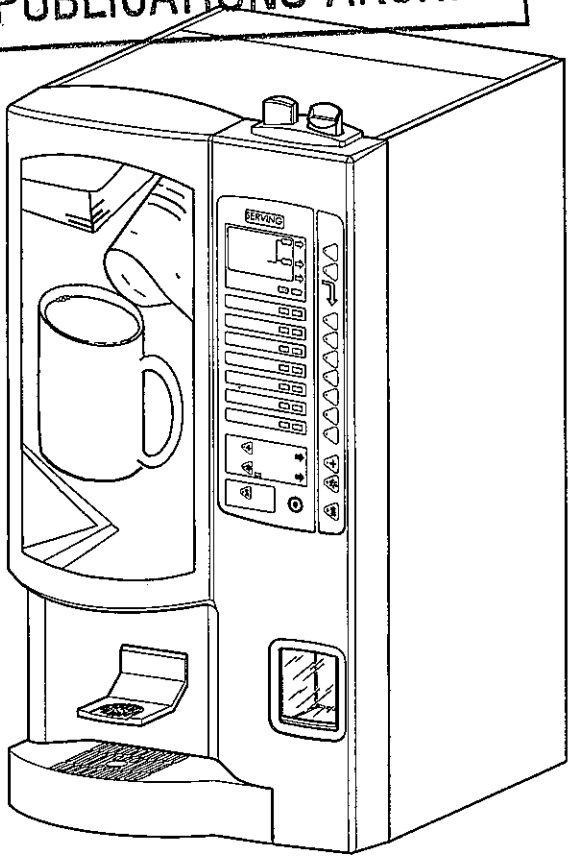
GPL

Café System

PUBLICATIONS ARCHIVE



Set-Up Guide

6600023

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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 Manual. Your investment in this equipment will be protected by using this Set-Up Guide and the Parts Manual in your operation, service and maintenance work. By following prescribed procedures, machine performance and safety will be preserved.

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ABOUT THIS BOOK

This ***Set-Up Guide*** is intended for use by the owner/operator of this vending machine. It contains installation, programming, and service information that may be beyond the scope of responsibilities of those persons who daily operate and maintain the merchandiser. For those purposes, National Vendors has provided the ***Operators Guide***.

FEATURES

MERCHANDISER CONFIGURATION

Standard Configuration:

- Fresh brew (FB) coffee, FB decaf, blended coffee, espresso, cappuccino, hot chocolate, and hot water

Optional Configurations Available:

- A soluble product, such as soup, whitener (with whipper), or International coffee (with whipper) may be substituted for decaf coffee

DRINK SIZES

- 5 oz to 12 oz drinks may be served
- Choice of small or large drink volume may be served for each selection
- Consumer's own mug or cup must be used
- Consumer may use a multi-cup carafe made via the standard key-switch
- Carafe mode is available for all drink types

MICROPROCESSOR CONTROLLED

Built-in software controls all operational functions of the merchandiser:

- Merchandiser configuration
- Multiple pricing
- Data retrieval
- Drink timing and recipe settings
- Water temperature setting
- Diagnostic messages

COIN MECHANISM

None standard, but the GPL Cafe' System can easily be converted to a coin-operated unit.

Options:

- 24 VDC, 15 Pin connector "Dumb" mech. (Mars #TRC-6010XV, Coin Acceptors #9302-LF)
- Executive coin mech. interface

OPTIONS

- Color photo P.O.P. for machine door
- Matching base cabinet with large capacity waste containers, removable floor liner, and small internal shelf. Available with or without external liquid draining option.
- Electric water pump kit (for installing plumbing to bottled water)
- Inlet water filter kit (choice of Cuno brand or Everpure brand)
- Bolt-on manual cup dispensers to fit paper or foam cups, with color-matched housing for cup dispensers
- Insulated 60 oz thermal carafe
- Bolt-on condiment tray with compartments for napkins, stirring sticks, sugar and lightener packets, and for customer cup placement while adding condiments to drink

BREWING SYSTEM

- Drip brewing with filter paper to maximize the quality of each drink
- Adjustable steep times
- Peristaltic action pumps brewed coffee from the brewer to the dispensing nozzle

SPECIFICATIONS

CAPACITIES:

- Pre-ground coffee, regular or decaf ..... 5 lbs.
- Freeze-dry coffee, regular or decaf ..... 2 lbs.
- Hot chocolate ..... 10 lbs.

SELECTIONS:

- Standard: 14 selections: 2 drink sizes of the following: Coffee, Decaf Coffee, Blended Coffee, Espresso, Mochaspresso®, Hot Chocolate,and Hot Water
- Additional Options: 14 selections: 2 drink sizes of any of the above plus Coffee with whitener, Cafe' Mocha, Cappuccino, Caffe' Latte, and others

DIMENSIONS:

Machine:

- Height ..... 34.75" (35.13" if equipped with coin insert)
- Width ..... 19"
- Depth ..... 22.63"

Optional Base Cabinet:

- Height ..... 30" including 6" skirt and levelers
- Width ..... 19"
- Depth ..... 22.63"

WATER TANK:

- Capacity ..... 2.2 gallons
- Water Valves ..... Up to 4 hot water valves
- Domestic Heating Element ..... 1250 watts @ 115 VAC
- International Heating Element ..... 2000 watts @ 230 VAC

WEIGHT:

- Machine ..... 145 lbs.
- Optional Base Cabinet ..... 95 lbs.

POWER REQUIREMENTS

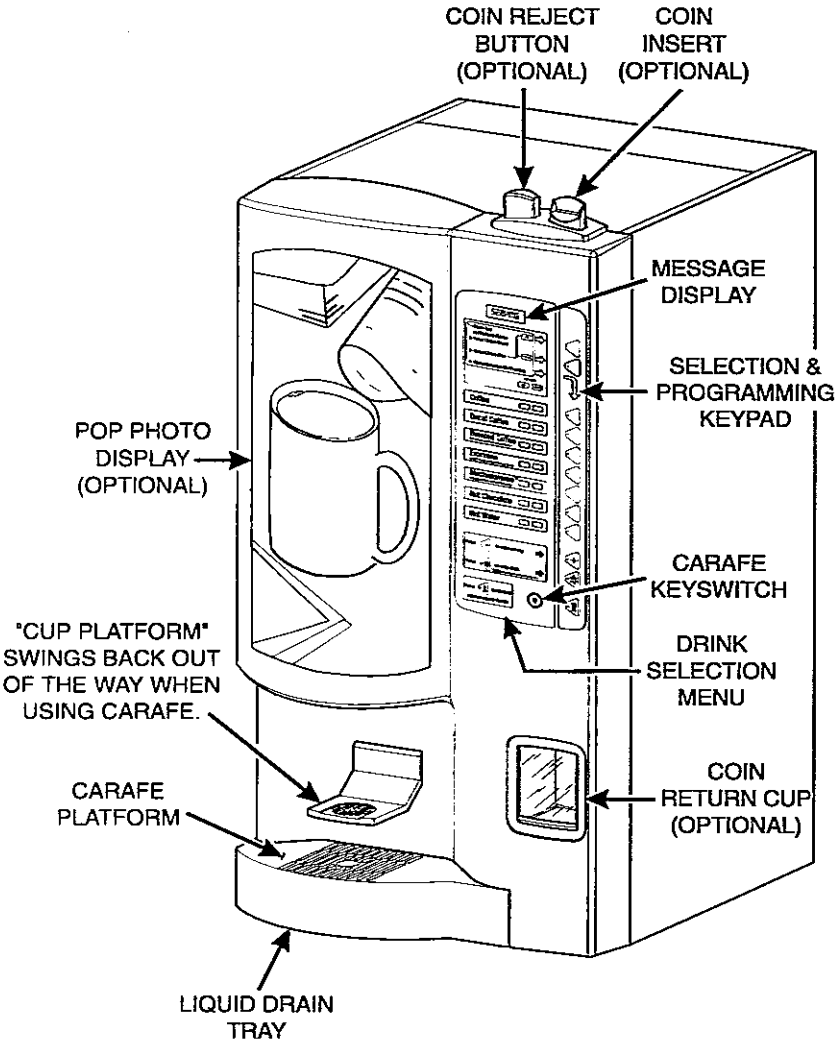
- Domestic ..... 115 VAC / 60 Hz - 15 Amp Circuit
- International ..... 230 VAC / 50 Hz - 10 Amp Circuit

INDOOR USE ONLY

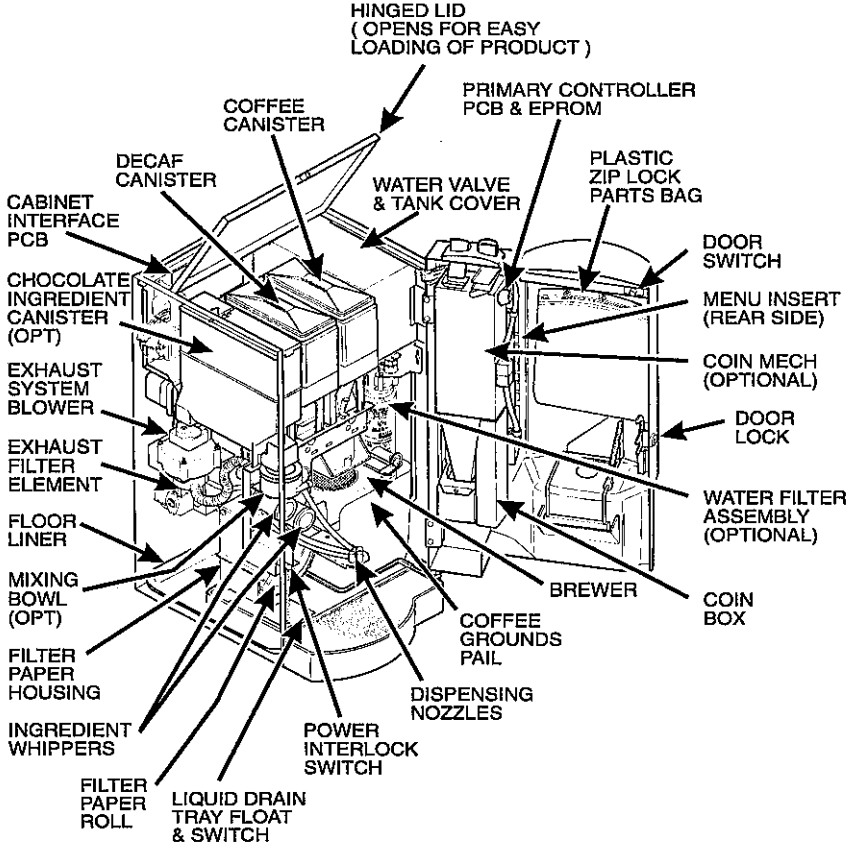
NOTE - DOMESTIC UNITS

An internal 3-amp fuse ONLY protects the electronics inside the machine. All other machine circuitry is protected by the fuse or circuit breaker at the location which provides power to the machine.

MAJOR COMPONENTS



EXTERNAL VIEW



INTERNAL VIEW

WHAT YOU WILL NEED

POWER SOURCE:

This merchandiser requires electrical power as shown in the following table. If you are using more than one merchandiser, ensure each merchandiser has its own electrical circuit.

Table 1. Power Requirements

Country	Voltage	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

NOTE - DOMESTIC UNITS

An internal 3-amp fuse ONLY protects the electronics inside the machine. All other machine circuitry is protected by the fuse or circuit breaker at the location which provides power to the machine.

WATER SUPPLY:

The best type of water for coffee brewing is normal tap water, filtered to remove sediment, dirt, and chlorine. The Cuno Brand - Model CS-61 or the Everpure Brand - Model "OCS" water filters are recommended to provide the proper level of filtration. If your location has chemically softened water, do one of the following:

- Install a non-softened water supply line to the merchandiser location
- Contact your local water filter supplier for information and suggestions
- Use a bottled water source with the optional electric water pump

WATER PRESSURE:

Maximum water pressure ..... 80 PSI
Minimum water pressure ..... 20 PSI

TOOLS AND MATERIALS:

You will need the following tools and materials (not included unless otherwise noted):

- Sufficient ¼" (6.35 mm) or ⅜" (9.52 mm) O.D. copper tubing to reach between the merchandiser and the water supply without stretching. If ¼" (6.35 mm) O.D. plastic tubing is used, use a brass insert (included with most ice maker kits) to support the inside tubing wall.
- Water shut-off valve to fit the tubing (OPTIONAL).
- A ½" open-end wrench, or an adjustable wrench.
- Sufficient coffee and other products of the proper type for your merchandiser configuration.
- Self-adhering rubber seal strip material (supplied with each unit in the parts bag)

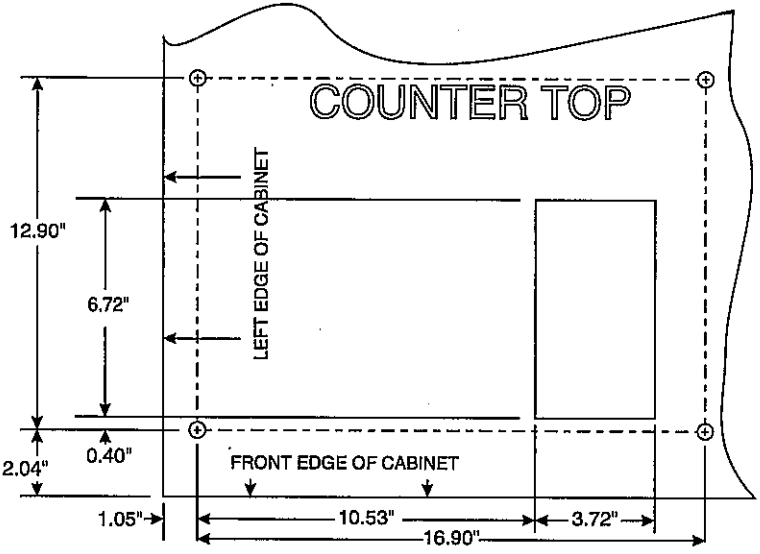
COMPLETE THE INSTALLATION:

For sanitary purposes, water or food products must not be allowed to collect under your GPL Cafe' System. To prevent this, install the supplied rubber sealing strip material to exclude solids and liquids:

1. Remove the paper backing from the 6' rubber sealing strip.
2. Apply the sealing strip to all four bottom edges of the machine base.

Your GPL Cafe' System may be permanently mounted to its location (such as a counter top). However, before drilling holes in your counter top, take some time to find the best location. Consider the location of the filter paper hole (if used). Make sure there is space under the desired location for a grounds pail. Dimensions are given below to reference the mounting holes in relation to the machine cabinet.

1. Drill four holes (7/16" to 1/2" in diameter) as shown:



2. If you want to use a larger grounds pail mounted under the counter, cut a 3.72" x 6.72" hole as shown. (You need to cut a corresponding hole in the bottom of the machine's plastic floor liner pan.)
3. Obtain four #6/16 - 18 thread-cutting screws long enough to protrude about 3/8" to 1/2" above the counter top.
4. Secure the machine to the mounting location. Take care not to overtighten the screws, or you might strip out the plastic nuts in the machine base. Route the filter paper through the hole into your grounds pail.

WATER SUPPLY INSTALLATION

The GPL Cafe' System was designed to be set up with ¼" OD copper or semi-rigid plastic tubing. An insert (not supplied) is recommended to support the inside diameter of the plastic tubing. However, the adapter fitting (supplied) can be used to set up your machine to an existing ⅜" OD water supply line.

1. Make sure you have the proper electrical and water supplies near the merchandiser's location.

NOTE

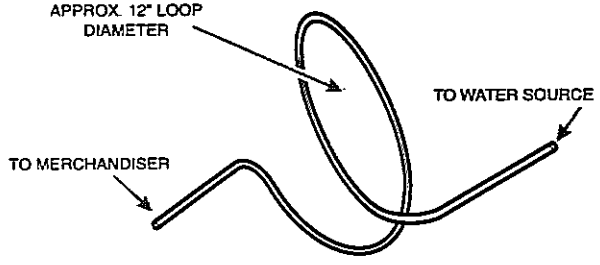
If you are connecting your merchandiser to tap water, proceed with the steps on this page. If you are using a bottled water unit, use the WATER SUPPLY INSTALLATION procedures provided with your bottled water pump accessory.

2. Connect one end of your water line to the water source. If the water cannot be shut off at this location, you should install a shut-off valve between the water source and the merchandiser.

3. Place the free end of the water line in a sink, or a pail large enough to hold about five gallons of water.

4. Turn on the water supply and flush the water line with a minimum of five gallons of water. ***DO NOT*** flush the water line after connecting it to the merchandiser, because you may introduce contaminants into the merchandiser system.

5. Turn off the water and connect the free end of the water line to the merchandiser following the instructions below. Arrange the water line in a loop as shown to allow moving the merchandiser without straining the water line.



WATER LINE ARRANGEMENT

If you are setting up your GPL Cafe' System with a ¼" OD water supply line then continue with step 6. If you will be using ⅜" OD water line, skip to step 7.

6. Insert the water supply tubing through the compression nut and ferrule. Bottom the tubing out onto the internal shoulder of the bulkhead fitting. Tighten the nut finger tight, then tighten with a ½" open end wrench an additional 1¼ turns. Skip steps 7 through 9, and proceed directly to step 10.

These parts, found in the bag assembly, are being supplied to facilitate setting up your new GPL Cafe' System for use with existing 3/8" OD water lines. Numbers in parentheses ( ) in the following steps reference index numbers in this table:

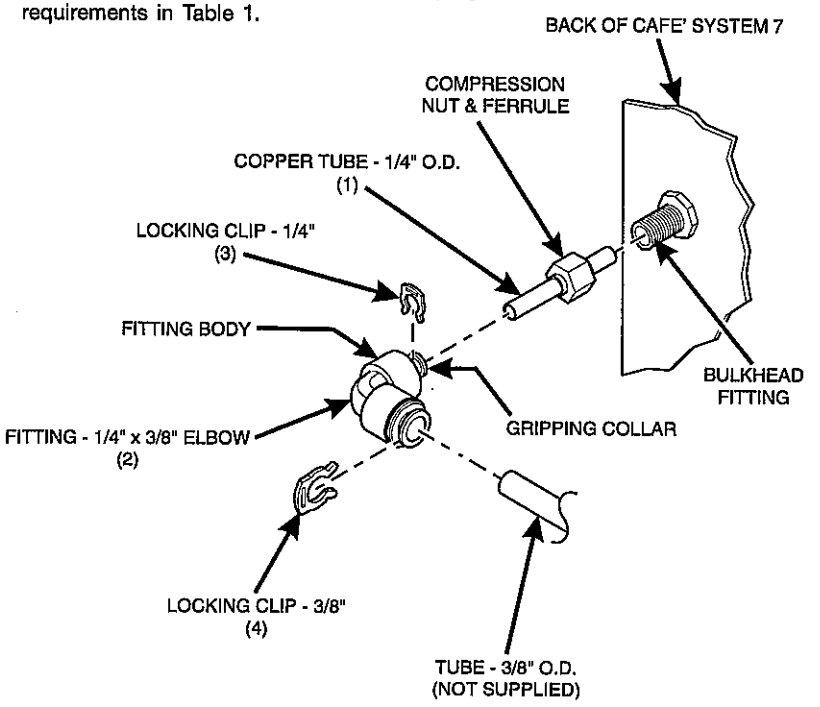
INDEX	PART NUMBER	DESCRIPTION	QTY
1	6408140	TUBE - 1/4" OD - 2.00 IN	1
2	6408141	FITTING - 1/4" X 3/8" ELBOW	1
3	6408142	LOCKING CLIP - 1/4"	1
4	6408143	LOCKING CLIP - 3/8"	1

7. Insert one end of the 2" tube (1) through the compression nut and ferrule. Bottom the tubing out onto the internal shoulder of the bulkhead fitting. Tighten the nut finger tight, then tighten with a ½" open end wrench an additional 1¼ turns.

8. Insert the other end of the 2" tube (1) into the ¼" end of the fitting (2) until it passes through the internal "O" ring and bottoms out on the shoulder. Install the ¼" locking clip (3) between the fitting body and the gripping collar as shown.

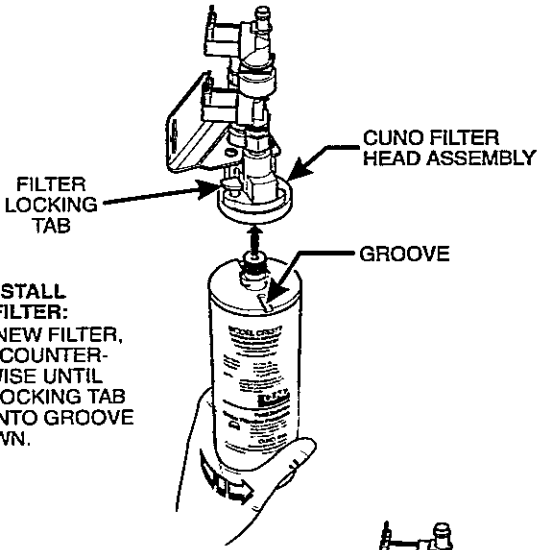
9. Install your 3/8" copper or semi-rigid plastic tubing into the 3/8" end of the fitting (2). Install the 3/8" locking clip (4) between the fitting body and the gripping collar as shown.

10. Place the merchandiser in its location and plug it into a wall outlet which meets the requirements in Table 1.



INSTALL THE WATER FILTER

CUNO BRAND...

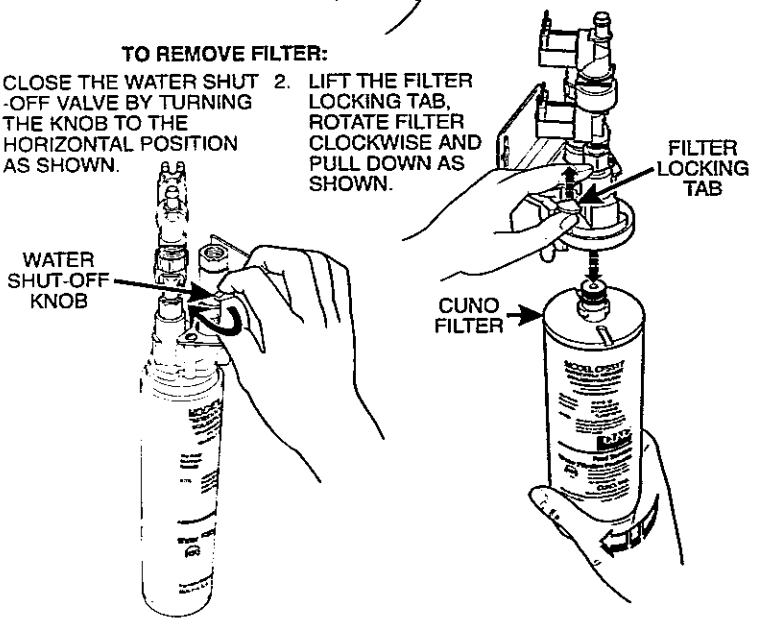


TO INSTALL THE FILTER:

1. INSERT NEW FILTER, ROTATE COUNTER-CLOCKWISE UNTIL FILTER LOCKING TAB SNAPS INTO GROOVE AS SHOWN.

TO REMOVE FILTER:

1. CLOSE THE WATER SHUT -OFF VALVE BY TURNING THE KNOB TO THE HORIZONTAL POSITION AS SHOWN.
2. LIFT THE FILTER LOCKING TAB, ROTATE FILTER CLOCKWISE AND PULL DOWN AS SHOWN.



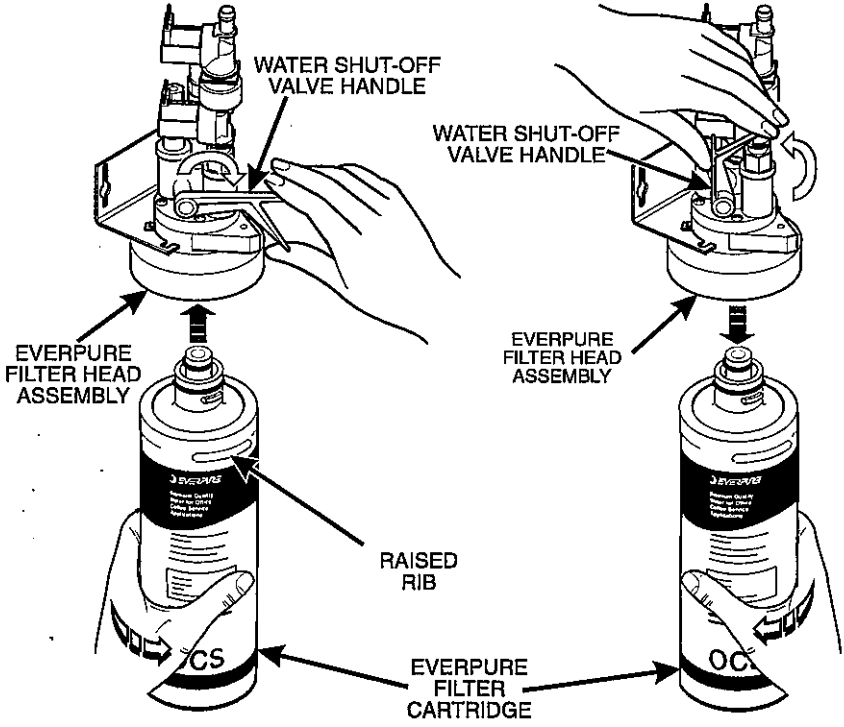
EVERPURE BRAND...

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 HORIZONTICAL POSITION AS SHOWN BELOW.

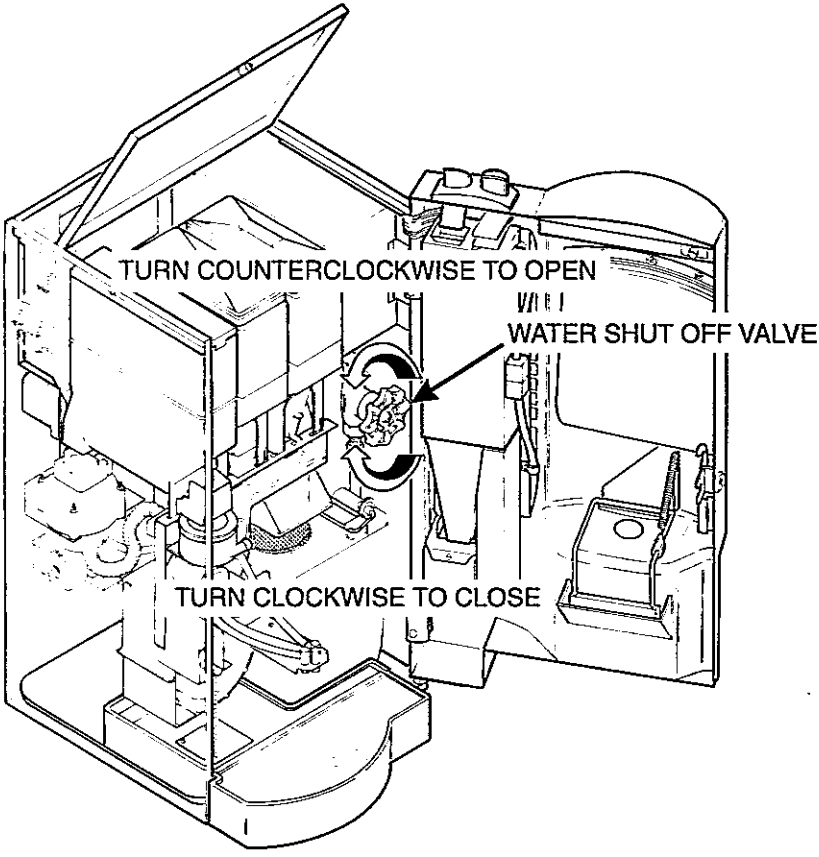
TO REMOVE FILTER:

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.



THE MANUAL SHUTOFF VALVE

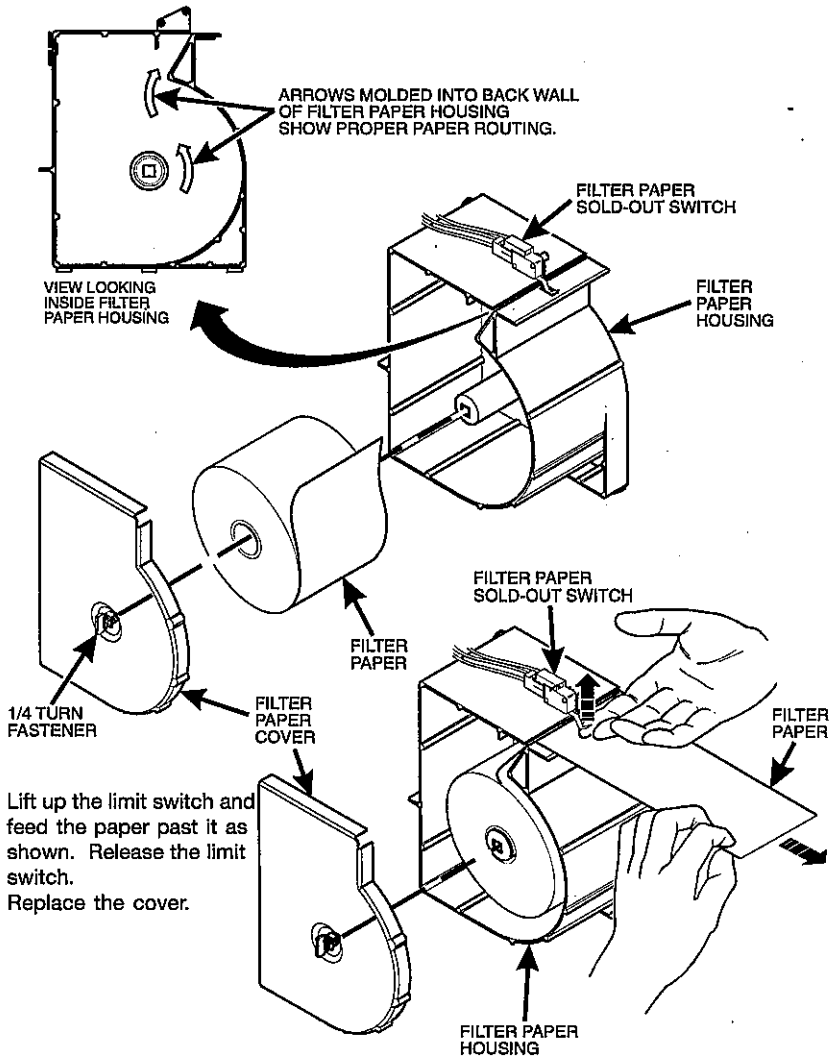
If your GPL Cafe' System does not have the Cuno or Everpure filter option, a manual shutoff valve is installed. Before you fill the water tank, turn the valve handle counter-clockwise to open the valve fully.



INSTALL FILTER PAPER

LOAD THE FILTER PAPER HOUSING...

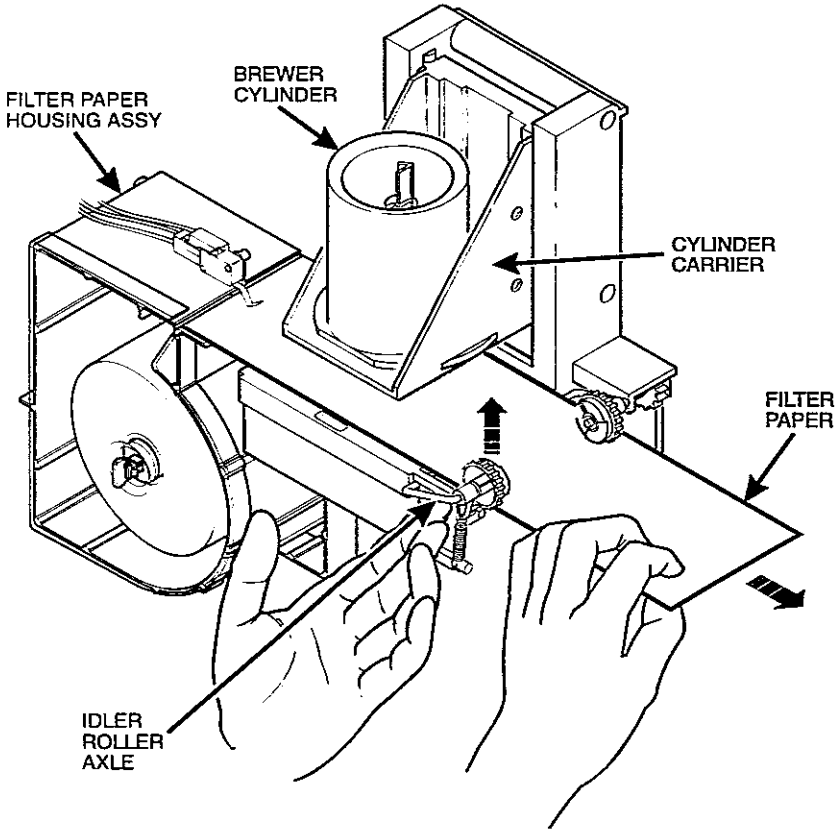
1. Turn the fastener ¼ turn couterclockwise and remove the filter paper cover.
2. Insert filter paper in the filter paper housing as shown.
3. Feed the paper out of the housing as shown by the arrows molded into the back wall of the filter paper housing.



4. Lift up the limit switch and feed the paper past it as shown. Release the limit switch.
5. Replace the cover.

FEED PAPER THROUGH THE BREWER...

6. Hold the idler roller axle up out of the way as shown.
7. Route the paper under the brewer cylinder and the idler rollers.
8. Release the idler roller axle, capturing the filter paper.
9. For machines with base cabinets: Feed filter paper through the upper bucket into the lower grounds bucket.



SET UP THE COIN MECHANISM (OPTIONAL)

NOTE

Only the following 24VDC, 15 pin connector coin mechanisms and "Executive Interface" coin mechanisms will function with the GPL Cafe' System:

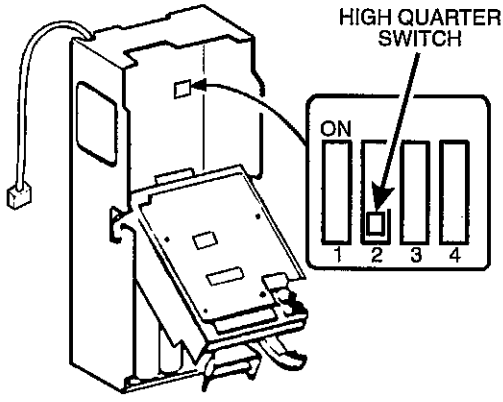
Mars TRC-6010XV
Coin Acceptors #9302-LF

Setting the Quarter Switch. If your coin mechanism is not a MARS TRC 6010XV, skip this procedure and begin loading the coin mechanism.

1. Flip down the front of the coin mechanism as shown, and set the quarter switch.

Loading the Coin Mechanism.

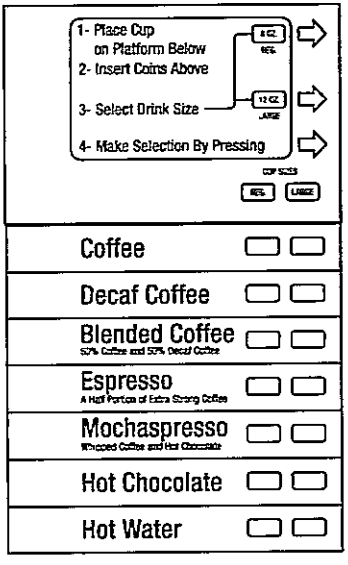
1. Open the cabinet door.
2. Insert coins into their respective tubes until each tube has been filled.
3. Inspect the tubes for shingled coins and correct if necessary.



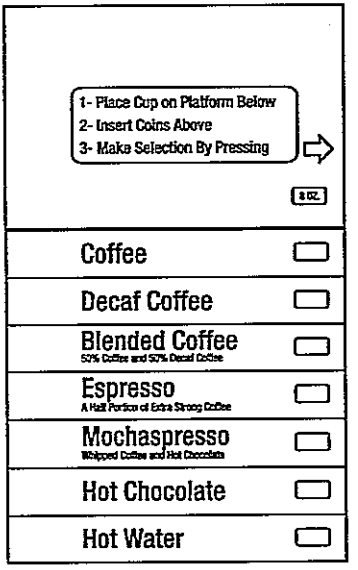
SET UP THE MENU INSERTS

Two sets of menu inserts are included with your GPL Cafe' System. One set is used in machines where two different drink sizes are available; the other is used when only one drink size is offered. In addition, blank inserts and inserts allowing you to write in custom selections are provided.

APPLY DRINK SIZE LABELS HERE



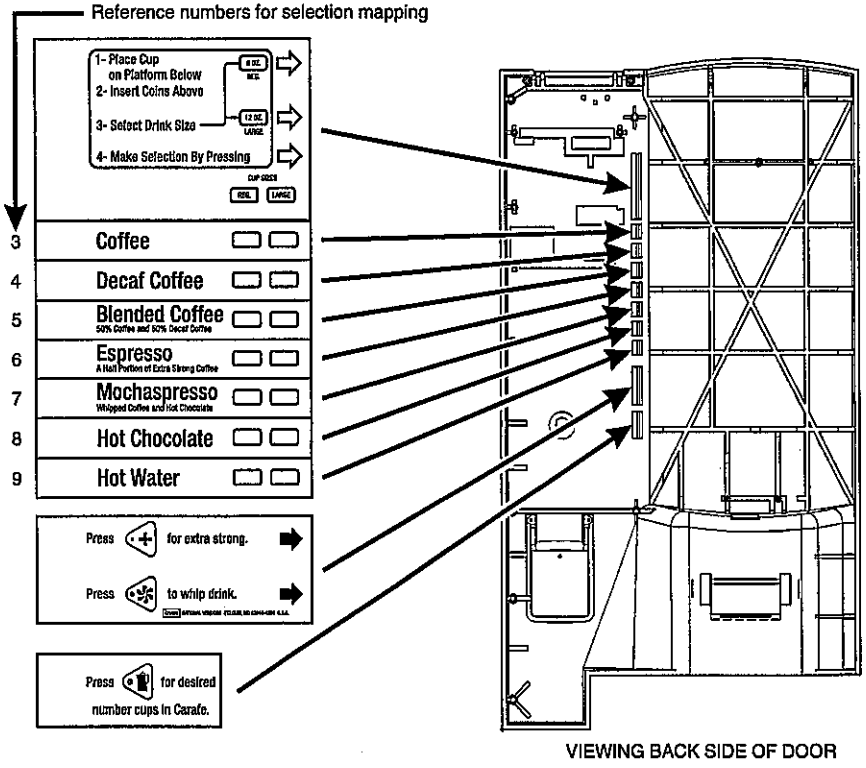
MENU INSERTS FOR TWO CUP SIZES



MENU INSERTS FOR ONE CUP SIZE

This diagram shows you where each of the menu inserts are used. Blank inserts are provided in the event that all selections are not sold. For example, if you don't offer Mochaspresso® and Hot Chocolate, then the Hot Water selection will appear directly under Espresso, followed by the two blanks. Refer to "Key Mapping/Drink Sizes" to verify the order in which these inserts will appear on the menu.

NOTE: Shown as a two cup-size machine.



INTERLOCK SWITCH

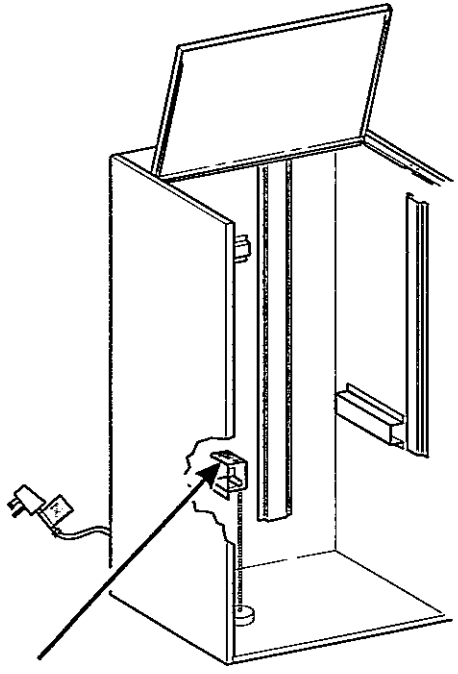
The power interlock switch is provided as a safety feature to help you avoid exposure to high voltage while performing routine cleaning and servicing of the GPL Cafe' System. The power interlock switch has three positions:

1: **IN** The switch is in this position when the door is closed, much like the light switch in a refrigerator. High voltage is applied everywhere in the cabinet.

2: **MID** The switch will move to this (safe) position when the door is opened. High voltage is confined to the power panel assembly under the cover in the back of the machine. Voltage is no longer present at the tank heater, valves, pump, or auger motors, but as long as the machine is plugged in, the interface board still has voltage applied, and all DC and low-voltage applications in the cabinet are active.

UNPLUG THE GPL CAFE' SYSTEM FOR ANY SERVICE ACTIVITIES INVOLVING THE POWER PANEL ASSEMBLY, OR ANY ELECTRICAL COMPONENTS.

3: **OUT** The service person must pull the switch out to this position. High voltage is applied to all devices in the cabinet, just as if the door were shut. BE EXTREMELY CAREFUL if working in the cabinet with the switch in this position.



INTERLOCK SWITCH

LOAD PRODUCTS

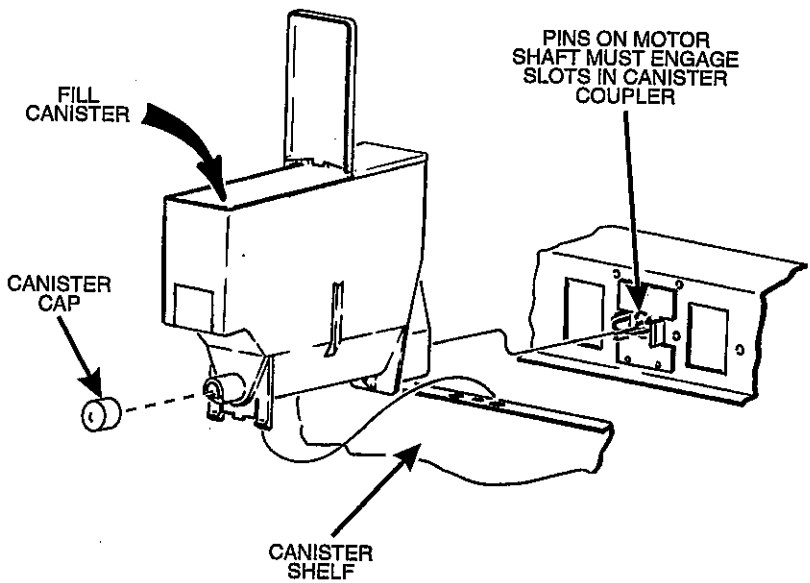
Filling Canisters:

1. Flip open the machine lid to gain access to the product canisters.
2. Open each canister lid and carefully pour product into the canister.
3. Close or replace each canister lid after filling.

Installing Canisters:

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 the front canister feet 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.
5. Replace stainless steel product chutes.

Canister Caps. The parts bag contains a number of red vinyl caps. Place these caps over the canister nozzles as shown to avoid spilling product when removing and replacing the canisters.



FILL WATER TANK

For safety purposes, the water inlet valve is not allowed to operate with the tank water level in the low condition for more than one minute. After that, TANK ERR is shown in the display if the tank is not filled to its proper level. To clear that error, or to initially fill the water tank (which takes more than 1 minute), proceed as follows:

a. Open the door and pull OUT the interlock switch.

b. If your GPL Cafe' System is not equipped with a water filter, open the water shut off valve as shown.

c. Insert your carafe key and turn it clockwise to enable the programming mode.

d. Press , then . The display shows the water tank temperature.

e. Press . The display shows: TANK.FILL.

f. Press , then . The display shows: FILLING. This clears any tank error and starts filling the tank, if necessary. When the tank is full, the display returns to TANK.FILL.

IMPORTANT

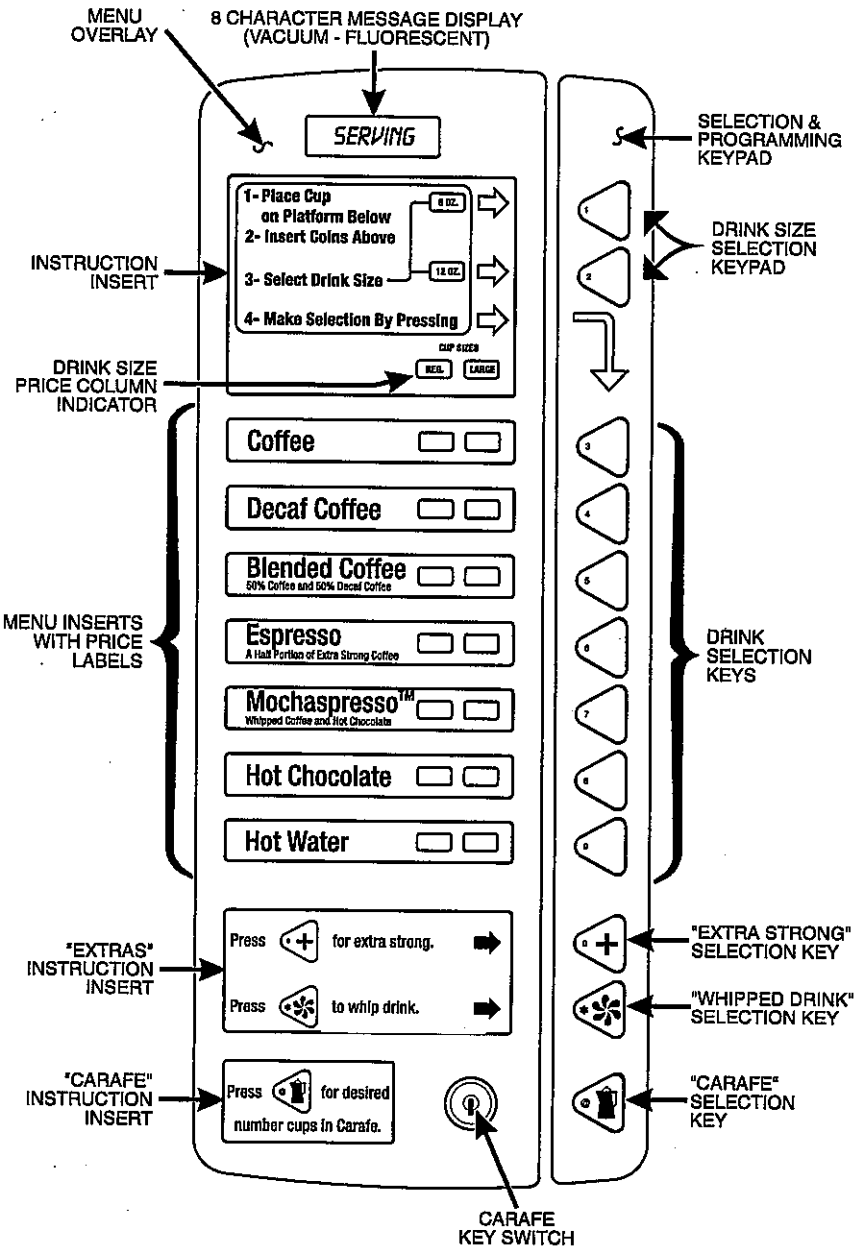
Closing the door or otherwise actuating the interlock switch terminates programming and returns the machine to the vending mode, ending the TANK FILLING procedure. In addition, leaving this function by pressing twice will stop the tank from filling.
DO NOTHING UNTIL THE TANK. FILL MESSAGE HAS BEEN DISPLAYED AND THE TANK IS FULL.

g. If it is taking longer than 6 minutes to fill the tank *AND THERE ARE NO LEAKS*, you may see TANK ERR in the diagnostic list again. Just repeat steps b - e after making sure there are no other problems, such as a restriction in the water inlet line or a clogged water filter.

NOTE

The heater will not function until the tank is full. The normal heat up time to reach operating temperature is 45 minutes.

CONTROLS AND DISPLAYS



PROGRAMMING

Programming your GPL Cafe' System is straightforward and easy to do. Before you get started, take some time to look over these steps that need to be completed prior to any other programming.

INITIAL STEPS:

1. Open the door. The interlock switch must be in the middle position for any programming to work.
2. Insert your key in the carafe key switch and turn it 90° clockwise to the ON position. This tells the machine that you are about to do some programming steps.
3. **OPTIONAL:** Pull the interlock switch OUT. **HIGH VOLTAGE IS NOW APPLIED TO THE MACHINE.** You only need to do this if you are going to be operating the brewer pump, valves, canister motors, or other items in the cabinet which require high voltage. You can still configure the machine and selections without pulling out this switch.
4. You generally enter a function by pressing , followed by the number for that function. For example, to enter the SERVICE mode you press , then .

INSIDE A FUNCTION:

Pressing moves you forward through all the different programming screens. There is no way to move backwards, so if you have to go back to a previous screen, just press until that screen shows up again. If you can choose between two or more options in a function, pressing switches between the options.

LEAVING A FUNCTION:

There are two ways to leave a function:

1. Press twice, or press and release the interlock switch. This returns you to the standby message.
2. Press and the number key for another function. You go directly to that function.

FINDING YOUR WAY AROUND:

After you become familiar with the programming functions in this section, you can use the PROGRAMMING FLOWCHARTS in Appendix D as a shortcut. Think of this section as detailed directions, and the flowcharts as a roadmap.

SUPERVISOR MODE

Your GPL Cafe' System is equipped with a special "Supervisor" mode. A supervisor is allowed access to all programming functions without needing a carafe key. In addition, the supervisor can prevent anyone without the supervisor code from accessing any or all programming functions.

A. ENTER SUPERVISOR MODE

1. Make sure the door is open and the machine is in the "ready" mode (not already in a programming function).
2. Press and . The display shows *CODE---*.

NOTE
All machines have a factory default supervisor code of 000.

3. Enter your 3-digit code. You have 6 seconds to enter your supervisor code before the screen goes back to the previous display. If you enter the wrong code, the previous display is shown. If you successfully enter the code, the display shows *SUPERVISOR* one time. You can now access all programming functions.
4. To leave Supervisor mode, shut the door.

B. VIEW OR CHANGE THE SUPERVISOR CODE

1. Enter the SUPERVISOR mode as instructed in **A** above.
2. Enter the CONFIGURATION mode by pressing and .
3. Press to advance through the selections until the display shows *CODE XXX*.

   (XXX is the current Supervisor code number.)
4. Use the number keys to enter a new code number. Note that your new number is followed by a decimal point. This decimal point will remain in the display until you have "locked in" your new code. This helps to prevent mistakes.
5. Press and to lock in the new code number. The decimal is now gone from the display. If you don't lock in your new code number, the old number is still active.

C. PROTECT PROGRAMMING FUNCTIONS

1. Enter the SUPERVISOR mode as instructed in **A** above.
2. Enter the CONFIGURATION mode by pressing and .
3. Press to advance through the selections until the display shows *PROTECT*.

   (This display only lasts for a short time, then it is replaced by - - - - - - - -. The dashes are placeholders for the nine programming functions, and will be replaced by numbers representing which functions you have protected (prevented others from using).
4. Press any or all of the following keys to protect its corresponding function from unauthorized access:

OR **= REG. & LG. DRINKS SETUP**

= VIEW DATA COUNTERS

= ASSIGN PRICES

= SET OPTIONS

= NOT USED

= PAY COINS

= TEST MACHINE

= VIEW ERRORS

SPECIAL NOTES:

a. Functions 1 and 2 (SELECTION SETUP) both activate the *1* in the display.

b. Function 3 (DATA RECALL) has an additional choice. Pressing once causes a plus sign to be displayed. This means that others can still view sales data, but they cannot clear it. Pressing a second time displays a *3*, and prevents all access.

5. The display shows which functions are protected. For example, *1+ 45-7--.* means that only the supervisor can set up drinks, clear data, change price lines, set options, and pay out coins.
6. Observe that there is a decimal point trailing the above example. This means that you have not "locked in" these items as yet. Press and to lock in the protected functions. The decimal is now gone from the display. If you don't lock in these numbers, the old numbers (if any) are still active.

SET UP CONFIGURATION

The last step in setting up your GPL Cafe' System is to program it. In this section, you will learn to use the keypad and display to:

- Configure your machine
- Assign prices to price lines
- Set up selection prices and product and water dispense times
- Check your work

CONFIGURE YOUR MACHINE

1. Open the door and insert your key in the carafe key switch. Turn the key 90° clockwise to the ON position.
2. Press and to enter the CONFIGURATION mode. Press to advance through the following selections:

- **FREE VEND**

  Press to switch between *FREE ALL* (all selections are free), *FREE OFF* (no selections are free), and *FREE JUG* (only the carafe is free). See DATA RECALL for a method of keeping track of Carafe vends.

- **LANGUAGE**

  You may change the customer display language if you wish. Press until your language is displayed: *ENGLISH*, *DEUTSCH*, *FRANCAIS*, or *ESPANOL*.

- **WATER TANK TEMPERATURE DISPLAY UNITS**

You can choose your water tank temperature to be displayed in degrees Fahrenheit or Celsius. Press to switch between UNITS F and UNITS C.

- **WATER TANK TEMPERATURE SETPOINT**

Use the number keys to change the water tank temperature setpoint. Vending will be inhibited if the tank temperature falls more than 20° below the setpoint. This feature preserves the quality of the drink served to the customer.

SETPOINT The water tank heater tries to maintain a constant temperature, much like a household thermostat. This temperature is called the SETPOINT. The actual water temperature fluctuates from time to time, because cold water will enter the tank after a vend, and time is needed to heat that water up to the setpoint.

The valid range of temperature setpoints is from 149° F(65° C) to 205° F (96° C).

- **VEND LIMIT (fresh brew only)**

After a certain number of brewed selection vends, the grounds pail will be full of spent coffee grounds and filter paper. You need to set an upper vend limit to avoid overflowing the pail. Press the number keys to change the vend limit number in the display, and enter a number between 5 and 995 in increments of 5. If you vend only 8 oz. drinks, the recommended full count is 95. If you vend all 12 oz. drinks the recommended full count is 80 (the factory default setting). A setting of 80 is also recommended if you vend both 8 oz. and 12 oz. drinks. Keep in mind that these settings are based on the factory default product times. Custom product times may result in more grounds being dumped, decreasing the number of possible vends before the pail is full. The best way to find the right setting is to start low and gradually work your way up to a full pail. Make sure the spent coffee grounds and filter paper are not backed up into the filter paper drive mechanism. This could prevent the brewer assembly from operating properly.

NOTE

Entering a zero (0) will disable this function, causing a potential overflow problem.

- **CONFIGURATION CODES**

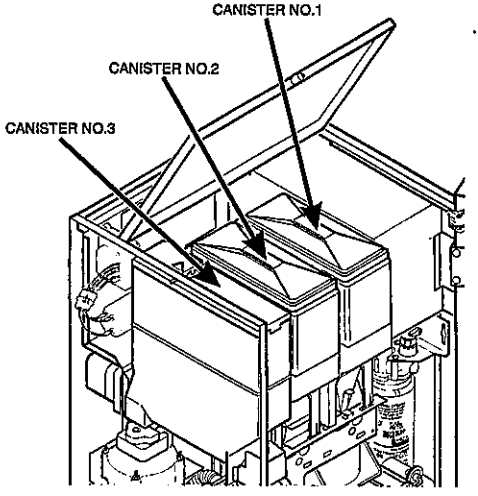
The configuration codes (CONF XYZ) must agree with the physical configuration of your machine. Set the X, Y, and Z codes according to the following tables:

Whipper Configuration

Enter for (X)	Definition
1	Whip drinks only when is pressed
2	Whip drinks unless is pressed

NOTE

If you program the whipper option ON for a drink, the button has no effect (see SET UP SELECTIONS).



Whitener Configuration

Enter for (Y)	Definition
1	No whitener (whitener not available)
2	Whitener is used (whitener is available)

Machine Configuration

Enter for (Z)	Definition
1	All Freeze Dry
2	Single Fresh Brew - Made from product in canister #1
3	INVALID - NOT USED
4	Dual Fresh Brew - Made from products in canisters #1 and #2

Press , then to lock in this setting.

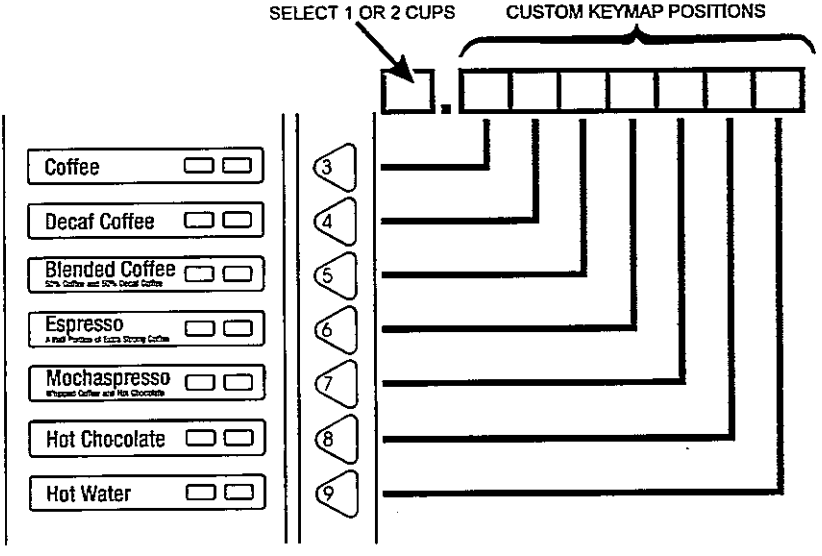
- **KEY MAPPING/DRINK SIZES**

The display will show KEYMAP for a moment, then you will see something like this:

2.XXXXXXX

The "2" just before the decimal point means that the machine is set up to vend two drink sizes. You can change this back and forth between one size and two by pressing **1** or **2**.

The seven "X"s are occupying positions representing the buttons numbered 3 through 9:



Notice that the seven characters to the right of the decimal point are shown as boxes. This is because each selection button is represented by a position in the display, but any number between 0 and 9 or any letter between A and K can be in that position. All this allows you to take advantage of a very flexible custom menu setup.

The keymap is used to choose which recipes will be assigned to which keys. To assign a recipe to a key, press the intended key repeatedly until the number/letter of the desired recipe appears. Repeat this for all keys. When the keymap is satisfactory, save the new map by pressing and . Note that there are more possible recipes than keys. Because of this and other factors, it is important to reload the timers after altering the keymap, even if only the order of recipes was changed. This may be done manually or by using the default load screen following the keymap screen.

If any recipes are not possible with the current configuration, that recipe letter will be skipped on the keymap screen. Each number between 0 and 9 or letter between A and K represents a selection. All current recipes are listed below, along with any restrictions which may accompany them. Note that recipes 0 - 9 can be made with all machines, but recipes A - K are only available with machines configured for whitener.

CODE	DEFINITION
0	No selection is assigned to this button.
1	Coffee (or Tea) made from canister #1
2	Decaf coffee made from canister # 2
3	Blend - A percentage only mix of coffee and decaf coffee. Both coffee and decaf must be configured for this to work.
4	Espresso #1 - A short throw from canister #1. Timers are fully programmable.
5	Espresso #2 - A short throw from canister #2. Timers are fully programmable.
6	Mochaspresso #1 - A percentage only mix of coffee and hot chocolate. Both coffee and chocolate must be configured for this to work.
7	Mochaspresso #2 - A percentage only mix of decaf coffee and hot chocolate. Both decaf coffee and chocolate must be configured for this to work. This drink is not possible if the machine is configured for whitener.
8	Hot chocolate made from canister #3.
9	Water - Hot water only
A	Coffee with whitener - Made from canister #1 plus whitener.
B	Reserved for future recipes.
C	Reserved for future recipes.
D	Espresso with whitener #1 - A short throw from canister #1 plus whitener. Timers are fully programmable.
E	Reserved for future recipes.
F	Café Mocha - Made from canisters #1 and #3 (coffee and hot chocolate) plus whitener. Includes two percentages for setting approximate times for whitener and hot chocolate. Timers are fully programmable.
G	Cappuccino #1 - A mix of coffee and heavy whitener. Includes a percentage for setting approximate times. All timers are fully programmable.
H	Reserved for future recipes.
I	Caffè Latte #1 - Same as Cappuccino #1 except whipped and layered differently.
J	Reserved for future recipes.
K	Hot whitener - Made from whitener and hot water.

You have the option of programming any button to vend any one of these selections! For example, you're not vending Mochaspresso® or Hot Chocolate, and you don't want two empty spaces between Espresso and Hot Water. Do this:

a. Set up your menu inserts as shown previously, with Hot Water opposite button **7**, and the two blank inserts opposite buttons **8** and **9**.

b. Go to the *KEY MAP* display as explained previously.

c. Press the number corresponding to the selection you are vending from button **3**. In this case, you are vending coffee (the product in the right canister), number **1**.

d. Press the number corresponding to the selection you are vending from button **4**. In this case, you are vending decaf (the product in the middle canister), number **2**.

e. Repeat this procedure for buttons **5** and **6**.

f. Press the number corresponding to the selection you are vending from button **7**. In this case, you are vending hot water, number **9**.

g. Since you are not vending anything from buttons 8 and 9, press twice.

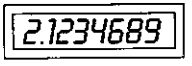
The display should now look like this: 2.1234900

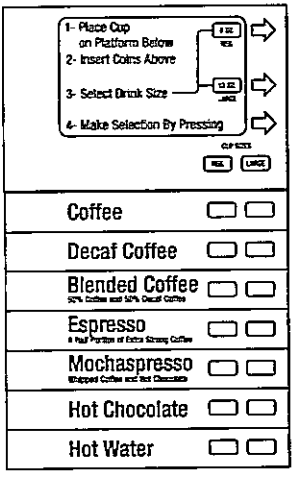
h. Press , then to lock in this setting.

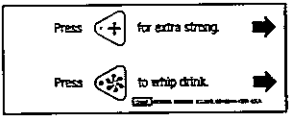
Press twice to leave the CONFIGURATION mode at any time.

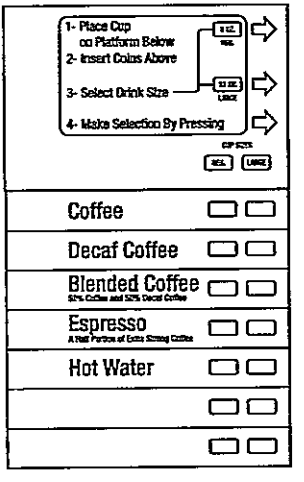
FOR EXAMPLE...

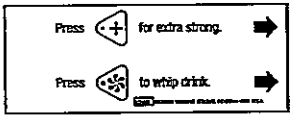
Here are two examples based on the settings shown previously. The menu insert configuration on the left represents a fully featured machine with Mochaspresso® and Hot Chocolate. The menu inserts on the right show a machine which does not vend Hot Chocolate or Mochaspresso®, and utilizes the blank inserts. More complicated arrangements can be built by mixing the order of the menu inserts and the key mapping. The choice is up to you.











- **FACTORY DEFAULTS AND DRINK SIZES**

Your merchandiser is pre-loaded with factory default times for dispensing 8¼ oz and 12 oz drinks. To change one or both drink sizes, or to dispense one drink size only, use the following procedure:

1. Set drink sizes:

   The display will show DEFAULTS for a moment, then you will see something like this:

   8.OZ. 12

   The number on the left represents the size of a regular drink. In this example, an 8 ounce drink. You can change the drink size by pressing 1 until the desired size is displayed. Your choices are: 5, 7, 8, 9, 10, 12, and ---. The number on the right represents the size of a large drink (12 ounces in this example). You can change the drink size by pressing 2 until the desired size is displayed.

2. Enter defaults for one drink size only:

   CAUTION THIS WILL ERASE ANY CUSTOM DISPENSE TIMES YOU HAVE ESTABLISHED FOR ALL SELECTIONS IN THIS SIZE!!

   a. Lock out the selection you DO NOT want to enter defaults for by setting it to ---.

   NOTE
   This setting only inhibits loading defaults for this size. It **WILL NOT** inhibit this cup size from vending.

   b. Press and . When the transfer is finished, the display shows FINISHED.

2. Enter defaults for both drink sizes at one time:

   CAUTION THIS WILL ERASE ANY CUSTOM DISPENSE TIMES YOU HAVE ESTABLISHED FOR ALL SELECTIONS!!

   a. Make sure both selections display the desired drink size.

   b. Press and . When the transfer is finished, the display shows FINISHED.

SET PRICES FOR PRICE LINES

Prices are set for selections in two steps: 1) A price is set for a price line, then 2) A price line is assigned to the selection.

TIME SAVING TIP!

When you have more than one selection with the same price, you can save time by assigning the same price line to each of those selections. For example, the 1.3, 1.4, and 1.5 selections are all assigned to a price line number that is priced at $0.45. Now the price goes up to $0.50. Instead of changing each individual price, you just change the price line number assigned to those three selections. A total of 8 different price lines are available for multiple drink pricing in the machine.

1. Open the door and insert your key in the carafe key switch. Turn the key 90° clockwise to the ON position.

2. Press , then to enter the PRICE LINE mode.

3. The display shows: *PR.1 X.XX*. X.XX is the price that is currently assigned to **PRICE LINE NUMBER** 1. You can change this by entering a new price with the number keys. For example, enter , then . You have assigned a price of 35 cents to that price line number. Your display will now show: *PR.1 .35*.

4. Press to display the remaining seven price line numbers. Repeat step 3 until all desired price line numbers are set up.

5. Press twice to leave the PRICE LINE mode.

IMPORTANT

After prices have been set for each of the price lines, you must assign a price line to each selection. See SET UP SELECTIONS in the following section.

SET UP SELECTIONS

1. Open the door and insert your key in the carafe key switch. Turn the key 90° clockwise to the ON position.

2. To set up a regular size drink, press , then , followed by the selection number. To set up a large size drink, press , then , followed by the selection number.

3. Press to scroll through the settings for the current selection. The price line assignment, timer codes, definitions, allowable range, and increments are shown in the table on the next page.

   NOTE: Some of the codes may not show up, depending upon machine configuration and the type of product being set up.

4. You can change the displayed settings by pressing the appropriate number keys. For example, let's set up your selection. This selection is typically hot chocolate, so some of the codes and options will not show up.

   a. The display shows: *18.$ PR.5.* This means that the selection is currently assigned price line number 5. Press . You have reassigned price line number 3 to the selection, and your display now shows: *18.$ PR.3.*

   b. Press . The display shows: *18.A 9.65.* This means that the water time for the selection is currently 9.65 seconds. Enter . You have reduced the water time to 9.50 seconds, and your display now shows: *18.A 9.50.*

To check water settings, first pull the interlock switch out to the ON position. **HIGH VOLTAGE IS APPLIED TO YOUR MACHINE.** Disconnect the water line leading from the water valve to the brew cylinder. Collect the water for measurement at the free end of the water line in a measuring cup or graduated cylinder. **BE CAREFUL OF THE HOT WATER!!!** Press , then . The water valve opens, and you can measure the dispensed water volume with a graduated cylinder. Refer to the water volume chart in Appendix C. Press the interlock switch in to the middle position.

NOTE

To disable this or any other individual drink selection, enter a zero for the water time.

CODE	DEFINITION	RANGE	INCREMENT
S	Price line assignment NOTE Before assigning a price line to a selection, set the prices for each of the price lines. See SET PRICES FOR PRICE LINES in the previous section.	1 - 8 (8 prices)	N/A
A	Water dispense time.	0 - 99.95 seconds NOTE Time must be greater than 0 or selection is disabled. To disable this or any other individual drink selection, enter a zero for the water time.	0.05 second steps
B	Product dispense time.	0 - 12.75 seconds	0.05 second steps
B+	Extra strong product dispense time (freeze dried and fresh brewed).	0 - 12.75 seconds	0.05 second steps
C	Steep time (brewed drinks only)	0 - 99.5 seconds	0.5 second steps
C+	Total steep time for an extra strong brewed drink	0 - 99.5 seconds	0.5 second steps
D	Pump time (brewed drinks only)	0 - 99.5 seconds NOTE Must be greater than twice the water time, or selection is inhibited.	0.5 second steps
E	Whitener product dispense time	0 - 12.75 seconds	0.05 second steps
F	Second product dispense time	0 - 12.75 seconds	0.05 second steps
F+	Extra strong second product dispense time.	0 - 12.75 seconds	0.05 second steps
G	First product percentage (% decaf coffee to regular coffee, % chocolate to coffee, or % whitener to coffee)	5% - 95%	1% steps
H	Second product percentage (% chocolate to coffee) for Cafe' Mocha.	5% - 95%	1% steps
*	Selections always whipped (ON) or optionally whipped (OPT)	ON or OPT	N/A

c. Press . The display shows: *18.8 5.60*. This means that the product dispense time is currently 5.60 seconds. Enter . You have reduced the product dispense time to 5.45 seconds, and your display now shows: *18.8 5.45*.

To check product settings, first pull the interlock switch out to the ON position. HIGH VOLTAGE IS NOW APPLIED TO YOUR MACHINE. Hold a container under the canister spout. Then, press , then . The canister motor will run and you can measure the dispensed product using a suitable gram-measuring scale or balance. Press the interlock in to the middle position.

d. Press . The display shows: 18.B+ 5.60. This means that the extra-strong dispense time for hot chocolate is currently 5.6 seconds. You want to leave this time alone, so don't enter anything.

e. Press . The display shows: 18.* ON. This means that hot chocolate is always whipped. Press . The display now shows: 18.* OPT, and the customer has to press to get a cup of whipped hot chocolate.

f. Press . The display shows: 18.$ PR.3. This means you have finished with the setup for this selection. Other selections will have more options, such as ground coffee, but they are handled in the same way.

5. Press twice to exit the SET UP mode.

6. If your machine is configured with whitener, you have the capability of dispensing additional drinks, including Cafe' Mocha, Cappuccino, and Caffe' Latte. These new drinks allow for full control over the timers. In addition, there is a percentage screen which allows you to compute approximate times for these drinks as a "starting point" for setup.

   When computing new times for Café Mocha, Cappuccino, and Caffè Latte, the program uses times from existing coffee, hot whitener, and hot chocolate drinks (base drinks) if they are available. If those drinks do not exist, then standard default times will be used in the computation. For the most accurate computed times, set up the "base" drinks prior to the multi-product recipes.

   To use this feature, execute the setup selection sequence for the key programmed to Café Mocha, Cappuccino, and Caffè Latte. Step down to the appropriate percentage code "G". "G" is used for all three drinks; "H" is only used for Café Mocha. Enter the desired percentage(s), then press and . The new times are then computed and entered. Press repeatedly to step down and view the new times.

OPERATION

VEND A SINGLE DRINK:

1. Place a cup or mug on the cup platform.
2. Press to select a regular size drink, or to select a large size drink.
3. Press the desired selection. For example, press to select the product in canister #1.

For extra strong, press . **To whip your drink, press** .

MULTI-CUP VENDING INTO A CARAFE:

Any valid drink shown on the menu may be multi-cup vended into a carafe as follows:

1. Place your carafe on the carafe platform. (This will push the cup platform inside the machine and out of your way.)
2. Insert your key in the carafe key switch and turn it 90° clockwise to the ON position. The display shows CUPS 1.
3. Press until the number of cups your carafe will contain is displayed.

> **HELPFUL HINT:**
> If, for example, your GPL Cafe' System is set up to vend 8-ounce regular drinks and 12-ounce large drinks, a 60-ounce carafe will fill up faster if you select five large drinks instead of seven regular drinks.

4. Press or , then your selection. The display shows the cup number counting down. If you decide you don't want as much in your carafe as you first selected, you may turn the key switch off at any time. Dispensing stops after the current cup is complete.
5. When the last cup has vended, the machine goes back to the single vend mode, even if the keyswitch is still turned ON. To fill another carafe, you must turn the keyswitch 90° counter-clockwise, then 90° clockwise to the ON position.
6. **If your machine has a coin mechanism**, deposit at least enough money to pay the cost of the number of cups you are going to vend. If you have change coming, the machine will pay the change after the last cup is vended. If you didn't deposit enough money, the machine will not vend. You must deposit sufficient credit to cover the number of cups requested.

SCROLLING MESSAGES

When certain errors occur, you will see a message scrolling on the display. These messages call attention to conditions which can be remedied by someone at the scene without the need of a service technician. The following table lists the message, what can be done about it, and a reference to the corresponding error message in the FAULT ISOLATION section.

DISPLAY	POSSIBLE REMEDY	CORRESPONDS TO...
NO FILTER PAPER	Add filter paper (if empty). Check to see that the paper is properly positioned under the empty switch and under the paper rollers.	NO PAPER
DRAIN TRAY IS FULL	The drain tray is filled with liquids - empty the tray. If the tray is empty, the float is most likely resting on the platform and not hanging in the float well. Position the float so it hangs freely in the well. It will slightly touch the bottom of the drain tray.	TRAY.FULL
CHECK INTERLOCK SWITCH	1. Interlock switch is in the "mid" position. Pull it all the way out. 2. The drain tray is filled with liquids - empty the tray. 3. The float is resting on the platform and not hanging in the float well. 4. Any combination of the above three items.	TRAY.FULL
GROUNDS PAIL IS FULL	Empty the coffee grounds pail and reset the pail count (see MAINTENANCE).	PAIL.FULL
COLD WATER-TRY LATER	Check for leaks, pinched water line, closed water valve, or a closed water filter valve. If these are ok, perform the procedures given in FILL WATER TANK.	LOW TEMP
RESET THE BREWER	The brewer is in the CLAMP position. Cycle the brewer (see Test Brewer Operation in the MAINTENANCE section). NOTE The machine will attempt to pump any water out of the brewer before it unclamps.	BREW ERR
MAKE ANOTHER SELECTION	This display occurs when selections are *locked out*. Perform the Lock Out Selections procedure in the MAINTENANCE section to unlock selections as appropriate. If all selections are locked out the display will read ALL SELECTIONS LOCKED OUT.	LOCKED

OTHER PROBLEMS AND SOLUTIONS

PROBLEM	SOLUTION
The green display is not lit.	Check to see if the GPL Cafe' System is plugged into the wall receptacle.
The unit will not take money.	Is the unit on free vend? To check, perform the steps given in SET UP CONFIGURATION. If the machine is on free vend, turn free vend off.
Some keys will not work in the programming mode.	You are not authorized to use these functions. Contact your supervisor.

FAULT ISOLATION

1. Open the door.

2. Either:

   Press . If there are no faults on the machine, -NO ERR- is displayed. If a fault is displayed, continue pressing to view all faults. The standby message is displayed following the last fault.

   - OR -

   Insert your key in the carafe key switch and turn it 90° clockwise to the ON position, and press , then to see the list of faults. If there are no faults on the machine, -NO ERR- is displayed. Possible faults are as follows:

DISPLAY	DEFINITION	POSSIBLE REMEDY
CONF.ERR	Configuration error	Check configuration code is correct
TRAY.FULL	Drain tray is full	Empty drain tray, ensure switch is not sticking
PAIL.FULL	Grounds pail is full; pail count has been reached	Empty grounds pail, reset counter
NO PAPER	No filter paper	Install more filter paper, make sure paper is properly fed through switch
LOW TEMP	Low water temperature	Let water reach proper operating temperature, make sure heater is working
SENSOR	Temperature sensor has failed	Check harnessing from PCB to float assembly, change float assembly
TANK ERR	Tank failed to be filled/refilled	Check for leaks, reset error and allow tank to continue filling
BREW ERR	Brewer is in incorrect position	Run brewer test
BREW JAM	Brewer has jammed	Free brewer jam
WHIP 123	Whipper has jammed	Free whipper jam, replace whipper
LOCKED	All selections are locked	Unlock selection(s), if appropriate
NO MECH	Coin mech has a fault, controller not communicating with coin mech	Replace coin mech, check wiring
NO.BREWER	Machine detected a missing or malfunctioning brewer	Check harnessing and brewer switch assembly
ROM ERR	EPROM checksum failed	Replace the EPROM

3. Take the appropriate corrective action.

TESTING

You can check out certain areas of your GPL Cafe' System's operation.

1. Pull the interlock switch OUT. **HIGH VOLTAGE IS NOW APPLIED TO THE MACHINE.** Insert your key in the carafe key switch and turn it 90° clockwise to the ON position.
2. Press , then to enter the SERVICE mode.
3. Press to switch between the following selections:

- **WATER TANK TEMPERATURE DISPLAY**
  The tank temperature is displayed in either Fahrenheit or Celsius, depending upon the configuration setting. To set the tank temperature setpoint, see **SETUP CONFIGURATION**.

- **WATER TANK FILL**
  For safety purposes, the water inlet valve is not allowed to operate with the tank water level in the low condition for more than one minute. After that, a *TANK ERR* message is displayed if the tank is not filled to its proper level. To clear that error, or to initially fill the water tank (which takes more than 1 minute), proceed as follows:

  a. The display shows: *TANK.FILL*.

  b. Press , then . The display shows: *FILLING*. This indicates that the tank is filling and/or the error is cleared. When the tank is full, the display returns to *TANK.FILL*.

  c. If it is taking longer than 6 minutes to fill the tank *AND THERE ARE NO LEAKS*, you may see the *TANK ERR* message again. Just repeat step b after making sure there are no other problems, such as a restriction in the water inlet line.

NOTE

The heater does not function until the tank is full. The normal heat up time to reach operating temperature is 45 minutes.

- **PUMP TEST**
  The display shows: *PUMP*. To test liquid pump operation, proceed as follows:

  a. Press , then . The display shows: *PUMP X*, and counts down the time (X) remaining on the pump test.

NOTE

If the brewer is clamped at the start of this test, the pump will run much longer in order to evacuate any remaining liquid.

- **BREWER TEST (Machines with brewers only)**
  The display shows: BREWER. To test brewer operation, proceed as follows:

a. Press , then . The display shows: MOVE -2. This indicates that the brewer is moving to its closed position. When it reaches that position, the display shows: CLAMP 1- (1 is the switch that is closed when the brewer is clamped).

b. Press , then . The display shows: MOVE 1-. This indicates that the brewer is moving to its opened position. When it reaches that position, the display shows: OPEN -2 (2 is the switch that is closed when the brewer is open).

Under some conditions, the display may read ERR 12. This means that switches 1 and 2 are both seen as closed, and the brewer position is unknown. To view the error, follow the steps under FAULT ISOLATION. Take the appropriate corrective action, then return to the brewer test.

- **WHIPPER TEST**
  The display shows: WHIP 123. To test an individual whipper, press the number corresponding to the whipper you want to test. The display shows WORKING while the whipper is running, then returns to WHIP 123. Pressing , then tests only the first whipper.

- **INPUT SWITCH TESTS**
  The display shows: IN. 123-. The numbers 1, 2, and 3 and the dash each correspond to one of the input switches: Water tank level switch - 1, Liquid drain tray float switch - 2, Filter paper sold-out switch - 3, Water tank low level switch - dash (-). As you actuate the overflow tray float and filter paper sold-out switches, watch the number in the display change to a dash. Obviously you cannot manually actuate the tank level switch, but when the tank is full, the display shows IN. 123-. When the water is between the full and low switch levels, the display shows IN. -23-. Finally, when the water is below the low level, the display shows IN. -234.

- **KEYPAD TEST**
  The display shows KEYPAD. Press any key to test its operation. (For example, pressing causes all "3"s in the display.) Press and to test all segments in the 8-character vacuum fluorescent display. The displays remain lit until you press again.

- **SOFTWARE VERSION NUMBER**
  The version number of the current software is displayed. Press and to compute and display the EPROM checksum. A typical display will show SUM 752C. The checksum is the four character alpha-numeric on the right. This number must correspond to the number label attached to the EPROM chip itself.

4. Press twice to leave the TEST mode.

DATA RECALL

1. Open the door and insert your key in the carafe key switch. Turn the key 90° clockwise to the ON position. Press , then to enter the DATA mode.

- **TOTAL SALES**

2. The display shows SALES for a moment, then $. XXXX.XX. The "X"s represent the dollar figure of sales made by the machine. This total is NOT resettable.

3. Press to advance through the following displays:

- **TOTAL VENDS**

The display shows VENDS for a moment, then ◆. XXXXXX. The "X"s represent the total vends made by the machine. This total is NOT resettable.

- **VENDS BY PRICE LINE**

The display shows how many vends were made from each price line. Examples:
PD.1 25. This represents **25** paid vends **(PD)** from price line **1**.

OR

FR.4 10. This represents **10** free vends **(FR)** from price line **4**.

Pressing shows all the price lines which have had vends. **NOTE:** If a price line has not had a vend, it will not be displayed. These displays are resettable.

Keeping Track of Carafe Vends

Carafe vends are basically multiple vends from normal selections. To keep a separate record of these vends, set FREE VENDING to FREE JUG. (See SETUP CONFIGURATION.) Then, the total of all FR sales and vends represents carafes.

- **CLEAR INFORMATION**

The display shows: CLEAR X. This means that the resettable data has been cleared X number of times. This total is not resettable. Press , then to clear the resettable data. The VENDS BY PRICE LINE displays will be reset to zero, and will not be displayed until vends have been made. The CLEAR display is incremented by one.

5. Press twice to leave the DATA mode.

PAYOUT

This feature is only available if you have a coin mechanism other than an exec mech installed in your GPL Cafe' System.

1. Open the door and insert your key in the carafe key switch. Turn the key 90° clockwise to the ON position.
2. Press , then 7 to enter the PAYOUT mode.
3. The display shows NDQ 345. This means that pressing 3 causes the coin mech to pay out Nickels, pressing 4 pays out Dimes, and 5 pays out Quarters.
4. Press twice to leave the PAYOUT mode.

MAINTENANCE

* INDICATES TASKS THAT CAN BE PERFORMED BY PERSONNEL AT THE MACHINE LOCATION.

Before performing the following steps, open the door. Some tasks may require you to pull the interlock switch out to the ON position.

EMPTY THE LIQUID DRAIN TRAY *

1. Lift the float and chain assembly out of the drain tray.
2. Pull the drain tray straight out of the merchandiser.
3. Empty the drain tray in a suitable location, and clean it in accordance with the sanitation instructions. The stainless steel carafe platform is removable for easy cleaning by lifting it out of the tray.
4. Replace the drain tray in the merchandiser.

EMPTY THE GROUNDS PAIL *

1. Remove and empty the drain tray (see above). Be careful not to spill any liquid.
2. Tear off filter paper at brewer housing. Place all used grounds and paper in the grounds bucket.
3. Remove the grounds pail from the merchandiser.
4. Empty the grounds pail and clean it in accordance with the sanitation instructions.
5. Replace all parts in reverse order of disassembly.
6. Clear the grounds pail count (see below).
7. Re-feed filter paper as explained previously.

RESET TANK ERROR *

NOTE

This item will not display if no tank error exists.

IMPORTANT

Pull the interlock switch out to the ON position before continuing.

1. Press until the display shows *TANK FILL*.
2. Press , then . This clears any tank error and starts filling the tank, if necessary.
3. If it is taking longer than 1 minute to fill the tank *AND THERE ARE NO LEAKS*, you may see *TANK ERR* in the diagnostic list again. Just repeat steps 1 - 3 after making sure there are no other problems, such as a restriction in the water inlet line or a clogged water filter.

NOTE

The heater will not function until the tank is full. The normal heat up time to reach operating temperature is 45 minutes.

CLEAR GROUNDS PAIL COUNT *

NOTE

This item will not display if the vend limit was set to 0 during CONFIGURATION.

1. Press until the display shows *PAIL X*. X represents the number of brewed selection vends which have taken place since the last time the counter was cleared. Normally you will be clearing this after you have emptied the grounds pail.
2. Press , then to clear the vend count. The display shows *PAIL 0*.

TEST BREWER OPERATION *

1. Pull the interlock switch out to the ON position. **HIGH VOLTAGE IS NOW PRESENT IN THE MACHINE.** Press until the display shows *BREWER*.
2. Press and to test the brewer. The brewer runs, and the display shows the remaining pump time (if any), then returns to *BREWER*.

RINSE BREWER *

1. Pull the interlock switch out to the ON position. **HIGH VOLTAGE IS NOW PRESENT IN THE MACHINE.** Press until the display shows *BREW RIN*.

CAUTION

Rinse water is **hot**. Be careful not to get any on you during the following steps.

2. Place a cup or other suitable container below the dispensing nozzles to catch the **HOT** rinse water.
3. Press and to rinse the brewer. The brewer closes, hot water runs through the brewer, the pump and coffee whipper run, and the display shows *RINSING*, then returns to *BREW RIN*.

RINSE MIXING BOWL *

1. Pull the interlock switch out to the ON position. **HIGH VOLTAGE IS NOW PRESENT IN THE MACHINE.** Press until the display shows *BOWL RIN.*

CAUTION

Rinse water is **hot**. Be careful not to get any on you during the following steps.

2. Place a cup or other suitable container below the dispensing nozzles to catch the **HOT** rinse water.
3. Press , then to rinse the bowl. Hot water runs through all mixing bowls, each whipper runs, and the display shows *RINSING*, then returns to *BOWL RIN.*

LOCK OUT SELECTIONS *

Use this feature to temporarily disable selections if, for example, all product has been used for a particular selection. Enable the selection once the product canister has been replenished.

1. Press . The display momentarily shows *LOCKS*, then shows something like this: *L3456789*. This display shows that all selections are active.
2. To lock a selection, press its number on the keypad. The number is replaced by a dash (-). If customers try to vend this selection, they will see *SELECT ANOTHER DRINK* in the display.

NOTE

Don't forget that some selections are made with a combination of ingredients. For example, cappuccino is made of chocolate and coffee. Therefore, if you lock out chocolate, you will need to lock out cappuccino as well. Another example is blended coffee.

CHANGE FUSES

NOTE

An internal 3-amp fuse ONLY protects the electronics inside the machine. All other machine circuitry is protected by the fuse or circuit breaker at the location which provides power to the machine.

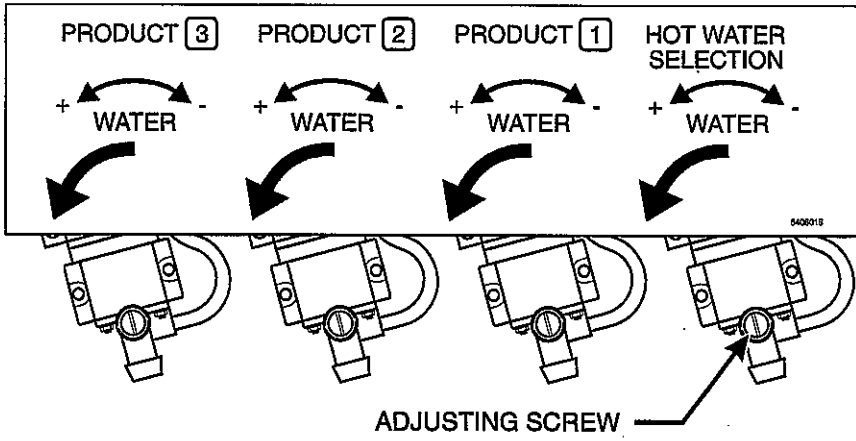
FUSE TYPE: 3A, 250V, MDL3 Time Delay Glass Cartridge
REPLACE FUSE WITH ONE OF THE SAME TYPE AND RATING

1. Unplug the machine.
2. Remove all canisters (see above). Remove valve cover.
3. Loosen the two screws holding the cabinet electronics cover. Remove the cover.
4. The fuse is located in a clip near the lower left hand corner of the cabinet interface board.
5. Remove the old fuse by pulling straight out of the clips. Install new fuse.
6. Replace all parts in reverse order of assembly. Plug in the machine.

ADJUST WATER VALVES

The water valves are factory set and should not need to be adjusted. However, if you can't get the water volume you need by adjusting the water throw time alone, then go ahead and adjust the valves. Do this in conjunction with setting the factory default timers during the Product Configuration programming mode.

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.



CLEANING AND SANITATION

CLEANING

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

SANITIZING

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.

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, Federal and State Health Departments require regular cleaning and sanitizing procedures for food contact parts.

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

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 high enough to kill bacteria. Water must be at least 170° F.

Unplug the machine before using water on the machine.

In either case, the object 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.

A GOOD PLACE TO START -- YOUR SANITATION KIT

You need to be sure that each machine is clean, safe, and functioning when you leave it. In order to properly do this, you need to have a complete set of the right tools. In addition to the screwdrivers, pliers, and test equipment necessary to repair a machine, you need to have the tools to clean the machine.

✓ 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 re-contaminate 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.

SANITATION PROCEDURES

Your GPL Cafe' System has been specially designed for easy disassembly without tools. Refer to the recommended cleaning and sanitation interval table on the final page of this section. For each item, complete the procedure as outlined here.

Food-Contact Parts

NOTE

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

Canisters - Empty and wash the canisters, augers, and spouts. Sanitize with hot water and allow to air dry completely before returning to cabinet.

Mixing Bowls - The inside of all mixing bowls can be rinsed as follows:

Press until the display shows *BOWL RIN*.

CAUTION

Rinse water is **hot**. Be careful not to get any on you during the following steps.

Place a cup or other suitable container below the dispensing nozzles to catch the **HOT** rinse water.

Press , then to rinse the bowl. Hot water runs through all mixing bowls, each whipper runs, and the display shows RINSING, then returns to BOWL RIN.

Beverage Discharge Nozzles - Disconnect the beverage dispensing tube from the nozzles. Remove the nozzles from the mounting bracket. Remove the cap from the nozzle, wash clean and sanitize the nozzles and cap.

Brewer -

Press until the display shows *BREW RIN*.

CAUTION

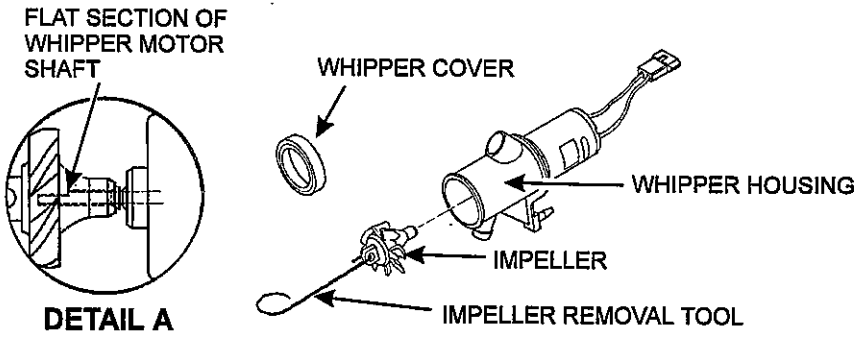
Rinse water is **hot**. Be careful not to get any on you during the following steps.

Place a cup or other suitable container below the dispensing nozzles to catch the **HOT** rinse water.

Press , then to rinse the brewer. The brewer closes, hot water runs through the brewer, the pump and coffee whipper run, and the display shows RINSING, then returns to BREW RIN.

Ingredient Chutes - Remove the metal chute(s), wash clean, and sanitize by rinsing with hot water. Air dry before reinstalling.

Whipper Lids and Impellers -



a. Remove the whipper cover.
b. Using the impeller removal tool (located in the plastic bag assembly), remove the impeller from the whipper housing as shown.
c. Wash the cover, impeller, and impeller housing. Sanitize with hot water and allow to air dry before reassembling.
d. To reassemble, see detail A. Note that the whipper motor shaft has a flat section. Make sure this flat section lines up with the "D" shaped hole in the impeller. Press the impeller all the way onto the whipper motor shaft. Replace the cover.

Non Food-Contact Parts

Brewer Mechanism Cleaning - Remove the brewer assembly to clean. See **CLEAN THE BREWER.**

Exhaust Fan Filter - Remove the filter from its housing. Wash with soap and water, rinse, wring dry, and replace into housing.

Grounds Pail - Empty and rinse the grounds pail.

Liquid Drain Tray - Empty, wash, and rinse with hot water. Sprinkle detergent powder in the bottom of the tray to help control odors. You might want to save this until last, because the waste water from rinsing the bowls and brewer will collect here.

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.

National Vendors recommends using the following supplies:

A mild detergent and warm water on the cabinet, brewer, and other NON ELECTRICAL components.

CAUTION

The plastic parts in your merchandiser should be cleaned with mild detergent and warm water. The use of other cleaning agents may damage the material, and should be avoided.

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, service kit part number 6400080 is available. In addition, if your machine has the Everpure water inlet filter system option, a second kit (part number 6400086) is also available.

SANITATION INTERVALS

The items to be cleaned and/or sanitized are divided into four categories: Brew section, Dry section, Waste section, and Water section. These divisions will help you clean and sanitize the GPL Cafe' System in an organized manner. Make a copy of the Record of Cleaning on the next page and keep it in the plastic bag mounted on the back of the cabinet door.

RECOMMENDED CLEANING AND SANITATION INTERVALS

CATEGORY	ITEM	DAILY	WEEKLY	MONTHLY
BREW SECTION	Brewer Cylinder, Funnel	R	C/S	
	Brewer Mechanism		C	
	Mixing Bowls	R	C/S	
	Whippers	R	C/S	
DRY SECTION	Ingredient Canisters			C/S
	Ingredient Chutes		C/S	
WASTE SECTION	Liquid Drain Tray	C		
	Exhaust Fan Filter & Screen			C
	Grounds Pail	C		
	Cup Support & Drain Tray Cover	C		
WATER SECTION	Beverage Discharge Nozzles		C/S	
	Water Filter Service			Check

S = Sanitize at this interval R = Rinse at this interval C = Clean only at this interval

NOTE

Rinse (R) functions can be accomplished using procedures outlined on pages 44 and 45.

Make copies of this cleaning record, cut it out, and keep it in the plastic bag mounted on the inside of the door. It will be your record of cleaning all four areas of your GPL Cafe' System.

RECORD OF CLEANING

19 ____

	BREW SECTION	DRY SECTION	WASTE SECTION	WATER SECTION	BY
JAN	☐	☐	☐	☐	
FEB	☐	☐	☐	☐	
MAR	☐	☐	☐	☐	
APR	☐	☐	☐	☐	
MAY	☐	☐	☐	☐	
JUN	☐	☐	☐	☐	
JUL	☐	☐	☐	☐	
AUG	☐	☐	☐	☐	
SEP	☐	☐	☐	☐	
OCT	☐	☐	☐	☐	
NOV	☐	☐	☐	☐	
DEC	☐	☐	☐	☐	

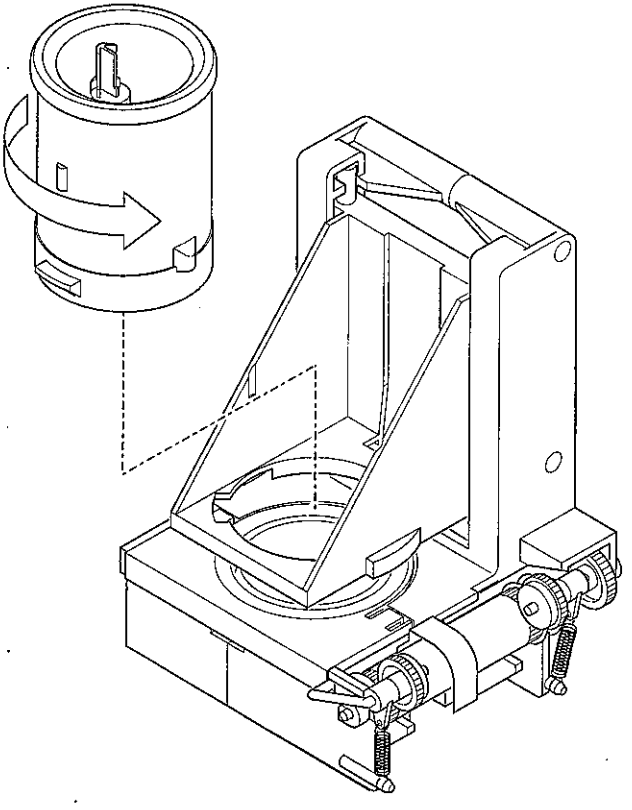
CLEAN THE BREWER

The brewer has two main parts you can remove: the brew barrel and the screen and seal assembly. You can remove them with the brewer in the machine, or the entire brewer can be removed as one unit.

1. On the left side of the brewer, cut off and discard the filter paper.

2. Remove the hose at the top of the brew barrel.

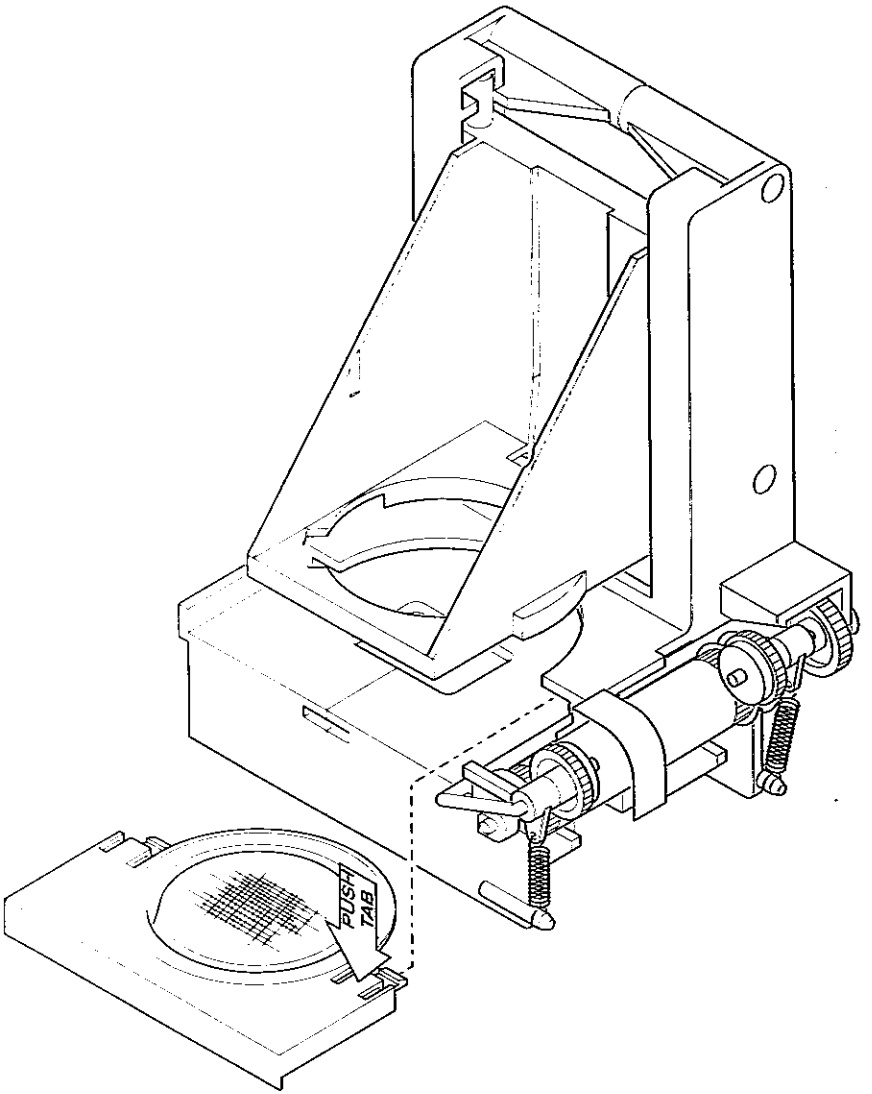
3. Grasp the top of the brew barrel, and turn it ¼ turn to the left as shown. Lift straight up and remove.



4. Remove the hose from the bottom of the screen and seal assembly.

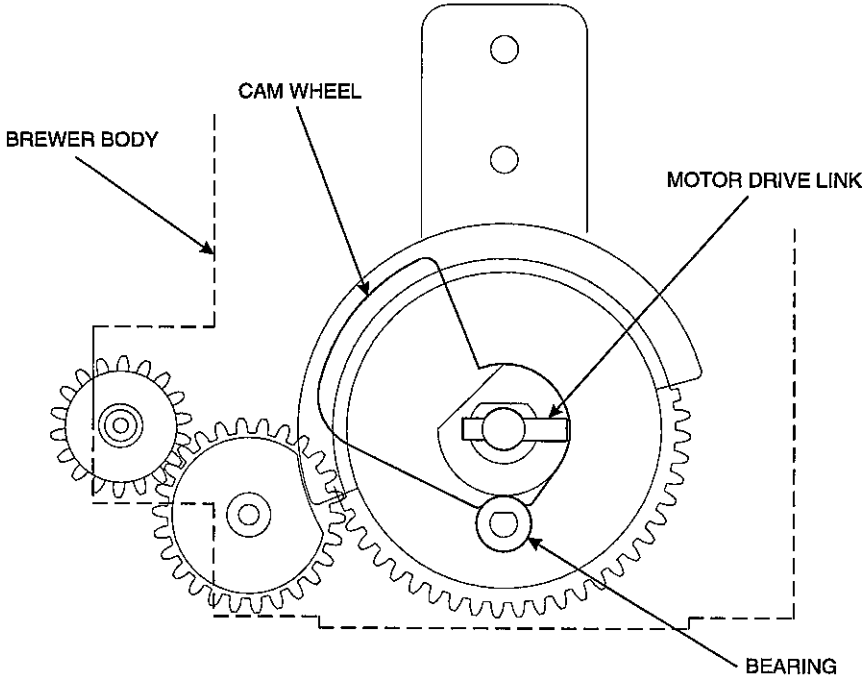
5. At this point, you can remove the brewer or leave it in the machine.
   a. To remove the brewer, pivot the bottom of the unit up toward you, lift upward slightly, and pull straight out.

6. Remove the screen and seal assembly as shown:
   a. Press down on the tabs with your fingers, and slide straight back.
   b. Lift straight up and pull out.

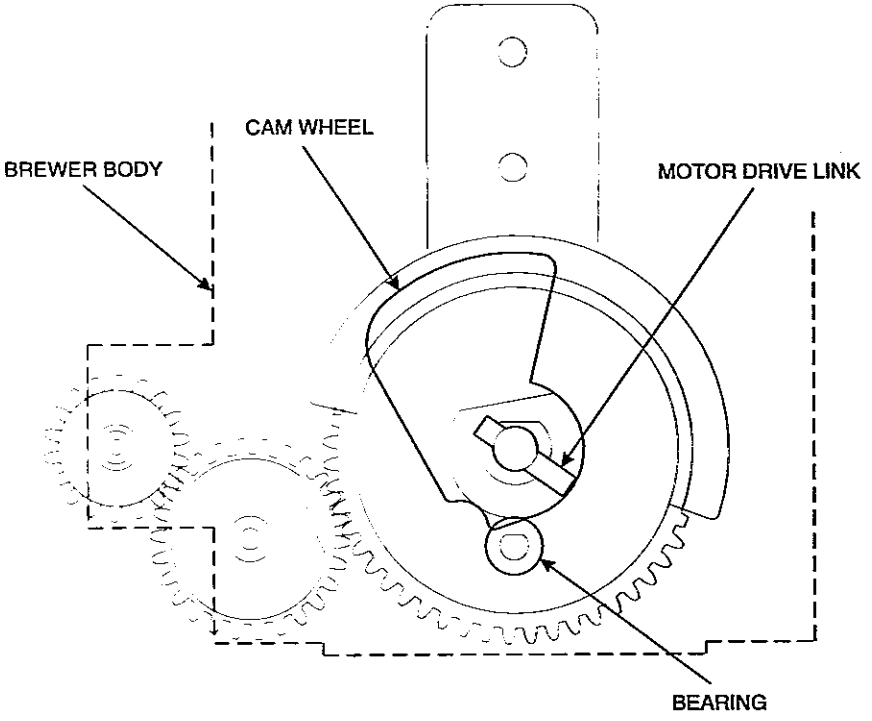


7. Thoroughly wash all parts using soap and water. Sanitize by rinsing thoroughly with hot water. Air dry, or blow dry with compressed air (if available).

8. If you removed the brewer, make sure the motor drive link is aligned as shown.



If the motor drive link is aligned properly, the notch in the cam wheel will capture the bearing.



If the motor drive link is not aligned properly...

The notch in the cam wheel is turned away from the bearing. You must manually turn the cam wheel to capture the bearing in the notch.

9. Assemble in the reverse order of disassembly. **NOTE:** when replacing the screen and seal assembly, make sure you hear **TWO CLICKS** as you push it all the way in.
10. Feed new filter paper through the brewer, and don't forget to connect the hoses!

APPENDIX A.

SERVICING INSTRUCTIONS FOR THE OPTIONAL WATER PUMP KIT

INSTALLING A NEW WATER BOTTLE (See figure 1.)

It is a good idea to replace the water bottle before it runs completely out of water. This ensures minimal interruption of your coffee service. With experience, you will be able to judge the best time to change the water bottle just before it runs out.

1. Unplug the water pump from its electrical outlet.
2. Remove the filter/cover and plastic tubing from the old water bottle.
3. Place the end of the plastic tubing into the water bottle, making sure the end lays on the bottom of the bottle, as shown.
4. Fit the cover/filter over the neck of the water bottle and snap into place.
5. Plug the pump into its electrical outlet.

NOTE

If the pump emptied the water bottle, it may need to be reset before it will operate. See RESET THE WATER PUMP, below.

RESET THE WATER PUMP (See figure 2.)

If your bottle runs out of water, or the water pump senses a no-pressure condition, it will stop running after 3 minutes. You must manually restart the pump with the RESET button, as shown. If the bottle runs dry, you could also get a *TANK ERR* message displayed on your GPL Cafe' System. If this occurs, perform the **FILL WATER TANK** procedures given in the Setup manual, or contact a service technician.

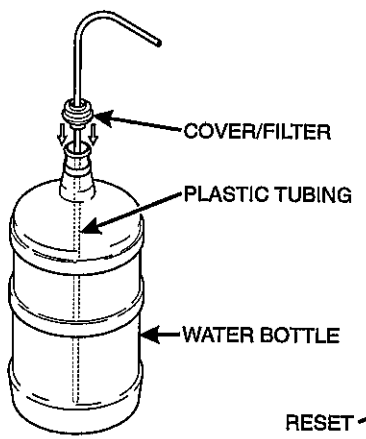


FIGURE 1

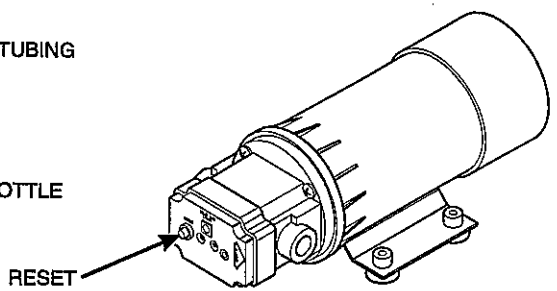


FIGURE 2

APPENDIX B
PUMP TUBING REPLACEMENT PROCEDURE

1. Unplug the GPL Cafe' System from the wall outlet.

2. Remove the pump assembly from the GPL Cafe' System.

3. Remove the four screws holding the pump cover to the pump body (see figure 1).

4. CAREFULLY remove the pump cover. If you have to pry it off the pump body, only pry on the flat side where the tubing is located. If you pry on the curved section, you could damage it, which will in turn damage the new tubing.

5. Remove the old pump tubing and discard.

NOTE

If you are replacing the tubing because of a leak, the roller assembly will need to be cleaned prior to reassembly. If no leaks occurred, skip to step 9.

6. Spread the arms of the clip apart, and remove the roller assembly. If you need to remove the clip, spread the arms wide open and carefully lift it off the motor shaft.

7. Clean all of the roller assembly parts and dry with compressed air. Make sure they are free of residue.

8. Reassemble the roller assembly. The roller housings are interchangeable, and it makes no difference which way the roller assembly faces on the pump motor shaft with the following exception: Make sure the flat sides of the holes in the roller housings line up. Otherwise, you will not be able to put the roller assembly back on the pump motor shaft.

NOTE

If the roller assembly is not installed ALL THE WAY on the motor shaft, the pump tubing will be cut. *The roller housings will break if hit with a hammer.*

9. Slide the roller assembly back onto the pump motor shaft and secure with the clip. You may need to use a pair of pliers to CAREFULLY snap the clip back onto the roller housing.

10. Install the new pump tubing into the pump body as follows (see figure 2):
    a. Measure 9½" from one end of your new piece of tubing. Mark it with a pencil.
    b. Line the pencil mark up with the outside of the pump body as shown.
    c. Work the tubing into the pump body while turning the roller assembly counter-clockwise, as shown. DO NOT FORCE the tubing. Make sure the top of the tubing is even with the tops of the rollers. If it is lower or higher, it can get pinched, which can lead to premature failure or leaks. Before installing the pump cover, turn the roller assembly as shown in figure 2, view A.
    d. Note that the pump cover and pump body have locator pins and holes molded into the curved face, as shown. Use a flat object about ½" wide x 1/16" - 1/8" thick ***without*** sharp edges to hold the tube in toward the roller assembly as you install the pump cover. This will allow you to assemble the cover without pinching the

tubing between the top and bottom housings. Be sure the locator pins fit into their holes.

e. Hold the pump cover in place while inserting the four screws. Tighten the screws until they just snug up. DO NOT OVER-TIGHTEN.

11. Install the pump into the GPL Cafe' System and connect the tubing. Connect the pump to the machine wiring harness.

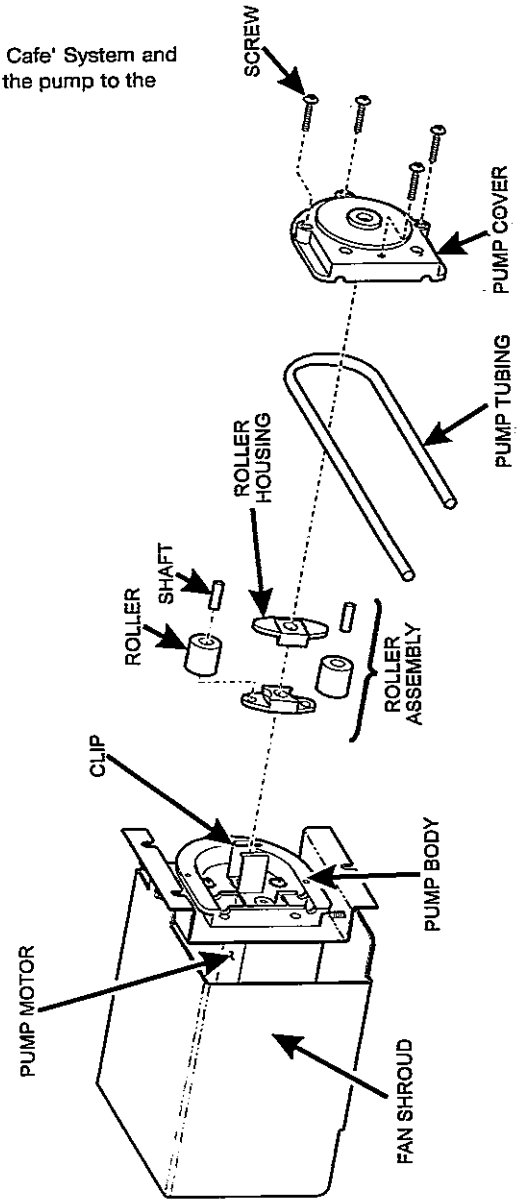


Figure 1

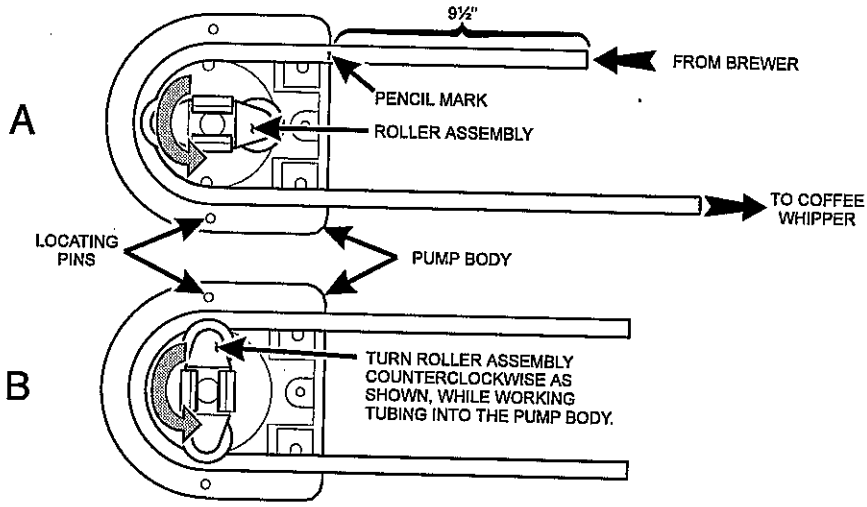

9½"
FROM BREWER
PENCIL MARK
A
ROLLER ASSEMBLY
TO COFFEE WHIPPER
LOCATING PINS
PUMP BODY
B
TURN ROLLER ASSEMBLY COUNTERCLOCKWISE AS SHOWN, WHILE WORKING TUBING INTO THE PUMP BODY.

Figure 2

APPENDIX C.

FACTORY DEFAULT TIMES

Your GPL Cafe' System comes with factory default water and product dispense times for all selections. If your GPL Cafe' System is not a dual fresh brew machine, it is assumed that freeze dried coffee or decaf will be vended from the canister 2 location. Therefore, the corresponding default times will be loaded. However, if you wish to vend an International Coffee in place of freeze dried coffee or decaf, you will need to manually enter the water and dispense times. Recommended default water and product dispense times for International Coffee are given on page C-5. During the course of setting up your machine, you may deviate from those settings to suit individual tastes. If you desire to return to the original settings, please refer to these tables. Your machine comes factory loaded with 8¼ and 12 ounce cup sizes. **Cappuccino ratios are 15% chocolate to 85% coffee. Blended coffee ratios are 50% decaf coffee to 50% regular coffee.**

NOTE

Product weights may vary slightly, depending upon the nature of the product you are using.

FRESH BREW DRINKS

CUP SIZE	"A" WATER	NORMAL "B" PRODUCT	EXTRA "B+" PRODUCT	STEEP "C"		PUMP* "D"
	TIME / VOLUME (SECONDS)/(ML.)	TIME / WEIGHT (SECONDS)/(GR.)	TIME / WEIGHT (SECONDS)/(GR.)	NORMAL TIME "C" (SECONDS)	EXTRA TIME "C+" (SECONDS)	TIME (SECONDS)
FRESH BREW COFFEE AND FRESH BREW DECAF						
5 oz	4.50 / 130	1.40 / 5.00	1.40 / 5.00	3.00	5.00	12.00
7 oz	6.40 / 190	2.00 / 7.10	2.00 / 7.10	3.00	5.00	15.00
8 oz	7.50 / 220	2.30 / 8.20	2.30 / 8.20	3.00	5.00	17.00
9 oz	8.20 / 240	2.50 / 8.90	2.50 / 8.90	3.00	5.00	19.00
10 oz	9.00 / 265	2.80 / 10.00	2.80 / 10.00	3.00	5.00	22.00
12 oz	11.00 / 315	3.40 / 12.10	3.40 / 12.10	3.00	5.00	26.00
FRESH BREW ESPRESSO						
5 oz	2.25 / 65	1.40 / 5.00	1.40 / 5.00	3.00	5.00	9.00
7 oz	3.20 / 95	2.00 / 7.10	2.00 / 7.10	3.00	5.00	11.00
8 oz	3.75 / 110	2.30 / 8.20	2.30 / 8.20	3.00	5.00	12.00
9 oz	4.10 / 120	2.50 / 8.90	2.50 / 8.90	3.00	5.00	13.00
10 oz	4.50 / 130	2.80 / 10.00	2.80 / 10.00	3.00	5.00	14.00
12 oz	5.50 / 158	3.40 / 12.10	3.40 / 12.10	3.00	5.00	15.00

* If the programmed pump time is less than twice the water time, the pump time will default to 32 seconds.

FREEZE DRY DRINKS

CUP SIZE	WATER	PRODUCT	
	TIME/VOLUME "A" (SECONDS)/(ML.)	NORMAL TIME/WEIGHT "B" (SECONDS)/(GRAMS)	EXTRA TIME/WEIGHT "B+" (SECONDS)/(GRAMS)
FREEZE DRY COFFEE			
5 oz	5.90 / 120	0.20 / 0.90	0.25 / 1.10
7 oz	8.20 / 170	0.30 / 1.20	0.40 / 1.50
8 oz	9.65 / 200	0.40 / 1.50	0.55 / 1.80
9 oz	10.20 / 210	0.50 / 1.60	0.65 / 2.00
10 oz	11.70 / 240	0.55 / 1.80	0.70 / 2.20
12 oz	14.80 / 305	0.70 / 2.20	0.90 / 2.60
FREEZE DRY DECAF			
5 oz	5.90 / 120	0.15 / 0.90	0.20 / 1.10
7 oz	8.20 / 170	0.25 / 1.20	0.35 / 1.50
8 oz	9.65 / 200	0.35 / 1.50	0.45 / 1.80
9 oz	10.20 / 210	0.40 / 1.60	0.50 / 2.00
10 oz	11.70 / 240	0.45 / 1.80	0.60 / 2.20
12 oz	14.80 / 305	0.60 / 2.20	0.75 / 2.60
FREEZE DRY ESPRESSO			
5 oz	2.95 / 60	0.20 / 0.90	0.25 / 1.10
7 oz	4.10 / 85	0.30 / 1.20	0.40 / 1.50
8 oz	4.85 / 100	0.40 / 1.50	0.55 / 1.80
9 oz	5.10 / 105	0.50 / 1.60	0.65 / 2.00
10 oz	5.85 / 120	0.55 / 1.80	0.70 / 2.20
12 oz	7.40 / 153	0.70 / 2.20	0.90 / 2.60

CHOCOLATE DRINKS

CUP SIZE	WATER "A" TIME / VOLUME (SECONDS)/(ML.)	PRODUCT "B" NORMAL TIME / WEIGHT (SECONDS)/(GRAMS)	PRODUCT "B+" EXTRA TIME / WEIGHT (SECONDS)/(GRAMS)
5 oz	5.90 / 100	3.25 / 17.00	3.25 / 17.00
7 oz	8.20 / 160	4.60 / 24.00	4.60 / 24.00
8 oz	9.65 / 170	5.60 / 28.00	5.60 / 28.00
9 oz	10.20 / 180	5.90 / 31.00	5.90 / 31.00
10 oz	11.70 / 200	6.50 / 34.00	6.50 / 34.00
12 oz	14.00 / 240	8.20 / 41.00	8.20 / 41.00

HOT WATER ONLY

CUP SIZE	TIME / VOLUME "A" (SECONDS)/(ML.)
5 oz	5.90 / 100
7 oz	8.20 / 160
8 oz	9.65 / 170
9 oz	10.20 / 180
10 oz	11.70 / 200
12 oz	14.30 / 240

"INTERNATIONAL COFFEE" - SOLUBLE PRODUCT

This International Coffee - Soluble Product table contains factory recommended times. These are not pre-programmed "default" times as for other selections, but will give you a starting point to manually enter your International Coffee - Soluble Product dispense times.

CUP SIZE	WATER "A"	PRODUCT "B"	PRODUCT "B+"
	TIME / VOLUME (SECONDS)/(ML.)	NORMAL TIME / WEIGHT (SECONDS)/(GRAMS)	EXTRA TIME / WEIGHT (SECONDS)/(GRAMS)
5 oz	5.90 / 110	2.55 / 10.00	2.55 / 10.00
7 oz	8.20 / 150	3.40/ 13.50	3.40 / 13.50
8 oz	9.65 / 180	4.10 / 16.20	4.10 / 16.20
9 oz	10.20 / 195	4.50 / 17.80	4.50 / 17.80
10 oz	11.70 / 215	5.00 / 19.70	5.00 / 19.70
12 oz	14.00 / 260	6.00 / 23.70	6.00 / 23.70

The following tables are for drinks that use whitener. These drinks are only available in machines configured with the whitener option.

FRESH BREW DRINKS WITH WHITENER

CUP SIZE	"A" WATER	NORMAL "B" PRODUCT	EXTRA "B+" PRODUCT	STEEP "C"		PUMP* "D"	"E" WHITENER PRODUCT
	TIME / VOLUME (SECONDS)/(ML.)	TIME / WEIGHT (SECONDS)/(GR.)	TIME / WEIGHT (SECONDS)/(GR.)	NORMAL TIME "C" (SECONDS)	EXTRA TIME "C+" (SECONDS)	TIME (SECONDS)	TIME / WEIGHT (SECONDS)/(GR.)
FRESH BREW COFFEE AND FRESH BREW DECAF WITH WHITENER							
5 oz	3.60 / 105	1.40 / 5.00	1.40 / 5.00	3.00	5.00	12.00	0.15 / 0.25
7 oz	5.10 / 150	2.00 / 7.10	2.00 / 7.10	3.00	5.00	15.00	0.20 / 0.35
8 oz	6.00 / 175	2.30 / 8.20	2.30 / 8.20	3.00	5.00	17.00	0.25 / 0.45
9 oz	7.05 / 205	2.50 / 8.90	2.50 / 8.90	3.00	5.00	19.00	0.30 / 0.50
10 oz	7.75 / 225	2.80 / 10.00	2.80 / 10.00	3.00	5.00	22.00	0.35 / 0.60
12 oz	9.45 / 280	3.40 / 12.10	3.40 / 12.10	3.00	5.00	26.00	0.40 / 0.70
FRESH BREW ESPRESSO WITH WHITENER							
5 oz	1.05 / 30	1.40 / 5.00	1.40 / 5.00	3.00	5.00	9.00	0.10 / 0.15
7 oz	1.80 / 50	2.00 / 7.10	2.00 / 7.10	3.00	5.00	11.00	0.10 / 0.15
8 oz	2.25 / 65	2.30 / 8.20	2.30 / 8.20	3.00	5.00	12.00	0.15 / 0.25
9 oz	2.80 / 80	2.50 / 8.90	2.50 / 8.90	3.00	5.00	13.00	0.15 / 0.25
10 oz	3.15 / 90	2.80 / 10.00	2.80 / 10.00	3.00	5.00	14.00	0.20 / 0.35
12 oz	4.00 / 115	3.40 / 12.10	3.40 / 12.10	3.00	5.00	15.00	0.20 / 0.35

* If the programmed pump time is less than twice the water time, the pump time will default to 32 seconds.

FRESH BREW RECIPE DRINKS

CUP SIZE	"A" WATER	NORMAL "B" PRODUCT	EXTRA "B+" PRODUCT	STEEP "C"		PUMP* "D"	"E" WHITENER PRODUCT	SECOND PRODUCT "F"	EXTRA SECOND PRODUCT "F+"
	TIME / VOL. (SEC.)/(ML.)	TIME / WEIGHT (SEC.)/(GR.)	TIME / WEIGHT (SEC.)/(GR.)	NORMAL TIME "C" (SECONDS)	EXTRA TIME "C+" (SECONDS)	TIME (SECONDS)	TIME / WEIGHT (SEC.)/(GR.)	TIME / WEIGHT (SEC.)/(GR.)	TIME / WEIGHT (SEC.)/(GR.)
FRESH BREW CAFE' MOCHA									
5 oz	0.55 / 15	1.40 / 5.00	1.40 / 5.00	3.00	5.00	9.00	0.20 / 0.35	1.05 / 5.25	1.05 / 5.25
7 oz	1.15 / 35	2.00 / 7.10	2.00 / 7.10	3.00	5.00	11.00	0.30 / 0.50	1.45 / 7.25	1.45 / 7.25
8 oz	2.85 / 85	2.30 / 8.20	2.30 / 8.20	3.00	5.00	12.00	0.35 / 0.60	1.65 / 8.25	1.65 / 8.25
9 oz	3.15 / 95	2.50 / 8.90	2.50 / 8.90	3.00	5.00	13.00	0.40 / 0.70	1.85 / 9.25	1.85 / 9.25
10 oz	4.00 / 115	2.80 / 10.00	2.80 / 10.00	3.00	5.00	14.00	0.45 / 0.80	2.05 / 10.25	2.05 / 10.25
12 oz	5.55 / 165	3.40 / 12.10	3.40 / 12.10	3.00	5.00	15.00	0.50 / 0.90	2.45 / 12.25	2.45 / 12.25
FRESH BREW CAPPUCCINO AND CAFFÈ LATTE									
5 oz	2.65 / 75	1.40 / 5.00	1.40 / 5.00	3.00	5.00	9.00	0.45 / 0.80		
7 oz	4.30 / 125	2.00 / 7.10	2.00 / 7.10	3.00	5.00	12.00	0.65 / 1.15		
8 oz	5.40 / 160	2.30 / 8.20	2.30 / 8.20	3.00	5.00	14.00	0.75 / 1.30		
9 oz	5.85 / 170	2.50 / 8.90	2.50 / 8.90	3.00	5.00	15.00	0.85 / 1.50		
10 oz	6.75 / 200	2.80 / 10.00	2.80 / 10.00	3.00	5.00	16.00	0.95 / 1.65		
12 oz	8.55 / 250	3.40 / 12.10	3.40 / 12.10	3.00	5.00	20.00	1.10 / 1.90		

* If the programmed pump time is less than twice the water time, the pump time will default to 32 seconds.

FREEZE DRY DRINKS WITH WHITENER

CUP SIZE	WATER	PRODUCT		"E" WHITENER PRODUCT
	TIME/VOLUME "A" (SECONDS)/(ML.)	NORMAL TIME/WEIGHT "B" (SECONDS)/(GRAMS)	EXTRA TIME/WEIGHT "B+" (SECONDS)/(GRAMS)	NORMAL TIME/WEIGHT "E" (SECONDS)/(GRAMS)
FREEZE DRY COFFEE WITH WHITENER				
5 oz	4.25 / 90	0.20 / 0.90	0.25 / 1.10	0.15 / 0.25
7 oz	5.90 / 125	0.30 / 1.20	0.40 / 1.50	0.20 / 0.35
8 oz	6.95 / 145	0.40 / 1.50	0.55 / 1.80	0.25 / 0.45
9 oz	7.80 / 160	0.50 / 1.60	0.65 / 2.00	0.30 / 0.50
10 oz	8.95 / 185	0.55 / 1.80	0.70 / 2.20	0.35 / 0.60
12 oz	11.35 / 235	0.70 / 2.20	0.90 / 2.60	0.40 / 0.70
FREEZE DRY DECAF WITH WHITENER				
5 oz	4.25 / 90	0.15 / 0.90	0.20 / 1.10	0.15 / 0.25
7 oz	5.90 / 125	0.25 / 1.20	0.35 / 1.50	0.20 / 0.35
8 oz	6.95 / 145	0.35 / 1.50	0.45 / 1.80	0.25 / 0.45
9 oz	7.80 / 160	0.40 / 1.60	0.50 / 2.00	0.30 / 0.50
10 oz	8.95 / 185	0.45 / 1.80	0.60 / 2.20	0.35 / 0.60
12 oz	11.35 / 235	0.60 / 2.20	0.75 / 2.60	0.40 / 0.70
FREEZE DRY ESPRESSO WITH WHITENER				
5 oz	1.60 / 35	0.20 / 0.90	0.25 / 1.10	0.10 / 0.15
7 oz	2.45 / 50	0.30 / 1.20	0.40 / 1.50	0.10 / 0.15
8 oz	2.95 / 60	0.40 / 1.50	0.55 / 1.80	0.15 / 0.25
9 oz	3.40 / 70	0.50 / 1.60	0.65 / 2.00	0.15 / 0.25
10 oz	3.95 / 80	0.55 / 1.80	0.70 / 2.20	0.20 / 0.35
12 oz	5.15 / 110	0.70 / 2.20	0.90 / 2.60	0.20 / 0.35

FREEZE DRY RECIPE DRINKS

CUP SIZE	"A" WATER	NORMAL "B" PRODUCT	EXTRA "B+" PRODUCT	"E" WHITENER PRODUCT	SECOND PRODUCT "F"	EXTRA SECOND PRODUCT "F+"
	TIME / VOL. (SEC.)/(ML.)	TIME/WEIGHT (SEC.)/(GR.)	TIME/WEIGHT (SEC.)/(GR.)	TIME / WEIGHT (SEC.)/(GR.)	TIME / WEIGHT (SEC.)/(GR.)	TIME / WEIGHT (SEC.)/(GR.)
FREEZE DRY CAFE' MOCHA						
* 5 oz	0.00 / 00	0.00 / 00	0.00 / 00	0.00 / 00	0.00 / 00	0.00 / 00
7 oz	2.45 / 50	0.30 / 1.20	0.40 / 1.50	0.30 / 0.50	1.45 / 7.25	1.45 / 7.25
8 oz	3.65 / 75	0.40 / 1.50	0.55 / 1.80	0.35 / 0.60	1.65 / 8.25	1.65 / 8.25
9 oz	3.95 / 80	0.50 / 1.60	0.65 / 2.00	0.40 / 0.70	1.85 / 9.25	1.85 / 9.25
10 oz	5.20 / 110	0.55 / 1.80	0.70 / 2.20	0.45 / 0.80	2.05 / 10.25	2.05 / 10.25
12 oz	7.45 / 155	0.70 / 2.20	0.90 / 2.60	0.50 / 0.90	2.45 / 12.25	2.45 / 12.25
FREEZE DRY CAPPUCCINO AND CAFFÈ LATTE						
5 oz	3.45 / 70	0.20 / 0.90	0.25 / 1.10	0.45 / 0.80		
7 oz	5.55 / 115	0.30 / 1.20	0.40 / 1.50	0.65 / 1.15		
8 oz	6.90 / 145	0.40 / 1.50	0.55 / 1.80	0.75 / 1.30		
9 oz	7.35 /150	0.50 / 1.60	0.65 / 2.00	0.85 / 1.50		
10 oz	8.75 / 180	0.55 / 1.80	0.70 / 2.20	0.95 / 1.65		
12 oz	11.50 / 240	0.70 / 2.20	0.90 / 2.60	1.10 / 1.90		

* Cafe' mocha is not recommended for this drink size. Insufficient water is dispensed to properly rinse the mixing bowls.

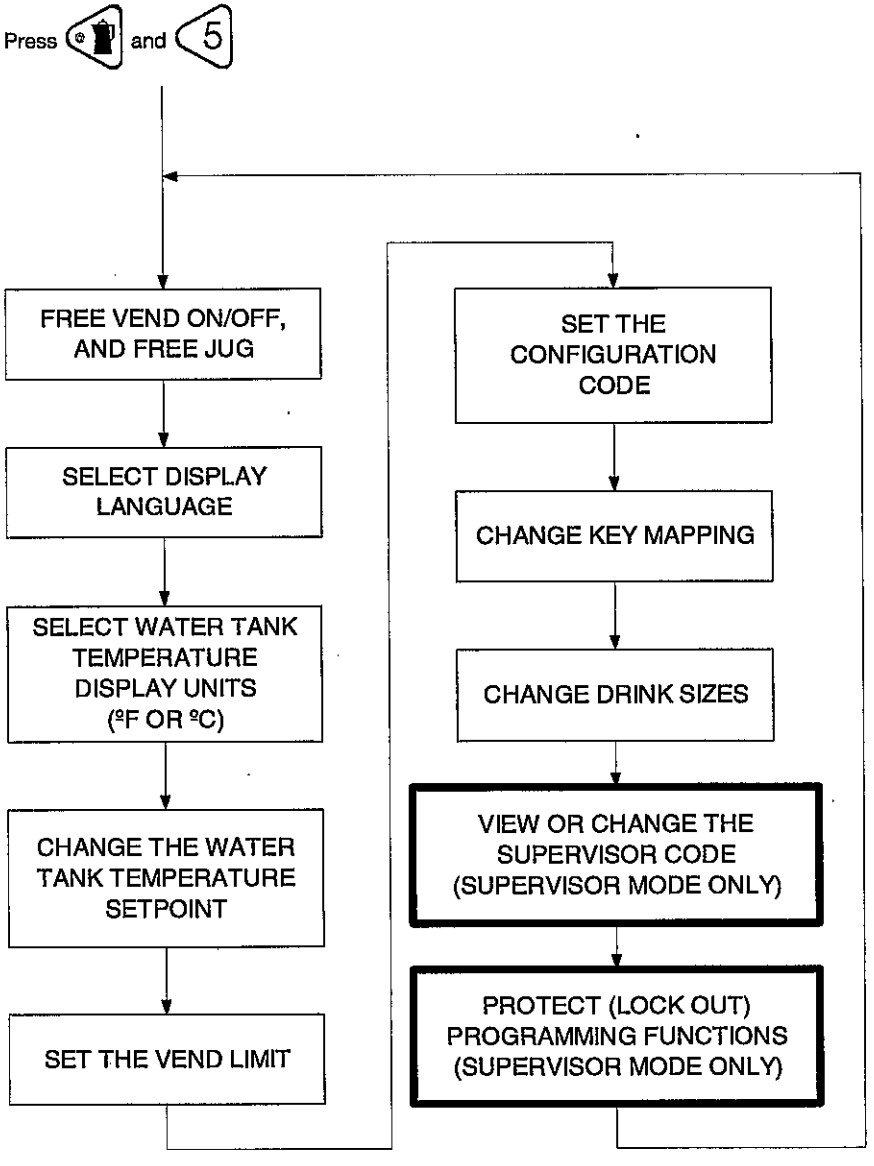
HOT WHITENER

CUP SIZE	WATER "A"	PRODUCT "B"	PRODUCT "B+"
	TIME / VOLUME (SECONDS)/(ML.)	NORMAL TIME / WEIGHT (SECONDS)/(GRAMS)	EXTRA TIME / WEIGHT (SECONDS)/(GRAMS)
5 oz	5.90 / 110	0.70 / 1.20	0.70 / 1.20
7 oz	8.20 / 150	1.00 / 1.75	1.00 / 1.75
8 oz	9.65 / 180	1.15 / 2.00	1.15 / 2.00
9 oz	10.20 / 195	1.30 / 2.25	1.30 / 2.25
10 oz	11.70 / 215	1.45 / 2.50	1.45 / 2.50
12 oz	14.00 / 260	1.70 / 3.00	1.70 / 3.00

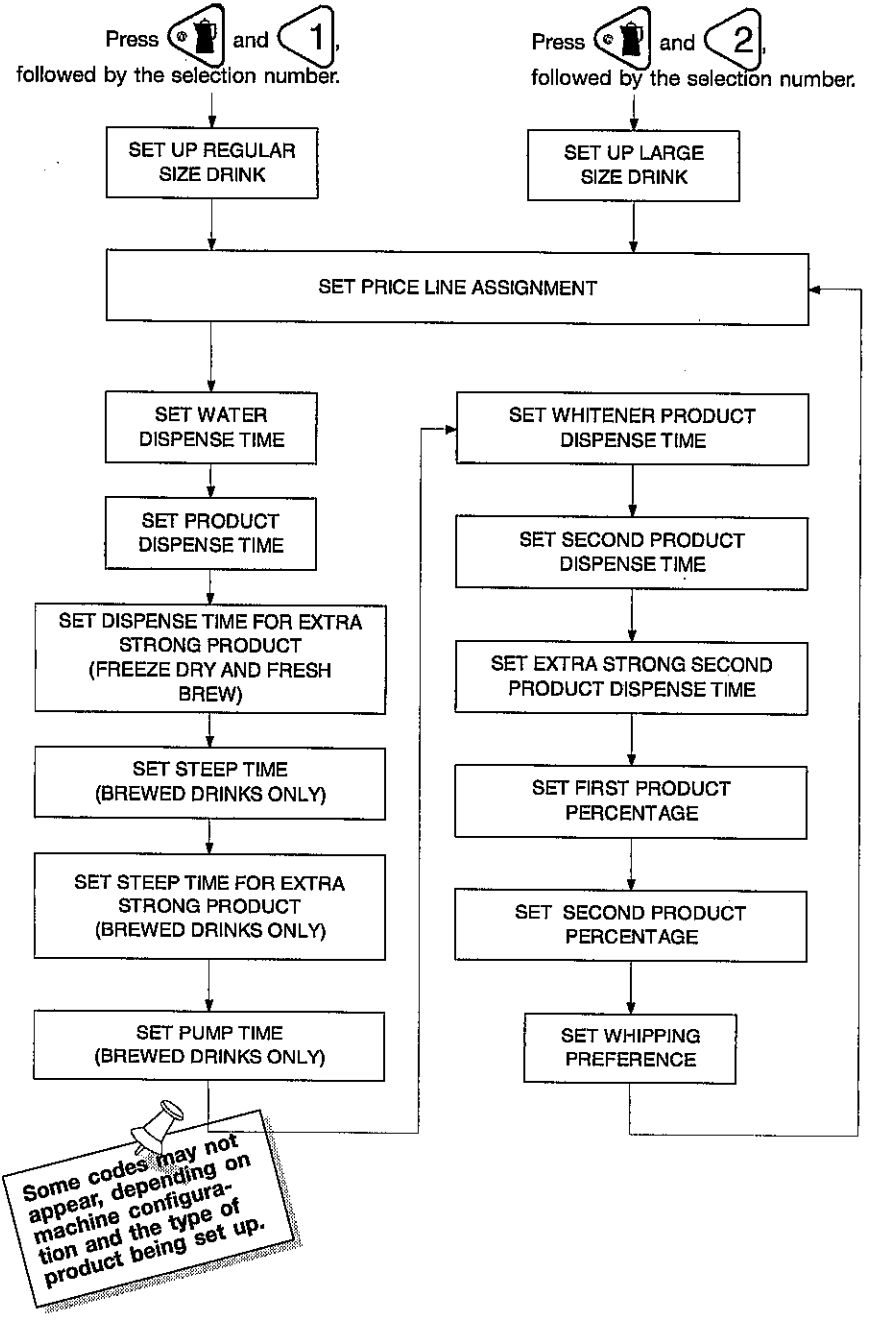
APPENDIX D.

PROGRAMMING FLOWCHARTS

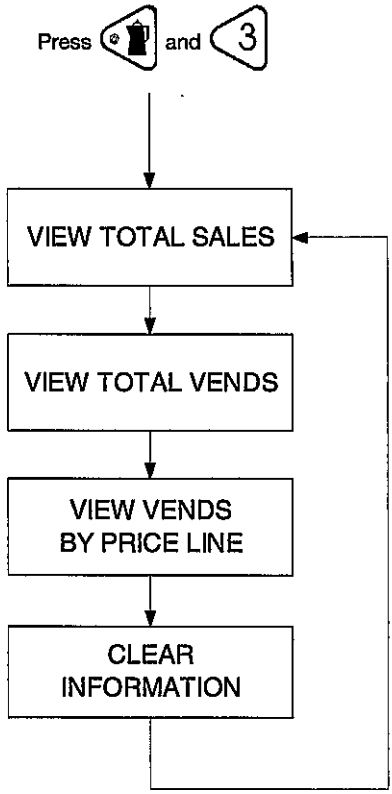
CONFIGURATION MODE



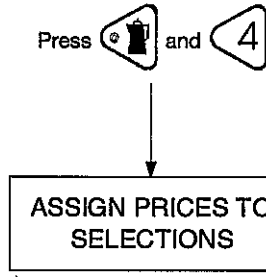
SET UP SELECTIONS MODE



DATA RECALL

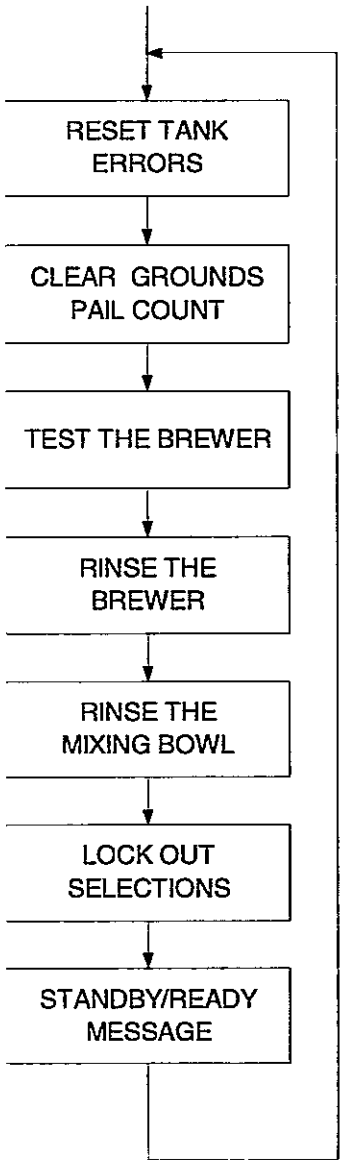


PRICE MODE



PERFORM MAINTENANCE TASKS

Repeatedly press to get to each of the following tasks:



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 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 GPL Merchandisers.

GPL 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 GPL 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. GPL 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.

GPL