedure listed above.

STEP	ACTION	TOP L.E.D. DISPLAY	BOTTOM L.E.D. DISPLAY	REMARKS
1.	-	AGt	02	Present Value
2.	Press HI-TEMP	AGt	03	Incremented 1 minute
3.	Press HI-TEMP	AGt	04	NEW AGt Value
4.	Press PERM-PRESS	PL17	Blank	-
5.	OPEN PS switch	FILL - 25	FILL - 25	Operational Mode

OBSERVATIONS: The new AGt value (i.e., 4 minutes) has been entered in the Dual Microprocessor Controller (DMC) computer non-volatile memory in Step No.3 above by pressing the PERM-PRESS key.

NOTE: In the programming mode, the PERM-PRESS key (within the upper set of keys or lower set of keys) functions as the "ENTER" key.

The AGt register will change at a higher rate of speed by pressing and holding the LO-TEMP key or the HI-TEMP key continuously.

AGt is programmable from a minimum of 1 minute to a maximum of 99 minutes in one-minute increments.

T. PROGRAM LOCATION 17 (PL17) PdrY (Percent Dry, Auto Cycle)

The PdrY register is a Program Location that holds the selected dryness level that the Dual Microprocessor Controller (DMC) computer will seek for both baskets (tumblers) when in the Automatic Mode.

This register can be accessed/changed using the following procedure:

STEP	ACTION	TOP L.E.D. DISPLAY	BOTTOM L.E.D. DISPLAY	REMARKS
1.	-	FILL - 25	FILL - 25	Flashing
2.	CLOSE PS switch	72 °F	72 °F	Room Temperature
3.	Press PERM-PRESS	PL01	Blank	Ready To Read
4.	Press HI-TEMP	PL02	Blank	Next Location
5.	Press HI-TEMP	PL03	Blank	Next Location
6.	Press HI-TEMP	PL04	Blank	Next Location
7.	Press HI-TEMP	PL05	Blank	Next Location
8.	Press HI-TEMP	PL06	Blank	Next Location
9.	Press HI-TEMP	PL07	Blank	Next Location
10.	Press HI-TEMP	PL08	Blank	Next Location
11.	Press HI-TEMP	PL09	Blank	Next Location
12.	Press HI-TEMP	PL10	Blank	Next Location
13.	Press HI-TEMP	PL11	Blank	Next Location
14.	Press HI-TEMP	PL12	Blank	Next Location
15.	Press HI-TEMP	PL13	Blank	Next Location
16.	Press HI-TEMP	PL14	Blank	Next Location
17.	Press HI-TEMP	PL15	Blank	Next Location
18.	Press HI-TEMP	PL16	Blank	Next Location
19.	Press HI-TEMP	PL17	Blank	Target Location
20.	Press PERM-PRESS	PdrY	97	Present Value

To change the selected dryness level that the DMC computer will seek when in the automatic drying mode while pointing at the PdrY register, add the following steps to the procedure listed on the preceding page (page 50).

STEP	ACTION	TOP L.E.D. DISPLAY	BOTTOM L.E.D. DISPLAY	REMARKS
1.	•	PdrY	97	Present Value
2.	Press LO-TEMP	PdrY	96	Decremented 1 percent
3.	Press LO-TEMP	PdrY	95	NEW PdrY Value
4.	Press PERM-PRESS	PL18	Blank	-
5.	OPEN PS switch	FILL - 25	FILL - 25	Operational Mode

OBSERVATIONS: The new PdrY value (i.e., 95 percent) has been entered in the Dual Microprocessor Controller (DMC) computer non-volatile memory in <u>Step No. 4</u> above by pressing the PERM-PRESS key.

NOTE: In the programming mode, the PERM-PRESS key (within the upper set of keys or lower set of keys) functions as the "ENTER" key.

The PdrY register will change at a higher rate of speed by pressing and holding the LO-TEMP key or the HI-TEMP key continuously.

PdrY is programmable from a minimum of 90 percent to a maximum of 100 percent in one-percent increments.

U. PROGRAM LOCATION 18 (PL18) "A" Factor and "B" Factor

Program Location 18 (PL18) contains two (2) registers:

"A" (Slope Program Factor) and "B" (Heat Loss [offset] Factor).

The "A" and "B" registers contain the factors that the Dual Micro-processor Controller (DMC) computer uses to calculate dryness as it proceeds through the drying cycle when in the automatic drying mode.

These registers can be accessed/changed using the following procedure: (Refer to the following page [page 52].)

STEP	ACTION	TOP L.E.D. DISPLAY	BOTTOM L.E.D. DISPLAY	REMARKS
1.	-	FILL - 25	FILL - 25	Flashing
2.	CLOSE PS switch	72 °F	72 °F	Room Temperature
3.	Press PERM-PRESS	PL01	Blank	Ready To Read
4.	Press HI-TEMP	PL02	Blank	Next Location
5.	Press HI-TEMP	PL03	Blank	Next Location
6.	Press HI-TEMP	PL04	Blank	Next Location
7.	Press HI-TEMP	PL05	Blank	Next Location
8.	Press HI-TEMP	PL06	Blank	Next Location
9.	Press HI-TEMP	PL07	Blank	Next Location
10.	Press HI-TEMP	PL08	Blank	Next Location
11.	Press HI-TEMP	PL09	Blank	Next Location
12.	Press HI-TEMP	PL10	Blank	Next Location
13.	Press HI-TEMP	PL11	Blank	Next Location
14.	Press HI-TEMP	PL12	Blank	Next Location
15.	Press HI-TEMP	PL13	Blank	Next Location
16.	Press HI-TEMP	PL14	Blank	Next Location
17.	Press HI-TEMP	PL15	Blank	Next Location
18.	Press HI-TEMP	PL16	Blank	Next Location
19.	Press HI-TEMP	PL17	Blank	Next Location
20.	Press HI-TEMP	PL18	Blank	Target Location
21.	Press PERM-PRESS	Α	5	Present Value

The "A" Factor and the "B" Factor register values pertain to the thermal characteristics of the dryer and are set at the factory. NORMALLY, THESE VALUES SHOULD NOT BE CHANGED. Should the register values have to be changed, add the following steps to the procedure listed above.

STEP	ACTION	TOP L.E.D. DISPLAY	BOTTOM L.E.D. DISPLAY	REMARKS
1.	-	A	5	Present Value
2.	Press LO-TEMP	Α	4	Decremented 1 Unit
3.	Press LO-TEMP	A	3	NEW "A" Value
4.	Press PERM-PRESS	В	75	Present Value
5.	Press HI-TEMP	В	76	Increment 1 Unit
6.	Press HI-TEMP	В	77	NEW "B" Value
7.	Press PERM-PRESS	PL01	Blank	-
8.	OPEN PS switch	FILL - 25	FILL - 25	Operational Mode

OBSERVATIONS: The new "A" Factor value and the new "B" Factor value (i.e., "A=3" and "B=77" respectively) have been entered in the Dual Microprocessor Controller (DMC) computer non-volatile memory in Step No. 4 and Step No. 4 and Step No. 7 by pressing the PERM-PRESS key. (Refer to the lower listing on the preceding page [page 52].)

NOTE: In the programming mode, the PERM-PRESS key (within the upper set of keys or lower set of keys) functions as the "ENTER" key.

Both registers will change at a higher rate of speed by pressing and holding the LO-TEMP key or the HI-TEMP key continuously.

The "A" Factor is programmable from a minimum of 1 to a maximum of 9 in single-unit increments.

The "B" Factor is programmable from a minimum of 1 to a maximum of 99 in single-unit increments.

SECTION VII

Factory Preset Parameters/Programs

Unless otherwise specified at the time of ordering, the Dual Micro-processor Controller (DMC) computer has been preprogrammed by the factory with the following parameters. Should program changes be found necessary, please read this manual carefully to thoroughly familiarize yourself with the DMC computer programming characteristics.

A. SINGLE COIN ONLY

Program Location	Parameter	Range	Status	Remarks
01	°F / °C	-	°F	
	AUtO tInE	-	TIME	
	Grd / nGrd	-	GRD	
	bUZ / nbUZ	-	BUZ	
	Coin / FrEE	-	COIN	
	FLS / nFLS	-	FLS	
	bCrS / bCLO	-	BCLO	
	ACOn / AtIn	-	ATIM	
02	drYL	1 - 99	01	see NOTE - 1
03	HI-drY-tEnp	100 - 150 °F	150	
04	HI-COOL-tEnp	100 - 150 °F	100	
	HI-COOL-tInE	0 - 9 minutes	2	
05	LO-drY-tEnp	100 - 150 °F	120	
06	LO-COOL-tEnp	100 - 150 °F	100	
	LO-COOL-tInE	0 - 9 minutes	2	
07	PP-drY-tEnp	100 - 150 °F	130	
08	PP-COOL-tEnp	100 - 150 °F	100	
	PP-COOL-tInE	0 - 9 minutes	2	
09	LCdE	1-9999	25	
10	rCdE	1-9999	25	
11	tPLC	1 - 99 minutes	10	
12	AtSt	1 - 9999	25	İ
13	AFAt	1 - 9999	10	
14	Adrt	1 - 99 minutes	30	
15	GdLY	1 - 9 minutes	2	
Į.	Gont	10 - 99 seconds	20	
16	AGt	1 - 99 minutes	10	
17	PdrY	90% - 100%	97	
18	A	1-9	5	
	В	1 - 99	. 7 5	

NOTE: 1. PL02 is disabled. It is included for compatibility with existing microprocessors (computers) ONLY.

SECTION VIII

Program Location Summary

Program	Location Summary		
Location	Location Summary		
PL01	°F (Fahrenheit) / °C (Celsius)		
	Automatic Mode / Timed Mode		
	with Anti-Wrinkle / without Anti-Wrinkle		
	Buz/Tone / no Buz/Tone		
	for Anti-Wrinkle		
	Free Dry Mode / Coin Mode		
	Flash Display / no Flash Display		
	Bad Coin Option		
	Accumulative Time Mode / Accumulative Coin Mode		
PL02	Number of Automatic Peaks - DISABLED 1		
PL03	High Temperature		
PL04	High Cool Down Temperature		
	High Cool Down Time		
PL05	Low Temperature		
PL06	Low Cool Down Temperature		
	Low Cool Down Time		
PL07	Permanent Press Temperature		
PL08	Permanent Press Cool Down Temperature		
	Permanent Press Cool Down Time		
PL09	Left Coin Denomination		
PL10	Right Coin Denomination		
PL11	Time Per Left Coin		
PL12	Amount to Start		
PL13	Minimum Amount For More Time (on coin accumulate)		
PL14	Maximum Time For Automatic Dry 2		
PL15	Anti-Wrinkle Timing		
PL16	Maximum Active Time for Anti-Wrinkle Cycle		
PL17	Percent Dry (dryness level) ²		
PL18	"A" - Slope Factor ²		
	"B" - Heat Loss (offset) Factor ²		

For compatability with existing controls.
 For Automatic Cycle ONLY.

SECTION IX

Optional 9 Volt Battery Back-Up

Dryers ordered from the factory with the 9 Volt Battery Back-Up Option (battery is not included) allows the Dual Microprocessor Controller (DMC) computer to maintain its operating status should a momentary power interruption occur while the dryer cycle is in progress.

It is suggested that the battery be replaced at least once a year or as found necessary. The battery life will depend on the age of the battery, the amount of power interruptions, and the back-up time used.

IMPORTANT: For proper operation use alkaline batteries ONLY. Suggest Eveready Energizer, Duracell, or equivalent.

DO NOT USE CARBON TYPE

BATTERIES.

SECTION X

Replacement Parts

IMPORTANT: When ordering replacement parts from your Distributor or the ADC factory, please specify the dryer <u>model number</u> and <u>serial number</u> in addition to the <u>parts description</u> and <u>part number</u>, so that your order is processed accurately and promptly.

ADC 112136 1—03/08/91-200 2—06/04/91-200 3—09/03/91-200 4—09/23/91-200 5—12/16/91-50 6—01/17/92-150 7—02/10/92-200 8—03/25/92-200 9—05/07/92-200 10—08/03/92-500 11 - 09/01/92-500 12—12/11/92-500 13*- 04/09/93-500 14--06/11/93-500 15---07/29/93-500

