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DOCUMENT NUMBER

OWN-CE-046

DOCUMENT TITLE

Cold Fusion Dispensing System Owner's Manual

REVISION
A

RELEASE INFORMATION

Approval Signatures/Dates			
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Revision	Date	Change History	ECO#
A	1/28/11	Initial Engineering Release	2655

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Section 1: IMPORTANT SAFEGAURDS

READ ALL INSTRUCTIONS CAREFULLY BEFORE USING YOUR BLENDTEC COLD FUSION DISPENSING SYSTEM.

1.1 Safety Certification

The Blendtec Cold Fusion Dispensing System (Model S02) is certified by ETL to comply with UL/ANSI standard 763-2000, 3rd Edition, November 30, 2000.

1.2 Health Certification

Model S02 is certified by ETL to comply with NSF/ANSI Standard 18.

1.3 Precautions

- Avoid contact with moving parts.
- Keep fingers, hair, hands and clothing away from all moving parts.
- These precautions will prevent personal injury and/or damage to the system.

1.4 Power Cord Precautions

- Do not operate with a damaged power cord or plug.
- If the power cord or plug is damaged it must be replaced by the manufacturer or its authorized service agent in order to prevent any hazard.
- Keep power cord away from sharp edges.
- Never use an extension cord with the unit.
- Unplug the unit when changing location or servicing.

1.5 Power Receptacle Requirements

The Cold Fusion Dispensing System operates in a power range of 1600-1800 Watts at 120 VAC, 50-60Hz. To avoid nuisance tripping of the circuit breaker, the Cold Fusion Dispensing System **requires two separate dedicated 15 AMP 120 VAC circuits** and receptacles (NEMA 5-15R).

1.6 Power Load Requirements

DO NOT USE ANY OTHER ELECTRICAL EQUIPMENT ON THE SAME CIRCUIT AS THE COLD FUSION DISPENSING SYSTEM. Risk of overloading the circuit and/or compromising the system electrical equipment may occur.

1.7 System Repairs

Do not attempt to perform repairs. Never remove the covers or panels on the unit. The unit does not contain adjustable or customer serviceable parts. The manufacturer or their authorized agent must perform all interior service and adjustments. Removing covers or panels, or attempting to effect repairs, will void the warranty. For repairs call Blendtec Customer Service at 1-800-253-6383.

1.8 Damaged Unit

Never operate the unit if it appears to be damaged. If the unit malfunctions, call the manufacturer first. If it is damaged in any way, call for service to evaluate the extent of damage and the possibility of either repair or replacement.

1.9 Ice Hopper Precautions

Never put any type of foreign object into the ice hopper. Metal utensils and other hard objects can damage the ice hopper and will void the warranty. The machine should never be turned on without the ice hopper lid properly installed.

1.10 Attachments

Never operate the unit with attachments not sold or authorized by Blendtec. The use of unauthorized attachments may cause fire, electric shock, unit malfunction, or injury. Damage incurred by the use of such attachments will not be covered by warranty.

1.11 Cleaning Precautions

Never use a water jet to clean the system. Use of a water jet to clean the system can result in malfunction or damage to the unit. This type of damage/malfunction IS NOT covered under warranty.

Save these Instructions for Future Reference

IMPORTANT

The Cold Fusion Dispensing System was thoroughly cleaned prior to packaging at Blendtec. There is no implied control over shipping conditions or times. It will be necessary to clean and sanitize the Cold Fusion Dispensing System before connecting any food product or preparing any drinks (see Section 5 for cleaning instructions).

BLENDTEC COLD FUSION CUT SHEET

Cold Fusion Dispensing System (Model S02A)

Key Features

- Easy to use single switch activation
- Self cleaning and sanitizing
- Dispenses directly into serving cup
- No messy blender container to wash
- 8 product input hook-ups
- Customized drinks with hundreds of combinations
- 3 drink sizes available
- Powerful 13AMP blender motor
- Solid state electronics with LCD readout
- Consistent product, water and ice dispense

Specifications

Model	S02
UPC Code	N/A
Configuration	N/A
Control System	Touchpad
Programmable Drink Settings	7
Drink Sizes	3
Cycle Counter	Yes
Display	LCD Type
Electrical Characteristics	
Power Consumption	1800W-2400W
Power Output	Varies with speed
Power Source	2 Separate 120V, 50-60HZ, 15A, Single Phase
Plug Configuration	Nema 5-15R 
Frequency	50-60Hz
Power Cord Length	7' (2.14m)
Package Configuration	QTY Included
Model S02 Dispensing System	1
Product Tubing	40'
Product Hose Clamps	8

Assembled Footprint	
Height	42" (107cm)
Width	22" (56cm)
Depth	30" (76cm)
Certification Information	
Electrical/Safety	ETL (UL and CSA equivalent, Report #3138795PRT-001)
Sanitation/Food Safety	ETL (NSF and ANSI equivalent, Report #100023493PRT-002)
Warranty Information	
Overall System Warranty*	12 Months Parts & Labor or 24 Months Parts Only
Blend Chamber*	12 Months Parts & Labor or 24 Months Parts Only
Blender Motor*	12 Months Parts & Labor or 24 Months Parts Only
Pump Cube*	12 Months Parts & Labor or 24 Months Parts Only
*Periodic Maintenance and Service Required	
Weight/Shipping Information	
Net Weight	196 lbs (89 kg)
Shipping Weight	349 lbs (159 kg)
Shipping Carton Dimensions	43" W x 47" L x 32" H (109cm x 119cm x 81cm)

Table 1: Specification Cut Sheet

Section 2: INTRODUCTION

WELCOME TO AN EXCITING NEW LEVEL OF PRODUCT DISPENSING!

Introducing the Cold Fusion Dispensing System by Blendtec!

The Blendtec Cold Fusion Dispensing System incorporates the latest advances in blending and dispensing technology into a new self-service blending system. The result is a machine that provides:

- **Independent delivery of frozen blended drinks to customers**
- **Controlled labor and finished product cost**
- **High margin product with minimal labor**
- **No-tend® technology**
- **High revenue per square foot**
- **Hundreds of drink combinations from one machine**
- **Self-contained ice-maker inside the machine**

Quality- Blendtec has engineered and developed a self-contained unit that will produce its own ice and blend hundreds of drink combinations to perfection. The evolution of this technology comes from years of experience developing equipment and drink solutions for both large and small operations in the restaurant industry.

Precision- The Blendtec Cold Fusion Dispensing System is a microprocessor-controlled machine designed to quickly and consistently make precise blended drinks from ice, water, and liquid or juice concentrate. The Cold Fusion is a self-calibrating system; carefully developed frozen drink recipes are consistently and accurately blended, ensuring that customers get a perfect drink every time.

Safety- The Cold Fusion is self-cleaning. Not only does the Cold Fusion produce the best blended drinks available, it also automatically cleans and sanitizes the blend chamber and food contact areas to keep product flowing safely and properly with each dispense.

Profitability- Blendtec has developed a one-of-a-kind system to enable owners/operators to take advantage of the highly profitable and consumer driven market for blended drinks. In addition, the Cold Fusion has the option of ad space on the front monitor which can be utilized for additional revenue streams to the owner/operator.

The Cold Fusion has three main sections;

1. The blend station and alcove
2. The ice hopper and ice maker
3. The control board.

The following pages contain specific information which will familiarize you with the most advanced blended drink system available today.

Figure 2: Front View

Figure 1: Assembly Model

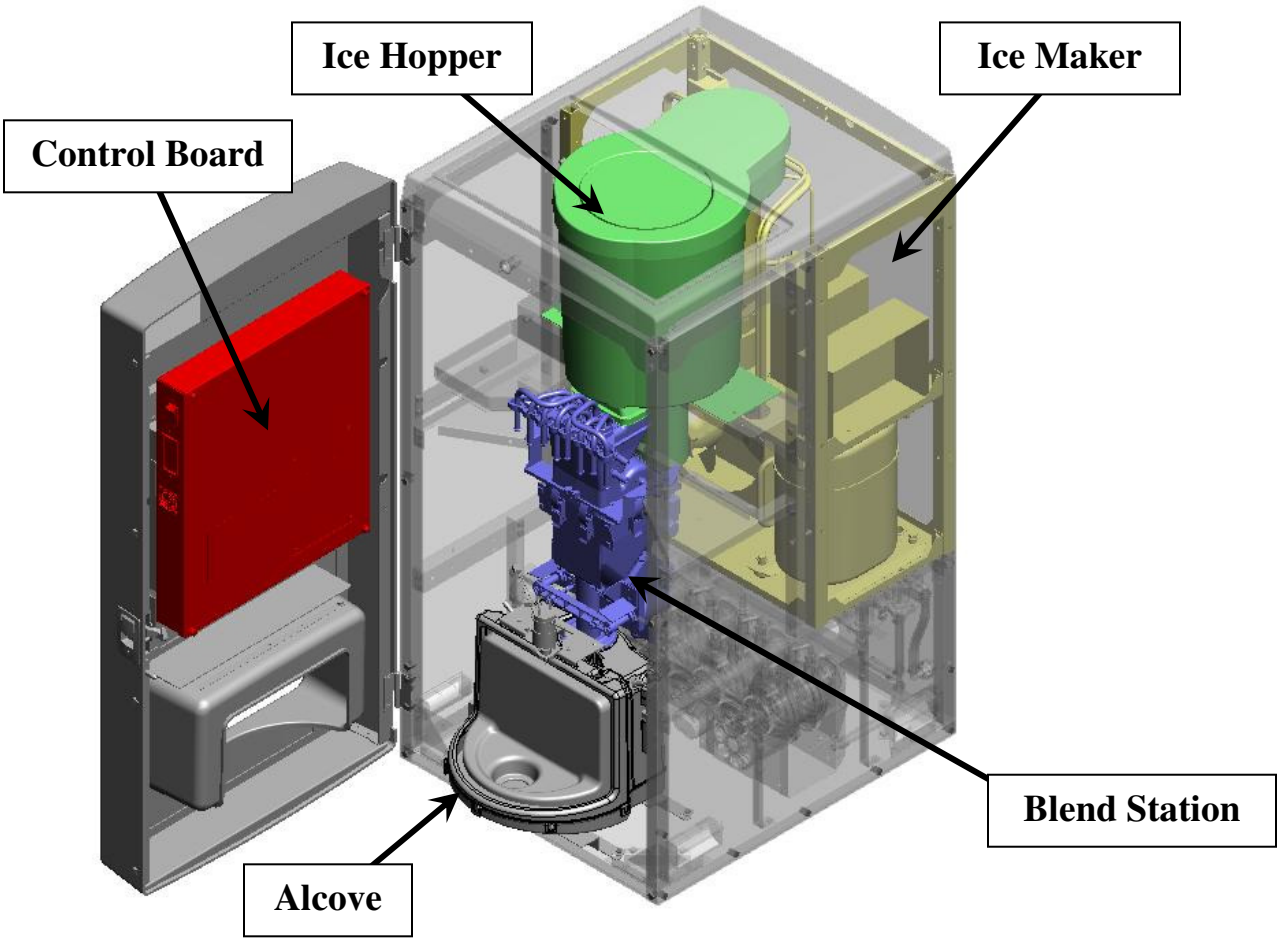


Figure 3: Opened Assembly Model

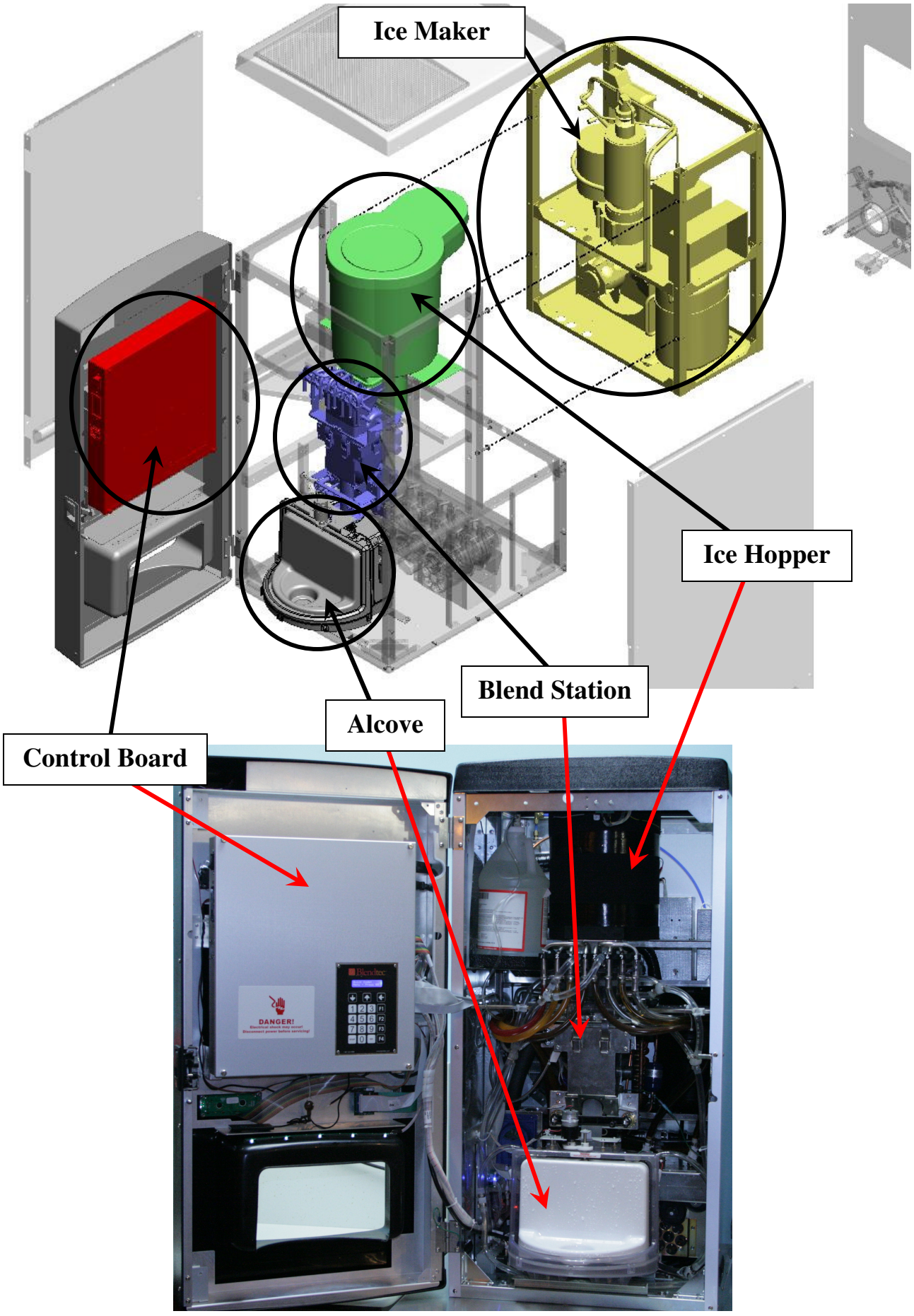


Figure 4: Cold Fusion Dispensing System

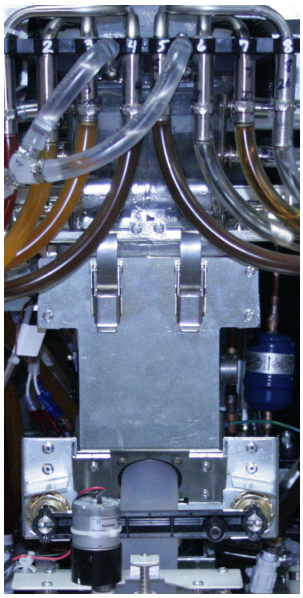


Figure 5: Blend Station

Figure 6: Ice Hopper

Figure 7: Control Board

2.1 The Blend Station

The blend station contains a powerful blender motor that is controlled by the microprocessor on the control board. You can select the speed and duration of each blend cycle for each drink size.

2.2 The Ice Hopper

The ice hopper is designed to consistently deliver the amount of ice that is required for each drink. The insulated ice hopper will hold approximately 2.5 gallons (or 16 pounds) of ice. As a safety measure the hopper motor will not run when the hopper lid is removed.

2.3 The Control Board

The control board contains the microprocessor that controls all of the functions of the system. The control board is utilized to make and program drinks, run cleaning cycles, as well as configure all of the system settings.

Section 3: INSTALLATION

Read all instructions, cautions, notes and warnings before attempting to setup and operate this machine. Warranties may be voided if this machine is improperly installed. This machine must be installed in a manner that complies with all applicable health and safety regulations.

Two options for counter placement:

1. The feet and bottom plate provided with the machine can be installed; Section 3.1.

2. Machine can be placed and sealed directly to the counter; Section 3.2.

3.1 Counter Placement- Using Provided Feet

A bottom plate and four adjustable heavy duty screw-in feet are provided with each machine. If the feet are used, the bottom plate must be installed. To install, lean the machine back and position the bottom panel so that there are no gaps on the bottom surface. Then screw the front feet into the threaded corners of the base of the machine. Finally, lean the machine forward and screw in the back feet. These feet provide an easy to clean surface beneath the machine. The unit must be leveled for proper functionality. This can be done very easily using the adjustable feet.

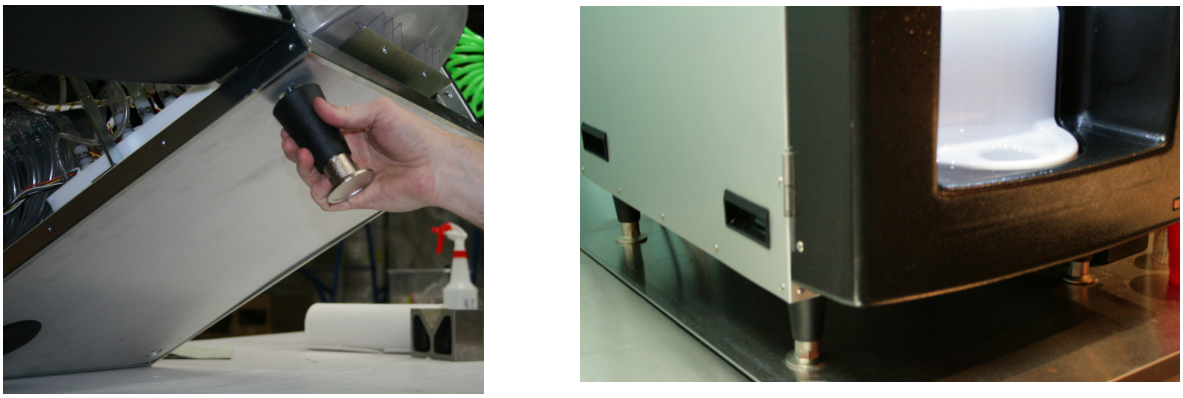


Figure 8: Bottom plate and screw-in Feet

3.2 Counter Placement- Directly Sealing to Counter

If you are not using the screw-in feet the Cold Fusion Dispensing System must be placed on and sealed to a hard flat surface that is capable of supporting its weight (see **BLENDTEC COLD FUSION CUT SHEET**) and all accessories. The unit must be leveled for proper functionality. See the end of section 3.3 for proper sealing instructions.

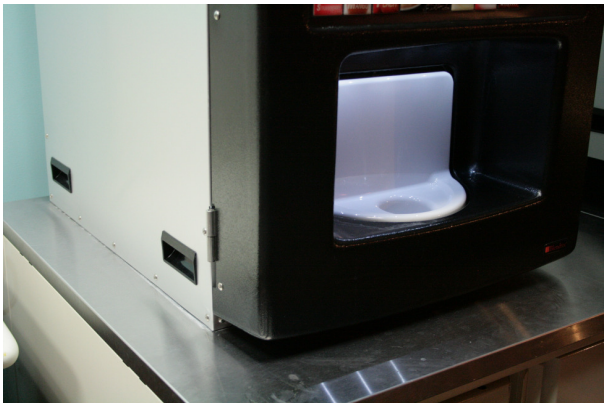


Figure 9: Counter Sealing

3.3 Product Tubing Routing

Two options for product tube routing:

1. Through hole in back panel.

2. Through cutout in bottom base plate.

- **Through Hole in Back of Machine**

  - If product tubing is to be routed through the back of the machine, simply install the provided grommet into the hole in the back panel of the machine and run the product line tubing through it. The tubing hole that is not used should be capped with the provided cap (See Figure 10).

Figure 10: Tube Routing Through Back

- **Through Cutout in Bottom of Machine**

  - If the Cold Fusion Dispensing System will be installed with product tubes fed through the bottom, first cut the hole in the counter for the tubing according to the diagram in Figure 15. There is a hole provided in the bottom of the Cold Fusion Dispensing System for tubing (see Figure 11). The hole in the counter must line up directly under the corresponding hole in the Cold Fusion Dispensing System to allow proper sealing. The tubing hole that is not used should be capped with the provided cap (See Figure 12). If the bottom plate and feet are used a cap or grommet should be installed into the bottom plate.

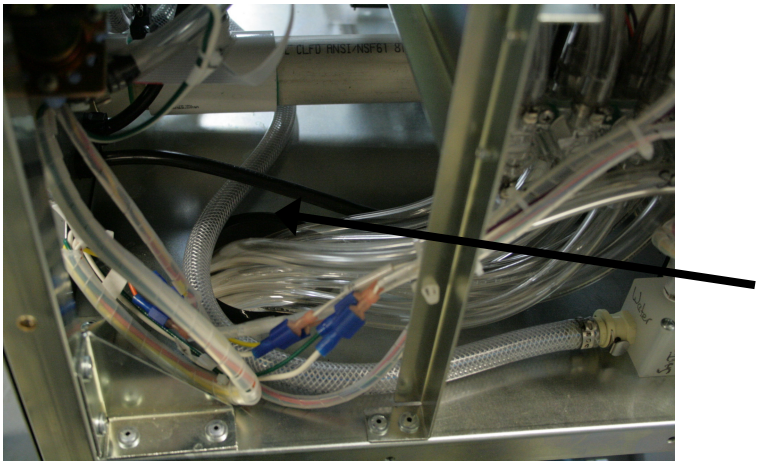


Figure 11: Tube Routing Through Bottom

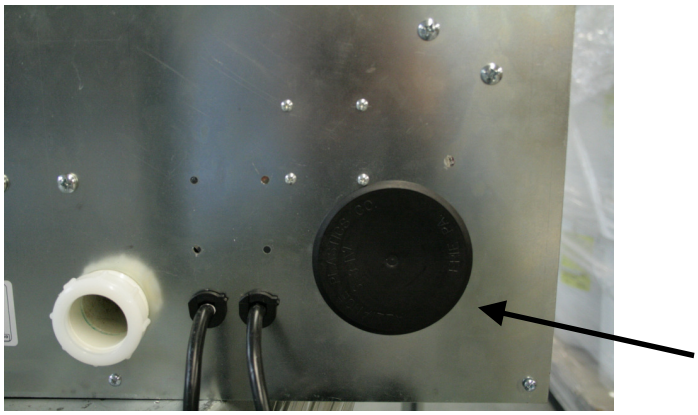


Figure 12: Provided cap to be placed in unused tubing hole.

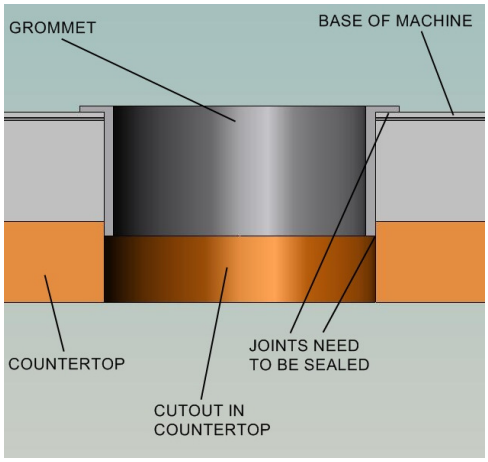


Figure 13: Countertop with Tube Routing

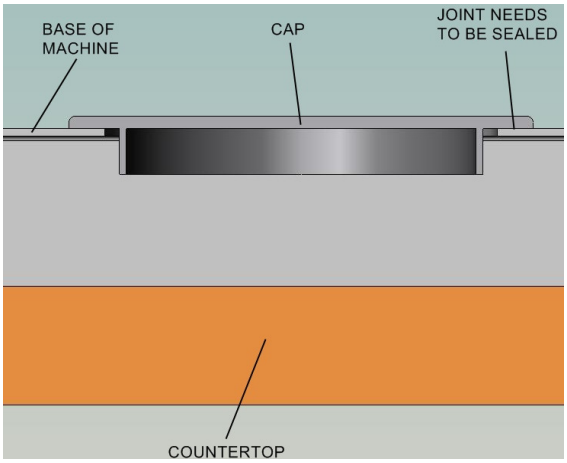


Figure 14: Countertop with Cap

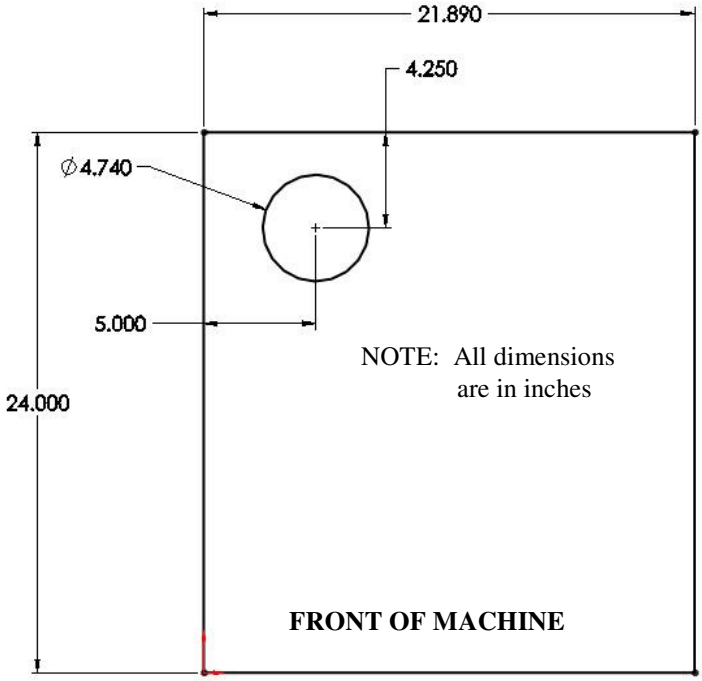


Figure 15: Cold Fusion footprint (without door) and tubing cutout location

- Place the Cold Fusion Dispensing System on the counter being careful to line up the tubing holes if they are being used. If a tubing hole is used and the machine is to be sealed directly to the counter, the hole must have a grommet placed in it from inside the Cold Fusion Dispensing System. The grommet must be sealed to the bottom of the Cold Fusion Dispensing System and the counter with a silicone sealant. If the adjustable feet are used, a grommet should be sealed to the counter as well as one installed into the machine.

- Run a bead of silicone sealant around all four sides of the base of the Cold Fusion Dispensing System where it meets the counter. The bead must not have any gaps and at least a 1/8" (3.175mm) fillet.

3.4 Electrical Connections

The Cold Fusion Dispensing System requires two dedicated 15 AMP circuits with 120 VAC receptacles, NEMA 5-15R (see Figure 16).

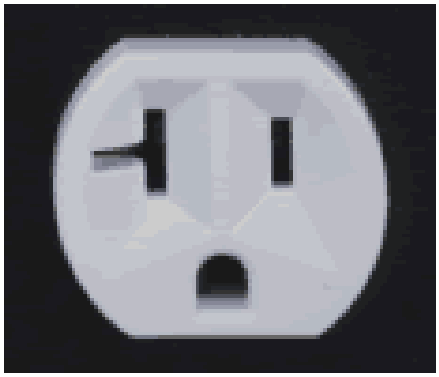


Figure 16: NEMA 5-15R Receptacle

3.5 Water Connections

The Cold Fusion Dispensing System requires 3/8” compression fitting for water connection. This connection is located in the lower left-hand corner as you face the back panel (see Figure 17). It is recommended that a reinforced water line is used with this unit. For proper operation, incoming water must have a pressure rating of at least 40 PSI (no greater than 120 PSI) and a minimum flow rate of 1/3 gallon/minute. If necessary, add a booster system to the inlet to maintain a minimum of 40 PSI.

Figure 17: Water Connection

All of the sanitizing system chemicals are certified to be effective with water hardness of up to 500 ppm (calculated as $CaCO_3$). If the local water supply hardness exceeds 500 ppm (calculated as $CaCO_3$) at any time, measures to keep the water hardness below 500 ppm must be incorporated into the supply lines for water to this system. The Cold Fusion Dispensing System is internally equipped with NSF approved backflow protection on the water inlet. Where required the Cold Fusion Dispensing System must be installed with any additional equipment necessary to comply with federal, state or local codes having jurisdiction.

Water pipe connections and fixtures directly connected to a potable water supply shall be sized, installed, and maintained in accordance with federal, state, and local codes.

3.6 Drain Connection

The drain is located in the center/bottom of the back panel of the machine. The drain fitting will accept 1.5” O.D. smooth wall tubing. The full capacity of the 1.5" drain line is essential to ensure optimal operation under any condition and in any location. Blendtec will not support the use of any smaller drain sizes. Failures caused by using a smaller drain size will void all warranties.

To attach the drain tube, loosen the nut on the drain fitting, then install the drain pipe and retighten the nut to seal against the tube. The Cold Fusion Dispensing System does not contain an internal trap. It must be installed with adequate backflow protection and any other necessary equipment to comply with federal, state or local codes having jurisdiction. It is recommended that rigid or reinforced tubing is used.

3.7 Product Lines and Connections

The product line connections leaving the pump cube assembly are located near the back of the machine. The lines come with pre-installed quick connect quarter-turn fasteners. Each line is labeled (1–8) for identification purposes. These labels correspond to the pump number as found on the front of the pump cube and as used during system/drink programming. Product should be connected to corresponding desired pump/drink location.

If it becomes necessary to replace the quick connect fasteners, use 3/8" outer diameter barbed fittings and a hose clamp sized to fit.

3.8 Bag-in-Box (BIB) System

Product tubing lines should be fed from the BIB's to the machine product line quick connect quarter-turn fasteners. Tubing and connectors must be cut to desired length and assembled using hose clamps. Connect each of the product feed tubes from the hose harness to the corresponding product line in the Cold Fusion Dispensing System.

Along with making the Cold Fusion machine self-cleaning, Blendtec has provided an easy way to clean and sanitize the product tubing lines. Along with the product lines, an additional tubing line is provided marked "BSV" for Beverage Sanitizing Valve. This line is provided with a CIP adapter. When sanitizing a line simply disconnect product tubing at the BIB end and connect it to the BSV line using the CIP adapter. For additional instructions on sanitizing product tubing lines see Section 5.11.

Because each BIB requires a separate tube feeding the system Blendtec highly recommends marking each product line with its respective pump number. Using a permanent identifying means of your choice, mark both ends of each product line. Arrange the length of the hose at the BIB end so that the BIB coupler can be attached to both the BIB and the BSV line CIP adapter. Attach a BIB coupler to the BIB end of each product line using an appropriately sized clamp.

NSF/ANSI standards require all product bags be stored in some type of enclosure, regardless of the system used for storing the product bags (NSF/ANSI Standard 18).

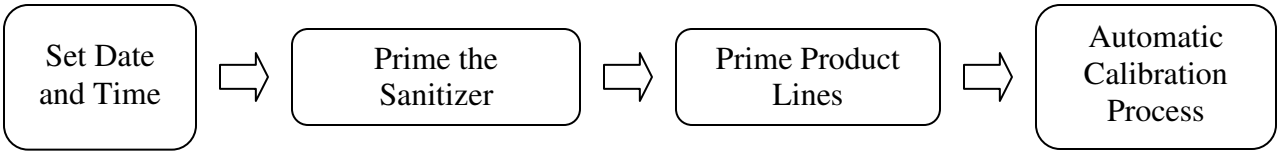
3.9 Backflow Prevention

The Blendtec Cold Fusion Dispensing System is equipped with NSF certified on-board backflow protection in the water system. However, if required, the system must be installed with any additional backflow protection as required by federal, state, or local codes having jurisdiction.

3.10 Initial Start-up

Once the Cold Fusion Dispensing System is completely and properly installed you are now ready to begin the initial start-up procedure.

- **Start-up Sequence:**



- **Turning on the machine**

  Open the front door and locate the **POWER SWITCH** on the left side of the Control Board and move the switch to the **ON** position.

- **Initial Start-up Procedure**

  Setting the Time

  - When you turn on the machine for the first time the display will show the current time settings.
  - Use ↑or ↓ to adjust the hour as appropriate or use the keypad to enter the number directly. Press GO to save the entry and advance to minutes. Follow this same procedure for minutes, AM/PM, Day, Month, and Year.

Figure 18: Time Set Menu

  Priming the sanitizer

  - To prime the sanitizer press and **hold** the **F1** button until suds appear in the blend chamber. Release the **F1** button.
  - Water will continue to flow when the **F1** button is released. This is normal. Allow the water to flow until there are no visible suds in the blend chamber and all sanitizer has been flushed from the lines. **Press STOP** when complete.

Prime Product Lines

- The set-up will now prime the product lines. **Press GO** to start priming the first line. When product reaches the blend chamber and no bubbles are visible, the line is primed. Once the line is primed **Press STOP to Advance** to the next product line. Continue this process until all the lines have been primed.

Automatic Water Calibration, Product Calibration and Ice Calibration

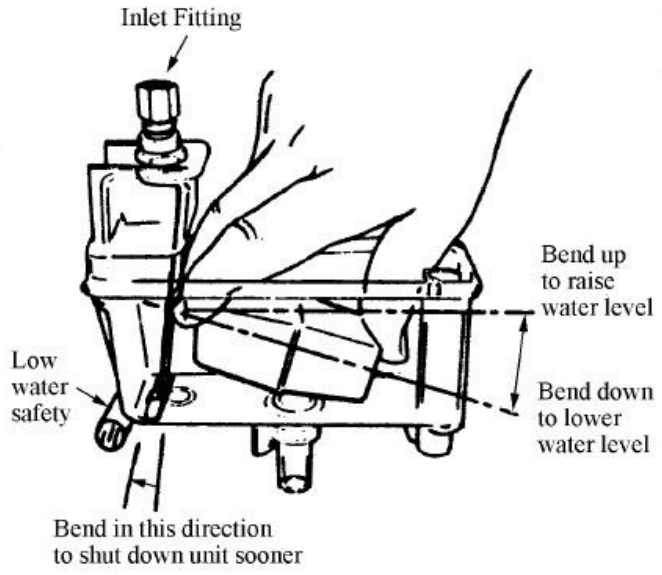
- The Cold Fusion Dispensing System will auto-calibrate the water, the product in each line, and the ice dispense. This process will take several minutes. Do not stop the auto-calibrate as it is essential to proper functionality.

The Initial Set-up is now COMPLETE!

Additional Water Float Adjustments (If Necessary)

NOTE: Do not start unit before adjusting the float. If unit will not start be sure water reservoir is full. Low water safety control must be properly adjusted to start and shut down unit. If water level drops below bottom of reservoir, unit must shut down. Adjustment is made by moving magnet up or down.

- **Water Level—**If necessary adjust float by bending float arm up or down as needed, push float assembly down until unit stops running. Release float and unit will restart. Keep water in reservoir at level line while unit is in operation. See Figure.
- **Low Water Safety Control—**Adjust magnet by bending magnet arm as needed to shut unit down if water level drops below bottom of reservoir.



Section 4: BASIC OPERATIONS

4.1 Front Door

The front door is latched closed to prevent unauthorized access to many of the functions of the Cold Fusion Dispensing System. To open the front door, first ensure that the lock (located on the right side of the door) is unlocked, then lift up on the latch. The front door is shipped unlocked with a set of keys provided on the backside of the door below the electronics. Pull up on the latch to release and open the door. To close the door, simply push it closed; it will automatically latch.

4.2 Dispensing Product Only (pump # + F3)

Product can be dispensed by pressing the keypad number corresponding to the desired pump (1-7) followed by pressing and holding the F3 button. The unit will dispense the selected product until the F3 button is released, or for 25 seconds. This feature allows the product lines to be primed with little waste.

4.3 Making Drinks

NOTE: For the machine to operate correctly the drink settings must be programmed into the machine before making a drink (see Section 6).

- Front Door Closed: Place an empty cup (S, M, or L) on the cup shelf. Make a drink selection by pressing any of the flavor buttons. To combine flavors select up to four additional flavors. Press the Blend My Drink button (right-most button). The cup door will rotate inside the machine and the system will automatically make the drink and dispense it into the cup. When finished, the cup door will rotate back out with a full cup.

- Front Door Open: Place an empty cup (S, M, or L) on the cup shelf. Select the drink number (1-7) from the numeric keypad. To combine flavors select up to four additional flavors by pressing the corresponding number. Press the GO button. The cup door will rotate inside the machine and the system will automatically make the drink and dispense it into the cup. When finished, the cup door will rotate back out with a full cup.

4.4 Dispense Ice Only (F2)

Press and hold the F2 button to dispense the desired amount of ice. The ice will dispense as long as the F2 button is held down or for 25 seconds.

4.5 Dispense Water Only (913 + GO)

To dispense only water, enter the quick code 913 and press GO. Water will start dispensing into the blend chamber. Press STOP to abort dispense, otherwise the system will dispense water for 25 seconds.

4.6 Run Blender Motor Only

This feature can be used in two ways: as a ramp pulse (gradually increasing speed) or to run at a constant speed. To use as a ramp pulse, press and hold the F4 button. The motor will stop when the F4 button is released. To run at a constant speed, choose the desired speed by selecting a number on the keypad (1-9) and then press and hold the F4 button. The blender will run until the F4 button is released or for 25 seconds.

4.7 Resetting a Sold-out Drink

The Cold Fusion Dispensing System is equipped with a product flow sensor that monitors the flow of product for each drink. If at any time no flow is detected on a product line, the system will stop making the drink and the sold-out indicator above the drink button will illuminate. Once the BIB has been replaced, the sold-out indicator can be reset.

A sold-out drink indication is reset using one of three methods: with the front door closed by holding down the front panel button corresponding to the newly replaced BIB for approximately 5 seconds; by pressing and holding the F3 button from the control panel; or by utilizing the Reset Low Pumps routine from the settings menu. Refer to section 7.30 *Reset Low Pumps / Drink Sold-out* for complete instructions on each of these methods.

Section 5: CLEANING & SANITIZING

5.1 General

The Blendtec Cold Fusion Dispensing System blend chamber is equipped with an automated rinsing and cleaning system for maintaining cleanliness. Operator responsibilities are limited to maintaining general cleanliness and resupplying the sanitizing chemicals as needed. Please refer to the chart in Table 2 for a schedule of regular cleaning and maintenance of the Cold Fusion System.

5.2 Normal System Operation

The interior of the blend chamber and dispensing system are rinsed clean after every drink. This process begins as soon as the filled drink cup is presented to the customer. Time permitting; the cup alcove area is also rinsed clean behind the cup shelf door after every drink. When demand is high (if a new drink selection is made prior to completion of the blend chamber rinse cycle), the alcove rinse is automatically delayed until there is sufficient time for an alcove rinse to be performed.

5.3 Periodic Cup Shelf Rinse

At specified intervals the system will automatically rotate the cup shelf and rinse it off. This step is automatically delayed when a drink has been selected, and bypassed if no drinks have been dispensed since the last rinse. See Section 7.20 *Set the Cup Shelf Rinse Interval* for instructions on setting the Periodic Cup Shelf Rinse interval and duration.

5.4 Periodic Sanitization

On a periodic basis, not to exceed four hours after the first dispense, the system performs a clean and sanitize cycle of the blend chamber, dispensing system, and alcove. Following this cycle, there is a residual sanitizing effect that helps to maintain system cleanliness over whatever period of time may follow before the next dispense. The four-hour countdown to the next sanitize cycle does not begin until after the next drink dispense is performed.

5.5 Periodic Auxiliary Cleaning Cycles

To help maintain overall food system cleanliness, there are periodic auxiliary cleaning cycles which may also occur between the Sanitization Cycles. These cycles are only implemented when there have been several minutes after the last drink was dispensed, in an effort to avoid interrupting customer activity.

5.6 Normal Startup and Shutdown

To ensure that the system is kept clean and sanitary, the system automatically performs a sanitize cycle when it is turned on from a power-off condition as long as it was not shut down in the sanitized state. Similarly, to ensure optimum cleanliness during power-off conditions, the system can be set up to automatically perform a sanitize cycle prior to normal shutdown. This leaves a residual biostatic film on the food contact and splash-zone surfaces that helps ensure continued cleanliness even during extended shutdowns. See section 7.19 *Set the Automatic Sanitize-At-Close Time* for instructions on programming the sanitize-at-close start time.

5.7 Abnormal Startup and Shutdown

If the system is shut down abnormally (for example, during a power loss), it is not able to ensure that the system is kept clean and sanitary. (In worst case conditions it could be in the middle of making a drink with food products left in the blend chamber.) The system will perform a standard sanitize upon the restoration of power and return itself to ready mode.

If the period of shutdown is longer than 1 hour, it may be necessary to run the sanitization cycle more than once. To do this, open the front service door. On the keypad enter the quick code 501 and press GO. This will start the full sanitization cycle. Repeat this process until the blend chamber is clean.

5.8 Special Cleaning and Sanitizing Cycles

The operator has the option of ordering special cleaning or sanitizing cycles at any time, should the need arise. The available cycles and commands for starting them are given below:

NOTE: Each of the cycles in section 5.8 can be accessed through the menu via the Sanitize Cycles column (see Figure 31).

- **Start the Blend Chamber Sanitization Cycle (508 + GO)**

  The blend chamber/alcove sanitization cycle can be started without running through the entire sanitization process. To do this, enter the quick code 508 and press GO. Enabling this cycle will only sanitize the blend chamber and alcove; it will not rinse or wash them.

- **Start the Blend Chamber Clean Cycle (507 + GO)**

  The blend chamber/alcove clean cycle can be started without running through the entire sanitization process. To do this, enter the quick code 507 and press GO. Enabling this cycle will only wash the blend chamber and alcove; it will not rinse or sanitize them.

- **Start the Blend Chamber Extended Rinse Cycle (506 + GO)**

  The blend chamber/alcove extended rinse cycle can be started without running through the entire sanitization process. To do this, enter the quick code 506 and press GO. Enabling this cycle will only rinse the blend chamber and alcove; it will not wash or sanitize them.

- **Start the Cup Shelf Rinse Cycle (504 + GO or press and hold drinks 1 and 4)**

  The Cold Fusion Dispensing System is designed to automatically start a cup shelf rinse cycle on customer-defined intervals. The cycle will only run if a drink has been made since the last cup shelf rinse. There are two options for starting the cup shelf rinse cycle.

  - First, using the control panel keypad inside the machine enter the quick code 504 and press GO. The cup door will close and the cup shelf rinse will start. The display will show the amount of time left for the cycle.

  - Second, with the service door closed, press and hold buttons 1 (far left button) and 4 simultaneously for approximately 5 seconds. The cup door will close and the cup shelf rinse will start. The display will show the amount of time left for the cycle.

    NOTE: The cup shelf rinse cycle will not run if there is a cup on the cup shelf. Make sure the cup shelf is clear before executing this cycle.

- **Start the System Drink Rinse Cycle (505 + GO)**

  The Drink Rinse Cycle is executed each time a drink is made. This cycle will rinse the blend chamber and alcove. To start the drink rinse cycle manually, enter the quick code 505 and press GO. Press STOP at any time to abort the cycle.

- **Ice Scrub (509 + GO)**

  The purpose of the ice scrub is to scrub the inner walls of the blend chamber.

  - To start an ice scrub enter the quick code 509 and press GO. The cycle will run for approximately twenty (20) seconds.
  - Press STOP at any time to abort and exit

- **Alcove Rinse (510 + GO)**
  - To rinse the alcove only enter the quick code 510 and press GO
  - Press STOP at any time to abort and exit

5.9 Sanitizer Refill

The system contains a sanitizer dock for holding a 1 gallon container of cleaner/sanitizer concentrate. The system also provides notification when it is ready for refill. Once refill notification is provided, the operation time for the system will be limited to ensure that there is always adequate solution for all cleaning and sanitizing operations. If refill is not completed in a timely manner, the system will shut down automatically until the container is replaced.

Whenever the system indicates that it is time to refill the sanitizer, it is important that the sanitizer is replaced before the next sanitize cycle, otherwise the system will disable itself at the time of the next sanitize cycle call. A list of approved acid sanitizers and their sources is provided in Appendix B.

- Open the front door of the Cold Fusion Dispensing System. Locate the thumb latch on the tubing connector on the sanitizer cap. Press the latch and disconnect the tubing from the cap. Remove the sanitizer jug from the machine. Remove the cap by twisting it in the counter-clockwise direction. Place this cap in a full container of sanitizer. Set the full container in the sanitizer dock and re-connect the tubing.

- The system now requires priming. Enter the service code 503 and press GO. Press and hold the F1 button until there are visible suds in the blend chamber. Release the F1 button. Water will continue flowing to purge the water lines of any sanitizer solution. As soon as there are no visible suds in the blend chamber press STOP. It is recommended that an extended rinse cycle be run to purge the blend chamber of sanitizer, to do this enter the quick code 506 and press GO. Repeat if necessary.

WARNING

The sanitizer used in cleaning the Cold Fusion Dispensing System is a caustic (acidic) agent. Refer to the sanitizer label for all warnings. Use caution when handling the sanitizer solution.

Recommended Cleaning and Maintenance Chart			
Task*	Daily	Weekly	Quarterly
Wipe down front of machine	☑		
Clean Alcove Door and inside Alcove Area		☑	
Check/Clean Filter and Condensor			☑
Check/Clean Water Filter			☑
Sanitize Product Lines			☑
Sanitize Alcove			☑
Sanitize Ice Hopper			☑
Sanitize Ice Maker			☑
Grease Solenoids			☑

Table 2: Cleaning and Maintenance Schedule

5.10 Short Term- Daily or Weekly Cleaning

- **Wipe down:**

  Daily or weekly as needed, wipe down the exterior of the unit, base cabinet, alcove door and alcove shelf, and BIB system with a clean damp rag.

- **Alcove:**

  The alcove door can be removed to allow easy access for cleaning as needed.

  - Open the front door (see section 4.1)
  - Lift up on the gear in the center of the alcove (see Figure 19).
  - Rotate the top of the door forward then lift the door out of the alcove (see Figure 20).
  - Clean interior alcove surfaces and door surfaces as needed. Special attention may need to be given to alcove housing area that is visible to customers when door is rotated back and a drink is being made, as well as the upper surface inside the alcove where the product is dispensed.
  - To replace the door, lift the gear and rotate the door until it is in its normal operating position.

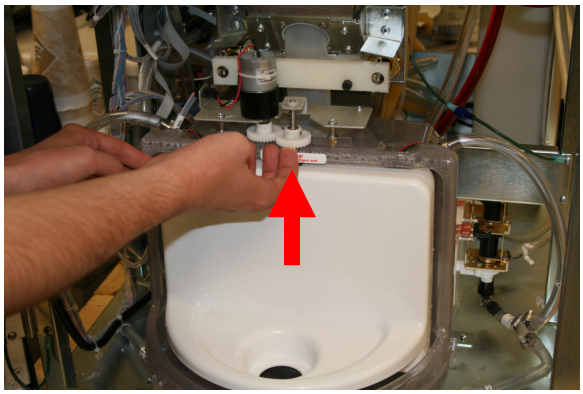


Figure 19: Alcove door gear drive assembly

Figure 20: Removal of Alcove door

- Release the gear. Rotate the door and the gear until the shaft can fall into place, allowing the gear to fully engage.
- Run a cup shelf rinse cycle (504-GO). This will realign the alcove door with the alcove and front door.

5.10 Long Term- Periodic Cleaning

Quarterly, or as required by local health code, sanitize all product lines, ice chute, alcove, ice maker, and ice hopper utilizing the steps below. The best time to perform this cleaning cycle is either before or after work hours when plenty of time is allotted.

- **Sanitize Ice Machine**

  Icemaker Cleaning and Sanitizing Procedures

  - Do not use any of the ice made during cleaning operations.
  - Clean and sanitize ice hopper area when cleaning icemaker.
  - Turn machine off.
  - Shut off water supply.
  - Remove machine lid and ice hopper lid.
  - Remove ice from ice hopper.
  - Mix approved cleaner (1 gallon as directed). Recommended cleaner: Nu-Calgon ice machine cleaner. Mixture: 3-1/3 ounces per gallon of water.

    WARNING: Cleaner must be safe for stainless steel.
  - Turn machine on and add cleaner solution to water feed reservoir until 1 gallon has been used.
  - Drain the water feed reservoir and the ice maker using the bypass hose. The bypass hose is located between the water level control unit and the ice maker.
  - Completely fill the water feed reservoir with water.
  - Drain the water feed reservoir and the ice maker using the bypass hose.
  - Turn machine off.
  - Clean auger/diverter assembly in a sink using cleaner mixture.
  - Sanitize auger/diverter assembly using approved sanitizer. Allow to sit for two (2) minutes and reinstall in icemaker.

    NOTE: Sanitize using approved sanitizer; or household liquid bleach (50 ppm chlorine). Mixture: 1 fluid ounce per gallon room temperature water.
  - Fill the water feed reservoir with approved sanitizer mixture and allow it to sit for two (2) minutes.
  - Drain the water feed reservoir using the bypass hose.
  - Follow the **Sanitize Ice Hopper** instructions on the next page at this time.

- **Sanitize Ice Hopper**

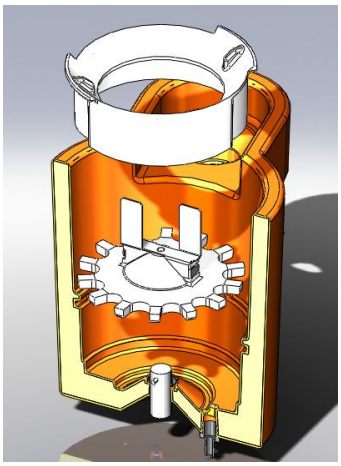


Figure 21: Ice Hopper Exploded View

  - Make certain the machine and ice maker are unplugged from the wall outlet. Make sure that the water supply is also turned off. Put a 'Do Not Use' sign on the machine.
  - Remove the machine lid and ice hopper lid.
  - Manually remove and discard as much of the ice as possible from the hopper.
  - Replace the ice hopper lid and switch the power to the machine back on.
  - On the main control keypad, press and hold the F2 button to dispense any remaining ice pieces into the blend chamber. It may be necessary to occasionally purge the ice from the blend chamber in order to keep the chamber from becoming too full. This may be done by running a drink rinse cycle (code: 505-GO) or an extended rinse cycle (code: 506-GO).
  - Remove the ice hopper lid again. All of the internal components of the ice hopper are completely removable by rotating or snapping into place. Remove the internal components (ice hopper shutoff, dispense disc, and stir tine). See figures below**.** These components may be washed by hand using an approved sanitizer or washed in a dishwasher.

Figure 22: Ice Hopper with Lid

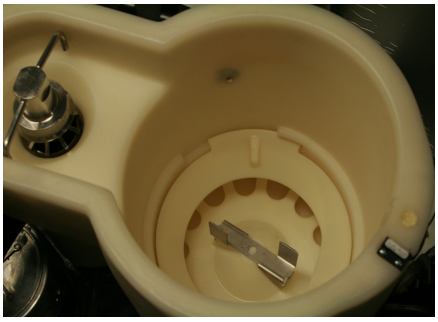


Figure 23: Ice Hopper without Lid

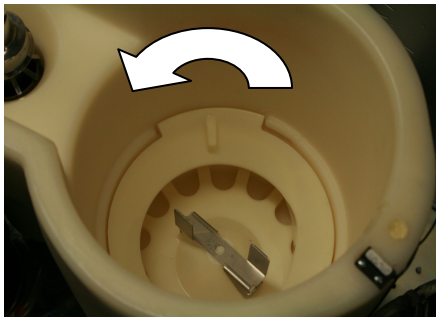


Figure 23: Rotate to Remove

- Spray or wipe the interior surface of the ice hopper with a food-safe mild soapy solution. Follow the manufacturer's instructions for mixing the solution. If recommended by the manufacturer, allow the cleaner to soak the surfaces of the ice hopper before rinsing. Use a scrub brush if needed to help loosen and remove water scale or other debris.

Figure 24: Shelf Removed

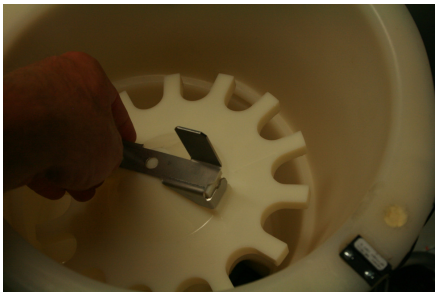


Figure 25: Removing Disk

Figure 26: Disk Removed

Ice Chute Clean/ Sanitize

- While the Ice Hopper is disassembled it is recommended that the Ice Chute be cleaned and sanitized. Using a long flexible brush and a mild soapy solution, reach into the bottom of the Ice Hopper clean all the surfaces of the ice chute (Figure 27).
- Use the brush and clean hot water to rinse all the surfaces of the ice chute (Figure 28).
- Use the brush to wipe a solution of sanitizer on all surfaces of the ice chute.
- Rinse the hopper by slowly pouring or spraying clean, hot water over the surfaces of the ice hopper to rinse away the soapy solution. It is very import to pour slowly as the rinse water will empty through the blend chamber and down the alcove drain. Over-pouring may cause flooding of the alcove drain pan area.

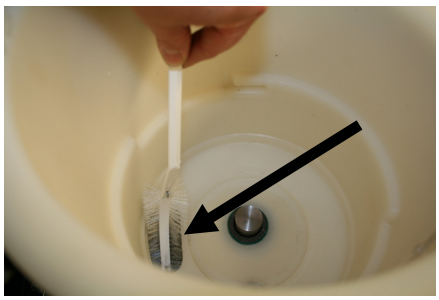


Figure 27: Cleaning Ice Chute from Hopper

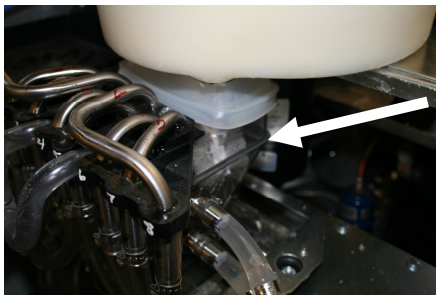


Figure 28: Cleaning Chute with Brush

- Mix 2-5 gallons of sanitizer solution per the manufacturer's instructions (see Appendix B for approved sanitizers). Gently pour or spray the sanitizing solution over the surfaces of the ice hopper. Typically sanitizers are required to remain in contact with the sanitized object for a specific amount of time. Refer to and follow the manufacturer's instructions regarding the sanitizer.
- Allow hopper to drain thoroughly and air dry for five (5) to ten (10) minutes before re-installing internal components and turning on ice maker.
- Turn machine on as well as the water supply.

- **Automated Product Line Sanitizing Instructions (502 + GO)**

  The recommended approach for cleaning the food product lines is to use the automated Clean-In-Place (CIP) sanitization cycle as detailed below. It is recommended this process be done periodically for all product lines and whenever a new product flavor is being used to prevent cross-contamination.

  - Prepare a suitable cleaning solution in a small container that is still large enough to accommodate your hand and a BIB coupler. Note that, as an extra precaution, it is recommended that the cleaning solution be food compatible.
  - Disconnect the desired product line from its BIB connection and clean out any accumulated product on the coupler or in its latching mechanism. This is accomplished by first wiping any accessible accumulated product off of the coupler. Be sure to avoid getting any of the product into the inaccessible areas of the thumb-latch mechanism. After the loose accumulation has been removed, dip the BIB end of the coupler into the prepared cleaning solution and manually operate the thumb-latch to allow the cleaning solution to penetrate into those inaccessible areas and help to remove any accumulated product. Continue this process until the thumb-latch mechanism is clean and operating freely. Wipe off the outside of the coupler as needed.
  - Set the system to begin the CIP process by entering the quick code 502 and pressing GO. The display will read, "Select SanMode: Sanitize All Pumps". Use ↑or ↓ to toggle between 'Sanitize All Pumps' and 'Sanitize SingPump'. Press GO to continue. ('Sanitize All Pumps' should only be used if you have a custom sanitize harness to sanitize all the lines simultaneously)
  - The display will read, "Select Pump: 1". Manually enter the desired pump number. Press GO to continue.
  - The display will read, "Connect Product line to CIP". Connect the cleaned BIB coupler to the CIP connector as shown. Make sure CIP connector is connected to the product line displayed on the control board. Press GO when complete.

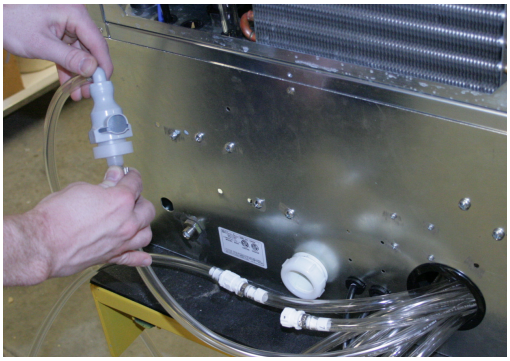
    

    Figure 29: Product Line Sanitizer Hook-Up
  - The display will read, "Make sure product line is connected to CIP". Confirm connection and press GO.
  - The system will start an automated cleaning, sanitizing, and rinsing cycle for the pump, product line, and couplers.
  - Once the system has finished the product tube sanitizing cycle, it will stop operation and signal the operator to disconnect the CIP adapter and reconnect the product BIB. Once the BIB is reconnected press GO.
  - The system will then proceed to prime the product line with product from the BIB. The operator must watch the product line and signal the machine to stop priming as soon as undiluted product has reached the chamber by pressing STOP.

Note: The operator may need to let a prime run a little longer when there is evidence that the initial product has been diluted by the residual rinse water in the line (this is more likely to occur with thinner product concentrates).

- Repeat these steps for all product lines that need to be cleaned and sanitized.
- Once all of the lines are primed, the system will automatically proceed to perform a complete sanitize of the blend chamber and alcove before returning the system to the ready mode. The automated CIP process is now complete.
- To prime manually, follow the instructions in section 4.2 *Dispensing Product Only*

- **Sanitize Alcove**
  - Remove the alcove door
  - Using a mild soapy solution, wipe down all surfaces of the alcove and alcove door. Excess water will drain through the drain opening located at the back of the unit.
  - Use clear, hot water to rinse the surfaces of the alcove and alcove door. A handheld spray bottle works best.
  - To sanitize the surfaces of the alcove and cup door, either spray or wipe the surfaces with the sanitizing solution.
  - Replace the alcove door

- **Check/ Clean Water Filter**

  Quarterly, or as needed, it may be necessary to clean out the water filter located at on back bottom right hand corner of the machine. To do so, simply remove the right side skin from the machine and locate the water filter shown in Figure 30. Remove the filter, clean, and replace.

Figure 30: Water Filter Location

- **Check/ Clean Filter and Condensor**
  - Quarterly, or as needed, it may be necessary to clean the electro-static filter located in the lid on top of the machine. It may also be necessary to clean off the condensing unit located in the back of the machine.
  - To clean the electro-static filter, simply lift it from the top of the machine and remove all dust and particulate using compressed air, CO2 gas, or a vacuum cleaner.
  - To clean off the condensing unit use compressed air, CO2 gas, a vacuum cleaner, or a brush and rag, to remove all dust and particulate. The condensing unit must be free from obstruction and any dust build up in order for the machine to function properly.

- **Preventive Ice Maker Maintenance**

  Preventive maintenance can increase the trouble free life of your icemaker. Many authorized service agencies offer service contracts for your icemaker. Contact your local distributor for further information.

  Monthly

  - Clean the condenser. Use a brush, vacuum cleaner or blow from inside with air or CO2 gas.
  - Inspect water feed reservoir at least once a month until a definite pattern for cleaning and sanitizing has been established.

  Quarterly

  - This is the maximum period of time between cleaning and sanitizing the icemaker. In addition to recommended monthly procedure, and if a more frequent cleaning and sanitizing pattern has not been established, unit must be cleaned and sanitized.

  Semi-Annually

  Semi-Annually in addition to all previously established service procedures perform the following:

  - Check for water leaks in tube connections, water fittings and lower icemaker water seal.
  - Check drain tubes for clogs and aged tubes. Replace if tubes are stained or brittle.
  - Check for signs of condensation. Clean where necessary and replace insulation properly.
  - Check safety circuits for proper operation.
  - Check refrigeration system.
  - Check unit for abnormal noise. Tighten machine and housing screws, if necessary.
  - Check white upper bearings on auger assembly. If bearings are less than 1/16” thick, replace.

Section 6: BASIC PROGRAMMING

This section will cover the basics of programming the Cold Fusion Dispensing System. These steps will allow you to program each drink setting for your specific requirements. In this menu you will be able to view and change your drink settings.

The Cold Fusion Dispensing System is equipped with menu-driven access to all of the settings. This feature allows the user to easily access any of the system settings without requiring access to the quick codes. See Figure 31 for the menu-driven reference chart.

The Cold Fusion Dispensing System can be set up to passcode protect all system settings. If the settings passcode is enabled (the internal display will read, "Passcode:") the system requires the user to enter the passcode before accessing the settings menu or modifying any system settings. Instructions in this section and *Section 7: Advanced Programming* assume the passcode has been entered and the system settings are accessible. See section 7.34 *Passcode Access* for more details.

6.1 Setup Drinks Menu (303+ GO)

The Setup Drinks menu allows the user to change the settings for; the pump dispense, water dispense, ice dispense, blend cycle, and pause setting for each drink.

IMPORTANT

When designing drink recipes for product, water, and ice, quantities must be entered to add up to desired **SMALL** size drink (default 16 oz). Medium and large drink recipes will be calculated automatically by the system according to the total drink sizes entered (see section 6.3).

- To enter the setup drinks menu, either scroll through the DRINK SETTINGS menu until "Setup Drinks" is displayed or enter the quick code 303 and press GO. The display will read, "Modify Drink #1 Pump 1 0.0 oz".

  NOTE: If a Blender Dispenser Memory Module has been used to program the pump names then the pump name will be shown in place of "Pump 1" and the profile volume setting will be displayed.

- Use the buttons on the control panel and as described in Table 3 and Table 4 to navigate through the settings.

Button	Function 1	Function 2
↑	Decrement/Previous Drink	Toggle Enable/Disable
↓	Increment/Next Drink	Toggle Enable/Disable
GO	Store the selection and move to the next field	YES
←	Move to the previous field	Move to the previous field
STOP	Press once to exit the menu	NO

Table 3: Button assignments and definitions

Button	Start-up Mode	Menu Mode	Normal/Idle Mode
F1	Advance to the next step in the sequence (as long as the step has previously been visited)	Advance forward without saving entry	Engage the blend chamber dump valve
F2	Go back to the previous step In the sequence	Revert backward without saving entry	Dispense ice (as long as the button is held down)
F3	N/A	N/A	Dispenses juice (enter pump number and press F3 to dispense)
F4	N/A	N/A	Runs the blender at a ramp/selected speed

Table 4: Function key explanations

- Adjusting Pump (Product) Dispense Volumes
  - Product dispense volumes can be adjusted to fit your specific needs; however, when you find a drink setting that works for you, it is recommended that you do not change it unless absolutely necessary.
  - To adjust the pump settings, scroll to the drink number by using the ↑ or ↓ button as described in Table 3
  - Using the numeric keypad on the control panel, enter the new value (in tenths of an ounce) and then press GO. The new value will be stored to memory and the next drink setting will be displayed. To clear a value to zero (0), enter 0 and press GO.
- Adjusting the Ice Dispense Volume
  - Scroll to the ice setting by pressing either the GO button or the function keys as described in Table 4
  - Using the numeric keypad on the control panel, enter the new value (in tenths of an ounce) and then press GO. The new value will be stored to memory and the next drink setting will be displayed. To clear a value to zero (0), enter 0 and press GO.
- Adjusting the Water Dispense Volume
  - Once values for product and ice are entered, the display will flash 'RECALCULATING WATER VALUE' and the water dispense volume will be displayed. This value is based off of the **small** drink size entered in the DRINK SIZES menu minus the values entered for product and ice.
  - (Small drink size)= 16 oz., (product volume)= 4 oz., (ice volume)= 9.5 oz.;

    16 oz. – 4 oz. – 9.5 oz. = Water: (2.5 oz.). Press GO to continue.
- Adjusting the Shot option
  - The Shot option allows the user to set up a specific drink as a "shot" or supplemental flavor. With this option enabled a customer is not allowed to select the flavor as a primary flavor – it can only be used as a supplement to another flavor.
  - To toggle the feature between 'enable' and 'disable' use the ↑ or ↓ button as described in Table 3.
  - When the desired selection is displayed press the GO button to store the setting and advance.

- Selecting the Blend Cycle

  - The next three settings in the drink parameters are Scycl, Mcycl, and Lcycl. These settings are used to select which blend cycle will be used for each size drink.
  - Scroll to the first blend cycle setting (Scycl) by pressing either the GO button or the function keys as described in Table 4.

  There are six (6) pre-programmed cycles available in the system. (The default cycle #1 is expected to work for all size drinks for most products).

  Table 5: The Six Default Blendtec Blend Cycles

  - Using the numeric keypad on the control panel, enter the desired cycle (1-6). The second line of the display will show the total cycle time of the selected cycle. To store this setting, press GO. The cycle will be stored to memory and the next drink setting will be displayed. To clear a value to zero (0), enter 0 and press GO (A cycle must be programmed into the data set even if the cycle time is zero).

	SpeedA	TimeA	SpeedB	TimeB	SpeedC	TimeC	SpeedD	TimeD	SpeedE	TimeE
Cycle 1	3	5	7	15						
Cycle 2	3	3	5	5	7	15				
Cycle 3	3	3	5	7	7	15				
Cycle 4	3	5	7	10	8	10				
Cycle 5	3	5	7	10	7	10				
Cycle 6	3	5	7	10	8	15				

Table 5: The Six Default Blendtec Blend Cycles

  - Press the GO button to advance to the Mcycl and Lcycl settings; modify the settings as required for the drink. (The default cycle #1 is expected to work for all size drinks for most products).

- Adjusting the Pause Time

  The pause time is the amount of time the blender motor will wait until it begins to blend. During this time the system will dispense all of the drink ingredients into the blend chamber before the blender is engaged, thus reducing the chance of product splashing and ensuring a complete blend. This pause time can be reduced to save cycle time.

  - To adjust the pause setting, scroll to the pause setting by pressing either the GO button or the function keys as described in Table 4.
  - Using the numeric keypad on the control panel, enter the new value (in seconds) and press GO. The new value will be stored to memory and the next drink setting will be displayed. To clear a value to zero (0), enter 0 and press GO.

6.2 Locking Out Drink Combinations (310+ GO)

The Cold Fusion Systems allows customers to mix and match flavors as desired. However, there may be cases where the combination of two flavors is known to be undesirable. The system will allow you to lockout this combination of flavors.

- To access the Drink Combo Lockout menu, either scroll through the menu until "DrinkComboLock" is displayed or enter the quick code 310 and press GO. The display will read, "Drink Combo Lockout", press GO to advance.
- Now the display will read, "Select Drink #". Enter the number corresponding to the pump of one of the drinks you would like to lockout.
- The display will show all the drink numbers along the top with an L or a U below them for locked or unlocked. The number you first selected will have an X below it. Scroll through the drink numbers using the GO button and use the ↑ or ↓ button as described in Table 3 to select L or U.
- Press STOP to exit to the main menu.

6.3 Changing the Drink Sizes (301 + GO)

- The Cold Fusion Dispensing System has adjustable cup sensors capable of detecting up to three different cup sizes, and will allow you to enter total volumes for these (3) drink sizes. To access the Set Sizes menu, either scroll through the menu until "Drink Sizes" is displayed or enter the quick code 301 and press GO. The display will read "Small 16 oz.", where 16 oz. represents the current size in ounces.
- Using the numeric keypad on the control panel and the buttons as described in Table 3 enter the desired size of the small drink and press GO. The setting will be stored in memory and the display will advance to the medium drink setting. Continue this process for the medium and large sizes.

IMPORTANT

It is not necessary to use different values for all three sizes, but the "Small" drink size will always be used for Drink Setup. The "Small" drink size correlates directly with the data set programmed into the Setup Drinks menu (303). When entering specific drink recipes in the Setup Drinks menu, the system will constrain you to values that add up to total the "Small" size entered in this menu. If you wish to change the size of a drink it must be done in this menu, not in the Drink Setup menu. The system uses the recipe entered in the Setup Drinks menu and the small drink size to automatically generate the recipe ratios for medium and large drinks.

The Cold Fusion system has a range of 8oz to 25.5oz, any value entered less than or greater than this range will automatically default to 16 oz.

- Press the STOP button to exit the Drink Sizes menu.

Section 7: ADVANCE PROGRAMMING

This section is intended for the owner/manager and service technician who will take the time to fully understand the Cold Fusion Dispensing System and the information contained in this manual. In this section greater detail is spent on controls and reports that the system can supply.

The Cold Fusion Dispensing System is equipped with menu-driven access to all of the settings. This feature allows the user to easily access any of the system settings without requiring access to the quick codes. See Figure 31 or last page of manual for the menu-driven reference chart.

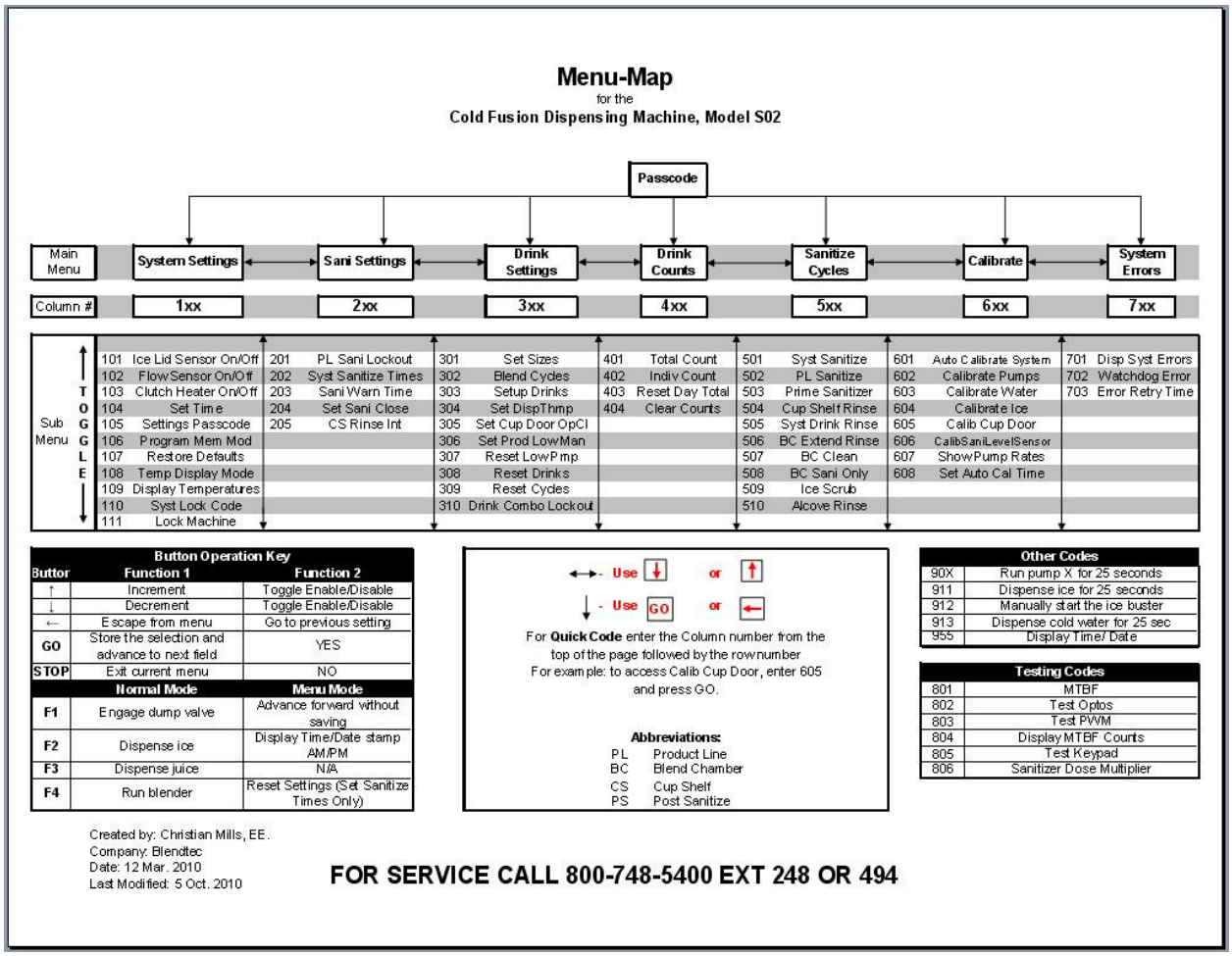


Figure 31: Menu-driven reference chart (see second to last page of manual for larger version)

The quick codes for adjusting system settings can be derived from the column number followed by the line number for the desired settings as found in the menu-driven reference chart in Figure 31. For example, to access the maximum sanitize interval setting, enter the quick code 203 (2 – column number, 03 – line number).

7.1 Setting the Automated Calibration Interval and Time (608 + GO)

The Cold Fusion Dispensing System contains a No-Tend autonomous calibration feature. At a user-defined time of day, the system will check each product for a minimum dispensed volume. If a product BIB meets the dispensed volume requirement it will calibrate itself, so as to ensure that drinks are made consistently every time even as BIB product levels fluctuate. The autonomous calibration interval can be adjusted to fit the needs of each location.

- To set the Autonomous Calibration Interval either scroll through the menu until "SetAutoCal" is displayed or enter the quick code 608 and press GO. The display will read, "AutoCalibStngs: Disabled".
- Use the ↑ or ↓ button as described in Table 3 to enable or disable the Autocalibrate function. Press the GO button to store the settings and advance.
- If the function is enabled, the system will read, "Time of Day: ". Use the ↑ or ↓ button as described in Table 3 to select the desired hour of the day for the machine to autocalibrate. Press the GO button to store the setting and advance.
- The system will now read, "Calibrate after 96 oz. dispensed". Use the keypad to enter the desired volume (default is 96 oz.). Press GO to store the setting and advance. Press STOP to exit.

7.2 Starting the Autonomous System Calibration Cycle (601 + GO)

To manually start the autonomous system calibration cycle either scroll through the menu until "AutoSystCalib" is displayed or enter the quick code 601 and press GO. The system will start the calibration process for water, product, and ice.

7.3 Water Flow Calibration - Manual (603 + GO)

The water flow rate is calculated in much the same way as the pumps. This section guides you through the process of calibrating the water flow for the Cold Fusion Dispensing System.

- To start calibrating water, either scroll through the menu until "Calibrate Water" is displayed or enter the quick code 603 and press GO.
- The pinch valve will close and water will start dispensing until it reaches the level sensor probe, at which time the system will drain the water. This process will repeat three (3) times.

7.4 Calibrate Pumps/ Product Flow Calibration – Manual (602 + GO)

NOTE: The product calibration routine depends on the water dispense rate to function properly. DO NOT ATTEMPT TO CALIBRATE THE PRODUCT UNTIL THE WATER HAS BEEN CALIBRATED.

The Cold Fusion Dispensing System requires calibration of each product for proper system operation. Because fittings, tubing, temperature, and product can all cause the pump to dispense at a different rate, each pump should be calibrated to obtain the product pump rate. This section will guide you through the manual pump calibration process.

- To manually start calibrating the pumps only, either scroll through the menu until "CalibratePumps" is displayed or enter the quick code 602 and press GO
- The display will read, "Calibrate all pumps." Use the ↑ and ↓ arrows to toggle between all pumps and single pump. While the desired option is displayed Press GO to advance.
- **Calibrate All Pumps**
  - When 'all pumps' is selected, the pinch valve will close and the system will start pumping for five (5) seconds. The system will then dispense water into the blend chamber to assist in measuring.

- When the water reaches the level sensor probe the system will drain the water/product solution and repeat the process.
- Following the second dispense the system will calculate and store the pump rate (not displayed). A rinse will commence.
- This process will continue automatically for all pumps.
- Press STOP at any time to exit the menu.

NOTE: For each pump a product flow sensor will check for flow. If no flow is detected following the pump time the system will store a flow rate of zero, rinse the blend chamber, and continue with the next pump.

- **Calibrate Single Pump**

  When 'Calibrate Single Pump' is selected, enter the desired pump number using the numeric keypad and press GO to begin calibration of that pump.

7.5 Ice Dispense Calibration- Manual (604 + GO)

NOTE: The ice calibration routine depends on the water dispense rate to function properly. DO NOT ATTEMPT TO CALIBRATE THE ICE UNTIL THE WATER HAS BEEN CALIBRATED.

- To start calibrating the ice dispense either scroll through the menu until "Calibrate Ice" is displayed or enter the quick code 604 and press GO.
- The system will dispense ice for two (2) seconds while dispensing water. When the water level reaches the level sensor probe the system will drain the ice/water solution.
- This process will repeat three (3) times.

7.6 Display the Pump Rates (607 + GO)

NOTE: If the pumps have not been calibrated, the values displayed will not reflect the actual pump rates.

- To display the pump rates either scroll through the menu until "Show Pmp Rates" is displayed or enter the quick code 607 and press GO. The display will read, "Pmp1: 0.0 oz/sec Pmp2: 0.0 oz/sec".
- Use ↑ or ↓ to cycle through pumps. Two pump rates are displayed at the same time.
- Press STOP to exit this menu.

7.7 Cup Door Calibration (605 + GO)

The Cup Door Calibration routine is used to automatically calculate the amount of time the cup door will rotate open or closed before slowing down. Optimization of the cup door open/close time is necessary to prolong the life of the door motor.

- To start the Cup Door Calibration routine either scroll through the menu until "Calib Cup Door" is displayed or enter the quick code 605 and press GO. The display will read, "CalibrateCupDoor Press GO toStart". Press GO.
- The cup door will close and open three (3) times.
- The system will return to its idle state when this process is complete.

7.8 Calibrate Sanitizer Level Sensor (606 + GO)

- At times it may be necessary to calibrate the sanitizer level sensor/ bubble detector. To do this scroll through the menu until the display reads, “CalibSanLevSen” or enter the quick code 606 and press GO. The display will read, “Press GO to Calibrate Sani Level Sensor”.
- Press GO to continue. The Sanitzer Level Sensor will automatically calibrate and the display will exit to the main menu.

7.9 Ice Hopper Lid Sensor (101 + GO)

The Ice Hopper Lid Sensor will disable the ice delivery and ice maker systems when the lid has been removed. This option allows the user to select whether or not the system will notify the attendant that the lid is not in place and that the system will not operate.

NOTE: To prevent personal injury, the ice delivery and ice maker systems WILL NOT activate when the ice hopper lid is not in place, whether the ice hopper lid sensor is enabled or disabled.

- To enable or disable the ice hopper lid sensor either scroll through the menu until “Ice Lid Sensor” is displayed or enter the quick code 101 and press GO. The display will either read, "Ice Lid Sensor Enabled" or "Ice Lid Sensor Disabled".
- Use the buttons as described in Table 3 to toggle the ice hopper lid sensor on or off
- Press STOP to exit the menu.

7.10 Product Flow Sensor Settings (102 + GO)

The Product Flow Sensor monitors the flow of product during a drink and while priming the product lines. If no flow is detected while a drink is made, the Product Flow Sensor sends a sold-out signal to the main control board. During priming it is used to automatically reset a sold-out drink condition if flow is detected. Each channel (1-7) on the Product Flow Sensor can be enabled or disabled by following the steps below.

- Enter the Product Flow Sensor settings by either scrolling through the menu until “Flow Sensor” is displayed or enter the quick code 102 and press GO. The display will read, “Flow Sensor Stgs Pump1: Disabled”.
- Use the buttons as described in Table 3 to toggle the channel on or off.
- Use the function keys as described in Table 4 to scroll through the different pumps and enable or disable the product flow sensor for each channel as desired.
- Press STOP to exit this menu.

7.11 Clutch Heater Settings (103 + GO)

The Clutch Heater is only meant to be used in high-humidity atmospheric conditions. If enabled, the clutch heater cycles through all eight (8) clutches in the Cold Fusion Dispensing System (at 33% duty cycle) while the system is idle.

- To modify the clutch heater setting either scroll through the menu until “Clutch Heater” is displayed or enter the quick code 103 and press GO. The display will read, “Clutch Heater Disabled”.
- Use the buttons as described in Table 3 to toggle the clutch heater on or off.
- Press STOP to exit the menu.

7.12 Restore Defaults

There are three types of settings that can be restored to defaults: drink settings, blend cycles, and restore all settings. These three will revert key setting back to the company profile defaults. If your system was not programmed with your specific company profile settings then the default settings will revert to Blendtec factory defaults.

- **Reset Drink Settings (308 + GO)**

  This feature will restore the drink settings to the original customer profile settings or to the factory defaults.

  - To access this setting either scroll through the menu until “Reset Drinks” is displayed or enter the quick code 308 and press GO. The screen reads, "Reset Drinks?".
  - Press GO again to confirm that the drink settings should be reset to the defaults. The screen will say "Storing Drinks" and a count will show the progress.

- **Restore Blend Cycles (309 + GO)**

  This feature will restore the blend cycles to their original customer profile settings or to the factory defaults.

  - To access this setting either scroll through the menu until “Reset Cycles” is displayed or enter the quick code 309 and press GO. The screen reads, "Reset Cycles?"
  - Press GO again to confirm that the blend cycles should be reset to the defaults. The screen will say "Storing Cycles" and a count will show the progress.

- **Restore All Default Settings (107 + GO)**

  The Restore All Default Settings feature allows the user to restore all of the system settings to the original customer profile settings or to factory defaults.

  - To access this setting either scroll through the menu until “RestoreDefault” is displayed or enter the quick code 107 and press GO. The screen reads, "RestoreDefaults? DoNot InitSystem".
  - At this time the user may select to restore all settings to the original customer profile settings (“DoNot InitSystem”) or to the factory defaults (“InitializeSystem”). To select Initialize System use the ↑ or ↓ buttons to toggle between the two options.

  NOTE: The Initialize System option is only meant to be used by Blendtec personnel to reset the system after testing and prior to shipment. This option will force an initial startup procedure (setting the time, priming lines, calibrating the pumps, water, and ice). DO NOT USE THIS OPTION UNLESS ABSOLUTELY NECESSARY!

  - Press GO when the desired option is displayed. All system settings will be restored to the original customer profile settings or to factory default settings.

7.13 Locking the Machine

This feature allows the manager/owner to lock out the entire machine, so that the machine is inoperable. The manager/owner can change the lockout code at any time.

- **Change or Set the Machine Lockout Code (110 + GO)**

  - Scroll through the menu until “Syst Lock Code” is displayed or Enter the quick code 110 and press GO. Display reads, "Enter Lock Code:". Enter the current code (factory default is 0) and press GO. The screen now reads, "New Lock Code:"

  - Enter the new code (one to four digits) and press GO. The screen then reads, "Re-Enter code:” Re-enter the new code and press GO.

Write your code down and keep it in a safe place for future reference. If you can no longer remember the code, call Blendtec Technical Support for assistance at 1-800-253-6383 or log on to http://commercial.blendtec.com/contact.aspx.

- **Lock Machine (111 + GO)**

  This menu will disable all functions except for the ice buster.

  - To lock the machine either scroll through the menu until “Lock Machine” is displayed or enter the quick code 111 and press GO. The screen will say, "Do you want to lock the system?"

  - Press GO to verify. The machine will remain inoperable until the correct lockout code is entered and the GO button is pressed.

7.14 Drink Counts

The Cold Fusion Dispensing System automatically keeps record of the total machine drink count, the daily drink count of all drinks made, and the drink count for each individual drink. The daily drink count of all drinks and the individual drink counts can both be reset as needed; the total machine drink count is non-resettable.

- **Total Machine Count (401 + GO or press and hold drinks 2 and 5)**

  - To access the machine count either scroll through the menu until “Total Count” is displayed or enter the quick code 401 and press GO. The total machine count will be displayed. This is a total of all the drinks made on the machine and is not resettable. You can also access the total drink count from the front switch by pressing and holding drinks 2 and 5, the drink count will be displayed for 5 seconds.

  - If the number of cycles has exceeded 65,535 cycles then there will be a multiplying counter that is displayed also. The multiplying counter will increment each time the machine count reaches 65,535 and resets to 0.

  - To exit the machine count screen press STOP

- **Individual Drink Counts (402 + GO)**

  - Each time a drink is made a respective count will be incremented. This count can be viewed by either scrolling through the menu until “Indiv Count” is displayed or entering the quick code 402 and pressing GO. Display will read, "Drink # 1 XX".

  - Use the ↑ or ↓ button to navigate through the drinks

  - When multiple flavors are selected, these drink counts reflect the primary (first) flavor selected only.

  - These counts can be cleared by using the quick code 404 *Clear Drink Counts*. This feature can be used to keep a daily count of each drink for your records.

- **Resettable Total Drink Count (403 + GO)**
    - To view a total of all of the individual drinks either scroll through the menu until "Daily Total" is displayed or enter the quick code 403 and press GO. The display will read the resettable drink total 'Drink Total XX'. This total count is reset to zero when the drink counts are cleared (404 *Clear Drink Counts*).
- **Clear Drink Counts (404 + GO)**
    - To clear individual drink counts (includes the total drink count but not the total machine count), either scroll through the menu until "Clear Counts" is displayed or enter the quick code 404 and press GO. The screen reads, "Clear All Drink Counts?".
    - Use ↑ or ↓ to select a specific individual drink count to clear.
    - Press GO to confirm that the counts should be cleared.
    - Press STOP to abort and exit.

7.15 Advanced Blend Cycle Control (302 + GO)

This feature allows the user to customize up to six (6) blend cycles.

- To access the blend cycle menu either scroll through the menu until "Blend Cycles" is displayed or enter the quick code 302 and press GO. The screen reads, "LoadDefltCycles? Y – GO N – STOP".
- Press GO to load the Blendtec default cycles; press STOP to enter the settings without loading the default cycles. The display will read, "Modify Cycle #1 SpeedA: 0 Time: 0"; the speed value will be flashing.
- Enter the speed for SpeedA. (Speeds start at 1 and continue through nine (9), nine being the most aggressive.) Press GO to store the value and advance to the next parameter.
- The time value will flash. Enter the time in whole seconds that the blender will run at SpeedA and press GO. The time is stored and the display will advance.
- Repeat these steps for each additional desired step in the blend cycle (a step is defined as a change in motor speed). All six (6) cycles can be manipulated.

  NOTE – you can reduce the amount of noise coming from the blender motor by keeping the blender speed under seven (7).
- Use the buttons as described in Table 3 and Table 4 to navigate through the parameters of the blend cycle menu and to modify the cycles.
- Press STOP to exit the menu.

7.16 Product Line Sanitize Lockout (201 + GO)

The Product Line Sanitize Lockout can be set to lock the machine until a product line sanitization has occurred.

- To modify the Product Line Sanitization Lockout settings either scroll through the menu until "PLSani Lockout" is displayed or enter the quick code 201 and press GO. The display will read, "PL Sani Lockout Disabled".
- Use the buttons as described in Table 3 to toggle the setting on or off.

- While the setting is enabled, press GO to select the day of week for the system to lock.
- Use the buttons as described in Table 3 to adjust the settings.
- Press GO again to select the time of day for the system to lock.
- Use the buttons as described in Table 3 to adjust the settings and the function keys as described in Table 4 to review the settings.
- Press STOP to exit the menu.

7.17 Set the System Sanitize Times (202 + GO)

There may be times during the day when a system sanitize cycle is inappropriate. The Cold Fusion Dispensing System allows you to select the system sanitize interval and to determine the start time for each cycle during the day. To set up the desired system sanitize times, follow the steps below.

- Enter the quick code 202 and press GO or scroll through the menu until "SysSaniTimes" is displayed. The display will read, "Max Sanitize Interval: X hr", where X is the current interval setting.
- Use the ↓ or ↑ button to adjust interval. Press GO to store the setting and advance.
- The display will now read, "First Sani Start Time: 2:00 AM". This time is adjustable in 15-minute increments, from 12:15 a.m. to the max sanitize interval (ie: max sanitize interval = 4, start time range = 12:15 a.m. to 4:00 a.m.). Again use the ↓ or ↑ button to adjust the time. Press GO to store the setting and continue.
- The next sanitize time is calculated according to the max sanitize interval. Use the ↓ or ↑ button to adjust the time and press GO to store and continue.
- Repeat these steps to set the remaining sanitize start times.
- Press STOP to exit the menu.

7.18 Set the System Sanitize Warning Time (203 + GO)

Before each System Sanitize cycle starts the system gives a warning for a user-defined period of time. This is the System Sanitize Warning time. Its purpose is to warn the customer that the System Sanitize cycle will soon start. During the warning time, the customer can continue with his/her drink selection. If a drink selection is made, the System Sanitize cycle will be delayed until the Drink Rinse cycle has completed. The sanitize cycle will start immediately following the drink.

- To set the System Sanitize Warning Time enter the quick code 203 and press GO or scroll through the menu until "Sani Warn Time" is displayed. The display will read, "Sanitize warning time: 20 sec".
- Use the buttons as described in Table 3 to adjust the warning time.
- Press GO to save the entry.
- Press STOP to exit the menu.

7.19 Set the Automatic Sanitize-At-Close Time (204 + GO)

If desired, the Cold Fusion Dispensing System can be programmed to start an automatic System Sanitize cycle at the end of the day.

- To enable the Automatic Sanitize-At-Close option and to set the start time either scroll through the menu until “Sani at Close” is displayed or enter the quick code 204 and press GO. The display will read, "Sanitize @ Close Disabled".
- Use the buttons as described in Table 3 and Table 4 to toggle the setting on or off .
- While the feature in enabled, press GO to access the start time. The display will change to "Sanitize Close Time: 12:00 AM" and the 12 (hour) will begin to flash. Use the buttons as described in Table 3 to adjust the hour. When the hour is set, press GO. The minutes will start flashing.
- Use the buttons as described in Table 3 to adjust the minutes and press GO. The AM will start flashing.
- Use the buttons as described in Table 3 to toggle between AM and PM; press GO.
- Press STOP at any time to exit the menu.

NOTE: The default time is 12:00 AM. If the Sanitize close time has previously been set, that time will be displayed.

7.20 Set the Cup Shelf Rinse Interval and Duration (205 + GO)

- To set the Cup Shelf Rinse interval and duration either scroll through the menu until “Cup Tray Rinse” is displayed or enter the quick code 205 and press GO. The display will read, “Cup Tray Rinse Interval 15 min”.
- To adjust or enter the interval time, use the buttons as described in Table 3.
- Press GO to save the entry and advance to the duration setting
- To adjust or enter the duration time, use the buttons as described in Table 3
- Press STOP to exit the menu

7.21 Display the Machine’s Blender Motor Temperatures (109 + GO)

- To Display the machine’s Blender Motor temperature either scroll through the menu until “DisplayTemp” is displayed or enter the quick code 109 and press GO. The display will read, “MotorTemp: XX°F” (Fahrenheit mode) or “MotorTemp: XX°C” (Celsius mode), where XX represents the current temperature. To change the display mode from °F to °C or from °C to °F, see section *7.22 Set the Temperature Display Mode*.
- Press STOP to exit this menu

7.22 Set the Temperature Display Mode (108 + GO)

- To set the machine’s temperature display mode either scroll through the menu until “Temp Disp Mode” is displayed or enter the quick code 108 and press GO. The first line of the display will read, “Temperature Mode”; the second line will display the current temperature display mode. Use the buttons as described in Table 3 to toggle between Fahrenheit and Celsius display mode.
- Press STOP to exit this menu

7.23 Priming the Sanitizer After Replacement (503 + GO)

- After replacing the Sanitizer jug it may be necessary to prime the sanitizer so that it is ready for the next System Sanitize cycle. To do this enter the quick code 503 and press GO. The display will read, "Press and hold F1 to start priming".
- Press and hold the F1 button until the sanitizer is visible in the blend chamber (you should see suds in the water).
- Release F1 to stop priming the pump. When F1 is released the water will continue to run to purge the water lines of the sanitizer. When the water in the blend chamber appears clear of any sanitizer solution press STOP.
- Run an extended rinse cycle (506) to purge the blend chamber of sanitizer (this should be repeated until all sanitizer is purged from the lines).

7.24 Setting the System Clock (104 + GO)

To set the system clock either scroll through the menu until “Set Time” is displayed or enter the quick code 104 and press GO. The display will read, “12 Hr 12:00 AM Mon 1 Jan 2001” and the 12 Hr will begin to flash. Use the buttons as described in Table 3 and Table 4 to navigate through the settings.

7.25 Display the Current Time and Date (955 + GO)

To display the current time and date enter the quick code 955 and press GO. The display will show the current time and date for two (2) seconds. (See *7.24 Setting the System Clock* for instructions on setting the clock.)

7.26 Set the System Error Retry Time (703 + GO)

If, during any of the system cycles the system encounters an error, the machine will disable itself and go into ERROR mode. Setting the System Error Lockout Time will automatically start the cycle again after the set period of time. For example, if the System Error Lockout Time is set to five (5) minutes, after a low water flow error has occurred the system will wait five (5) minutes and try the cycle again. If the system continues to go into error mode after restarting several times, shut the system down using the power switch (located on the left side of the Electronic Control Box inside the front door) and contact a qualified Blendtec service technician or contact Blendtec Technical Support.

- Enter the quick code 703 and press GO or scroll through the menu until “ErrorRetryTime” is displayed. The display will read, "Error Retry Time:10 min ".
- Use the buttons as described in Table 3 to adjust the time or simply enter the desired time using the numeric keypad
- Press GO to save the entry
- Press STOP to exit the menu

7.27 Set the Drink Dispense and Thump Times (304 + GO)

- To set the drink dispense and thump times either scroll through the menu until “Set Disp/Thump” is displayed or enter the quick code 304 and press GO. The display will read, "Dispense 10 Thumper: 20"; the dispense time will begin to flash.
- Use the buttons as described in Table 3 to adjust the dispense time. Press GO to store the setting into memory. The thumper time will start flashing.

- Use the buttons as described in Table 3 to enter the desired thumper time and press GO to store the setting into memory
- Press GO to save the entry
- Press STOP to exit the menu

NOTE: The dispense time is added to the total cycle time that is created using the quick code 302 *Advanced Blend Cycle Control*, as well as two (2) seconds for spout pinch-off and five (5) seconds to slow the motor down before dispensing. Example: If the cycle time (set in 302 *Advanced Blend Cycle Control*) is twenty-five (25) seconds and the Dispense Time is ten (10) seconds, then the total cycle time will be

Total cycle time = Cycle Time + 5 + Dispense Time + 2

= 25 + 5 + 10 + 2 = 42 seconds

NOTE: Dispense and thumper times are the same for each drink that is made.

7.28 Set Cup Door Open/Close Time (305 + GO)

The cup door open/close time is defined as the time it takes for the cup door to rotate from its open position to its closed position. This setting is used by the microprocessor to slow the cup door speed just before it reaches the open/closed position. If the cup door opens/closes too hard or not enough, use this setting to adjust the time. Another good approach would be to initialize a Cup Door Calibration routine, quick code 605 (see section 7.7 *Cup Door Calibration*).

- To modify the cup door open/close time either scroll through the menu until "SetCupDr Op/Cl" is displayed or enter the quick code 305 and press GO. The display will read, "Cup Door Op/Cl time X.X sec", where X.X represents the current cup door open/close time.
- Use the buttons as described in Table 3 to modify the settings or enter the new setting using the numeric keypad. Press GO to store the new setting.
- Press STOP to exit the menu

7.29 Manually Set Pump Low (306 + GO)

- To manually set a pump low and set a drink as sold-out either scroll through the menu until "SetProdLowManl" is displayed or enter the quick code 306 and press GO. The display will read, "Enter pump: 0".
- Using the numeric keypad enter the pump number (1-7) and press GO
- At this time you will be given the option to select another pump or exit. Press GO to select another pump and STOP to exit the menu.

7.30 Reset Low Pumps / Drink Sold-out

The Cold Fusion Dispensing System can reset a low pump or reset drinks from a sold-out condition in three (3) different ways: through the menu, selecting pump number and holding the F3 button, or by using the Automatic Drink Reset feature.

- **Automatic Drink Reset feature**
  - Locate the empty product container and replace it with a full container of the same product

- With the front door closed, from the front switch panel determine which sold-out drink was replaced in the previous step.
- Press and hold the switch for approximately three seconds. During this time the display to the right of the buttons will read, “Sorry, selection is sold out” for about 2 seconds. Keep holding the button.
- The system will start priming the product line. After priming is complete the display will read, “Reset complete!’. The system will then automatically begin to calibrate the product line that has been reset.

NOTE: The Automatic Drink Reset feature uses the Product Flow Sensor in resetting the drink. If no flow is detected after twenty (20) seconds the system will stop pumping and display the message, “Check connection to BIB Pump X”, where X is the pump number. Double check the connection to the BIB making sure it is secure and sealed. Select the drink button once again to start priming. If the same problem occurs a second time the display will read, “Reset Failed” and the system will exit the process. Repeat these steps. If the problem continues contact a qualified Blendtec service technician.

- **Resetting a pump through the menu (307 + GO)**
  - Scroll through the menu until “Reset Low Pump” is displayed or enter the quick code 307 and press GO. The display will read, “Select ResetMode Reset SinglePmp”. Press GO.
  - The display will read, “Reset pump 1 Press GO toStart”. At this point the pump number can be selected by using the buttons as described in Table 3 or enter the desired pump number using the numeric keypad.
  - After the display shows the desired pump number, press GO. The system will start priming the selected pump. Press STOP when priming is complete.
  - The system requires confirmation that the priming is complete. Press GO if priming is complete and STOP to continue priming.
  - If GO was selected the system will reset the drink. Repeat these steps for any other pumps that need to be reset.
  - If no other pumps are low then the system automatically starts a drink rinse cycle to clean the blend chamber.
  - Press STOP to exit the menu
- **Prime pump via F3 Button**
  - With the front door open select the pump to be primed by using the numeric keypad to enter the pump number
  - Press and hold the F3 button. Once steady flow is detected the second line will read, “Flow Detected!”
  - Release the F3 button when product is flowing into the blend chamber

7.31 Display System Errors (701 + GO)

- The Cold Fusion Dispensing System will log its most recent system errors (any time a "System Disabled" message appears). To view these errors enter the quick code 701 and press GO. The display will read, "ErrX:", where X represents the error number, along with the error. The second line will display the component that failed.
- Use the buttons as described in Table 3 and Table 4 to traverse through the errors; use the F2 button to display the time/date of each error.
- Press STOP to exit

7.32 Adjusting the Sanitizer Dosage Levels (806 + GO)

The Cold Fusion Dispensing System will come with pre-defined cleaner and sanitizer dosage levels. At times it may be necessary to adjust the dosage of either or both of these. THESE SETTINGS SHOULD ONLY BE ADJUSTED UNDER EXTREME CIRCUMSTANCES!

If the sanitizer dosage levels setting need to be adjusted please call Blendtec Technical Support at 1-800-253-6383 for assistance.

7.33 Set the Settings Passcode (105 + GO)

- To set the settings passcode either scroll through the menu until "Stgns Passcode" is displayed or enter the quick code 105 and press GO. The display will read, "SettingsPasscode Enabled".
- Use the buttons as described in Table 3 to enable or disable the settings passcode option. With this option disabled, the drink and machine settings are fully accessible at any time. Blendtec highly recommends keeping the settings passcode enabled to protect the system settings.
- With the settings passcode enabled, press GO. The display will read, "OldPasscode:XXXX NewPasscode: ", where XXXX represents the current machine passcode. Enter a new passcode (this code will be masked by ****) and press GO. The old passcode value will be shown.
- The first line of the display will change to, "ConfirmPscd: ". Re-enter the new passcode and press GO.
- If the second new passcode is not identical to the first then the display will read, "Passcodes did not match" for about two (2) seconds and the new passcode will have to be re-entered.
- If both passcodes are identical then the display will read, "Change passcode? Y - GO; N - STOP". Press GO to store the new passcode. The display will read, "System passcode has been reset!"

WRITE DOWN THE NEW PASSCODE AND STORE IT IN A SAFE PLACE FOR FUTURE REFERENCE!

- Press STOP at any time to exit the menu

7.34 Passcode Access

Each of the programming menus of the Cold Fusion Dispensing System is passcode-protectable. If the system passcode is enabled, then the user must enter the passcode before modifying any settings. If the interior display reads, “Passcode:”, enter the 4-digit passcode as described below:

- If no passcode has been set by the user then the default passcode is 2828. Enter the passcode and press GO.
- If the passcode has been reset by the user with a personalized passcode using the quick code 107 (see 7.33 *Set the Settings Passcode*), then that passcode must be used to access the menu and system settings. Enter the new passcode and press GO.

  WRITE DOWN THE PASSCODE AND STORE IT IN A SAFE PLACE FOR FUTURE REFERENCE!

- If the personalized passcode has been misplaced or forgotten contact Blendtec Technical Support (1-800-253-6383) for assistance in resetting the system default passcode.

Section 8: TROUBLESHOOTING

Should any problems be encountered during normal use, please refer to this section first for assistance.

Topic	Problem Description	Corrective Action (Manager)	Corrective Action (Technician)
Power	**No power to the machine (LCD screen and character displays are off)**	Ensure the power cord is plugged in.	Ensure the power cord is plugged into a live, grounded 20 Amp. 120 VAC circuit.
		Check the power switch located just inside the front panel – make sure it is in the ON position.	Ensure the machine is plugged into a dedicated circuit (the Self-Serve Dispensing System requires **TWO** dedicated 20 AMP circuit breakers).
		Check the GFI and circuit breaker status – make sure it has not tripped. If it has (the red light next to "FAULT" will be lit), press the reset button to reset.	Check the main power line from the source to the electronics box for cuts, nicks, and connectivity.
		If GFI trips upon reset call a qualified Blendtec service technician.	Check power harness inside the electronics box for proper connection.

Blender	**Blender stopped working**	Check for "Blender Overload", "Over temperature", or "Check Thermistor or Blend Chamber" error message on character display.	While the machine is idle press and hold the F4 button on the keypad to run the motor
			Check all harness connections for proper connectivity and for continuity.
			With a small test lamp (rated at 120 VAC) test the output voltage on the harness at the blend chamber.
			Replace the S3 Blender/Pump Control Board (P/N 15-326).
			Replace the blend chamber.

Ice	**Ice stopped dispensing or dispense disk is not turning.**	Press and hold F2 on the display to dispense ice.	Check for obstructions (foreign objects) and blockage in the ice hopper and its chute.
		Check inside display for hopper lid alert. Ensure the ice hopper lid is firmly and completely in place; try cycle again.	Check the condition of the hopper inserts.
			Using a test lamp, test the voltage at the ice motor connection.
		Ensure there is ice in the hopper.	Remove the electronics box cover and check the output for the ice motor.
			Replace ice motor.
	Ice dispenses when not in use	The Self-Serve Dispensing System is programmed with a timed ice buster that will activate the ice auger and dispense ice at regular intervals when the machine is on, but not in use. This helps keep the ice cubes from possibly freezing into one big block of ice over time. The timer resets after the last drink made, meaning if the machine does not make a drink during a prescribed period of time, then the ice auger will turn on for a preset period of time. The settings for the ice buster are adjustable.	

BIB/ Product	**Product bag is leaking**	Replace the bag.	
		Call your product distributor.	
	Product Sold Out	Press and Hold product button until LCD display reads "Resetting product line."	Ensure proper BIB installation. (Filters, hose length, box orientation).
			Run an Auto-calibrate cycle.

Drinks	**Drink is too runny**	Ensure the ice hopper is full.	If ice hopper is full then re-evaluate drink program settings.
			Recalibrate water, ice and pumps.
	Drink is too thick or cavitates in blender	Ensure that product bags are not empty and lines are not kinked.	Check the water supply, making sure it is on and unblocked (use 913-GO to dispense water).
		Check the water supply making sure it is on and unblocked (use quick code 913-GO to dispense water).	Check the water, product, and ice amounts in the drink programming. Cavitation is caused when the liquid and ice mixture in the blender jar is too thick and an air pocket (or bubble) is created around the spinning blender blade. This leaves the drink stuck to the sides of the jar and full of large ice particles. Be sure to put in enough product to produce a good flavor then add water until the drink does not cavitate when it is blended. If your drink is too watery, you can add more ice or less water until you get a drink that will form a smooth peak when dispensed into a cup.
			Run an Auto-calibrate cycle.
	Little or no flavor in drinks	Ensure that product bags are not empty.	Check for adequate pump time in the drink program.
		Ensure that the product line is completely primed.	Use pump# + F3 to check the line for flow.
		Check that the product hoses are not kinked.	Check for plugged lines due to hard/thick product.
		Call Blendtec Technical Support if the product does not dispense.	
	Too much flavor in drinks	Contact a qualified Blendtec service technician.	Check the function of the system to see if more than one pump turns at a time, if a pump turns that was not requested, or if a single pump turns as long as the ice is dispensing.
			Call Blendtec Technical Support.
	Drink was selected but the cup door did not rotate	Ensure the light above the selected drink is flashing.	Check the alcove door for clearance issues.
		Check the character display in case a cleaning or drink preparation cycle is running.	Perform a soft reset – press and hold buttons 1 & 7 for about 8 seconds.
		If drink light is not flashing and the display is clear of other cycle messages or error messages, select drink again.	Perform a hard reset by opening the front door and recycling the system power using the main power switch.
			Using a multi-meter check the voltage on the door motor connector.
			Replace the door motor.
	Drink does not completely evacuate blend chamber	Check the thumper time setting.	Remove the electronics box cover and check the thumper motor output.
		Drink may be thick (see above).	Check the voltage at the thumper using a test lamp.
			Check the drink parameters and adjust as necessary.
			Make sure the pinch valve solenoids are not sticking – add small amount of grease and try again.
			Replace pinch valve solenoids if necessary.
	Large chunks of ice in drink or poorly blended drink or dump chute clamp is not fully closing	Open the front door and manually push on clamp bar (above alcove) to ensure free motion.	Check the voltage on the harness at the solenoids.
		Press F1 on the control panel to activate dump chute clamp.	Open the electronics box and check the output of the solenoids (press F1 to activate).
		Contact a qualified Blendtec service technician.	Replace the output driver board (P/N: 15-329).
			Replace the dump solenoids.
			Lengthen blend cycle.

Pump Cube	**Pump is not pumping**	Check the connection to the product bag.	Ensure the pump motor is working by priming a line.
			Ensure the correct BIB line is connected to the corresponding pump.
			Check product lines for kinks and leaking.
			Using a test lamp and multi-meter, check voltage to the pump motor and clutch.
			Remove the electronics box cover and check the output of the clutch (LED on side of board should be lit). If LED does not light, wait 5 minutes and try again.
			Replace the Blender/Pump Control Board (15-326).
			Replace the output driver board (P/N: 15-329).
			Replace the pump cube.
	System starts pumping product and running cycles without user input	The Self-Serve Dispensing System will automatically calibrate, rinse and clean itself. Refer to the character display to the right of the drink buttons for information on system activity.	
		After a product is detected as sold-out the system will check the product line again by pumping for 5 seconds. This process is followed by a rinse. This is a normal function of the machine.	

Water	**Water does not dispense or low water flow error**	Check that the water is on and that there are no kinks in the hose to the machine.	Check that the water is on and that there are no kinks in the hose to the machine.
			Use quick code 913-GO to dispense water.
			Check water flow regulator.
			Check water valve voltage.
			Remove the electronics box cover and check the output of the water (Drink fill) relay.
			Clean the water filter.
			Call Blendtec Technical Service.
			Add booster pump.
	Standing water underneath the machine	Shut off water line, turn off machine and contact a qualified Blendtec service technician.	Check for leaks in the supply lines.
			Check for a clogged drain (alcove, hopper, and ice maker).
			Check all lines, fittings, and clamps.
			Check BSV/CIP harness for leaks.

Service Lights/ Display	**Service LED light is lit or flashing**	Check the LCD display window for specific error message.	If problem still exist after correcting error, contact Technical Support at Blendtec for further help.
		Contact a qualified Blendtec service technician if necessary.	
	Display reads "No Cup Detected" when cup is in place	Ensure the cup being used is not clear or transparent.	Open the front door and remove the alcove door Using a surface-tension reducing agent (such as Windex, JetDry, RainX) wipe down the sides of the alcove adjacent to the cup sensors.
		Ensure the front door is closed. Ambient (or stray) light may cause the cup size sensors to malfunction.	Recalibrate the cup size sensors.
		Open the front door. Remove the alcove door. Wipe down the interior of the alcove. Replace alcove door and try again.	Replace the cup size sensor boards (P/N 15-354)

Alcove	**Alcove door does not open or close completely**	Check for obstructions in the alcove (cup. napkin, etc.)	Check for obstructions.
		Open the front door and run a cup shelf rinse (504), paying attention to the movement of the door. If the door operates correctly, contact a qualified Blendtec service technician to fix the front door.	If not already performed by manager, recalibrate the alcove door.
		Recalibrate the alcove door.	Modify the alcove door open/close time.
			Remove the electronics box cover and check the cup door output.
			Replace the output driver board (P/N: 15-329).
			Replace alcove door motor.

LCD TV	**Display is blue and Reads " NO Card"**	Check that the CF memory card is seated correctly.	
		Ensure that the card is functional. Replace the card if damaged.	
	Display shows folder locations	Ensure that media has been properly installed on the card. Replace the card if damaged or non-functional.	

Ice Maker	**The ice maker won't turn on**	Ensure that the ice maker is connected to a dedicated 20 AMP circuit.	Check the center connection.
		Ensure proper water flow to the ice machine.	Check functionality of ice sensor.
		Ensure the ice sensor is not blocked.	
		Check lid placement.	
		The ice machine is programmed with a 5 minute disable time. Wait for 5 minutes and check again.	
	Won't make ice	Contact a qualified Blendtec service technician.	Check the ice auger motor functionality.
			Check the charge/run pressures, add/recharge if necessary.

Table 6: Troubleshooting

Note to Service Technician: The 24 VDC relay boards (P/N: 15-329) contain a resettable fuse for each output. If at any time while testing one of the input LEDs (on the large main relay board) is illuminated and its corresponding output LED (on the edge of the 24 VDC relay board) is not lit, allow the machine to sit for a few minutes and try again. This will allow the fuse time to cool down and reset. If the problem continues after 10 minutes, replace the 24 VDC relay board.

Section 9: ERROR MESSAGES

Table 7 contains a list of the system error messages, descriptions, and corrective action to be taken.

Error Messages	Explanation	Required Action
No Zero Crossing	The zero crossing circuitry is bad.	Replace the Electronic Assembly, SSS Control Board (P/N 15-325) or SSS Relay Board (P/N 15-338).
Product line sanitization required	The machine is in the sanitation lockout mode.	Run the product line sanitization (quick code 502) to unlock the system
Low/High H_2O Flow	The system detected low or high water flow	View the error codes to discover which component caused the failure. Check and/or replace the component
Blender overtemp	The blender motor reached its over-temperature range – it's too hot	Allow the system to sit idle for 30 minutes to allow the motor to cool. Lock the machine for 30 minutes (113) Allow the blender motor to cool for 30 minutes and retry a few cycles. If the blender motor temperature continues to rise rapidly, replace the blend chamber.
Check drink door	The alcove door is not operating properly	Check for obstructions in the alcove Open the front door and run a cup shelf rinse, paying attention to the movement of the door. If the door operates correctly, contact a qualified Blendtec service technician to fix the front door Recalibrate the alcove door (605) Modify the alcove door open/close time (305) Remove the electronics box cover and check the cup door output. Replace the output driver board (P/N: 15-329) Replace alcove door motor
Blender overload	The blender motor is not turning or the speed sensor is not operating properly	While the machine is idle press and hold the F4 button on the keypad to run the motor. With a small test lamp (rated at 120 VAC) test the output voltage on the harness at the blend chamber Replace the S3 Blender/Pump Control Board (P/N 15-326) Check all harness connections for proper connectivity and for continuity. Replace the blend chamber
Cup sensor error	The system attempted to make a drink when a cup was detected before the alcove door started rotating	Ensure the cup being used is not clear or transparent Ensure the front door is closed. Ambient (or stray) light may cause the cup size sensors to malfunction. Open the front door and remove the alcove door. Using a surface-tension reducing agent (such as Windex, JetDry, RainX) wipe down the sides of the alcove adjacent to the cup sensors. Replace the cup size sensor boards (P/N 15-354)
Check hopper lid	The ice hopper lid has been removed – the machine will not dispense ice	Ensure the ice hopper lid is in place and try again Check the ice hopper lid sensor by placing a magnet next to the sensor (located in the front-center of the ice hopper. Replace ice hopper lid sensor
Fill Sanitizer	The sanitizer reservoir is ready to be refilled	Open the front door. Locate the sanitizer jug on the upper-left side of the machine. Replace with approved sanitizer.

Table 7: Error messages

Section 10: WARRANTY INFORMATION INCLUDING SERVICE

Blendtec warrants the Cold Fusion Dispensing System for twelve (12) months parts and labor or twenty-four (24) months parts only, effective at time of purchase. Should there be any difficulty in using your Cold Fusion Dispensing System, please proceed as follows:

For Warranty Service:
Call Technical Support at 1-800-Blendtec (253-6383). We will discuss the problem together and, with you, decide on the best way to fix it. We may send a service technician to your facility and ship parts for the repair or we may ship a replacement machine to you.

For Non-Warranty Service:
Call Technical Support at 1-800-Blendtec (253-6383). We will discuss the problem together and, with you, decide on the best way to fix it. We may send a service technician and parts to your facility or ship a replacement machine to your facility. You will be billed for the cost of repair and any shipment. All costs related to parts and replacement will be discussed beforehand. Service cost will vary with provider.

Section 11: BLANK DRINK TEMPLATE

	Pmp 1	Pmp2	Pmp 3	Pmp 4	Pmp 5	Pmp 6	Pmp 7	Shot	Watr	Ice	Scycl	Mcycl	Lcycl	Pause
Drink 1														
Drink 2														
Drink 3														
Drink 4														
Drink 5														
Drink 6														
Drink 7														

Table 8: Blank Drink Template

APPENDIX A

Detailed BIB Considerations and Recommendations

A-1 BIB Considerations and Recommendations:

The Blendtec Cold Fusion Dispensing System is used with a variety of food products packaged in Bag-in-Box (BIB) packages. These products typically have a wide range of viscosities and are frequently loaded with pulp or other food solids. The Cold Fusion Dispensing System has been designed and configured to work well with a wide range of these products; however, there are some very important factors that must be considered for optimal operation of the system. Some of the most significant are:

- **Coupling Flow**
  The Cold Fusion Dispensing System is provided with BIB fittings of the Universal Dispensing Coupler (UDC) series from Colder Products Company (CPC). The choice of BIB fitment system is very significant since there are a wide range of options available. The choice of the fitment system is also critical to the proper operation of dispensing systems, including the Cold Fusion Dispensing System, especially when thicker products or products with solids are used.

  Blendtec recommends, the supplied CPC UDC series BIB fitment. Because of their adverse effect on system operation and system durability and reliability, Blendtec cannot recommend any other BIB systems other than the CPC UDC.

- **Food Product System Sanitizing**
  The Cold Fusion Dispensing System is equipped with provisions for the automated sanitizing of the food product line system (including the BIB fittings and all food product tubing and fittings). This system greatly simplifies the operation and is expected to substantially reduce the time and effort required.

  In order for this system to work, it is critical that there be some means of coupling the BIB coupler fittings back to the Clean-In-Place (CIP) system. Of the flow approved systems available, only one has the provisions available for such a CIP capability. This is the CPC UDC system, which also has the best flow characteristics of any of the systems that have been evaluated. The BIB system provided with the Cold Fusion Dispensing System includes the needed CIP adapters, and is strongly recommended for use with the Blendtec Cold Fusion Dispensing System.

- **Food Product Concentrate Characteristics**
  The performance of the Cold Fusion Dispensing System is impacted by both product concentrate thickness (viscosity) and by the size of food solids (pulp) in the concentrate. Because of the impact on pump rates, it is important to calibrate each pump to the characteristics of the product. It is also important to ensure that the concentrate characteristics do not adversely impact the performance and reliability of the system. The following criteria have been set to provide reasonably determined acceptability guidelines for suitable product concentrate characteristics:

  Effective Thickness (Viscosity) Criteria: The check for effective product thickness, which could include the impacts of temperature, food solids, and viscosity of the fluid, is as follows: With a product feed tube length of no more than 12 feet and an input source of an open 3/8” ID tube, or thru 3/8” ID tubing from a BIB using a 3/8” or larger CPC UDC series BIB coupler, and with the product at the expected operational storage temperature – the calibrated flow rate of the product through the system must be $\geq$ 0.7 oz/sec.

Use of a product where the calibrated flow under the given conditions is < 0.7 oz/sec indicates excessive loads on the systems pumps and hoses and could adversely affect the service life of the pumping system. Therefore, pumping liquids that don't meet this flow requirement will void the warranty. Blendtec can perform this test for you.

Food Solids (Pulp) Size Criteria: The criteria for the size of food solids relative to system operation is based on the relative dimensions of various restrictions present in the system. The density of those solids in the concentrate will impact the effective thickness of the concentrate and is covered by the effective thickness criteria. The allowable size criteria for solids to ensure acceptable system operation are as follows:

The maximum acceptable dimension for any food solids in the concentrate is ≤ 0.016" (0.4 mm). This would refer to the largest dimension in any non-spherical food solid.

The primary expected impact of excessive food solids sizes on system operation would be an increased potential for accumulation and clogging of the system, which would, in turn, be expected to result in irregular delivery of product to the drink. Accumulation and clogging downstream of the pump could also cause excessive wear in the pumps and should be avoided. The test of acceptability in such cases would be to run an effective thickness test of the system with the accumulations in-place. So long as the size criteria are met and the effective flow rate test, with accumulation in place, still meet the flow rate acceptability criteria, food solid size and density would not adversely affect warranty of the system.

- **Product Stratification Effects**

  The characteristics of food concentrates are sometimes such that a product will tend to stratify (separate) over time, with heavier components settling to the lower portion of the storage bag while only thinner, lighter components are left at the top. For the customer, this leads to varying drink quality, depending on where a particular BIB happens to be in its usage cycle. From a system operation standpoint, this could also potentially lead to excessive product effective thickness problems.

  The BIB is emptied from the bottom. Assuming that the product starts out well mixed from handling, the dispensed product thickens initially as product stratification develops over time, and later thins as the heavier bottom layer is consumed and the lighter top layer(s) are encountered. These product flow characteristic changes can also affect the pump rate, further amplifying variations in the consistency of the drinks produced. Such characteristics are strictly inherent to the food product formulation, and cannot be automatically corrected or counteracted by the system.

  Such problems have been encountered in the past with a variety of food product formulations. Unless the thickening of the layers causes the effective thickness of the food concentrate to exceed the system criteria, this effect has no impact on the system warranty. However, the operator needs to make certain that such effects are not present when drink consistency problems are encountered. Corrections of such problems are not covered in any way under the system warranty.

A-2 Ambient Condition Considerations and Recommendations:

There are several temperature effects that can have a significant effect on drink quality which cannot be readily compensated for by the system. Two of which are product temperature and ambient temperature. Since these are not compensated for by the system, the operator needs to be aware of their impacts and what to do to reduce their influence on the product.

- **Product Temperature Effects**
  Product Temperature effects are generally seen when a product BIB is removed from a refrigerated or other differentiated temperature area (such as outside or off of a truck) immediately prior to being tied into the system.

  Because of the effect that temperature has on effective product thickness, this will generally impact the effective pump rate of the product, and thus the drink quality, until the product temperature equalizes with the temperature that the pump calibration is based on. In conjunction with this, it is important that the pump calibration be performed using product BIBs that have been allowed to temperature stabilize to the nominal ambient temperature at which the system is expected to operate.

- **Ambient Temperature Effects**
  In addition to the effect that ambient temperature has on the product temperature after it has been integrated with the system, it also has an impact on the state of the ice in the ice hopper. This, in turn, can have a significant impact on the way that the ice is dispensed, and therefore on the drink quality.

  The system combination of the ice machine production rate (if used) and ice hopper size are designed to ensure that there is always ice available, regardless of customer demand. The characteristics of the ice in the system will tend to change throughout the day in a generally systematic manner as a result of the varying dispense rates for the drinks, as related also to the peak usage times. Widely varying ambient temperatures can greatly aggravate both those changes in the ice characteristics as well as product temperature effects and should be avoided if possible.

APPENDIX B

B-1 Confirm List of Sanitizers:

Identified Sanitizers for Blendtec ® Cold Fusion Dispensing System

Safety Note: To provide for safe refilling of the system, any acceptable sanitizer must be available in containers of not more than 1 gallon capacity (to avoid overfilling the on-board reservoir and subsequent spilling of the concentrate). The system should not be refilled until the low-sanitizer signal is received, and no more than one gallon should be added when refill is accomplished.

The concentrate containers need to have spouts with standard 38 mm threaded gallon jug closures to be compatible with the supplied refill adapter, or to come ready equipped with a CPC 38 mm, valved UDC cap. This enables the refill of the on-board reservoir through a closed channel to avoid spillage of the concentrate.

List of Currently Identified Sanitizers Which Are Known to Meet the System Criteria
The following sanitizers have been identified as meeting the Blendtec Cold Fusion Dispensing System functional criteria. This list is informative only and is not exhaustive. There may be other sources which also meet the below criteria. Any source not listed below, which can be confirmed to meet all of the requirements, would also be functionally acceptable for use in this system.

Final concurrence must be obtained from Blendtec, with approval from NSF prior to using any alternative sanitizers not listed below.

List of Sanitizers Identified As Functionally Acceptable and Approved by NSF

Supplier:

Birko Corporation
9152 Yosemite St.
Henderson, CO 80640-8027
Ph: 1-800-525-0476 Fax: 303-289-1190
www.birkocorp.com

Product Info: **Ala-Quat** 30% phosphoric acid Gallon Jug
5th generation QUAT

RMC [Rochester Midland Corp.]
333 Hollenbeck St
Rochester, NY 14621
Ph: 585-336-2200 Fax: 585-336-2357
www.rochestermidland.com

Product Info: **Acidiquat** 30% phosphoric acid Gallon Jug
Liquid Acid Cleaner 5th generation QUAT
And Sanitizer

Spartan Chemical Company, Inc.
1110 Spartan Dr.
Maumee, OH 43537-1725
Ph: 1-800-537-8990 Fax: 419-724-7500

www.spartanchemical.com
e-mail: oakite.products@chemetall.com

Also Distributed by:

Brady Industries, Inc.
1130 S. 3800 W.
Salt Lake City, UT 84104
Ph: 801-973-6166 Fax: 801-973-4144
www.bradyindustries.com
e-mail: terrel.kofoed@bradyindustries.com

Product Info: **Acid** 30-35% phosphoric acid Gallon Jug
Sanitizer FP 4th generation QUAT
Added surfactant

Oakite Products, Inc.
675 Central Ave.
New Providence, NJ 07974
HQ & Eastern Branch
Ph: 1-800-526-4473
Central Branch
Ph: 1-877-941-3800
Western Branch
Ph: 1-800-331-1197
www.oakite.com
e-mail: oakite.products@chemetall.com
Shop online at: www.oakitestore.com

Product Info: **Oakite** 20-30% phosphoric acid [May need to
Sanitizer 2 5th generation QUAT create label for
Added surfactant a 1 Gallon Jug]

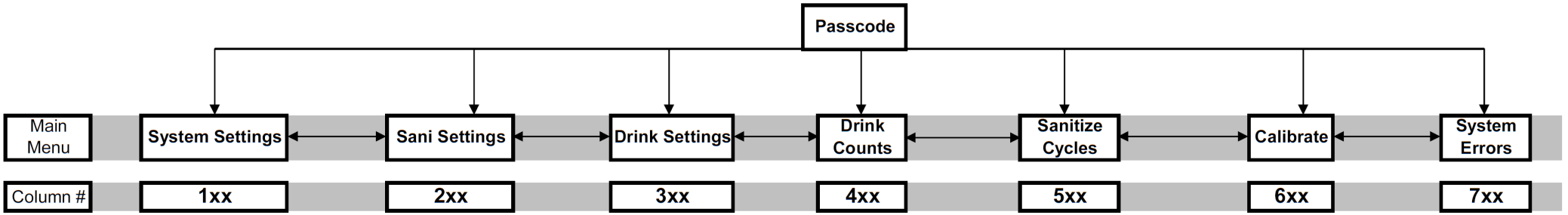
QVS, Inc. [Also: Kleen-San Systems]
238 Industrial Park Dr.
Soddy Daisy, TN 37379
Ph: 1-800-270-1235 Fax: 423-332-9499
www.qvsinc.com
e-mail (Pres & CEO): anelson@qvsinc.com

Product Info: **CL 510** 30-31% phosphoric acid Gallon Jug
Acid Sani-Quat 5th generation QUAT

Menu-Map

for the

Cold Fusion Dispensing Machine, Model S02



Sub Menu — TOGGLE

1xx		2xx		3xx		4xx		5xx		6xx		7xx	
101	Ice Lid Sensor On/Off	201	PL Sani Lockout	301	Set Sizes	401	Total Count	501	Syst Sanitize	601	Auto Calibrate System	701	Disp Syst Errors
102	Flow Sensor On/Off	202	Syst Sanitize Times	302	Blend Cycles	402	Indiv Count	502	PL Sanitize	602	Calibrate Pumps	702	Watchdog Error
103	Clutch Heater On/Off	203	Sani Warn Time	303	Setup Drinks	403	Reset Day Total	503	Prime Sanitizer	603	Calibrate Water	703	Error Retry Time
104	Set Time	204	Set Sani Close	304	Set DispThmp	404	Clear Counts	504	Cup Shelf Rinse	604	Calibrate Ice		
105	Settings Passcode	205	CS Rinse Int	305	Set Cup Door OpCl			505	Syst Drink Rinse	605	Calib Cup Door		
106	Program Mem Mod			306	Set Prod Low Man			506	BC Extend Rinse	606	CalibSaniLevelSensor		
107	Restore Defaults			307	Reset Low Pmp			507	BC Clean	607	Show Pump Rates		
108	Temp Display Mode			308	Reset Drinks			508	BC Sani Only	608	Set Auto Cal Time		
109	Display Temperatures			309	Reset Cycles			509	Ice Scrub				
110	Syst Lock Code			310	Drink Combo Lockout			510	Alcove Rinse				
111	Lock Machine												

Button Operation Key		
Buttor	**Function 1**	**Function 2**
↑	Increment	Toggle Enable/Disable
↓	Decrement	Toggle Enable/Disable
←	Escape from menu	Go to previous setting
GO	Store the selection and advance to next field	YES
STOP	Exit current menu	NO
	Normal Mode	**Menu Mode**
F1	Engage dump valve	Advance forward without saving
F2	Dispense ice	Display Time/Date stamp AM/PM
F3	Dispense juice	N/A
F4	Run blender	Reset Settings (Set Sanitize Times Only)

↔ - Use ↓ or ↑

↓ - Use GO or ←

For **Quick Code** enter the Column number from the top of the page followed by the row number
For example: to access Calib Cup Door, enter 605 and press GO.

Abbreviations:

PL	Product Line
BC	Blend Chamber
CS	Cup Shelf
PS	Post Sanitize

Other Codes	
90X	Run pump X for 25 seconds
911	Dispense ice for 25 seconds
912	Manually start the ice buster
913	Dispense cold water for 25 sec
955	Display Time/ Date

Testing Codes	
801	MTBF
802	Test Optos
803	Test PWM
804	Display MTBF Counts
805	Test Keypad
806	Sanitizer Dose Multiplier

Created by: Christian Mills, EE.
Company: Blendtec

Date: 12 Mar. 2010
Last Modified: 5 Oct. 2010

FOR SERVICE CALL 800-748-5400 EXT 248 OR 494

QUICK CODE MENU

for the

Cold Fusion Dispensing Machine, Model S02

MAIN MENU

System Settings		Clean Settings		Drink Settings		Drink Counts		Sanitize Cycles		Calibrate		System Errors	
101	Ice Lid Sensor On/Off	201	PL Sani Lockout	301	Set Sizes	401	Total Count	501	System Sanitize	601	Auto Calibrate System	701	Display Syst Errors
102	Flow Sensor On/Off	202	Syst Sanitize Times	302	Blend Cycles	402	Indiv Count	502	Prod Line Sanitize	602	Calibrate Pumps	702	Watchdog Error
103	Clutch Heater On/Off	203	Sani Warn Time	303	Setup Drinks	403	Reset Day Total	503	Prime Sanitizer	603	Calibrate Water	703	Error Retry Time
104	Set Time	204	Set Sani Close	304	Set DispThmp	404	Clear Counts	504	Cup Shelf Rinse	604	Calibrate Ice		
105	Settings Passcode	205	Cup Shelf Rinse Int	305	Set Cup Door OpCl			505	Syst Drink Rinse	605	Calib Cup Door		
106	Program Mem Mod			306	Set Prod Low Manual			506	BC Extend Rinse	606	Calib Sani Level Sensor		
107	Restore Defaults			307	Reset Low Pmp			507	BC Clean	607	Show Pmp Rates		
108	Temp Display Mode			308	Reset Drinks			508	BC Sani Only	608	Set Auto Cal Time		
109	Display Temperatures			309	Reset Cycles			509	Ice Scrub				
110	Syst Lock Code			310	Drink Combo Lockout			510	Alcove Rinse				
111	Lock Machine												

*ENTER QUICK CODE THEN PRESS **GO**

press STOP to exit

Abbreviations	
PL	Product Line
BC	Blend Chamber
CS	Cup Shelf

Normal Mode	
F1	ENGAGE DUMP VALVE
F2	DISPENSE ICE
F3	DISPENSE PRODUCT
F4	RUN BLENDER

Testing Codes	
801	MTBF
802	Test Optos
803	Test PWM
804	Display MTBF Counts
805	Test Keypad
806	Sanitizer Dose Multiplier
Other Codes	
90X	Run pump X for 25 seconds
911	Dispense ice for 25 seconds
912	Manually start the ice bust
913	Dispense cold water for 25 sec
955	Display Time/ Date

FOR SERVICE CALL 800-748-5400 EXT 248 OR 494