6390031

Model 631, 639

EuroTwin
Drink Center
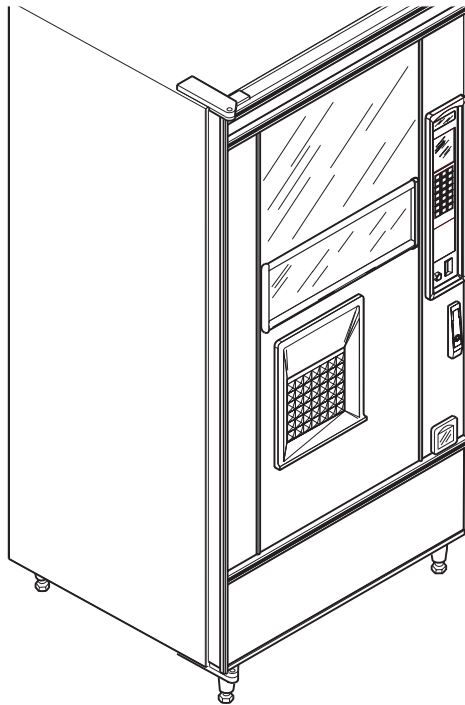
This machine has been engineered to our own rigid safety and performance standards. It has been designed to comply with sanitation and health guidelines recommended by the Automatic Merchandising Health-Industry Council (AMHIC) and it conforms with all other NAMA safety recommendations.

This machine has been manufactured in accordance with the safety standards of both Underwriter's Laboratories and the Canadian Standards Association. To maintain this degree of safety and to continue to achieve the level of performance built into this machine, it is important that installation and maintenance be performed so as to not alter the original construction or wiring and that replacement parts are as specified in the *Parts and Service Manual.* Your investment in this equipment will be protected by using this *Operator's Guide* and the *Parts and Service Manual* in your operation, service and maintenance work. By following prescribed procedures, machine performance and safety will be preserved.

Table of Contents

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INITIAL SET-UP

I. POWER REQUIREMENTS

This merchandiser requires power as shown in the following table. NOTE: Each merchandiser should have its own electrical circuit

Power Requirements

Country	Volts	Frequency (Hz)	Current (Amps)
Canada	115	60	15
France	230	50	10
Germany	230	50	10
United Kingdom	230	50	10
United States	115	60	15

II. WATER REQUIREMENTS

The best type of water for coffee brewing is normal hard water. If your location has chemically softened water, one of the following steps is advised:

• Have a non-softened supply line run to the merchandiser
• Contact your local water filter supplier for information and suggestions

Well water can also be used in the EuroTwin Machine. However, you should have it checked for levels of carbonates and alkalies. Contact your water filter supplier if these values are relatively high.

WATER PRESSURE

• Minimum water pressure: 20 psi (138.0 KPa) at 1/2 gallon/minute
• Maximum water pressure: 80 psi (522.0 KPa) at 1/2 gallon/minute

SUPPLY LINE REQUIREMENTS

• Locate the supply line at the rear of the merchandiser.
• Equip the line with a shut-off valve.

FLUSHING THE WATER SUPPLY LINE

Flush the water supply line before connecting it to the merchandiser. A minimum of five gallons is usually required before connecting the merchandiser to the supply line. DO NOT flush the merchandiser water system to avoid introducing possible water line contaminants into the merchandiser.

III. POSITIONING THE MERCHANDISER

You can position this merchandiser anywhere in a bank of machines. It can even be placed on the end flush against a side wall.

Leave enough room in front of the merchandiser for the door to move freely.

BE SURE THE REAR OF THE MERCHANDISER IS AT LEAST 6" AWAY FROM THE WALL. THIS WILL ENSURE WARM MOIST AIR IS VENTED OUT OF THE MACHINE'S INTERIOR AND THE REFRIGERATOR CONDENSER FAN IS NOT OBSTRUCTED.

WARNING
THIS MACHINE IS ONLY RATED FOR INSTALLATION IN AN INDOOR LOCATION.

IV. FINAL INSTALLATION

1.   CONNECT THE MERCHANDISER TO THE WATER SUPPLY

   a.   You will need the following:
   • A coil of copper tubing with outside diameter of 3/8 inch (9.5 mm) or greater. The appropriate plastic tubing may be substituted.
   • A 3/8 inch (9.5 mm) flare fitting
   b.   Connect the merchandiser to your water supply.

2.   CONNECT THE MERCHANDISER TO THE POWER SOURCE

Power to the merchandiser is controlled by the main power switch, located on the power panel.

   a.   Make sure the main power switch is OFF.
   b.   Connect the merchandiserís power cord to your wall outlet.

3.   LEVEL THE MERCHANDISER

a.   Place a spirit level on the top front edge of the cabinet with the door fully closed. Adjust the front legs only until the cabinet is reasonably level.
b.   Hold the door open about 4 inches.

WARNING
HAVE AN ASSISTANT HOLD THE MERCHANDISER WHILE YOU ADJUST THE LEG LEVELERS.

c.   Adjust the back legs so that the back leg leveler on the hinge side is off the floor just enough so a piece of paper can slide under it with only a bit of resistance.
d.   For proper weight distribution on all four legs, raise the back leg on the hinge side by unscrewing the leveler 1¾ turns.

NOTE
You may need to use pliers or channel locks to loosen the leg levelers.

SPIRIT LEVEL

FRONT

LEG

LEG LEVELER

LEFT REAR LEG
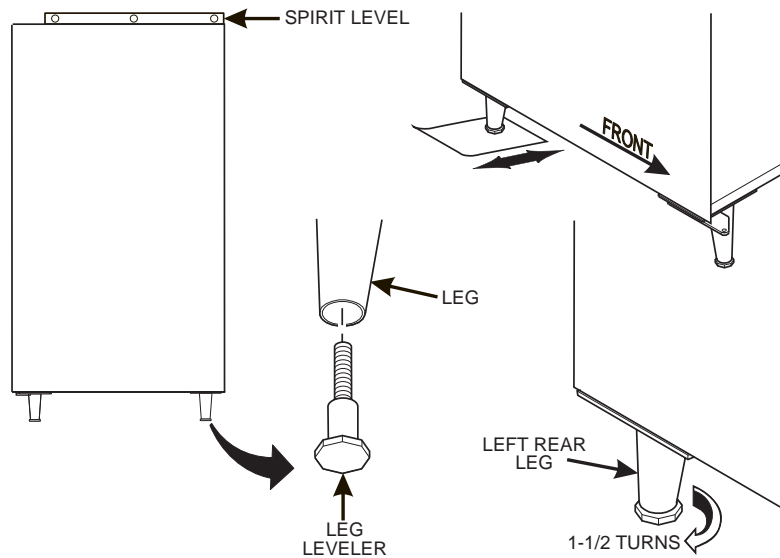
1-1/2 TURNS

4.   SET UP THE MENU ASSEMBLY

a.   From the inside of the door, remove the two screws as indicated, and remove the end cap as shown.

b.   Loosen the remaining 10 screws as indicated 1/2 turn. **Do not loosen the screws any more than necessary to avoid stripping out the menu frame.**

c.   Remove the menu board. If it is still held too tightly, repeat step 6.

d.   Set up the menu board as desired and reinstall it in the reverse order of disassembly.
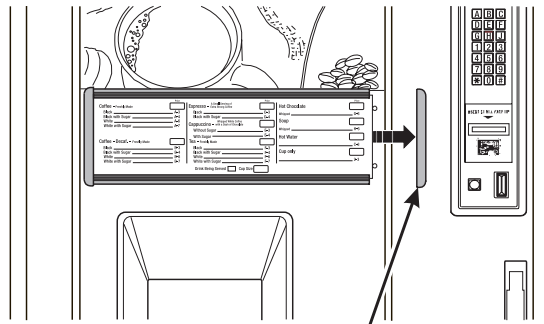
REMOVE THE MENU BOARD
END CAP AND SLIDE OUT THE
MENU BOARD.

LOOSEN
THESE
SCREWS

LOOSEN
THESE
SCREWS

REMOVE
THESE
SCREWS
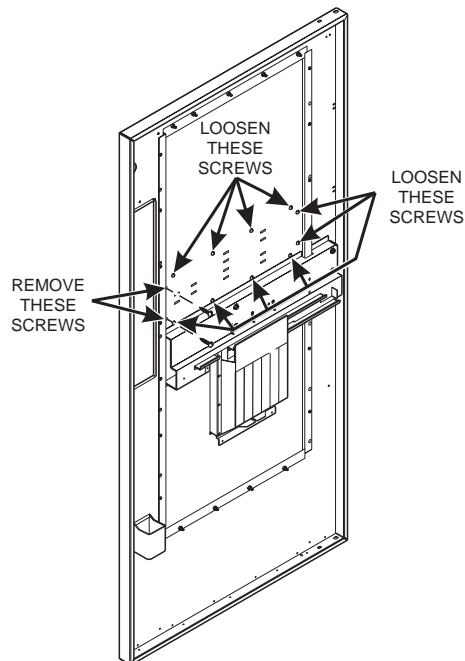
V. INSTALL OPTIONS

1.   INSTALL THE COIN BOX LOCK

  a.   Install the lock cylinder, washer, and nut in the order shown.
  b.   Tighten the nut.
  c.   Install the lock bar as shown, and secure with the screw.
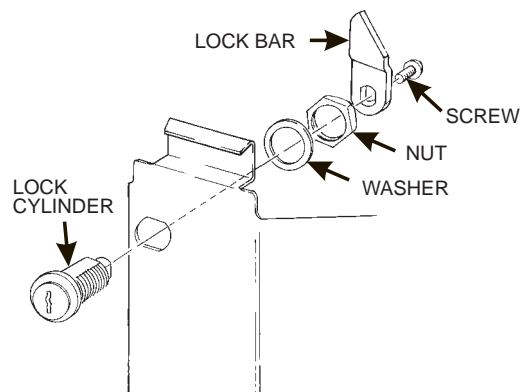
2.   MOUNT THE BASE PLATE BRACKETS

  a.   Secure a base plate bracket at each of the remaining pairs of holes with two of the hex head screws.

3. MOUNT THE BASE PLATE AND SLIDES

  a. Insert the short arm of the slides into the hinged tabs of the base plate. Position the slide so the notch near the short arm is on the bottom side.
  b. Insert the long arms of the slides into the base plate brackets.
  c. Insert a cotter pin through the hole in the back end of each slide. Secure the pins in place.
  d. Push the base plate toward the merchandiser cabinet. The front tab of the base plate bracket should seat in the notch in the long arm of the slide.
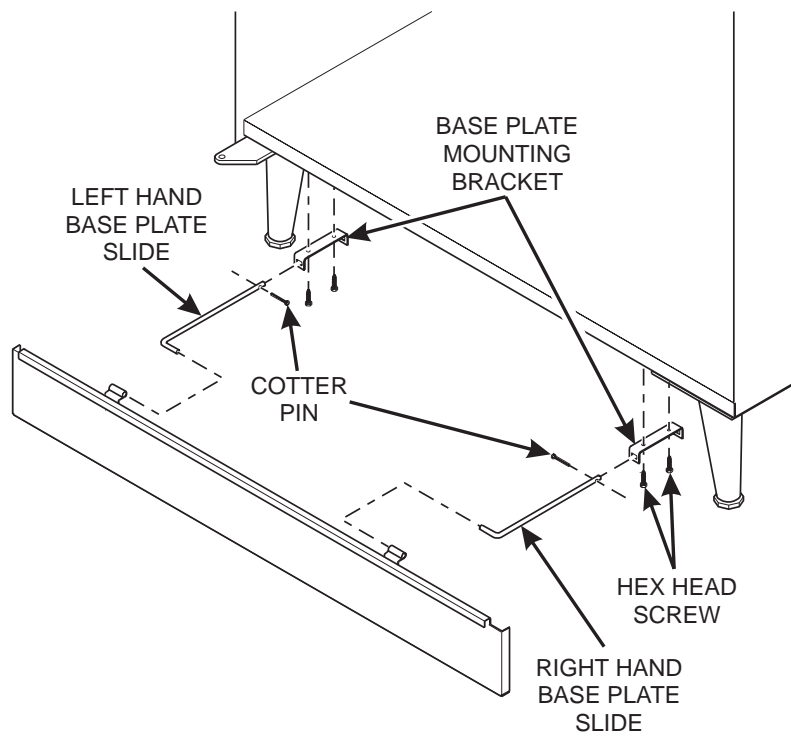
CAUTION
The mounting brackets are subject to damage when moving the machine with a fork lift.
Remove the brackets prior to moving the machine with a fork lift to prevent damage.

4.   **INSTALL THE WATER FILTER CARTRIDGE**

IF YOUR MERCHANDISER HAS THE WATER FILTER OPTION, IT CANNOT BE OPERATED WITHOUT A PROPERLY INSTALLED WATER FILTER CARTRIDGE.

NOTE

Check the water filter installation record. There is a place to write the vend number on the cartridge. The cartridge is effective for a maximum of 26,000 7 oz. vends, 22,000 8 oz. vends, 20,000 9 oz. vends, or 15,000 12 oz. vends. Local conditions may require more frequent replacement.

a.   Your filter cartridge is shipped inside the waste pail. Locate it and remove the wrapping.
b.   Remove the liquid waste pail (if present) to gain access to the water filter head assembly, located at the right rear of the machine.
c.   Install the filter as shown.

TO INSTALL FILTER:

1. ALIGN RAISED RIB ON FILTER CARTRIDGE WITH MATING SLOT IN HEAD ASSEMBLY.

2. FIRMLY INSERT FILTER CARTRIDGE INTO HEAD ASSEMBLY AND ROTATE COUNTER-CLOCKWISE 1/4 TURN TO THE STOP.

3. OPEN THE WATER SHUT-OFF VALVE BY PUSHING THE HANDLE TO THE HORIZONTAL POSITION AS SHOWN BELOW.

TO REMOVE FILTER:

1. CLOSE THE WATER SHUT-OFF VALVE BY LIFTING THE HANDLE TO THE VERTICAL POSITION AS SHOWN BELOW.

2. ROTATE THE FILTER CLOCKWISE AND PULL DOWN AS SHOWN.

WATER SHUT-OFF VALVE HANDLE

WATER SHUT-OFF VALVE HANDLE

EVERPURE FILTER HEAD ASSEMBLY

EVERPURE FILTER HEAD ASSEMBLY

RAISED RIB
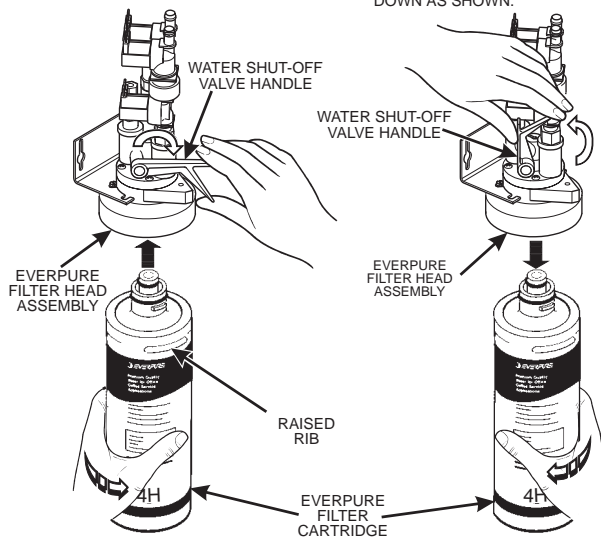
EVERPURE FILTER CARTRIDGE

VI. GET THE MACHINE READY TO VEND DRINKS

1. **SET UP THE CO$_2$ TANK**

   a.   Place the power switch in the OFF position.
   b.   Install a full CO$_2$ tank on the floor area in front of the cooling unit.
   c.   Remove the CO$_2$ tank lid.
   d.   Locate the CO$_2$ regulator and flat plastic washer (in a box), and the tapered plastic washer (in plastic bag).
   e.   Insert the tapered washer into the flare nut of the CO$_2$ line connected to the unit.
   f.   Using two wrenches, tighten the line to the regulator.
   g.   Insert the flat washer into the regulator nut.
   h.   Using two wrenches, connect the regulator to the tank outlet and tighten in place.

WARNING:
Not using a wrench on the tank side may damage the CO$_2$ tank, resulting in personal injury.

   i.   Open CO$_2$ tank valve.
   j.   Adjust the CO$_2$ regulator so that the secondary gauge reads 5.50 bar (80 PSI).
   k.   Lock the adjustment screw in place.
   l.   Remove the cooling machine cover and actuate the pressure relief valve located on top of the carbonator tank for 3 to 5 seconds.
   m.   Check for gas leaks along the CO$_2$ line.

2. **FILL THE HOT WATER TANK**

If you have the water filter option and **HAVE NOT** yet installed the water filter, return to step 7 and install the filter as instructed.

   a.   Turn on the water at its source.
   b.   Check for any water leaks.
   c.   Turn the machine power switch ON. The carbonator pump will start automatically and will fill the carbonator with water.

   d.   Press ⬚ .

   e.   Press ⬚ until the display shows *TANK.FILL*.

   f.   Press ⬚ again and let water flow into the tank.

   g.   The display will show *FILLING TANK.* After the tank is filled the display will show *TANK.FILL*.

NOTE

The tank will take some time to fill and reach its operating temperature.

h.   If this is the first time that the tank is being filled, perform the tank cleaning procedure given in Appendix C.

3.   LOAD THE CUP MECHANISM

CAUTION

Use only cups which have been designed for use in a hot beverage vending machine.

The size of cup you load must agree with the cup size that you will select during programming.

a.   Support the cup mechanism in the upright position.
b.   Push the latch forward to release the cup mechanism. Continue to support the cup mechanism while you lower it into the loading position.
c.   Remove the turret cover.

OBSERVE PROPER HYGIENE - DO NOT TOUCH THE CUPS!

d.   Open the bottom of the wrapper on a stack of cups.
e.   Insert the wrapped cups into the turret and pull the wrapper out.

DO NOT FILL CUPS ABOVE THE LEVEL MARKED ON THE OUTSIDE OF THE CUP TURRETS OR ABOVE THE "FILL LINE" LABEL INSIDE EACH TURRET, OR MOTOR JAMS WILL OCCUR.

USE ONLY THE SAME SIZE AND BRAND OF HOT DRINK CUPS IN EACH TURRET; DO NOT INTERMIX!

f.   Replace the turret cover after the turrets have been loaded.
g.   Be sure the cup mechanism is locked into the upright position.

TURRET DESIGNATIONS

CABINET
DOOR

RETAINING
STRAP

LID

LOAD CUPS
HERE

CUP MECH
MOUNTING
BRACKET

CUP TURRET

LATCH

CUPS

TOP VIEW
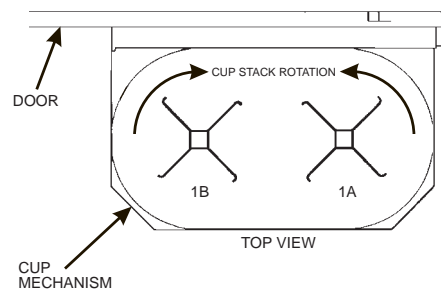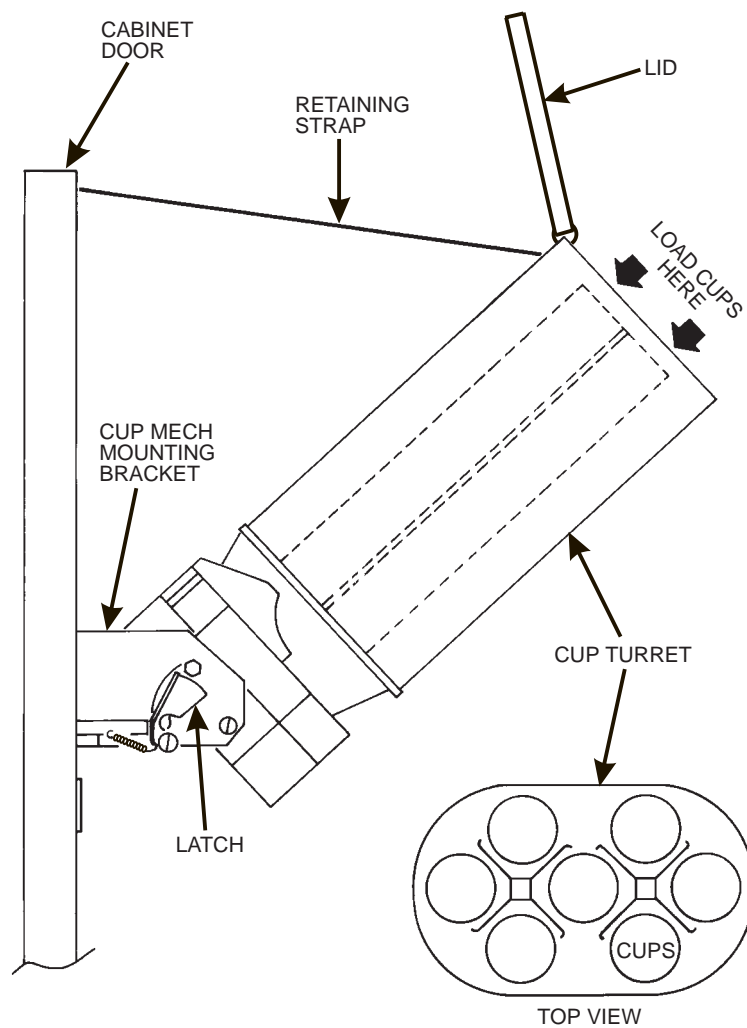
4. LOAD AND SET UP HOT DRINK PRODUCTS

a. Fill each canister with its respective product.
b. Once the hot water tank has reached its operating temperature, perform test vends (see **COLLECTING DRY PRODUCT GRAM THROWS and COLLECTING HOT WATER THROWS).** Adjustments may be necessary to water, product, or condiment throw times, or to the hot water valves. Refer to the appropriate sections in this manual for instructions on how to do this.

ADJUSTMENTS AND MINOR MAINTENANCE

EMPTYING THE BILL STACKER

1. PUSH UP LATCH

2. PULL DOWN BILL STACKER

3. REMOVE DOLLAR BILLS

430P001
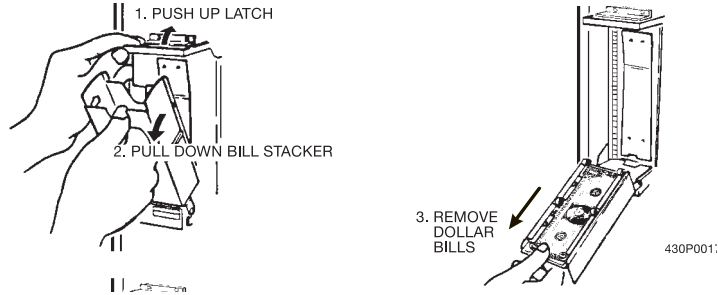
ADJUSTING THE AIR PRESSURE CONTROL (MODEL 639 ONLY).

This control determines the system pressure provided by the air compressor. Adjust the pressure as follows:

a. With the compressor running, pinch the brewer inlet air tube.
b. Adjust the pressure to read 10 - 12 psi on the gauge.

This will produce a pressure of 3 - 6 psi using regular coffee and 8⁰ oz cups. No further air pressure adjustments should be necessary.

PRESSURE GAUGE (AIR)

MONETARY PANEL

INCREASE

PRESSURE ADJUST CONTROL

0   30

INGREDIENTS SHELF

AIR PRESSURE CONTROLS
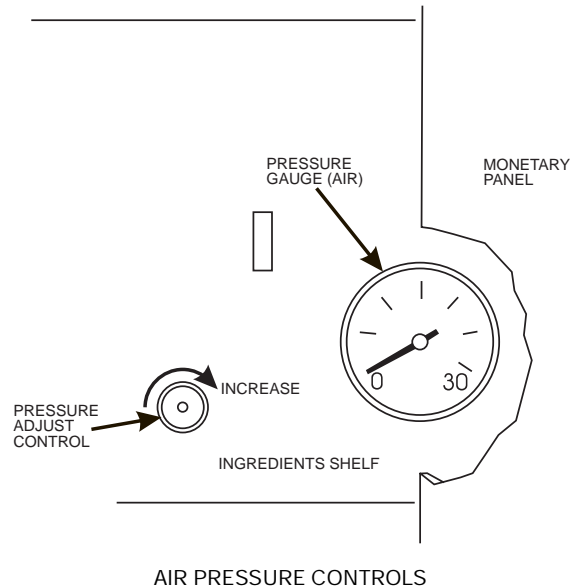
CUP MECHANISM ADJUSTMENT

1. Place seven cups in the cup ring.
2. Observe the clearance as shown in view B.
3. If necessary adjust by first loosening the adjustment arm screw (view A).
4. Move adjustment arm until correct clearance is achieved.
5. Hold adjustment arm in place and tighten adjustment arm screw.

ADJUSTMENT
ARM

VIEW A

LOOSEN SCREW
MOVE ARM

CUP
CAM

CUP
CAM

VIEW B

**CORRECT
ADJUSTMENT**

This clearance is just
large enough to allow
cup ejection

This side is snug
against cam

**ADJUSTED
TOO TIGHT**

**ADJUSTED
TOO LOOSE**

316P0118
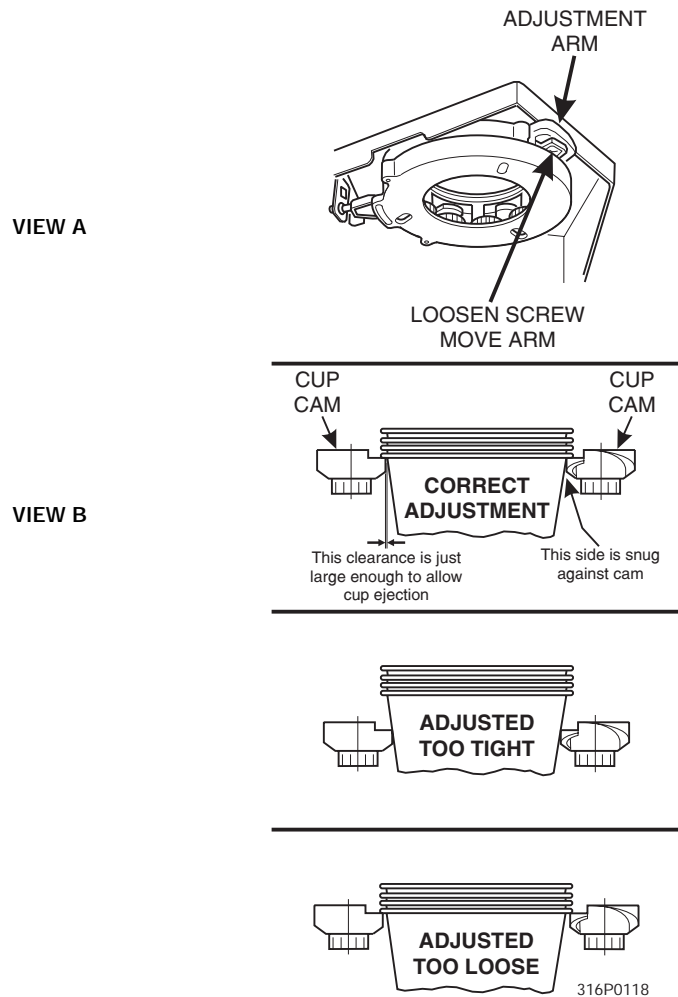
HOT WATER VALVE ADJUSTMENT

The hot water valves do not usually require adjustment, but in some cases adequate water volume cannot be achieved by the throw time setting alone (see the programming section). **IF ABSOLUTELY NECESSARY**, adjust the valves in conjunction with setting the factory default timers.

1. Using a slotted screwdriver, turn the adjustment screw clockwise to decrease the water flow rate.
2. Turn the adjustment screw counterclockwise to increase the water flow rate.
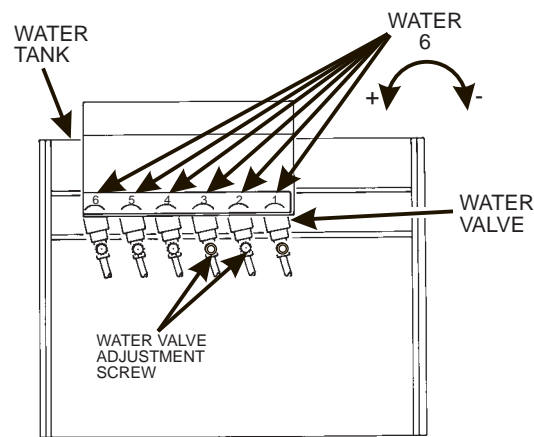
COLD WATER VALVE ADJUSTMENT

Cold water valves do not usually require adjustment, but in certain cases adequate water volume cannot be achieved by adjusting the throw time setting alone (see the programming section). IF ABSOLUTELY NECESSARY, ADJUST THE VALVES IN CONJUNCTION WITH SETTING THE TIMERS.

1. Turn the carbonated water adjustment screw counterclockwise (CCW) until it stops in the fully open position. Do not force it to stop the flow because it is not a positive closure system.
2. Turn it clockwise (CW) 3 full turns.
3. Turn the non-carbonated water adjustment screw CCW until it stops. Do not force it to stop the flow because it is not a positive closure system.
4. Turn it back clockwise (CW) 1 full turn.

CARBONATED
WATER VALVE

NON-CARBONATED
WATER VALVE

ADJUSTMENT
SCREW

SYRUP PUMP ADJUSTMENT

The syrup pumps do not usually require adjustment, but in some cases adequate volume cannot be achieved by the throw time setting alone (see the programming section). IF ABSOLUTELY NECESSARY, ADJUST THE VALVES IN CONJUNCTION WITH SETTING THE FACTORY DEFAULT TIMERS.
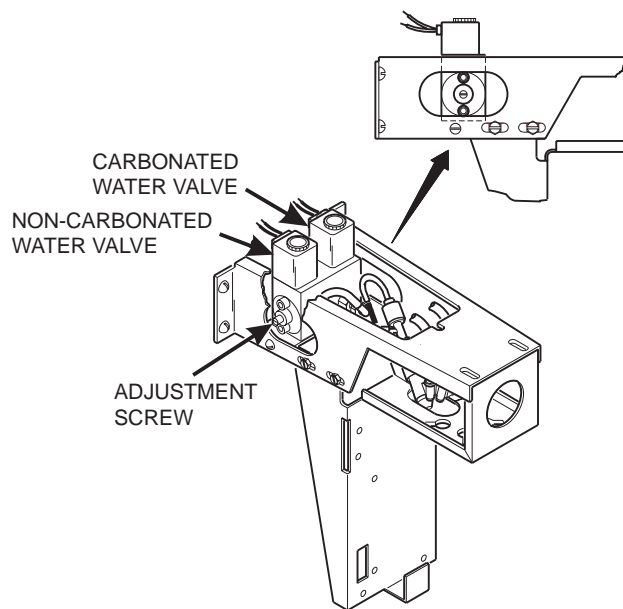
1. Loosen the locknut on the syrup pump adjustment screw.
2. Turn the screw clockwise (CW) until it is flush with the upper face of the locknut.
3. Turn the screw counterclockwise (CCW) 3 full turns.
4. Tighten the locknut to secure the screw.
5. Repeat steps 1 through 4 for the other syrup valve.

CANISTER INSTALLATION

1. Place the canister in position as shown.
2. Engage the pins on the motor shaft with the slots in the canister coupler.
3. Fit tabs on canister into the slots on the canister shelf.
4. To ensure canister is correctly engaged with the rear mounting bracket, gently push down on the front edge of the canister lid.
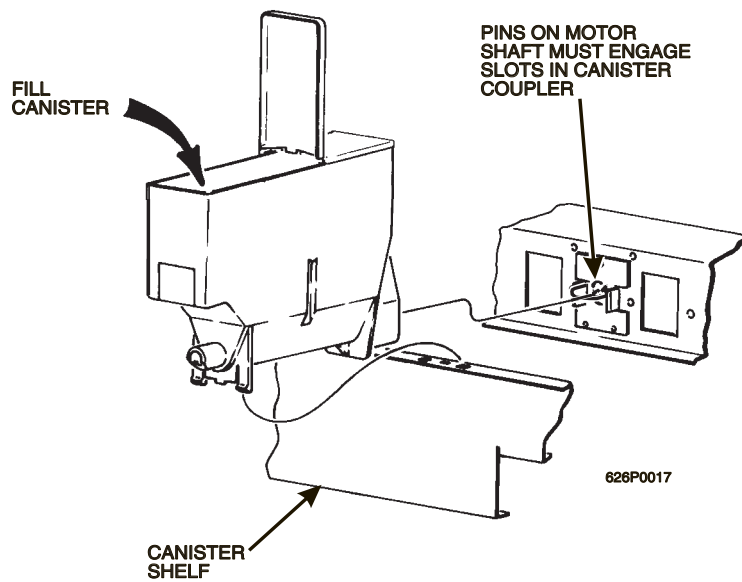
PROGRAMMING

HOW TO PROGRAM YOUR EUROTWIN

Some setup, test, and maintenance operations are computer controlled. The control panel switches (see figure 1) and the selection panel switches (see figure 2) regulate these operations.

Figure 1. Control Panel

Figure 2. Selection Panel

THE DISPLAYS

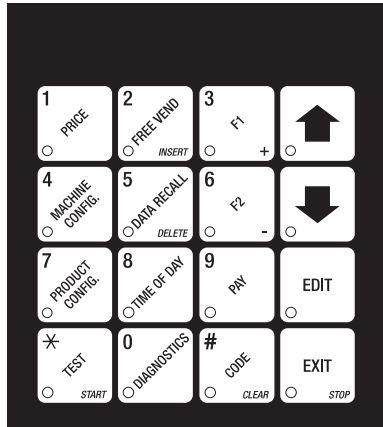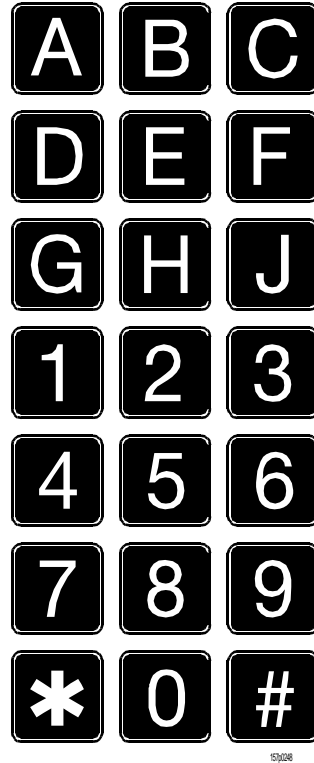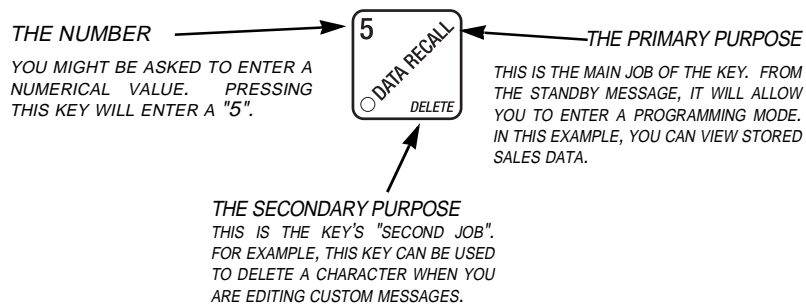The 10-character display performs two functions, and is referred to in this book as "the display":

1. It shows the customer's selection and how much credit is in the machine, as well as the ready, service, and time of day messages.

2. It provides information and feedback to the service person during maintenance.

THE FUNCTION KEYS

The keys on the control panel can be used for up to three things:

THE NUMBER

YOU MIGHT BE ASKED TO ENTER A NUMERICAL VALUE. PRESSING THIS KEY WILL ENTER A "5".

5
DATA RECALL
DELETE

THE PRIMARY PURPOSE

THIS IS THE MAIN JOB OF THE KEY. FROM THE STANDBY MESSAGE, IT WILL ALLOW YOU TO ENTER A PROGRAMMING MODE. IN THIS EXAMPLE, YOU CAN VIEW STORED SALES DATA.

THE SECONDARY PURPOSE
THIS IS THE KEY'S "SECOND JOB". FOR EXAMPLE, THIS KEY CAN BE USED TO DELETE A CHARACTER WHEN YOU ARE EDITING CUSTOM MESSAGES.

OTHER KEYS

The **MOVEMENT** keys on the control panel let you move inside a mode, and back and forth between modes. To see how these keys let you move around, study the flow diagram on the next page.

The up and down arrow keys are your "legs", which let you move up and down the list of tasks. These keys are what let you <u>continue</u> from one step to the next in programming procedures.

EDIT

This is your "activate" or "choose" key. It "opens a door" to additional information and lets you begin a programming task once you are inside of a mode. Sometimes, it is used as a toggle switch to show you your choices during a programming task.

EXIT
STOP

This is your "end" key. Pressing it one or more times will move you back to the start of the mode, or all the way back to the standby message.

CONTROL PANEL SWITCH FUNCTIONS EXPLAINED

Each of the control panel switches has one or more jobs to do. This list will give you a short overview of those jobs..

[1 PRICE] Press this button to put your machine into the Price Setting mode. You can see maximum and minimum machine prices, and change prices for entire machine or individual selection.

[2 FREE VEND / INSERT] Press this button to set up how the Free Vend mode will operate.

[F1] Press this button to view the water tank and cold plate temperatures, software version number, machine configuration, and active selection status.

[4 MACHINE CONFIG.] Press this button to:
- Select display language
- Select coin mechanism and options
- Select bill validator and options
- Set winner feature

[5 DATA RECALL / DELETE] Press this button to view total sales and vends by whole machine, selection, or drink size. Clear resettable data.

[F2] Press this button to:
- Download data into your portable data collection device (PDCD), **OR**
- Set printer baud rate, depending upon which device you are using

[7 PRODUCT CONFIG.] Press this button to:
- Set machine configuration
- Set up drinks
- Set which selections are active
- Set cup size
- Select sanitation and rinse times
- Set tank temperature

[8 TIME OF DAY] Press this button to:
- Set time of day
- Set day, month, year
- Set up time of day intervals for inhibit, freevend, and discount vending
- Select display messages
- Edit messages

[9 PAY] Press this button to pay one or more coins from the coin mechanism.

[0 DIAGNOSTICS] Allows you to see any fault or condition that has placed the machine out of service

[* TEST / START] Press this button to:
- Perform TEST VENDS
- Test machine functions
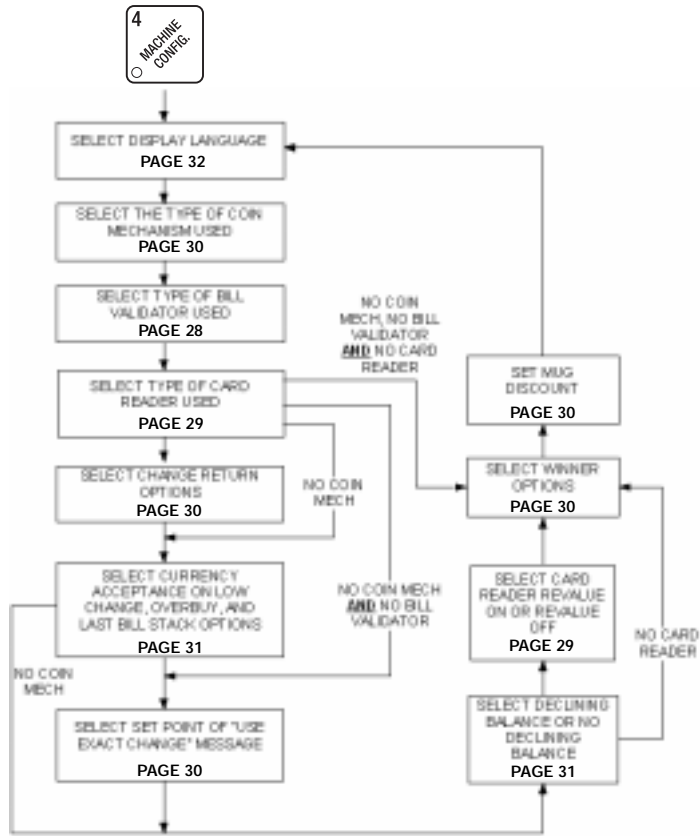- Test displays
- Fill the water tank

[# CODE / CLEAR] Press this button to:
- Enter the SUPERVISOR mode
- Change the SUPERVISOR access code
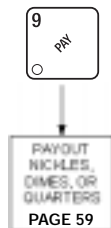- Lock and unlock access to functions

PROGRAMMING FLOWCHARTS

The flowcharts on the following pages will provide you with a "map" to the different programming features of your machine. Once you are familiar with the detailed programming steps given later in this section, you can use the flowcharts as a shortcut. Each chart begins with the key you will use to access those steps. Follow the lines and arrows from one step to another. A rectangular box contains the functions or tasks you will perform at that point. Sometimes, you have to make a decision. For example, look at the MACHINE CONFIGURATION chart. At one point, you are asked to select your monetary options (coin mech, bill validator, etc.). Depending upon your choice, you will take a different path. Note that if you have no mech, no validator, and no card reader, you bypass a whole lot of other options and are taken right to the winner selection screen. Just follow the lines and arrows, and you will get through it.
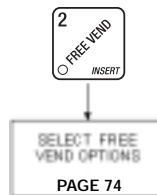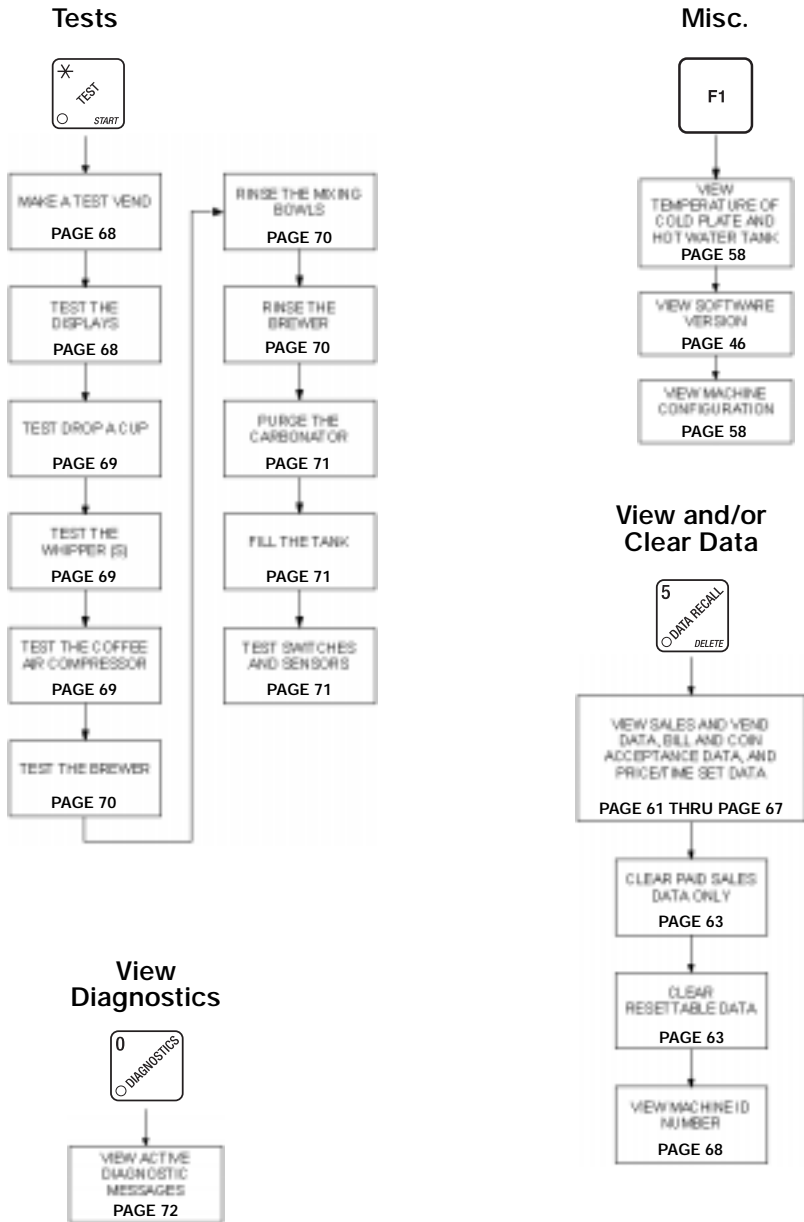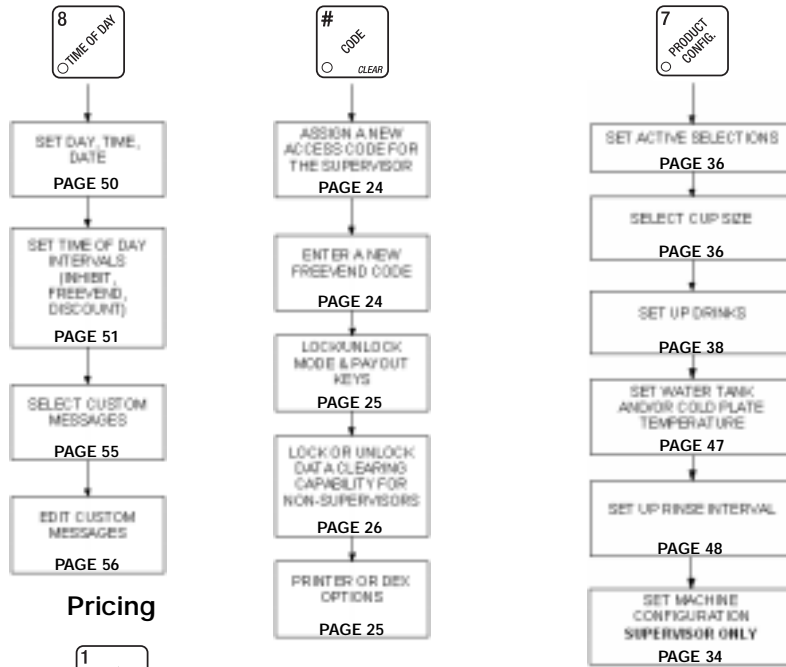
Machine Configuration

4 MACHINE CONFIG.

SELECT DISPLAY LANGUAGE
PAGE 32

SELECT THE TYPE OF COIN MECHANISM USED
PAGE 30

SELECT TYPE OF BILL VALIDATOR USED
PAGE 28

SELECT TYPE OF CARD READER USED
PAGE 29

SELECT CHANGE RETURN OPTIONS
PAGE 30

SELECT CURRENCY ACCEPTANCE ON LOW CHANGE, OVERBUY, AND LAST BILL STACK OPTIONS
PAGE 31

SELECT SET POINT OF "USE EXACT CHANGE" MESSAGE
PAGE 30

NO COIN MECH, NO BILL VALIDATOR **AND** NO CARD READER

SET MUG DISCOUNT
PAGE 30

SELECT WINNER OPTIONS
PAGE 30

SELECT CARD READER REVALUE ON OR REVALUE OFF
PAGE 29

SELECT DECLINING BALANCE OR NO DECLINING BALANCE
PAGE 31

NO COIN MECH

NO COIN MECH **AND** NO BILL VALIDATOR

NO CARD READER

NO COIN MECH

Payout Coins

9 PAY

PAYOUT NICKLES, DIMES, OR QUARTERS
PAGE 59

Free Vend

2 FREE VEND INSERT

SELECT FREE VEND OPTIONS
PAGE 74

Tests

```
  ✳
  TEST
○    START
```

MAKE A TEST VEND **PAGE 68**	RINSE THE MIXING BOWLS **PAGE 70**
TEST THE DISPLAYS **PAGE 68**	RINSE THE BREWER **PAGE 70**
TEST DROP A CUP **PAGE 69**	PURGE THE CARBONATOR **PAGE 71**
TEST THE WHIPPER (S) **PAGE 69**	FILL THE TANK **PAGE 71**
TEST THE COFFEE AIR COMPRESSOR **PAGE 69**	TEST SWITCHES AND SENSORS **PAGE 71**
TEST THE BREWER **PAGE 70**	

Misc.

```
 ┌─────┐
 │ F1  │
 └─────┘
```

VIEW
TEMPERATURE OF
COLD PLATE AND
HOT WATER TANK
PAGE 58

VIEW SOFTWARE
VERSION
PAGE 46

VIEW MACHINE
CONFIGURATION
PAGE 58

View and/or Clear Data

```
5
  DATA RECALL
○      DELETE
```

VIEW SALES AND VEND
DATA, BILL AND COIN
ACCEPTANCE DATA, AND
PRICE/TIME SET DATA

PAGE 61 THRU PAGE 67

CLEAR PAID SALES
DATA ONLY
PAGE 63

CLEAR
RESETTABLE DATA
PAGE 63

VIEW MACHINE ID
NUMBER
PAGE 68

View Diagnostics

```
0
  DIAGNOSTICS
○
```

VIEW ACTIVE
DIAGNOSTIC
MESSAGES
PAGE 72

Time of Day

```
8  TIME OF DAY
○
```

↓

SET DAY, TIME, DATE
PAGE 50

↓

SET TIME OF DAY INTERVALS (INHIBIT, FREEVEND, DISCOUNT)
PAGE 51

↓

SELECT CUSTOM MESSAGES
PAGE 55

↓

EDIT CUSTOM MESSAGES
PAGE 56

Pricing

```
1  PRICE
○
```

↓

VIEW MAXIMUM AND MINIMUM PRICES
PAGE 60

↓

SET PRICE FOR ENTIRE MACHINE
PAGE 60

↓

SET INDIVIDUAL SELECTION PRICES
PAGE 60

↓

SET ALL CUPS TO ONE PRICE
PAGE 60

↓

SET ALL SELECTION SIZES TO ONE PRICE
PAGE 60

Supervisor Functions

```
#  CODE
○      CLEAR
```

↓

ASSIGN A NEW ACCESS CODE FOR THE SUPERVISOR
PAGE 24

↓

ENTER A NEW FREEVEND CODE
PAGE 24

↓

LOCK/UNLOCK MODE & PAYOUT KEYS
PAGE 25

↓

LOCK OR UNLOCK DATA CLEARING CAPABILITY FOR NON-SUPERVISORS
PAGE 26

↓

PRINTER OR DEX OPTIONS
PAGE 25

Product Configuration

```
7  PRODUCT CONFIG.
○
```

↓

SET ACTIVE SELECTIONS
PAGE 36

↓

SELECT CUP SIZE
PAGE 36

↓

SET UP DRINKS
PAGE 38

↓

SET WATER TANK AND/OR COLD PLATE TEMPERATURE
PAGE 47

↓

SET UP RINSE INTERVAL
PAGE 48

↓

SET MACHINE CONFIGURATION **SUPERVISOR ONLY**
PAGE 34

DEX/Printer

```
F2
```

├─ DEX ──┴── PRINTER ─┤

DOWNLOAD DATA INTO PDCD.
PAGE 74

SELECT PRINTER BAUD RATE.
PAGE 27

PROGRAMMING PROCEDURES

The pages that follow contain all the programming steps you will need for the EuroT-win merchandiser. Each procedure is presented so that it "stands alone". This means that you can look up a procedure, go directly to it, perform the procedure, quit the procedure then go on about your business.

However, after looking at the programming flowcharts, you should notice that several

procedures are grouped under each mode key (such as ⬛), and you can move

between them by using the up and down arrow keys. Therefore, you don't have to exit a procedure before performing another one.

Most procedures respond to you the same way, like how to enter, leave, and move around inside them. Here is a short guide to help you through these common steps:

• To move directly from one procedure to another (provided they are both grouped

  under the same mode key), use ⬛ and ⬛ .

• When you are finished with a function, you will want to CONTINUE. To do that,

  you can press ⬛ (you may have to press it more than once, depending on

  how far into a procedure you are). You can then perform another programming or maintenance function. If you are completely done with maintenance, just shut the merchandiser door.

• Text that looks like this: *DISPLAY* represents what you will see in the display on the monetary panel.

• Definitions and helpful information will appear in shadow boxes:

GAIN ACCESS TO THE SUPERVISOR MODE

1. Press [#CODE/CLEAR key]. The display shows: $ENTER\ CODE$. You must enter the four-digit

    supervisor code within 6 seconds to gain access.

    #### NOTE
    A new machine has a factory-set supervisor code of 0000.

    When you have entered the right code, you will hear two beeps and see $UNLOCKED$ in the display. After a few moments, the standby message returns.

2. At the standby message, press [#CODE/CLEAR key], then [down arrow key]. You are now ready to

    perform various supervisor functions.

ENTER A NEW SUPERVISOR CODE

1. If you already entered your supervisor code, skip to step 3. If not,follow the steps in **GAIN ACCESS TO SUPERVISOR MODE, then return here.**

    #### IMPORTANT
    If you enter a new code, be sure to keep a written record of it. There is no other way to access the SUPERVISOR mode.

3. Press [down arrow key] until the display shows $SUPER\ XXXX$. The X's represent the cur-

    rent supervisor code. Use the number keys to enter a new code.

2. CONTINUE.

ENTER A NEW FREEVEND CODE

1. If you already entered your supervisor code, skip to step 4. If not,follow the steps in **GAIN ACCESS TO SUPERVISOR MODE,** then return here.

4. Press [down arrow key] until the display shows $FREE\ XXXX$. The X's represent the cur-

    rent freevend code. Use the number keys to enter a new code.

    #### NOTE
    See Appendix D for more information on the freevend keyswitch.

2. CONTINUE.

☞ LOCK OR UNLOCK MODE OR PAYOUT KEYS

1.   If you already entered your supervisor code, skip to step 1. If not,follow the steps in **GAIN ACCESS TO SUPERVISOR MODE, then return here.**

1.   Press [⬇] until the display shows either *X. LOCKED* or *X. UNLOCKED*. **"X"**

refers to the number or character shown on the mode or payout key in question (**1** through **9, #** and *****). To see if a key is locked or unlocked, press that key.

2.   Press [EDIT] to change between locked and unlocked. When anyone other

than the supervisor tries to enter a locked mode, the display shows *LOCKED*.

NOTE
The following mode keys cannot be locked out:

[F1]   [0 DIAGNOSTICS]

2.   CONTINUE.

☞ SET PRINTER OR DEX OPTIONS

1.   If you already entered your supervisor code, skip to step 3. If not,follow the steps in **GAIN ACCESS TO SUPERVISOR MODE**, then return here.

3.   Press [⬇] until the display shows one of the following:

PRINTER means that data will be sent directly to a printer,
                                                  OR
DEX ONLY means that data remains in memory after it is downloaded into a por-
                        table data collection device,
                                                  OR
DEX CLR means that resettable data is cleared after it is downloaded into a por-
                        table data collection device.

4.   Press [EDIT] to switch between the three choices.

2.   CONTINUE.

☞ LOCK OR UNLOCK DATA CLEARING ACCESS

1. If you already entered your supervisor code, skip to step 2. If not,follow the steps in **GAIN ACCESS TO SUPERVISOR MODE**, then return here.

1. Press [↓] until the display shows either *#. LOCKED* **or** *#. UNLOCKED*.

    LOCKED means that non-supervisors cannot clear resettable machine sales and

    vend data from the [5 DATA RECALL DELETE] key.

2. Press [# CODE CLEAR] to switch between *#. LOCKED* **and** *#. UNLOCKED.*

    NOTE
    The supervisor can clear data regardless of this setting, provided the supervisor code was correctly entered first.

2. CONTINUE.

☞ ASSIGN A CODE TO VIEW DATA WITHOUT OPENING THE DOOR

If the proper code is entered, sales and vend data can be viewed without opening the machine's door.

1. Follow the steps in **GAIN ACCESS TO THE SUPERVISOR MODE**.

2. Press [↓] until the display shows *NR XXXX*. The X's represent the currently entered code. Use the number keys to enter a new code, if desired.

3. CONTINUE.

☞ **SELECT PRINTER BAUD RATE (PRINTER MODE ONLY)**

> **BAUD RATE** The speed of data transfer, expressed in bytes per second. Your printer can receive data at a certain rate, and you must tell the machine what that rate is.

1.   Press [F2] . One of the following is displayed:

BAUD 1200 BAUD 2400 BAUD 4800 BAUD 9600

1.   Press [EDIT] until the correct baud rate for your printer is displayed.

2.   CONTINUE.

👉 SELECT BILL VALIDATOR AND OPTIONS

1. Press [4 MACHINE CONFIG.], then press [⬇] until one of the following is displayed:

NO DBV
No bills will be accepted or there is no bill validator installed (you can exit the function).

SER.1.2.5.10.20
The serial bill validator is selected and will accept $1, $2, $5, $10, and $20 bills. Use BILL SELECTION METHOD below to change the bills which will be accepted.

MDB.1.2.5.10.20
A standard MDB bill validator is selected. It will accept $1, $2, $5, $10 and $20 bills. Use BILL SELECTION METHOD below to change the bills which will be accepted.

MDB. <*>
An MDB bill validator which accepts non-standard bills or tokens is connected and operating. Press [✳ TEST START] to enter list of bills. (See **INITIAL SETUP OF NON-STAN-DARD BILL VALIDATOR** on the following page.)

BILL LIST OPERATION:

Use [⬆] and [⬇] to scroll through the list of bills.

Use [EDIT] to turn the bill acceptance ON or OFF.

Use [EXIT STOP] to move up to the top level screen.

1. 1.00 ON   -   1. = Bill validator channel 1, each bill has its own channel
1.00 = Bill value
ON = $1.00 bill will be accepted

1. 1.00 OFF   -   OFF = $1.00 bill will not be accepted

TKN   -   Token bills (same as coupon bills)

INITIAL SETUP OF NON-STANDARD BILL VALIDATOR:
Connect the bill validator, select MDB in the bill validator selection screens. The standard *MDB.1.2.5.10.20* screen will appear first. Exit the bill validator setup by pressing

[EXIT / STOP] . Bill information is now collected from the valida-tor. Re-enter the bill validator selection screen and the non-standard screen "*MDB. <*>*" will appear.

PULSE DBV   The pulse bill validator will accept $1 bills.

Press [EDIT] to choose the desired option.

2.   CONTINUE.

SELECT CARD READER AND OPTIONS

1.   Press [4 MACHINE CONFIG.] , then press [↓] until the current card reader is shown in the

display. Press [EDIT] to choose the desired card reader.

2.   CONTINUE. YOUR CHOICES ARE: *NO CARD*, *DUMB CARD*, OR *MDB CARD*.

NOTE
If you selected NO CARD you can exit the function.

1.   Press [↓] until one of the following is displayed:

REVALUE.ON   -   Allows credit to be transferred onto the card
REVALUE.OFF -   Credit cannot be transferred to the card

Press [EDIT] to display the desired choice.

3.   CONTINUE.

SELECT COIN MECHANISM AND OPTIONS

1. Press [4 MACHINE CONFIG.] , then press [↓] until the current COIN MECHANISM is

    shown in the display. Press [EDIT] to choose the desired coin mechanism.

    Your choices are: *DUMB MECH*, *MDB MECH*, *EXEC MECH*, or *NO MECH.*

2. Press [↓] until the display shows *CHANGE X.XX*.

    Coins and bills which are less than or equal to this value will be returned without
                             a purchase being made.
    Examples:

    CHANGE 0.00   -   Forced vend; NO change returned without a purchase.

    CHANGE .25   -   Nickels, dimes, and quarters returned without purchase.

    CHANGE 1.00   - $1 bills and SBAs will be returned as change without pur-
                        chase. Nickels, dimes, and quarters are also returned.

3. Press [↓] until the display shows: *LOW.MSG X.XX*. The display will show

    USE EXACT CHANGE when the amount of available change in the coin mecha-
    nism falls below the value of "X.XX". Enter a value with the number keys. For
    example, if *LOW.MSG 1.00* is displayed, the *USE EXACT CHANGE* message is
    displayed when less than a dollar's worth of change is in the coin mechanism.

4. CONTINUE.

☞　**SELECT MONETARY OPTIONS**

This function lets you:
*   **Set declining balance,**
*   **Set currency acceptance on low change,**
*   **Set overbuy options,**
*   **Set last bill stacking options**

> **DECLINING BALANCE** Once credit is established, multiple vends may occur until the coin return is pressed.

1.　Press ⌗ [4 MACHINE CONFIG.] , then press ⬇ until one of the following is displayed:

DECLINE.ON　-　More than one vend is allowed, with a declining balance.

OR

DECLINE.OFF　-　A declining balance is not allowed.

Press [EDIT] to display the desired choice.

1.　Press ⬇ until one of the following is displayed:

ACC<$$X.XX　-　The last bill which meets or exceeds maximum price will be held in escrow.

OR

ACC.STKX.XX　-　The last bill which meets or exceeds maximum price and MDB coupon bills (token bills) will be immediately stacked.

Example:　**If setting is *ACC.STK1.00* and maximum price is $1.50. This setting will immediately stack the second $1.00 bill inserted.**

Press [EDIT] to display the desired choice.

The value of "X.XX" has two purposes:
a.　The value of "X.XX" tells the machine how big a bill or coin to accept even though there is not enough change in the coin mech to cover all possible paybacks.
*   For example, enter **1.00.** Therefore, the machine will take a dollar bill or coin even though there is less than $1.00's worth of change. Entering 5.00 tells the machine to take a five even though there is less than $5.00's worth of change, and so forth.
　　NOTE: This could cause a customer to be short-changed.

• Entering **0.00** means that bills or coins will only be accepted if there is enough change to cover them.

    b.   The value of "X.XX" tells the machine how much the customer is allowed to overbuy a product. The customer will be short-changed when an overbuy occurs.

Example:

For a value of $0.25: if there is no change in the machine and the customer insers a $1.00 bill. The customer can purchase a product for $0.75 even though the change cannot be paid back. The customer will be short-changed. Normally a purchase will not be approved unless all change can be paid.

Entering 0.00 means that the vend will only be approved when the correct change can be returned (overbuy disabled).

2.   CONTINUE.

👉 SELECT DISPLAY LANGUAGE

1.   Press [4 MACHINE CONFIG.]. The current LANGUAGE is shown in the display. Press [EDIT]

to choose the desired language. Your choices are: *ENGLISH, DEUTSCH, FRANCAIS, ESPANOL, PORTUGUES, NEDERLANDS*, or *SWEDISH*.

2.   CONTINUE.

☞   **SET UP WINNER MODE**

> **WINNER**   At preselected intervals, a customer may receive a refund for a selection. You can select the intervals and qualifying selections.

1.   Press [4 MACHINE CONFIG.] , then press [⬇] until one of the following is displayed:

WINNER OFF Winner function is disabled.

OR

WIN XXX Winners are allowed at certain intervals, represented by "XXX".

Press [EDIT] to display the desired choice.

If you selected *WINNER OFF*, you can exit the function.

1.   The display shows *WIN XXX*. XXX represents the number of vends which must occur per each winner vend. For example, an interval number of 50 means that a winner can happen any one time during the next 50 vends. Using the number keys, enter an interval number between 10 and 9999.

2.   Press [⬇] . The display shows *✳ - - - - - - - - -* . The dashes in the display represent which selections are allowed winners. Press the appropriate letter key to enable a selection, press the key again to disable it. For example, pressing **A**, **C**, and **E** will cause the display to look like this: *A-C-E----_*, meaning that all **A**, **C**, and **E** selections can have a winner.

   ADVANCED OPTIONS:

   •   Press [✳ TEST START] to enable all selections.

   •   Press [# CODE CLEAR] to deactivate all selections.

   •   Press **0 or 1 to enable winners by cup size.**

   AN EXAMPLE . . .

   You want to enable winners on all selections except E and F. Do the following:
   a.   Press . The letters **A** through **J** appear in the display instead of the dashes.
   b.   Press "E" and "F". The letters **E** and **F** in the display are replaced by dashes.

2.   CONTINUE.

SET UP MUG DISCOUNT

You can establish a discount for customers who use their own mug.

1. Press [4 MACHINE CONFIG.], then press [↓] until the display shows *MUG DSC .00*. This example shows the existing discount amount is zero.

1. Enter a discount amount. This will be in cents, for example press [5 DATA RECALL / DELETE] or **5** to enter a discount amount of 5 cents.

2. CONTINUE.

SET UP MACHINE CONFIGURATION OPTIONS (SUPERVISOR MODE ONLY)

1. Press [7 PRODUCT CONFIG.] then [↓] until the display shows *D- J- WXYZ*.

   • "D" is the current status of the automatic delivery door. A dash (-) means the automatic door is turned off; a plus sign (+) means the door is turned on. Press to turn the door ON OR OFF.

   • "J" is the current status of the whippers. A plus sign (+) means drinks will not be whipped unless the **J** key is pressed during the vend. A dash (-) means drinks **WILL** always be whipped **unless** the J key is pressed during the vend. Press J to switch back and forth between these two choices.

   • "WXYZ" is the machine configuration code, explained as follows:

Machine Type Configuration

Enter for (W)	Definition
1	Reserved for alternate use
2	EuroTwin

Soup and Sugar Substitute Configuration

Enter for (X)	Definition
1	Canister 5 is not used
2	Canister 5 contains sugar substitute
3	Canister 5 contains soup
4	Canister 5 contains topping mix

::

| SINGLE BREW | A machine with only one brewed selection (the second selection is freeze-dried). |
| DUAL BREW | A machine with two brewed selections. |

Brewer Configuration

Enter for (Y)	Definition
1	Single brew - coffee or leaf tea (Model 639)
2	Dual brew - Coffee and decaf coffee (Model 639)
3	Freeze dry only - no brewer (Model 631)

Canister Mapping (See figure below)

| Enter for (Z) | Menu Selection Letters for Canister Numbers | | |
	3 (single condiment only)	2	1
1	F	B	A
2	F	A	B
3	B	F	A
4	B	A	F
5	A	F	B
6	A	B	F

INDEX: A = Coffee   B = Decaf   F = Tea

CUP FOR TAKING WATER THROWS

CUP DELIVERY STATION

639P0080
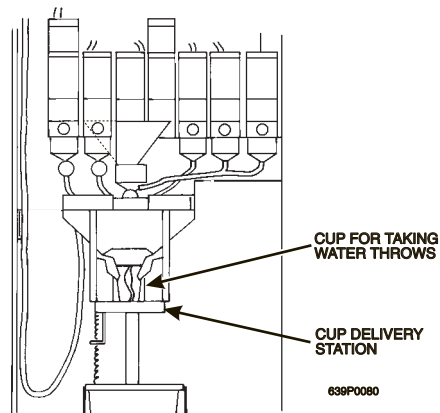
☞   **IDENTIFY THE ACTIVE SELECTIONS IN THE MER-
CHANDISER (SUPERVISOR ONLY)**

1.   Press [7 PRODUCT CONFIG.] , then press [⬇] until the display shows something like this:

0. ABCDEFGH. This display means that all regular size selections (0A - 0H) are available for vending. An unavailable selection has its letter replaced by a blank space.

1.   Press the appropriate letter to toggle the display on or off.

2.   Press [EDIT] to display cold selections for this size (*0. - - -5689*).

3.   Press [⬇] to view the active selections for the large size cup.

NOTE
Unconfigured selections will not appear in the product setups or diagnostics.

2.   CONTINUE.

☞   **SET UP CUP SIZES**

This machine is capable of vending two different drink sizes, even though there is only one size cup loaded. For example, if you have 10 ounce cups in your machine, you can vend any two available drink sizes **UP TO AND INCLUDING** 10 ounces. Make sure that the cups you have loaded are physically larger than the selected sizes.

1.   Press [7 PRODUCT CONFIG.] then [⬇] until the display shows *X. Y.   OZ*. "X" is the cur-

rently selected drink size for the regular drink, and "Y" is the currently selected drink size for the large drink.

4.   Press [0 DIAGNOSTICS] until the desired regular drink size is displayed; press [1 PRICE]

until the desired large drink size is displayed.

5. Any changes made to the cup sizes must be "locked in". There are two ways to do this:

    a. If you are keeping some cup sizes the same, or putting the same cups in different cup rings, press and hold . The display momentarily shows *CLEAR-ING*, two beeps sound, then shows *FINISHED*. This will reassign the old throw times to the new cup size, if possible.

    b. If you are loading all different size cups, or want to load all new default times, press and hold . The display momentarily shows *CLEARING*, two beeps sound, then shows *FINISHED*. This will reload the factory default times for all cup sizes, clearing any custom throw times you have established. (See the tables on the following pages for the factory default times.)

2. CONTINUE.

☞   **SET UP A HOT DRINK**

Be sure that the cup sizes you set in **SET UP CUP SIZES** agree with the cup sizes actually in your machine. All procedures for setting up the hot drinks are similar, so this example will demonstrate how to set up the A selection, regular size fresh brew coffee.

1.   Press [7 PRODUCT CONFIG.] then [↓] until the display shows *SETUP - ✿*. The star (✿) represents the selection (**A**, **B**, etc.). The dash (–) represents the size of the selection.

1.   Press **A**. (If you were setting up the A selection for the large size drink, you would press 1 first, then A.) The display shows *WAT. A 8.25*. This means that the currently set water throw time for the A selection is 8.25 seconds. Enter a new time if desired.

2.   Press [↓]. The display shows *DRY. A .60*. This means that the currently set dry product throw time for the A selection is .60 seconds. Enter a new time if desired.

3.   Pressing [↓] after each display will cause the following screens to appear:

DRY. A+	View and change the settings for an extra strong drink
SUG. A	View and change the settings for the sugar throw time
SUG. A+	View and change the settings for extra sugar throw time
LIT. A	View and change the settings for the lightener throw time
LIT. A+	View and change the settings for extra lightener throw time
SUB. A	View and change the settings for the sugar substitute throw time
SUB. A+	View and change the settings for extra sugar substitute throw time
STP. A	View and change the steep time
STP. A+	View and change the steep time for an extra strong drink
AIR. A	View and change the air compressor running time

WHP.A XXX   Press [EDIT] to view and change the whipper settings as follows:

ON-	The last 3 seconds of the drink is always whipped
ON+	The whole drink is always whipped
OFF	The drink is never whipped

• *If J + is selected (see VIEW MACHINE OPTIONS):*

OPT-	The last 3 seconds of the drink is whipped only when the J key is pressed
OPT+	The whole drink is whipped only when the J key is pressed

• *If J - is selected (see VIEW MACHINE OPTIONS):*

OPT-	The last 3 seconds of the drink is whipped unless the J key is pressed
OPT+	The whole drink is whipped unless the J key is pressed

DIFFERENCES:

Some selections will not show all of these items. For example, the **C** selection has only the water throw time displayed. The **E** selection will have some additional selections:

WA.2E   View and set the water throw time for the cappuccino second product (chocolate)

DR.2E   View and set the chocolate throw time for cappuccino

OPTIONS:

a.   At any of the preceding displays, you can press [TEST START] to test throw that item.

b.   At any of the preceding displays, you can press ✱ or # (on the selection switch panel) to step through a list of that item's throw times for other selections where that item is active. For example, pressing # at the *WAT.A* display will show the throw time for *WAT.B*. This is a handy way to move from one selection to another without going to the *SETUP* screen first.

NOTE

If you try to set up a selection that is not configured, the SETUP screen will remain in the display.

2.   CONTINUE.

Collecting Dry Product Gram Throws

☞ COLLECTING DRY PRODUCT GRAM THROWS

Measuring the gram throw allows you to get the right amount of dry product or condiment into your hot drink. To do this, you need a container to catch the product throw and an accurate gram scale to measure its weight.

1. Make a measuring container by cutting down a paper cup until it fits under the canister spout as shown.
1. Weigh the measuring cup and zero the gram scale accordingly.
2. Make 5 test throws as instructed in the programming steps.
3. Weigh each test throw, then add all 5 weights together and divide by 5 to get an average weight.
4. If necessary, adjust the throw time and repeat steps 3 and 4 until you get the correct product or condiment weight.

Tables D1 and D2 show the factory default settings for the various dry products sold by the merchandiser. They are good starting points for you to use in setting up your machine. In the end, the amount of dry product or condiments you use in your drinks depends upon taste and manufacturersí recommendations. Recommended weights and times are for guidance only, and you do not have to adhere to them.
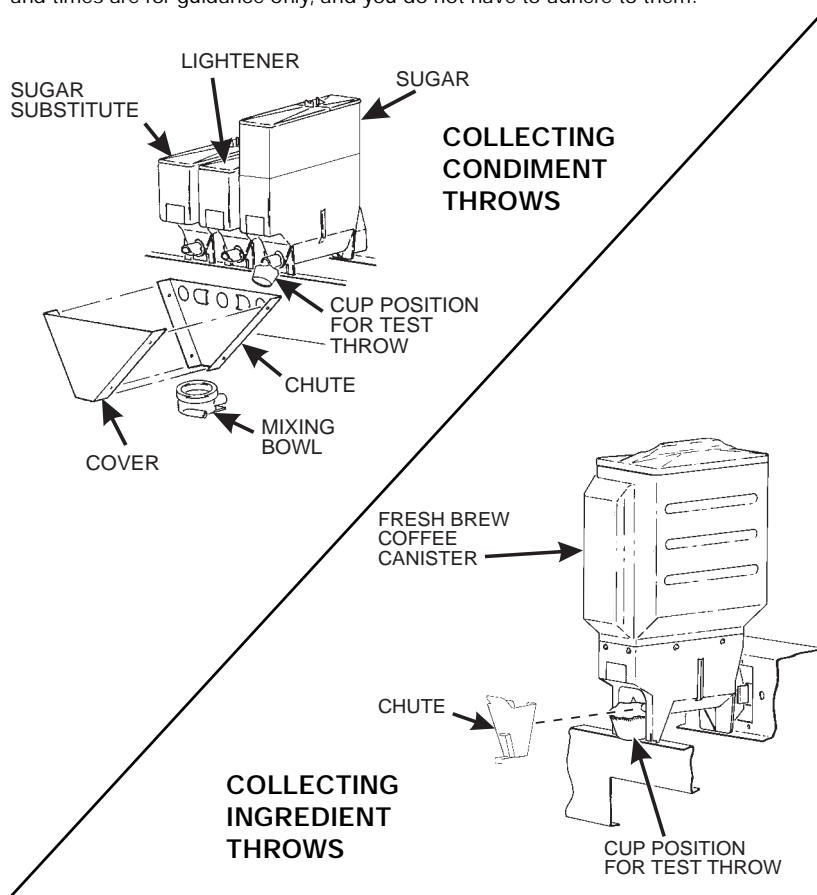
COLLECTING CONDIMENT THROWS

LIGHTENER
SUGAR SUBSTITUTE
SUGAR
CUP POSITION FOR TEST THROW
CHUTE
MIXING BOWL
COVER

COLLECTING INGREDIENT THROWS

FRESH BREW COFFEE CANISTER
CHUTE
CUP POSITION FOR TEST THROW

Table D1. Dry Product Weight and Throw Time Factory Default Settings

	Selection	Weight (in grams) per size cup					
		Throw times (in seconds) per size cup					
		5oz.	7oz.	8oz.	9oz.	10oz.	12oz.
A	Fresh brew coffee	5.70 1.60	8.00 2.20	9.00 2.50	10.00 2.80	11.00 3.10	13.00 3.65
A	Freeze dry coffee	0.90 0.35	1.20 0.50	1.50 0.60	1.60 0.65	1.80 0.70	2.20 0.90
A	Strong freeze dry coffee	1.10 0.65	1.50 0.90	1.80 1.10	2.00 1.20	2.20 1.35	2.60 1.60
B	Fresh brew decaf	5.70 1.60	8.00 2.20	9.00 2.50	10.00 2.80	11.00 3.10	13.00 3.65
B	Freeze dry decaf	0.90 0.35	1.20 0.50	1.50 0.60	1.60 0.65	1.80 0.70	2.20 0.90
B	Strong freeze dry decaf	1.10 0.65	1.50 0.90	1.80 1.10	2.00 1.20	2.20 1.35	2.60 1.60
D	Fresh brew coffee ESPRESSO	5.70 1.60	8.00 2.20	9.00 2.50	10.00 2.80	11.00 3.10	13.00 3.65
D	Freeze dry coffee ESPRESSO	0.90 0.35	1.20 0.50	1/50 0.60	1.60 0.65	1.80 0.70	2.20 0.90
D	Strong freeze dry coffee ESPRESSO	1.05 0.65	1.50 0.90	1.80 1.10	2.00 1.20	2.20 1.35	2.60 1.60
E	Fresh brew coffee CAPPUCCINO	5.70 1.60	8.00 2.20	9.00 2.50	10.00 2.80	11.00 3.10	13.00 3.65
E	Freeze dry coffee CAPPUCCINO	0.90 0.35	1.20 0.50	1/50 0.60	1.60 0.65	1.80 0.70	2.20 0.90
E	Strong freeze dry coffee CAPPUCCINO	1.05 0.65	1.50 0.90	1.80 1.10	2.00 1.20	2.20 1.35	2.60 1.60
F	Instant tea	0.90 0.70	1.20 1.00	1.50 1.25	1.60 1.30	1.80 1.60	2.20 1.85
F	Strong instant tea	1.10 0.90	1.50 1.25	1.80 1.60	2.00 1.75	2.20 1,85	2.60 2.10
G	Chocolate	17.00 2.80	24.00 4.00	28.00 4.65	31.00 5.15	34.00 5.65	41.00 6.80
H	Soup	4.30 0.70	6.00 1.00	7.00 1.15	7.60 1.25	8.50 1.35	10.20 1.65
H	Soluble Product	10.0 2.45	13.5 3.35	16.2 4.00	17.8 4.35	19.7 4.85	23.7 5.80

Table D1. Dry Product Weight and Throw Time Factory Default Settings (Cont.)

Selection	Weight (in grams) per size cup					
	Throw times (in seconds) per size cup					
	5oz.	7oz.	8oz.	9oz.	10oz.	12oz.
Chocolate used in cappuccino	3.10 0.55	4.50 0.75	5.00 0.85	5,80 1.00	6.20 1.05	7.60 1.30
Sugar used in espresso	2.10 0.35	3.00 0.45	3.50 0.55	4.00 0.60	4.50 0.65	5.50 0.80
Extra sugar used in espresso	3.00 0.50	4.35 0.65	4.80 0.75	5.35 0.80	6.25 0.90	7.20 1.05
Sugar used in cappuccino	3.50 0.45	5.10 0.65	6.00 0.75	6.80 0.85	7.70 0.95	9.40 1.20
Extra sugar used in cappuccino	4.60 0.60	6.80 0.90	7.70 1.00	8.50 1.10	9.40 1.20	11.00 1.45
Sugar used in tea	4.20 0.55	6.00 0.75	7.00 0.90	8.00 1.00	9.00 1.15	11.00 1.40
Extra sugar used in tea	1.50 0.70	2.00 1.00	2.50 1.15	3.00 1.25	3.50 1.40	4.50 1.65
Lightener used in tea	1.20 0.70	1.50 0.85	2.00 1.15	2.50 1.45	3.00 1.70	4.00 2.25
Extra lightener used in tea	1.50 0.85	2.00 1.15	2.50 1.45	3.00 1.70	3.50 2.00	4.50 2.60
Sugar substitute used in tea	0.60 0.75	0.85 1.05	1.00 1.25	1.10 1.35	1.30 1.60	1.50 1.90
Extra sugar substiture used in tea	0.80 1.00	1.10 1.35	1.30 1.60	1.40 1.75	1.60 2.00	1.90 2.40
Sugar	4.20 0.55	6.00 0.75	7.00 0.90	8.00 1.00	9.00 1.15	11.00 1.40
Extra sugar	5.50 0.70	8.00 1.00	9.00 1.15	10.00 1.25	11.00 1.40	13.00 1.65
Lightener	1.20 0.70	1.50 0.85	2.00 1.15	2.50 1.45	3.00 1.70	4.00 2.25
Extra lightener	1.50 0.85	2.00 1.15	2.50 1.45	3.00 1.70	3.50 2.00	4.50 2.60
Sugar substitute	0.60 0.75	0.85 1.05	1.00 1.25	1.10 1.35	1.30 1.60	1.50 1.90
Extra sugar substitute	0.80 1.00	1.10 1.35	1.30 1.60	1.40 1.75	1.60 2.00	1.90 2.40

The actual gram weight of a product or condimentthrow will vary depending upon the type of product or condiment used. The weights given are approximate based upon factory testing

Separate sugar, lightener, and sugar substitute timers are available for selections A/B/C, D, E, and F.

☞ COLLECTING HOT WATER THROWS

National Vendors recommends the factory default times be used for hot water throws to ensure proper mixing. Table W1 gives the factory default water throw times for the various size cups and product selections.

WARNING
This water is *HOT!* Be careful.
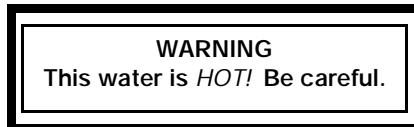
For a non-brewed selection, collect the water throws as follows:

1. Place a cup in the cup delivery station.
1. Ensure the merchandiser is using the factory defaults for the cup sizes (see **SET UP CUP SIZES).**
2. Initiate the water throw for a selection.
3. Remove the cup and pour the water into a graduated cylinder.
4. Refer to table W1 for the correct volume of water.
5. Adjust the **THROW TIME** for that selection and repeat steps 2 through 4 until the correct volume of water is thrown.
6. If you are unable to get the desired amount of water, reset the throw time to the factory default, then adjust the water valves. You may then readjust the throw times to fine-tune your water throws.

For a brewed selection, collect the water throws as follows:

1. Remove water supply hose from the brewer as shown on the next page.
7. Place the end of the hose in a graduated cylinder.
8. Follow steps 2 through 6 given for the non-brewed selection.
9. Replace the water supply hose on the brewer.

CUP FOR TAKING WATER THROWS

CUP DELIVERY STATION
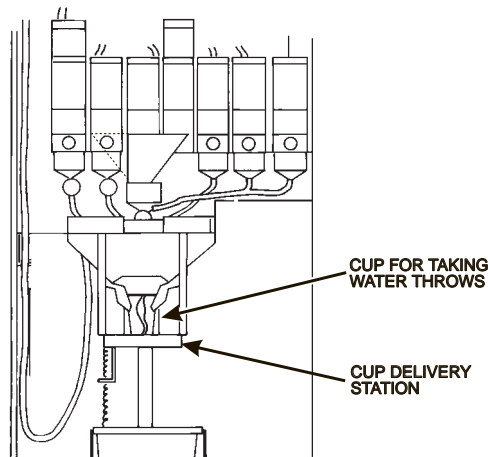
Table W1. Water Throw Default Times and Volumes

	Selection	Time (in seconds) per size cup					
		Volume (in ml) per size cup					
		5oz.	7oz.	8oz.	9oz.	10oz.	12oz.
A	Fresh brew coffee	2.15 130	3.00 190	3.45 220	3.80 240	4.10 265	4.90 315
A	Freeze dry coffee	4.95 120	7.00 170	8.25 200	8.65 210	9.90 240	12.60 305
B	Fresh brew decaf	2.15 130	3.00 190	3.45 220	3.80 240	4.10 265	4.90 315
B	Freeze dry decaf	4.95 120	7.00 170	8.25 200	8.65 210	9.90 240	12.60 305
D	Espresso (FB)	2.25 65	3.20 95	3.75 110	4.10 120	4.50 133	5.50 158
D	Espresso (FD)	2.50 60	3.50 85	4.15 100	4.35 105	4.95 120	6.30 153
F	Tea	4.95 120	7.00 170	8.25 200	8.65 210	9.90 240	12.60 305
G	Chocolate	4.85 100	6.80 140	8.25 170	8.75 180	9.70 200	11.65 240
H	Soup or plain water	4.80 110	6.95 160	8.25 190	8.70 200	10.00 230	12.15 280
H	Soluble Product	4.85 100	6.80 140	8.25 170	8.75 180	9.70 200	11.65 240

REMOVE THIS TUBE

GRADUATED CYLINDER
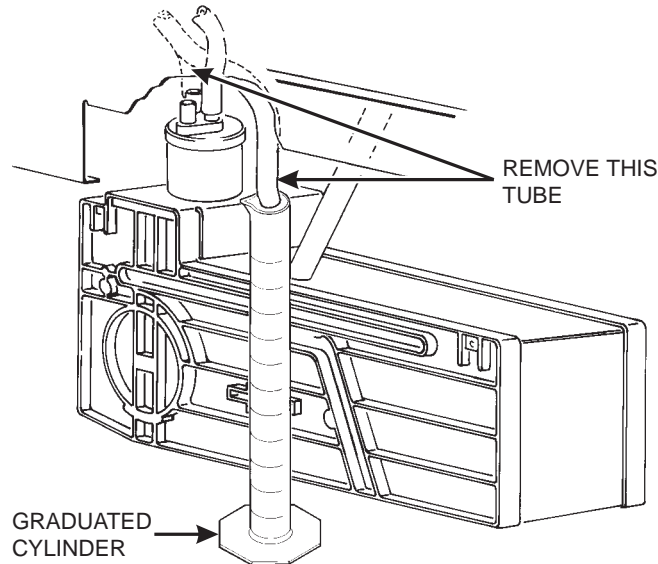
☞ SET UP A COLD DRINK

Be sure that the cup sizes you set in **SET UP CUP SIZES** agree with the cup sizes actually in your machine. All procedures for setting up the cold drinks are similar, so this example will demonstrate how to set up the 5 selection.

1. Press [7 PRODUCT CONFIG.] then [↓] until the display shows *SETUP - ✱*.

1. Press **1** and **5**. (For the "6" selection you would press 1 and 6, and so on.) The display shows *CLD.15 6.80*. This means that the currently set non-carbonated cold water throw time for this selection is 6.80 seconds. Enter a new time if desired.

2. Press [↓]. The display shows *CRB.15 6.80*. This means that the currently set carbonated cold water throw time for this selection is 6.80 seconds. Enter a new time if desired.

3. Pressing [↓] after each display will cause the following screens to appear:

   SRP.15 — View and change the syrup throw time

   PCT.15 — View and change the settings for the percentage of carbonation (0-100)

4. At any of the preceding displays, you can press [✱ TEST START] to test throw that item.

2. CONTINUE.

NOTE

The typical cold drink setup allows both a carbonated and still (non-carb) version. There may be cases when you wish to serve only one or the other.

To set up a still (non-carb) only, set the carbonation percentage (*PCT.15.XX*) to zero (*PCT.15.00*). This setup will cause both versions to vend with no carbonation.

To set up a carb only drink, set the desired carbonation level on the percent screen, then press [EDIT]. The display shows an asterisk to indicate this selection is carb only (*PCT.15 ✱ XX*). Press

[EDIT] again to remove the asterisk and allow still drinks.

👉 **COLLECTING COLD WATER AND SYRUP THROWS**

1. Place a cup in the cup delivery station.
1. Ensure the merchandiser is using the factory defaults for the cup sizes (refer to **SET UP CUP SIZES**, page 36).
2. Initiate the water (or syrup) throw for a selection.
3. Remove the cup and pour the liquid into a graduated cylinder.
4. Compare the measured throw to the volume as shown in table W2.
5. Adjust throw times to get the desired volume.
6. If you are unable to get the right volume by adjusting the throw times, reset throw times to the factory default, then adjust the water (or syrup) valve for that selection (see **ADJUSTMENTS AND MINOR MAINTENANCE**, page 11). Repeat steps 2 through 6 until the correct volume is thrown.

Table W2. Cold Water and Syrup Throw Default Times and Volumes

CUP SIZE		SYRUP			PLAIN WATER			CARB. WATER		
		VOLUME		TIME (SEC)	VOLUME		TIME (SEC)	VOLUME		TIME (SEC)
ML.	OZ.	ML.	OZ.		ML.	OZ.		ML.	OZ.	
177	6	25	0.85	2.5	125	4.2	4.25	125	4.2	4.25
207	7	30	1	3	150	5	5.25	150	5	5.25
244	8.25	36	1.2	3.5	181	6.1	6	181	6.1	6
266	9	40	1.4	4	200	6.7	7	200	6.7	7
296	10	45	1.5	4.25	222	7.5	8	222	7.5	8
355	12	50	1.7	4.5	250	8.5	9	250	8.5	9

👉 **VIEW SOFTWARE VERSION**

1. Press [F1], and press [⬇] until the display shows *VER XXXXXX.*

   "XXXXXX" represents the current software version number.

2. CONTINUE.

☞ SET HOT AND COLD TEMPERATURE

1. Press [7 PRODUCT CONFIG.] then [↓] until the display shows *35 ^{0}F 202* . In this exam-
    ple, 35 is the cold plate temperature setpoing and 202 is the water tank tempera-
    ture setpoint in degrees Fahrenheit. If a decimal point appears next to the tank
    temperature number, the heater is on. If a decimal poing appears next to the cold
    plate temperature number, the compressor is on.

1. If desired, enter a new setpoint in the accepted range of 149° - 205° F (65° - 96°
    C).

NOTE

The lower limit for vending is 10× below setpoint, up to a maximum
of 180× F (82× C).

2. To change display units (replace the "F" with a "C" for Celsius), press [EDIT] .

3. The cold plate temperature can be adusted between 34° and 49° F (1° - 9° C).

    Press [✳ TEST START] to increment to the next degree. Continue pressing to roll over

    back to 34° F.

CAUTION
Setting the cold plate temperature too low may result in freezing the
plate. Be careful when adjusting the cold temperature.

2. CONTINUE.

☞ **SET THE AUTOMATIC BREWER RINSE TIME (BREWER EQUIPPED MACHINES ONLY)**

The brewer will be automatically rinsed by one of two methods: You can specify a set time of day when the brewer is rinsed, or you can specify that rinsing takes place a set time after the last brewed selection is vended.

1. Press [7 PRODUCT CONFIG.] then [↓] until the display shows one of the following:

SAN.TIM 4.5   The time of day (in hours and tenths of hours) the machine rinses the brewer. In this example, brewer rinse takes place each day at 4:30 am. Range: 0.0 - 23.9 in .1 hour (6 minute) increments.

OR

SAN.HRS 2.5.   In this example, brewer rinse takes place 2.5 hours after the last vend. Range: 2.0 - 12.5 hours, in .1 hour (6 minute) increments.

NOTE
If 24 hours passes without a vend, no rinsing will take place. This eliminates unnecessary rinsing over a weekend or holiday.

1. Whichever one of the two choices is displayed is the method by which the brewer will be rinsed. Press [EDIT] to switch between these two displays. Enter a new time, if desired.

2. CONTINUE.

☞ **SET THE AUTOMATIC MIXING BOWL RINSE TIME**

Mixing bowl(s) can be automatically rinsed by one of two methods: You can specify a set time of day when the bowl is rinsed, or you can specify that rinsing takes place a set time after the last selection is vended.

1. Press [7 PRODUCT CONFIG.] then [↓] until the display shows one of the following:

    RIN.HRS 2.5 - This is how soon the machine rinses the bowls after a vend. In this example, bowl rinse takes place 2.5 hours after the last vend. Range: 2.0 - 12.5 hours, in .1 hour (6 minute) increments.

    OR

    RIN.TIM 4.5 - The time of day (in hours and tenths of hours) the machine rinses the bowls. In this example, bowl rinse takes place at 4:30 am. Range: 0.0 - 23.9 in .1 hour (6 minute) increments.

    NOTE
    If 24 hours passes without a vend, no rinsing will take place. This eliminates unnecessary rinsing over a weekend or holiday.

    OR

    RINSE OFF - No bowl rinse takes place.

1. Press [EDIT] to switch between these options, and the number keys to enter new values.

2. CONTINUE.

👉 SET THE TIME OF DAY

1.   Press [8 TIME OF DAY] . The display shows *TIME HH.MM*. **"HH.MM"** is the time of day in 24-hour format.

1.   Enter the current time using the number keys.

> **NOTE**
> 9:00 am is entered with a leading zero, like this: 0900; 9:00 pm is entered as 2100.

2.   CONTINUE.

👉 SET THE DAY OF THE WEEK

1.   Press [8 TIME OF DAY] , and press [⬇] until the display shows **@ *SMTWTFS*.** The letter representing the currently set day of the week will be flashing.

2.   Press [EDIT] until the correct day of the week is flashing.

2.   CONTINUE.

👉 SET MONTH, DAY, AND YEAR

1.   Press [8 TIME OF DAY] , and press [⬇] until the display shows *MM/DD YY*. **"MM" is the month, "DD" is the date, YY is the year.**

3.   Enter the current month, date, and year using the number keys.

   For example, press the following keys to enter February 22, 1996:
   0, 2, 2, 2, 9, 6

4.   Press [EDIT] to switch between MM/DD and DD/MM formats

☞ **SET TIME-OF-DAY INHIBITED VENDING**

Vending can be inhibited up to four times a day.

1. Press [8 TIME OF DAY], then press [⬇], until the display shows *INHIB* - - - -.

1. Go to the **TIME INTERVAL EDITING** procedure, page 52 for an example of how to set up time-of-day inhibited vending.

☞ **SET TIME-OF-DAY FREE VENDING**

Vending can be free up to four times a day.

1. Press [8 TIME OF DAY], then press [⬇], until the display shows *FREEV* - - - -.

2. Go to the **TIME INTERVAL EDITING** procedure, page 52 for an example of how to set up time-of-day inhibited vending.

☞ **SET TIME-OF-DAY DISCOUNT VENDING**

Vending can be discounted up to four times a day. For example, this can be used to favor early-arriving employees..

1. Press [8 TIME OF DAY], then press [⬇], until the display shows *DISCT* - - - -.

2. CONTINUE.Go to the **TIME INTERVAL EDITING** procedure, page 52 for an example of how to set up time-of-day inhibited vending.

TIME INTERVAL EDITING

8 TIME OF DAY

You can select up to four times of day for each special vending period.

NOTE
If two or more of these time periods overlap, the interval with the highest priority will overrule the other(s). This order of precedence is:

1. INHIBIT
3. FREEVEND
4. DISCOUNT

For example, if a DISCOUNT time period is scheduled for a certain area before the end of an INHIBIT time period, DISCOUNT does not begin until the INHIBIT interval has ended for that area.

The time interval editing procedure is almost the same for the INHIBIT, FREEVEND, and DISCOUNT intervals. There is one difference for the DISCOUNT time interval, so we will use it in our example. Assume you just finished the SET TIME-OF-DAY DISCOUNT VENDING procedure. Step 1 picks up where you left off . . .

1. The display shows *DISCT ----*. Press the number of the time interval you want to edit, or [EDIT] to edit time interval **1** (we'll use interval 1 for this example).

5. The display shows *1.DISCT ON* or *1.DISCT OFF.* This display tells you whether your time interval (represented by 1) is on or off. Press [EDIT] to change the condition of the time interval.

6. Press [↓]. The display shows *1.DSCT X* . "X" represents the discount percentage for this period. Enter a discount percentage of 25 with the number keys. (Discount percentages of from 0 to 99 are permitted.) The machine will apply a 25% discount to each price, rounding up to the nearest nickel (or whatever is the smallest coin accepted by the coin mechanism).

7. Press [↓]. The display shows *1.STRT X.XX.* "X.XX" is the currently set start time. Enter a new start time (24-hour format) for this interval. To enter the time for 3:30 pm, enter 1530.

8. Press ⬇. The display shows *1.STOP X.XX.* "X.XX" is the currently set stop time. Enter a new stop time (24-hour format) for this interval. To enter the time for 6:00 pm, enter 1800. You have now established a 25% discount that starts at 3:30 pm and ends at 6:00 pm.

9. Press ⬇. The display shows *1.@ - - - - - - -* . The dashes represent the days that this time interval is active. Pressing number keys 1 through 7 switches the days on/off. For example, press "2", "4", and "6". The display now shows *1.@ - M - W - F -*. This discount interval is only active on Monday, Wednesday, and Friday.

10. Press ⬇. The display shows *✳ - - - - - - - - -*. The dashes represent the selections affected by this time interval. Press the appropriate letter key to enable a selection, press the key again to disable it. For example, pressing A, C, and E will cause the display to look like this: *A - C - E - - - -*, meaning that all A, C, and E selections are affected by this interval.

Advanced Options:

- Press [✳ TEST START] to turn on all levels; press [# CODE CLEAR] to turn all levels off.
- Press **0** or **1** to enable selections by cup size.

11. Press ⬇. The display shows *1.MESG OFF* or *1.MESG X.* "OFF" means there is no custom message selected, and "X" represents the custom message number set for this interval. Press the number key of the message (1 through 8) you want displayed. To edit this message, press [EDIT] and follow the procedure given in **EDIT CUSTOM MESSAGES**, page 56. Press 0 to turn the message OFF for this time interval.

2. CONTINUE.

> **STANDBY MESSAGE** The message that is displayed during normal vending periods when there are no out-of-service faults on the machine.

☞ SELECT A STANDBY MESSAGE

1. Press [8 TIME OF DAY], then press [⬇], until the display shows *STANDBY XX.* "XX" represents the current message number selected for the standby message. Two dashes mean that the factory-set message is selected.

12. To select a message, just press the corresponding number (**1** through **8**). To display the factory-set message, press **0**.

13. The selected message (except the factory-set message) can be edited. To do this, press [EDIT] and follow the procedure given in **EDIT CUSTOM MESSAGES**, page 56.

2. CONTINUE.

☞ SELECT AN OUT-OF-SERVICE MESSAGE

1. Press [8 TIME OF DAY], then press [⬇] until the display shows *SERVICE XX.* "XX" represents the current message number selected to display when the machine is out-of-service. Two dashes mean that the factory-set message is selected.

14. To select a message, just press the corresponding number (**1** through **8**). To display the factory-set message, press **0**.

15. The selected message (except the factory-set message) can be edited. To do this, press [EDIT] and follow the procedure given in **EDIT CUSTOM MESSAGES**, page 56.

2. CONTINUE.

☞ **SELECT A FREEVEND MESSAGE**

1. Press [8 TIME OF DAY], then press [↓] until the display shows *FREEVEND XX.*

    "XX" represents the current message number selected for the message that displays when the machine is in the freevend mode. Two dashes mean that the factory-set message is selected.

1. To select a message, just press the corresponding number (**1** through **8**). To display the factory-set message, press **0**.

2. The selected message (except the factory-set message) can be edited. To do this, press [EDIT] and follow the procedure given in **EDIT CUSTOM MES-SAGES**, page 56.

2. CONTINUE.

👉 EDIT CUSTOM MESSAGES

1. Press ⬜ [8 TIME OF DAY] , and press ⬇ until the display shows *EDIT MSG'S*. Press the number of the message you want to edit. *MESSAGE X* is displayed (X represents the message number you pressed).

1. Press [EDIT]. The message text is displayed with the first character flashing.

2. To view the message, press [✳ TEST START]. The message scrolls across the display.

   To stop the scrolling, press [EDIT].

3. When the character you want to change is flashing, either enter it directly, or use [F1] and [F2] to step through the character set until the desired character is displayed. Use the arrow keys to highlight different characters. See the section on the next page for an explanation of special keys and the character set.

SHORTCUT

Instead of stepping through the whole character set to enter a letter that is not on your keypad, enter one close to the one you want, then step to it. Example: If you want to enter an **L**, first press [1 PRICE] to get an **R**, then press [F2] six times. Your **L** should now be displayed.

THE END OF MESSAGE CHARACTER

This is the most important character in your message, because it tells the machine when the message is ended. If you don't use this character, your message will be followed by a bunch of nonsense. This character can be selected either from the character set or by a direct key entry (see the next page).

ENTERING YOUR MESSAGE

Most of the keys on the control panel have a special purpose to help you create and edit your messages:

Key	Function
1 PRICE	Inserts an **R** at the flashing character.
2 FREE VEND / INSERT	Inserts a space at the flashing character.
4 MACHINE CONFIG.	Inserts an **S** at the flashing character.
5 DATA RECALL / DELETE	Deletes the current character and closes up the space.
7 PRODUCT CONFIG.	Inserts a **T** at the flashing character.
# CODE / CLEAR	Deletes the current character and leaves the space.
8 TIME OF DAY	Repeats the letter to the left of the flashing character.
9 PAY	Enters the special "end of message" character, which denotes the end of the message.
EDIT	"Pages" through the message, ten characters (one screen) at a time.
↓ ↑	Steps forward and backward through the message, one character at a time.
F1 F2	Steps forward and backward through the character list, one character at a time.

THE CHARACTER SET

0	A	K	U	[	
1	B	L	V	]	
2	C	M	W	#	
3	D	N	X	*	
4	E	O	Y	+	
5	F	P	Z	-	>
6	G	Q	(SPACE)	/	?
7	H	R	_	.	@
8	I	S	$	<	o
9	J	T	'	=	米
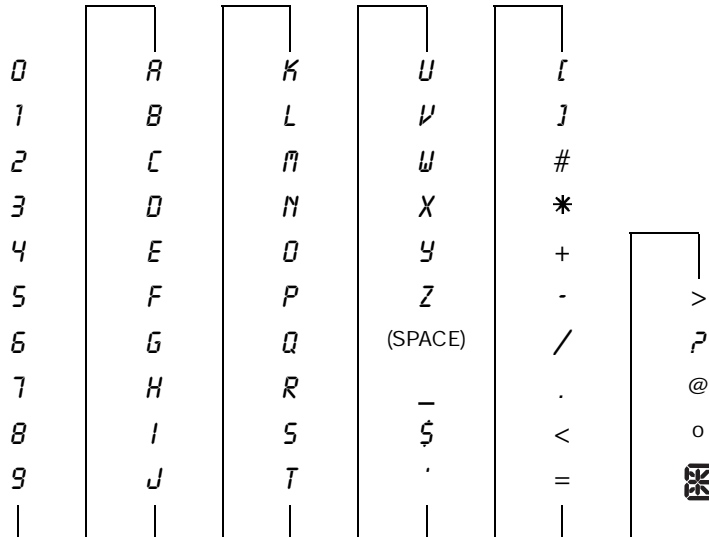
👉 VIEW WATER TANK AND COLD PLATE TEMPERA-TURE

1. Press [F1]. The display shows *XXX ⁰F YYY*. "XXX" is the current cold plate temperature, "YYY" is the current water tank temperature. "°F" means that both temperatures are displayed in degrees Fahrenheit (may be shown in degrees Celsius, depending upon your choice. See **SET HOT AND COLD TEMPERATURE**, page 47). A decimal point shown in the display indicates that the tank heater or compressor is operating.

2. CONTINUE.

👉 VIEW MACHINE CONFIGURATION SETTING

1. Press [F1], then press [⬇] until the display shows *0-J-WXYZ*. See **SET UP MACHINE CONFIGURATION OPTIONS**, page 34, for an explanation of this display.

1. Press [⬇]. The display shows *0. ABCDEFG-*. This shows the active selections for the regular size drink (0).

2. Press [EDIT]. The display shows *0. --56-89*. This shows the active cold drink selections for the regular size cup (0).

3. Press [⬇]. The display shows *1. ABCDEFG-*. This shows the active selections for the large size drink (1).

4. Press [EDIT]. The display shows *1. --56-89*. This shows the active cold drink selections for the large size cup (1).

2. CONTINUE.

👉 **PAYOUT COINS**

1. Press 【 9 PAY 】. If a dumb mech was selected, the display shows *NDQ* = *123*; if

    an MDB mech was selcted the display shows *PAY 123*.

1. Press 【 1 PRICE 】. A dumb mech pays out one *N*ickel; an MDB mech pays a coin

    from tube 1. Press 【 2 FREE VEND INSERT 】. A dumb mech pays out one *D*ime; an MDB mech

    pays a coin from tube 2. Press 【 F1 】. A dumb mech pays out one *Q*uarter; an

    MDB mech pays a coin from tube 3.
2. To continuously pay out coins, hold down the appropriate key.

2. CONTINUE.

☞ SET PRICES

1. Press [1 PRICE]. The display shows ✳✳ *2.50 .25*. This display shows the max-

    imum and minimum prices set in the machine. In this example, the maximum
    price is $2.50 and the minimum is $0.25.

1. Enter prices as using one of the following methods:

SET ENTIRE MACHINE TO ONE PRICE . . .

  a. Press [EDIT]. The display shows ✳✳ *X.XX*. Enter a price using the

      number keys. All selections in the machine are now set to this price.

SET THE PRICE OF AN INDIVIDUAL SELECTION . . .

  a. Press the number of the selection to be priced. (Example: 1A.) The display
      shows *1A X.XX*. Enter a price using the number keys. The selection is now
      priced.

  b. Press another letter key, or [⬇] to price another selection.

SET ALL CUP SIZES TO ONE PRICE . . .

You can set all regular drinks to one price, and all large drinks to a different price:

  a. Press 0 for regular size, or 1 for large size cups. If you pressed 1, the display
      shows *1✳ .XX .XX*. This is the currently set minimum and maximum price.

  b. Press [EDIT]. The display shows *1✳*.

  c. Enter a price using the number keys. All large cup drinks are set to one
      price.

  d. Press [⬇] to change the other size cup.

SET ALL SIZES OF A SELECTION TO ONE PRICE . . .

    a.   Press a selection letter (**A - H**, **X**, **Y**, **Z**, **8**, or **9**). If you pressed C, the display shows $\ast C$ $.XX$ $.XX$. This is the currently set maximum and minimum price.

    b.   Press | EDIT |. The display shows $\ast C$. Enter a price using the number keys. All sizes of this selection are set to one price.

    c.   Press | ⬇ | or another selection letter to change other selections.

2.   CONTINUE.

☞ VIEW NONRESETTABLE SALES AND VEND DATA

1.   Press | 5 DATA RECALL DELETE |. The display shows $NR\$$ $XX.XX$. "XX.XX" is a dollar and cents figure showing the total of all sales in the machine. This is a running total, and is not resettable.

1.   Press | ⬇ |. The display shows NR X. "X" is the total number of vends made by the machine. This is a running total, and is not resettable.

2.   CONTINUE.

👉 VIEW DATA THREE DIFFERENT WAYS

Paid sales and vends can be viewed three different ways: By whole machine, by selection, and by drink size within the selection. The first screen of the data item shows its machine total.

- To view the data by selection, press the letter of the selection you want to see.

  You can then press [⬆] and [⬇] to see data for all the active selections.

- To view the data by drink size:

    1. Press **0** for regular size drinks or 1 for large size drinks.

    2. Press the letter of the selection you want to see.

  FOR EXAMPLE: To view the data for a large A selection, press 1A. The data will be displayed.

  You can then press [⬆] and [⬇] to see data for all the active selections of that size.

👉 VIEW TOTAL PAID SALES

1. Press [5 DATA RECALL / DELETE], then press [⬇] until the display shows **✳✳$ XX.XX.**

    "XX.XX" is a dollar and cents figure showing the total of all PAID sales in the machine (as opposed to unpaid sales like winner and free vends). This is the total since the last time it was cleared.

1. If desired, view this data by individual selection or drink size.

2. CONTINUE.

👉 VIEW TOTAL PAID VENDS

1. Press [5 DATA RECALL / DELETE], then press [⬇] until the display shows **✳✳ XX. "XX"** is the total number of paid vends for the entire machine.

2. If desired, view this data by individual selection or drink size.

2. CONTINUE.

👉 CLEAR ALL RESETTABLE DATA

1. Press [5 / DATA RECALL / DELETE]. The display shows *NRS XX.XX*. This is a running total, and is not resettable.

1. Press and hold [# / CODE / CLEAR]. Two beeps sound and the display shows *CLEARING* momentarily, and then changes to *FINISHED*. All data is cleared.

2. CONTINUE.

👉 CLEAR PAID SALES DATA ONLY

1. Press [5 / DATA RECALL / DELETE], then press [↓] until the display shows *✳✳S XX.XX*.

   "XX.XX" is a dollar and cents figure showing the total of all **PAID** sales in the machine (as opposed to unpaid sales like winner and free vends). This is the total since the last time it was cleared.

2. Press and hold [# / CODE / CLEAR]. Two beeps sound and the display shows *CLEARING* momentarily, and then changes to *FINISHED*. All paid sales data is cleared; other data is not cleared.

2. CONTINUE.

👉 VIEW AMOUNT IN COIN BOX (NOT SHOWN IF ZERO)

1. Press [5 / DATA RECALL / DELETE], then press [↓] until the display shows *CBX XX.XX*.

   "XX.XX" is the dollar and cents amount in the coin box.

2. CONTINUE.

☞ **VIEW AMOUNT IN VALIDATOR (NOT SHOWN IF ZERO)**

1. Press [5 DATA RECALL DELETE], then press [↓] until the display shows *DBV XX.XX*. "XX.XX" is the dollar amount in the bill stacker.

1. Press [EDIT] to show the quantities of bills in the stacker. For example, the display shows *$01 20*, meaning that there are 20 dollar bills in the bill stacker.

   Press [EDIT] again to show the quantities of other bills, such as $5s, $10s, or $20s.

2. CONTINUE.

☞ **VIEW FREEVEND SALES BY TIME INTERVAL (NOT SHOWN IF ZERO)**

1. Press [5 DATA RECALL DELETE], then press [↓] until the display shows *-0$ XX.XX*.

2. Press [EDIT], then press [↓] until the display shows *1.FRV .00*. This is the total sales for freevend interval 1, shown even if zero.

3. Press [↓] to view intervals 2 through 4.

2. CONTINUE.

☞ **VIEW DISCOUNT SALES BY TIME INTERVAL**

1. Press [5 DATA RECALL DELETE], then press [↓] until the display shows *✳✳$ XX.XX*.

4. Press [EDIT]. The display shows *1.DSC .00*. This is the total sales for discount interval 1 (not shown if zero).

5. Press [↓] to view intervals 2 through 4.

2. CONTINUE.

👉 **VIEW FREE VENDS (NOT SHOWN IF ZERO)**

1. Press [5 DATA RECALL DELETE], then press [⬇] until the display shows *-0$ XX.XX*.

1. Press [EDIT], then press [⬇] until the display shows *FRV XX.XX*.

   "XX.XX" is the total machine-wide freevends, shown even if zero.

2. CONTINUE.

👉 **VIEW WINNERS (NOT SHOWN IF ZERO)**

1. Press [5 DATA RECALL DELETE], then press [⬇] until the display shows *-0$ XX.XX*.

2. Press [EDIT], then press [⬇] until the display shows *WIN XX.XX*.

   "XX.XX" is the total machine-wide winners, shown even if zero.

2. CONTINUE.

VIEW TIME DATA

1. Press [5 DATA RECALL DELETE], then press [⬇], until the display shows *TIME DATA.*

1. Press [EDIT]. The following message scrolls across the display:

    LAST POWER 01/30 13.51 FOR 00. 0.23

    This example shows that the last time the machine lost power was on January 30 (01/30) at 1:51pm (13.51) for zero days, zero hours, and 23 minutes (00. 0.23).

2. Press [⬇]. The following message scrolls across the display:

    LONGS.T POWER 01/30 10.58 FOR 00. 2.47

    This example shows that the longest time the machine was without power was on December 30 (01/30) at 10:58am (10.58) for zero days, 2 hours and 47 minutes (00. 2.47).

3. Press [⬇]. The following message scrolls across the display:

    FULL CLEAR 01/30 8.58

    This example shows that the last time resettable sales was fully cleared was on January 30 (01/30) at 8:58am (8.58).

4. Press [⬇]. The following message scrolls across the display:

    TIME SET 01/30 9.15

    This example shows that the last time the time or date was set was on December 30 (01/30) at 9:15 am (9.15).

5. Press [⬇]. The following message scrolls across the display:

    PRICE SET 01/30 9.42

    This example shows that the last time prices were set was on December 30 (01/30) at 9:42 am (9.42).

2. CONTINUE.

👉 **VIEW TOTAL UNPAID SALES**

NOTE
This does not appear if the total of unpaid sales is zero.

1. Press [5 DATA RECALL DELETE], then press [↓] until the display shows _*0$ XX.XX*.

   "XX.XX" is the total unpaid sales (free vends, winner vends, 100% discounts, zero price vends) for the entire machine.

1. If desired, view this data by tray and individual selection.

2. CONTINUE.

👉 **VIEW TOTAL UNPAID VENDS**

1. Press [5 DATA RECALL DELETE], then press [↓] until the display shows _*0 XX*. **"XX"** is the total number of unpaid vends for the entire machine.

2. If desired, view this data by tray and individual selection.

2. CONTINUE.

👉 **VIEW NUMBER OF TEST VENDS (NOT SHOWN IF ZERO)**

1. Press [5 DATA RECALL DELETE], then press [↓] until the display shows *TST X*. "X" is the number of test vends.

3. If desired, view this data by tray and individual selection.

2. CONTINUE.

👉 **VIEW NUMBER OF MUG VENDS (NOT SHOWN IF ZERO)**

1. Press [5 DATA RECALL DELETE], then press [↓] until the display shows *MUG X*. "X" is the number of mug vends.

4. If desired, view this data by tray and individual selection.

2. CONTINUE.

👉 **VIEW MACHINE ID NUMBER**

1. Press [5 DATA RECALL / DELETE], then press [⬇] or [⬆] until the display shows *I.D.*

   XXXXXX . The **X's** represent the 6-digit machine ID number.

1. You can edit the machine ID number if the SUPERVISOR access code has been previously entered.

2. CONTINUE.

👉 **TEST VEND SELECTIONS AND VERIFY CREDIT ADDED**

1. Press [✱ TEST / START]. The display shows *TEST .00*. You may now test vend selec-

   tions. If you insert money into the machine, the zeros in the display will be replaced with the amount of the credit. After the item vends, your money will be returned.

   NOTE
   You may make one more test vend if you close the door while still in TEST VEND mode.

2. CONTINUE.

👉 **TEST THE DISPLAY**

1. Press [✱ TEST / START], then press [⬇] until the display shows *DSPLY TEST*. The **"DRINK BEING SERVED"** lamp is lighted, and remains lighted until you leave this function.

2. Press [✱ TEST / START] to light all display segments; press [# CODE / CLEAR] to turn them off.

3. Pressing a **NUMBER KEY** on the control panel causes all segments to display that character.

2. CONTINUE.

☞ **TEST DROP A CUP**

1.	Press [TEST/START], then press [↓] until the display shows *CUP TEST*.

1.	Press [TEST/START] to drop a cup.

2.	CONTINUE.

☞ **TEST THE WHIPPER(S)**

1.	Press [TEST/START], then press [↓] until the display shows *WHIP TEST*.

2.	Press the number corresponding to the whipper you want to test (**1, 2,** or **3).** The whipper runs for one second. Whipper numbers will be displayed while the whipper is running.

2.	CONTINUE.

☞ **TEST THE AIR COMPRESSOR**

1.	Press [TEST/START], then press [↓] until the display shows *AIR TEST*.

3.	Press [TEST/START] to run the air compressor.

2.	CONTINUE.

👉 TEST THE BREWER

1. Press ⬚, then press ⬇ until the display shows *BREW TEST*.

WARNING

Keep away from the brewer mechanism while it is operating. Coming into contact with moving parts could injure you.

1. Press ⬚ to test each brewer position:

BREW'R BREW = The brewer is in the BREW POSITION.
BREW'R FLIP = The brewer is in the FLIP position.
BREW'R HOME = The brewer is in the HOME position.

2. CONTINUE.

👉 RINSE THE MIXING BOWLS

1. Press ⬚, then press ⬇ until the display shows *BOWL RINSE*.

2. Press ⬚ to rinse the mixing bowls. The display shows *RINSING* until the operation is complete.

2. CONTINUE.

👉 RINSE THE BREWER

1. Press ⬚, then press ⬇ until the display shows *BREW RINSE*.

3. Press ⬚ to rinse the brewer. The display shows *RINSING* until the operation is complete

2. CONTINUE.

PURGE THE CARBONATOR

1. Press [TEST/START] , then press [↓] until the display shows *PURGE TEST*.

1. Press [TEST/START] to purge the carbonator without refilling it.

2. CONTINUE.

CLEAR TANK ERRORS AND FILL THE TANK

1. Press [TEST/START] then [↓] until the display shows *TANK FILL*.

2. Press [TEST/START] . This clears any tank error and starts filling the tank, if necessary.

   If it is taking a long time to fill the tank **AND THERE ARE NO LEAKS**, you may

   see *TANK ERR* in the diagnostic list again. Just press [TEST/START] again after mak-

   ing sure there are no other problems, such as a restriction in the water inlet line or a clogged water filter.

2. CONTINUE.

TEST SWITCHES OR SENSORS

1. Press [TEST/START] then [↓] until the display shows *IN.MKPHL1*.

3. Actuate each switch or sensor to test its function:

   M = mug/cup sensor (if equipped)   K = freevend keyswitch
   P = waste pail switch   H = high water tank level switch
   L = low water tank level switch   1 = ring 1 cup sensor switch

As you actuate each input, the display element representing that switch blinks on. Releasing the switch causes that element to blink off again.

4. Press [EDIT] . The display shows *IN. CP*.

   C = No CO_2 pressure
   P = Carb tank low level.

2. CONTINUE.

☞ **VIEW DIAGNOSTIC MESSAGES**

1.   Press [0 DIAGNOSTICS] . the display shows any of the following diagnostic messages, depending upon any fault(s) present:

NO ERRORS   None of the following errors are detected:

KEYPAD XY   Key(s) x, y stuck.

ROM ERROR   Error in the programming EPROM. MACHINE WILL NOT OPERATE.

RAM ERROR   RAM is not initialized or is not compatible with the currently loaded software. If this message appears, initialize your RAM by performing the following procedure:

NOTE: Initializing RAM will erase all your data and drink settings. Be sure you have written this information down before continuing.

Press **AND HOLD** [# CODE CLEAR] until two beeps are heard, and the display shows *FINISHED*.

KEYSWITCH   The keyswitch input is actiave and configured as an inhibit.

$0 + J + WXYZ$ Configuration error; displays the machine configuration screen. NOTE: this is the actual config screen. You may enter the correct config number directly on this screen without further action.

TANK ERR   Tank failed to fill or refill.

RING.MTR   The cup ring is jammed.

MTR 1A1B   Cup turrets are jammed

NO CUPS   Out of cups.

BREW JAM   The brewer is jammed.

WASTE PAIL   The waste pail is full.

LOW WATER   The water level in the tank is low.

COLD WATER   Water in the tank is too cold to vend.

WARM PLATE   The cold plate is warm.

OVERTEMP   Inlet water is too warm to operate compressor

SENSOR12   Temp sensor failed or missing 1 = float sensor, 2 = coldplate.

WHIP123   Whipper motor failure (motor 1, 2, or 3).

DOOR JAM   The automatic delivery door is jammed.

NO CO2 CO_2 pressure is low.

SYRUP12   Syrup tank(s) are low (tank 1, 2).

NO MECH	Coin mech not detected - machine will not operate if configured for coin mech.
MECH COMM	Incomplete coin mech communications — check harness.
MECH.SENSOR	Coin mech reporting a bad tube sensor — replace mech.
MECH ROM	Replace the coin mechanism.
MECH.ACCEPT	Coin mechanism acceptor section is unplugged from the main body of the coin mech. Connect the cable and cycle machine power OFF and then ON.
MECH JAM	One or more coin tubes are jammed. Pay a coin from each tube until the jam is cleared.
DEBIT CARD	Card reader reporting error — machine will not operate if configured for DEBIT ONLY.
CHECK DBV	Bill validator reporting error — machine will not operate. Empty stacker, clear jams, etc.
DBV COMM	Incomplete bill validator communications — check harness.
DBV MOTOR	One of the motors has failed. The unit will disable itself until the error is corrected. Check for bill stuck in the acceptance path. If no bill is present, replace the validator. Cycle machine power OFF and then ON.
DBV SENSOR	One of the sensors in the bill validator has failed. The unit will disable itself until the error is corrected. Check for bill stuck in the acceptance path. If no bill is present, replace the validator. Cycle machine power OFF and then ON.
DBV JAM	A bill is jammed in the acceptance path. The unit will disable itself until the error is corrected. Remove bill stuck in the acceptance path. Cycle machine power OFF and then ON.
DBV STACKR	The stacker is open or removed. The unit will disable itself until the error is corrected. Install the stacker correctly.
CHK PRICE	Price error detected and changed to maximum - check prices.
NONE READY	all selections are reported out of service.

DOWNLOAD DATA TO A PDCD

1. Connect your portable data collection device (PDCD) in accordance with its operating instructions.

1. Press [**F2**]. Data is downloaded into your PDCD.

NOTE
Depending upon the setting selected in set PRINTER OR DEX options, data may be cleared after the download is complete.

2. CONTINUE.

SET FREEVEND OPTIONS

1. Press [**2 FREEVEND INSERT**] until one of the following is displayed:

FREE OFF - Normal vending mode. No items are on freevend. (A closure on the optional keyswitch input causes the machine to go out of service.)

- OR -

FREE ALL - All items are on freevend. The credit display shows

NO MONEY REQUIRED

(A closure on the optional keyswitch causes the machine to go out of service.)

- OR -

FREE W/KEY - All items are freevended while there is a closure on the optional keyswitch input. Normal cash sales are supported when the optional keyswitch input is open.

- OR -

FREE ONCE - A closure on the optional keyswitch input causes only the next item to be freevended. Coin mechanism errors are ignored. this state is designed for card or token systems where one item is vended per token. Normal cash sales are also supported.

2. Press [**EDIT**] until the option you want is displayed.

NOTE
See Appendix D for more information on the freevend keyswitch.

2. CONTINUE.

CLEANING AND SANITATION

BASICS

INTRODUCTION

Anybody who services vending machines must use proper sanitizing procedures. Health regulations require that hands be clean when cups, commodities, and food-contact parts are handled or serviced.

In addition, Health Departments require regular cleaning and sanitizing procedures for food contact parts.

The information in this section will explain how to clean and/or sanitize the merchandiser on a regular basis. A clean and well maintained merchandiser will provide a better product and greater safety for your customers.

CLEANING AND SANITIZING -- WHAT'S THE DIFFERENCE?

CLEAN means "free of visible soil". In cup vending machine servicing cleaning is done to maintain product quality and to remove food soils, oils, and mineral stains that could affect product taste, aroma, and appearance.

SANITIZING means the reduction to safe levels of the number of disease-causing bacteria that remain on the surface **after** cleaning. Therefore, cleaning and sanitizing are done in separate steps, as prescribed by health regulations and good industry practice.

When you sanitize you create a healthy and hygienic condition. This leads to wholesome food, which in turn leads to satisfied customers.

SANITIZING IS NO SUBSTITUTE FOR GOOD CLEANING

HOW DO I SANITIZE?

You can sanitize by using either of these two methods:

Chemicals: The object to be sanitized is treated with a bactericidal compound.

Heat: Raise the temperature of the object to be sanitized high enough to kill bacteria. Water must be at least 77^oC (170^oF).

Hot brew water (if available) is an acceptable sanitizer. When food-contact surfaces are washed and/or rinsed, use the hot water available in the machine.

Be sure to turn the machine off before using water on the machine.

In either case, the object to be sanitized must be thoroughly clean and completely rinsed in order for the sanitizing process to work. Caked-on soils, not removed by cleaning for example, may shield bacteria from a sanitizing solution.

NOTE

Hot brew water may cause damage to some parts of the cooling system and should not be used in any procedure unless specifically stated.

Where "Warm Water" is suggested the temperature is designated to be a maximum of 50^oC (122^oF).

A GOOD PLACE TO START -- YOUR SANITATION KIT

You need to be sure that each machine is clean, safe and functioning when you leave the location. In order to properly do this, you need to have a complete set of the right tools.

Here is a checklist of the items needed for a good sanitation kit:

Sanitation pail

☐ Tube and nozzle brushes for food contact surfaces

☐ Utility brush for dry spillage around canisters, etc.

☐ Disposable towels, wet-strength and lint-free

NOTE

Wiping with towels can recontaminate sanitized food-contact parts. Therefore, towels should not be used to dry food-contact surfaces. Instead, these parts should be air dried.

☐ Spray detergent, diluted to desired strength

☐ Urn cleaner packets for coffee stains and oils

☐ Odor control chemicals for pails

☐ Replacement parts (if the exchange method is used)

☐ Cabinet polish or window cleaner for the outside of the machine

Feel free to add some items to this list. For example, you may want to use a portable vacuum cleaner.

OVERALL CLEANING

Inspect your merchandiser both inside and out. Be sure to check corners and all less visible parts of the merchandiser.

Clean where needed.

Allow the inside of the cabinet to dry thoroughly before you close the door.

PREVENTIVE MAINTENANCE CLEANING

Periodically, you should visually inspect your merchandiser's hot water tank for excessive lime and scale buildup. This buildup on the tank walls, water valves and heater element will vary dramatically, depending upon water quality. You should develop a cleaning and deliming schedule based on the apparent local water quality.

NOTE
To aid in removing scale from your merchandiser, National Vendors has a service kit available: part number 6400080. In addition, if your machine has the Everpure water inlet filter system option, a second kit: part number 6400086 is also available.

CLEANING PROCEDURES

Non Food-Contact Parts

> <u>**Cup Delivery Compartment**</u> - Remove the cup delivery compartment from the merchandiser. Thoroughly wash the cup delivery compartment using a clean, damp, disposable paper wiper. Rinse with clean, hot, flowing water. Reinstall.
>
> <u>**Cabinet Cup Delivery Door**</u> - Wash with a clean, damp, disposable paper wiper.
>
> <u>**Waste Bucket**</u> - Empty, wash with a chlorinate detergent or equivalent chemical and rinse with hot water. Sprinkle detergent powder in the bottom of the waste bucket to help control odors. Be sure to replace the overflow switch float.
>
> <u>**Grounds Pail**</u> - Empty, wash and rinse with hot water. Reline the grounds pail with a clean plastic bag.
>
> <u>**Brewer Mechanism**</u> - Remove the brewer mechanism from its mounting and rinse with hot water.
>
> <u>**Cooling System**</u> - Wipe the top cover, any visible tubes and sides with a clean, damp, disposable paper wiper.
>
> <u>**Ingredient Rinse Tray**</u> - Remove product canisters. Wash and rinse with hot water.
>
> <u>**Exhaust Fan Filter**</u> - Remove the filter from its housing. Wash with soap and water, rinse, wring dry and replace into housing.
>
> <u>**Cabinet Door**</u> - Wipe the inside and out with a clean, damp, disposable paper wiper.
>
> <u>**Condenser**</u> - Clean with a small stiff brush. Avoid poking between the fins with screwdrivers or sharp objects which may puncture the condenser, requiring repairs.

SANITATION PROCEDURES

Food-Contact Parts

All food-contact parts must be cleaned and sanitized. Air dry, do not wipe dry.

Ingredient Canisters - Empty and clean and sanitize by washing the canisters, augers and spouts with hot water and allow to air dry before returning to cabinet.

Mixing Bowls - The inside of all mixing bowls may be rinsed by performing the "Bowl Rinse" operation as outlined in the Programming section of this manual.

If needed, remove the mixing bowls from the dry ingredient shelf. Clean and sanitize the mixing bowls by washing with hot water. Allow to air dry before reassembling.

Whipper Caps and Impellers - Remove caps and impellers from the whipper housings. Clean and sanitize the caps and impeller housing by washing with hot water and allow to air dry before reassembling.

Hot Beverage Discharge Nozzles - Disconnect all of the hot beverage dispensing tubes from the nozzles. Remove the nozzles from the mounting bracket. Remove the cap from each nozzle. Dip the tube cleaner brush in a sanitizing solution and thoroughly clean the nozzles and caps inside and out. Rinse the tube cleaner brush thoroughly with clean, hot water and brush the nozzles thoroughly between each rinse. Use a clean, damp, disposable paper wiper. Rinse with clean, hot water and dry thoroughly before reinstalling.

Cold Beverage Discharge Nozzles - Clean by removing the stainless steel dispense tubes from the holder by releasing the two thumb screws. Immerse the dispense tubes in warm water to remove any external deposits and brush clean. Clean inside the tubes with a small brush. Flush with warm water. Reinstall nozzles.

Syrup Tubes - First ensure that the waste bucket is in place. Lift the syrup dip tubes from the product container, and place them in a container of warm water and test throw until clear water comes out of the dispense nozzle.

Place the dip tubes into the container of sanitizing fluid. Perform test throws until the fluid pours from the dispense nozzle. Leave stand for the period recommended by the manufacturer of the sanitizing fluid (usually 10 to 15 minutes).

Place the syrup dip tubes in a 5 - litre container of clean, cold water and flush 1 litre through each syrup line using the test throw procedure.

Cold Water System - Ensure that the waste bucket is in place. Empty the carbonator by test throwing carbonated water until you hear sputtering at the dispense nozzle.

Remove the Everpure filter. Load an Everpure sterilizing (dummy) cartridge with 2 fluid ounces of Milton 2 fluid and fit the cartridge to the machine.

Test throw still (non-carbonated) water to clear any air locks. Release and allow the carbonator to fill with solution.

Test throw both carbonated water and still water once more to ensure that all of the tubes are full of the sanitizing fluid.

Switch power "OFF" and allow the machine to stand loaded with the sanitizing solution for 10 minutes. To flush out the sterilizing solution, remove the dummy cartridge and replace the Everpure filter. Switch power "ON". Vend 3 litres of still water from the machine then vend 3 litres of carbonated water.

Brewer, Brewer Basket and Brewer Funnel - The tubing and brewer may be cleaned and sanitized by performing the "Brew Rinse" operation as outlined in the programming section. The machine features an automatic brewer sanitizing feature also described in the programming section.

At times, it may become necessary to clean and sanitize the individual brewer parts. If this should occur, disconnect the tubes from the brewer manifold. Remove the brewer barrel and manifold assembly from its support. Remove the brewer basket and funnel assemblies. Wash all parts using a chlorinated detergent or equivalent chemical. Rinse thoroughly with hot water.

CARBONATED
WATER

NON-CARBONATED
WATER

SYRUP

SYRUP

COLD DRINK TUBE ROUTING DIAGRAM

FROM
CHOCOLATE
BOWL

FROM
SOUP
BOWL

FROM
CONDIMENT
BOWL

FROM HOT
WATER VALVE
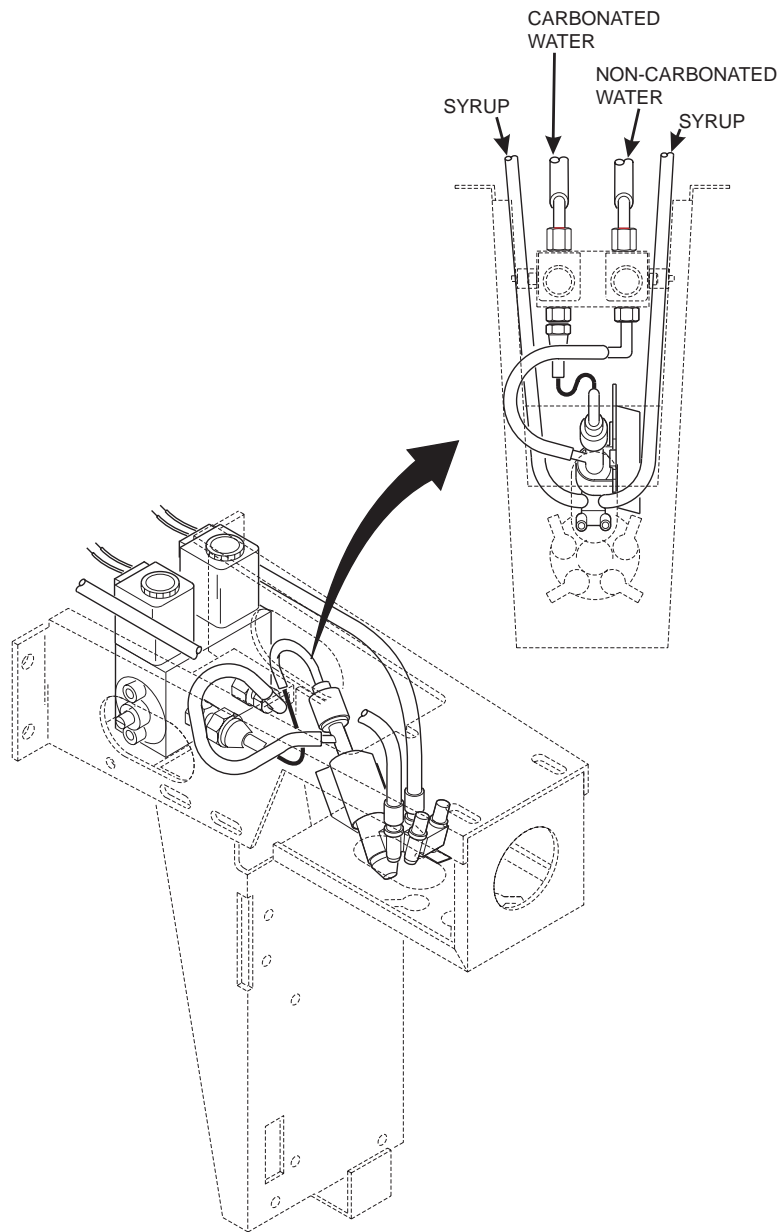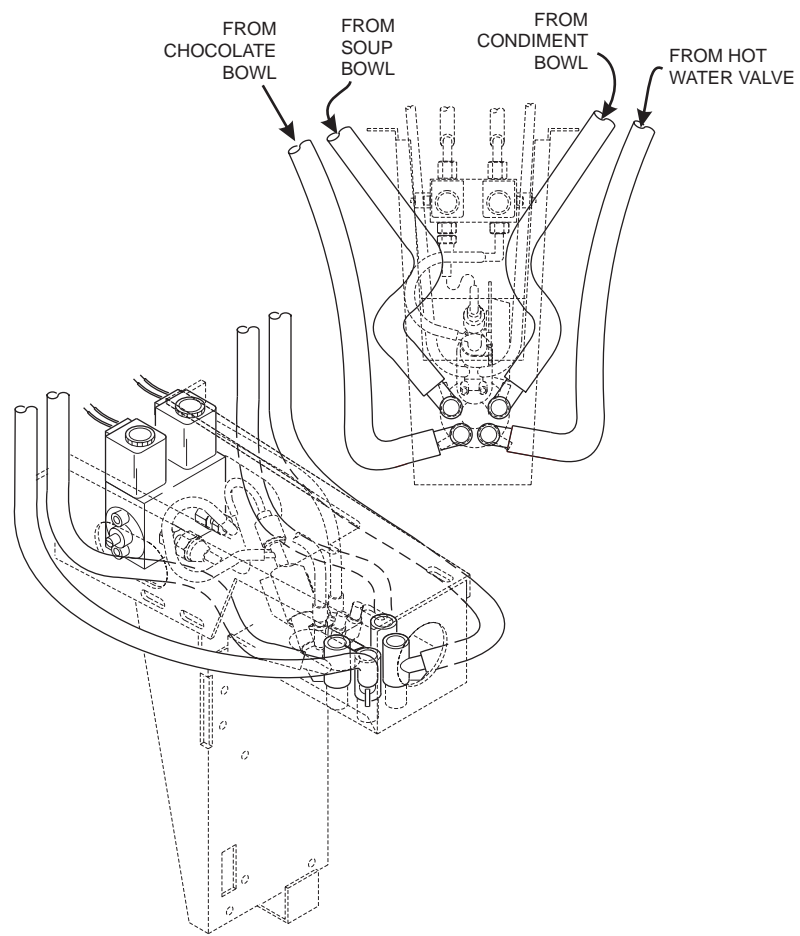
HOT DRINK TUBE ROUTING DIAGRAM

RECOMMENDED CLEANING AND SANITATION INTERVALS

ITEM	DAILY	WEEKLY	MONTHLY	QUARTERLY	SEMI-ANNUALLY
Ingredient Canisters	C		S		
Mixing Bowls	C	S			
Whipper Lids and Impellers	C	S			
Beverage Dischare Nozzles	C	S			
Cup Delivery Compartment	C				
Exhaust Fan Filter		C			
Waste Pail	C				
Brewer, Basket, Funnel	C	S			
Coffee Chutes	C	S			
Brewer Mechanism	C	C			
Grounds Pail	C				
S = Sanitize at this interval			C = Clean at this interval		

APPENDIX A. THE INFRARED MUG/CUP SENSOR

The infrared mug/cup sensor can sense the presence of a mug or cup without using moving parts.

Indicator light

The sensor is equipped with an indicator light. This light will help you get the best results from the infrared mug/cup sensor.

Under these conditions:

- Machine door open
- Cup station in place
- No cup in the station

The indicator light should be off. If it is on, it is indicating improper cup station alignment or excessive sensor sensitivity.

Under these conditions:

- Machine door closed
- Cup station in place
- No cup in the station

Press any letter on the selection switch panel, for example, **A**. Only the letter **A** should be showing in the message display. If $A\,MUG$ is displayed, it indicates one or more of the following:

- Improper cup station alignment
- Excessive sensitivity (the sensor is sensing the delivery door)
- Cup station lens is not clean

Cleaning

As indicated in the Sanitation section, you should remove the cup station to clean it. Pay particular attention to the dark colored infrared mug/cup sensor lens, which is part of the cup station. If it is not thoroughly cleaned, the sensor will not work properly.

CAUTION
Do not get liquid inside the sensor unit.

Cleaning the infrared mug/cup sensor unit itself is not usually necessary. If it does require cleaning, just wipe it with a damp cloth.

Calibration

1. Remove the plastic cap in the rear of the sensing unit, exposing the potentiometer adjusting screw, as shown in figure A1.

3. Turn the screw clockwise to increase sensitivity of cup detection, or counterclockwise to decrease sensitivity.

4. Calibrate the sensor:

<div align="center">

CAUTION
</div>

Do not adjust sensitivity too far, or unreliable sensing could result.

a. Using a piece of **WHITE** poster board or heavy cardboard, make a 5" x 5-5/8" target.

<div align="center">

NOTE
</div>

It is very important that this material be white.

b. Place the target in the cup station just beyond the cup deflectors (see figure A-2). The target should be standing vertically; not tilted forward or backward.
c. With the target in place, turn the adjusting screw **clockwise** very slowly until the indicator just turns ON.
d. Turn the adjusting screw **counterclockwise** very slowly until the indicator just turns OFF.

1. Replace the plastic cap.

2. Insert a mug into the cup station in the vending position and check to see that the red indicator light is ON.

This calibration will be adequate for most cups or mugs. In some cases, a slightly more sensitive setting is needed if the cup or mug is a dark color.
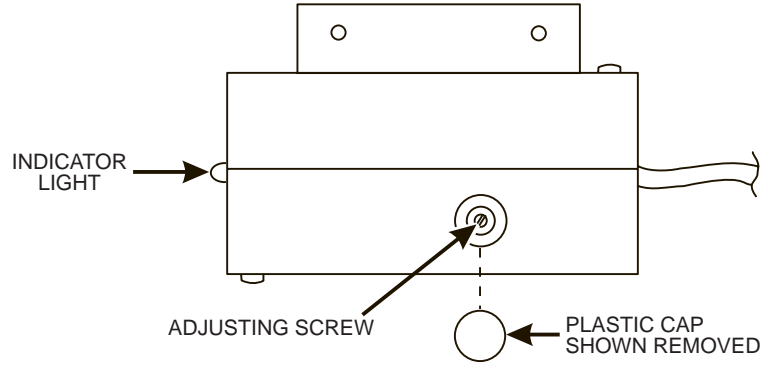
VIEWING REAR OF SENSOR ASSEMBLY

INDICATOR
LIGHT →

ADJUSTING SCREW

PLASTIC CAP
SHOWN REMOVED ←

Figure A-1

PLASTIC CAP

INDICATOR LIGHT ←

CUP
DEFLECTORS

CUP →
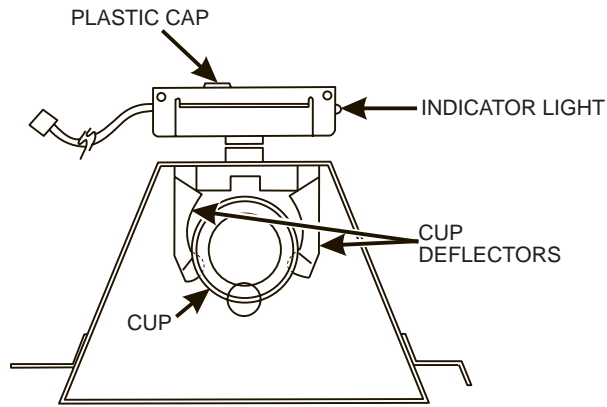
Figure A-2

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APPENDIX B. MODIFY CANISTER TO VEND 12 OZ. CUPS

Proceed as follows:

3. Remove all cups, then remove the turret center and turret base assembly from the canister.
4. Break off all 8 tabs on the bottom of the turret base as shown.

NOTE
You will no longer be able to vend smaller cups from this canister!
To return to vending smaller cups you must replace the modified turret base with an original turret base (part number 6233048) from National Vendors Parts Department.

5. Replace the turret center and turret base in the canister and load cups.
6. Drop a cup. If it drops properly, you are finished with the procedure, if not, continue with step 7.
7. Remove all cups, then remove the canister from the cup mechanism assembly.
8. Remove the funnel, replace the canister, and reload cups.
9. Drop a cup. If it drops properly, you are finished with the procedure, if not, continue with step 10.
10. Order a 5 oz/18oz cup ring (part number 6233120) from National Vendors Parts Department.

TURRET
CENTER

TURRET
BASE

BREAK OFF
ALL TABS

CANISTER

639p0079
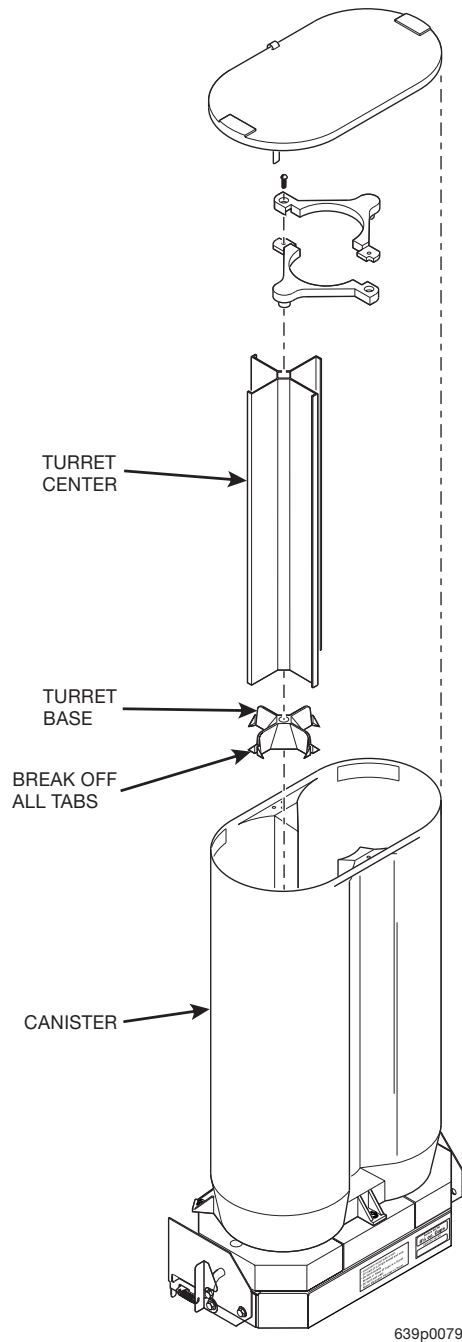
APPENDIX C. CLEAN THE HOT WATER TANK

Some smell and/or taste problems may occur in new machines. Follow this procedure to clean the hot water tank if you experience problems:

11. If the machine is in service, remove power from the machine.

12. Dissolve 1 tablespoon of common baking soda in a cup of water.

WARNING
The water tank may be HOT. Be careful when working on the tank.

13. Loosen or remove the hot water tank lid and pour the baking soda solution into the tank.

14. Apply power to the machine.

15. If the tank is not full, fill it.

16. Allow the tank to reach its operating temperature.

17. Leave the solution in the tank for **_AT LEAST_** ½ hour. If possible, leave the solution in the tank for 1 hour.

18. Drain the tank.

19. Refill the tank, then drain again.

20. Refill the tank and put the machine back into service.

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APPENDIX D. THE FREE VEND KEYSWITCH OPTION

The free vend keyswitch allows someone to set up free vending without needing to open the door.

NOTE

Freevend Options MUST be set to *FREE W/KEY* (see the programming section) for this to work properly.

TO START FREE VEND:

2. Place your key in the free vend keyswitch and turn it to the right. (If the keyswitch is already turned to the right, turn it to the left, then back to the right.) The display shows *ENTER CODE*.

3. Enter the four-digit free vend code. If you enter the wrong code, you have to return to step 2 and start over.

4. If you enter the correct code, the display shows: *FREE ON*.

5. Remove your key. **NOTE**: You don't have to turn the key back to the left to remove it, but it's a good idea to do so.

TO END FREE VEND:

1. Place your key in the free vend keyswitch and turn it to the right. (If the keyswitch is already turned to the right, turn it to the left, then back to the right.) The display shows: *ENTER CODE*.

2. Turn the keyswitch back to the left and remove your key. The display returns to the standby message.

TO ELIMINATE THE CODE REQUIREMENT:

1. The factory default code is 0000. If this code is used, the machine will not ask for a code, but will simply enter freevend mode.

2. To require a CODE entry, change the code to something other than 0000 (see **ENTER A NEW FREEVEND CODE** in the programming section).

**NOTE THAT NO CODE IS NECESSARY TO REMOVE THE
MACHINE FROM FREE VEND.**

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This Merchandiser is warranted for one (1) year against defective parts and workmanship. Any part or parts which are proven to be defective within one (1) year of the date of shipment will be repaired or replaced free of charge when the defective part is returned, with transportation charges prepaid, to the destination designated by the National Vendors Warranty Department.

This warranty applies only to the original purchaser of the Merchandiser and is null and void if the Merchandiser is sold during the period of warranty.

This warranty does not apply to a) electrical components, wiring, or circuits and/or for all mechanical parts or assemblies damaged as a result of operating the Merchandiser at other than the design voltage and frequency specified on the Electrical Rating Tag, or b) in event of vandalism, fire or negligence, or c) incandescent lamps, neon lamps, fluorescent lamps, ballasts, starters or other expendable items or d) when other manufactured components are installed in National Vendors Merchandisers.

National Vendors is not responsible for any cost of service rendered or repairs made by customer or its agents on Merchandiser or parts unless authorization to incur such expense has been given in writing by National Vendors prior to incurring such expense.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. NATIONAL VENDORS SHALL NOT BE RESPONSIBLE FOR CONSEQUENTIAL OR PUNITIVE DAMAGES. National Vendors neither assumes nor authorizes any person to assume for it any obligation or liability in connection with the sale of said equipment or any part thereof.