



HELIX

Operator's Manual



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Contact Information:

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This document contains the original instructions for the unit described.

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This document is for reference purposes only. For questions related to this Advance Copy document contact Customer Service, IMI Cornelius, 800-238-3600.

Correct Disposal of this Product



RECYCLE

This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmental safe recycling.

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SAFETY INSTRUCTIONS

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

Safety Overview

- Read and follow **ALL SAFETY INSTRUCTIONS** in this manual and any warning/caution labels on the unit (decals, labels or laminated cards).
- Read and understand ALL applicable OSHA (Occupational Safety and Health Administration) safety regulations and/or national and local codes before operating this unit.

Recognition

Recognize Safety Alerts



This is the safety alert symbol. When you see it in this manual or on the unit, be alert to the potential of personal injury or damage to the unit.

Different Types of Alerts

DANGER:

Indicates an immediate hazardous situation which, if not avoided, **WILL** result in serious injury, death or equipment damage.

WARNING:

Indicates a potentially hazardous situation which, if not avoided, **COULD** result in serious injury, death, or equipment damage.

CAUTION:

Indicates a potentially hazardous situation which, if not avoided, **MAY** result in minor or moderate injury or equipment damage.

SAFETY TIPS

- Carefully read and follow all safety messages in this manual and safety signs on the unit.
- Keep safety signs in good condition and replace missing or damaged items.
- Learn how to operate the unit and how to use the controls properly.

- **Do not** let anyone operate the unit without proper training. This appliance is **not** intended for use by very young children or infirm persons without supervision. Young children should be supervised to ensure that they do not play with the appliance.
 - Keep your unit in proper working condition and do not allow unauthorized modifications to the unit.
-

QUALIFIED SERVICE PERSONNEL



WARNING:

Only trained and certified electrical, plumbing and refrigeration technicians should service this unit. **ALL WIRING AND PLUMBING MUST CONFORM TO NATIONAL AND LOCAL CODES. FAILURE TO COMPLY COULD RESULT IN SERIOUS INJURY, DEATH OR EQUIPMENT DAMAGE.**

SAFETY PRECAUTIONS

This unit has been specifically designed to provide protection against personal injury. To ensure continued protection, observe the following:



WARNING:

Disconnect power to the unit before servicing following all lock out/tag out procedures established by the user. Verify all of the power is off to the unit before any work is performed.

Failure to disconnect the power could result in serious injury, death or equipment damage.



CAUTION:

Always be sure to keep area around the unit clean and free of clutter. Failure to keep this area clean may result in injury or equipment damage.

SHIPPING AND STORAGE



CAUTION:

Before shipping, storing, or relocating the unit, the unit must be sanitized and all sanitizing solution must be drained from the system. A freezing ambient environment will cause residual sanitizing solution or water remaining inside the unit to freeze resulting in damage to internal components.

CO₂ (CARBON DIOXIDE) WARNING

**DANGER:**

CO₂ displaces oxygen. Strict attention **MUST** be observed in the prevention of CO₂ gas leaks in the entire CO₂ and soft drink system. If a CO₂ gas leak is suspected, particularly in a small area, **IMMEDIATELY** ventilate the contaminated area before attempting to repair the leak. Personnel exposed to high concentrations of CO₂ gas experience tremors which are followed rapidly by loss of consciousness and **DEATH**.

FIRE HAZARD WARNING

**WARNING:**

This unit contains a flammable refrigerant. Keep all flammable materials away from the compressor area. Always be sure to keep the area around the unit clean and free of clutter. Failure to keep this area clean may result in a fire hazard, injury and/or equipment damage.

ELECTRICAL WARNING

**WARNING:**

This unit contains voltages that may represent a shock hazard. Always avoid touching metallic terminals and exposed wiring when the covers are off of the unit. Failure to comply could result in serious injury, death or equipment damage.

FAN WARNING

**WARNING:**

This unit contains fans. Caution must be taken to keep hands, etc. from contacting the rotating blades. Failure to avoid rotating blades could result in injury or equipment damage.

WATER USAGE

Connect only to the drinking water supply.

VENTILATION WARNING



WARNING:

Keep ventilation openings, in the appliance enclosure or in the built-in structure, clear of obstruction.

DEFROST WARNING



WARNING:

Do not use mechanical devices or other means to accelerate the defrosting process other than those recommended by the manufacturer.

APPLIANCE WARNING



WARNING:

Do not use electrical appliances inside the food storage compartments of the appliance unless they are of the type recommended by the manufacturer.

HELIX MACHINE USAGE

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

Children should be supervised to ensure that they do not play with the appliance.

This appliance is intended to be used in household and similar applications such as:

- staff kitchen areas in shops, offices and other working environments
 - farm houses and by clients in hotels, motels and other residential type environments
 - bed and breakfast type environments
 - catering and similar non-retail applications
-

DECOMMISSIONING AND/OR TRANSPORTING THE UNIT

Whenever the Signature unit is going to be removed from service and/or transported, the unit must be completely drained of product and rinsed out to remove residual product.

**CAUTION:**

When transporting the unit, make sure that the product bowl is removed from the top of the unit and stored in a safe place for shipment. The unit must be carefully tied down or stored in such a manner that the unit will not move during shipment.

STORAGE WITHIN THE MACHINE

**CAUTION:**

Do not store explosive substances such as aerosol cans with a flammable propellant in this appliance.

SYSTEM OVERVIEW

INTRODUCTION

The Helix unit is an automated smoothie machine. It allows blended drinks to be made easier and faster. All the products are stored in the Helix unit, removing the need for a back room package while retaining a small, compact footprint.

The Helix unit is designed to be operated by employees or persons with reduced physical, sensory or mental capabilities, unless they have been given supervision or instruction concerning the use of the Helix unit in a safe way and they understand the hazards involved in operating the unit.

With automatically portioned drinks, quality is assured from drink to drink while requiring very little interaction from the user. Without the use of blending pitchers and sinks to rinse, product and water waste issues are reduced from traditional smoothie machines.

FEATURES

- Simple operation (40 sec/drink) and nightly cleaning process
- Provides blended smoothie-type beverages with real fruit
- Blends the drink in the serving cup
- Ability to add whole fruit, fruit juice and purees
- Ability to add dairy components such as cream or yogurt
- Provides refrigerated space for up to 8 products
- Self-rinsing blender/mixer after each use
- Provides refrigerated space for whip cream
- Dispenses products with particulate sizes <1/8 in.
- Two single-serve blend chambers
- Provides cup and lid dispenser
- Simple bag in a tray system for quick bag change outs and cleaning



SPECIFICATIONS

Line Voltage:	.230VAC, 50 Hz
Max. Current Draw:	.12 Amps
Water Inlet Size:	3/8 in. (.95 cm) I.D.
Water Supply Pressure	0.48-0.83 MPa (70-120 psig)
Drain Outlet Size:	1.665 in. (4.23 cm) I.D.
Clearance Requirements:	12 in. (30.48 cm) top; 2 in. (5.08 cm) back
Equipment Weight:	612 lbs (278 kg)
CO ₂ /compressed air Tubing Size:	1/4 in. (0.635 cm) I.D.
CO ₂ /compressed air Supply Pressure:	0.48-0.83 MPa (70-120 psig)
BIB Tray Size:	2 gal. (7.6 liters)
Ice Storage Capacity:	18 lbs (14.5 kg)
Ice Make Rate:	600 lb/day (272 kg/day)
Unit Height:	75 in. (190.5 cm)
Unit Width:	26 in. (66.04 cm)
Unit Depth:	34 in. (86.36 cm)
Ambient Operating Temperature:	55 to 95° F (12.8 to 35°C)
A-Weighted Sound Pressure Level (during blender operation)	<70dB

The Helix unit is capable of using syrups with particulate matter up to 1/8" in size.



EG- Konformitätserklärung EC- Declaration of Conformity

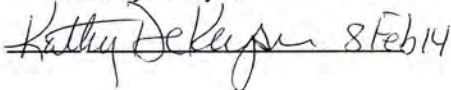
- 1) Hiermit erklären wir, **Cornelius. Inc.**
Herewith we, 101 Regency Drive, Glendale Heights, IL 60139, USA

dass die nachfolgende bezeichnete Maschine aufgrund der Konzipierung und Bauart sowie in der von uns in Verkehr gebrachten Ausführung den einschlägigen, grundlegenden Sicherheits- und Gesundheitsanforderungen der EG-Richtlinien entspricht.

declare that the following appliance complies with the appropriate basic safety and health requirements of the EC Directives based on its design and type, as brought into circulation by us.

Diese Erklärung bezieht sich nur auf die Maschine in dem Zustand, in dem sie in Verkehr gebracht wurde, vom Endbenutzer nachträglich angebrachte Teile und / oder nachträglich vorgenommene Eingriffe bleiben unberücksichtigt.
This declaration relates exclusively to the machinery in the state in which it was placed on the market, and excludes components which are added and/or operations carried out subsequently by the final user.

- | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2) Produktbezeichnung / Funktion:
<i>Designation/ function:</i> | automatische Smoothie-Maschine zur Zubereitung von Mischgetränken
<i>Automated Smoothie Machine to make blended drinks</i> |
| 3) Typenbezeichnung:
<i>Type:</i> | HELIX-HC |
| 4) Seriennummer:
<i>Serialnumber:</i> | 000000000000 |
| 5) Einschlägige EG Richtlinien:
<i>Applicable EC Directives:</i> | Maschinenrichtlinie 2006/42/EG
<i>Machinery Directive 2006/42/EC</i> |
| 6) Angewendete harmonisierte Normen:
<i>Used harmonized Standards:</i> | EN 62233:2008
IEC CISPR 14-1: 2011
IEC CISPR 14-2: 2008
IEC 61000-3-2: 2009
IEC 61000-3-3: 2008
EN 60335-1:2012
EN 60335-2-75: 2012
EN 60335-2-24: 2010
EN 60079-0: 2007 |
| 8) Dokumentationsverantwortlicher:
<i>Responsible for documentation:</i> | CORNELIUS DEUTSCHLAND GMBH
Attn Klaus Wiemer- Director of Engineering
Carl-Leverkus-Strasse 15, D-40764 Langenfeld, Germany |
| 9) Mitangewendete EG Richtlinien:
<i>Additional used EC Directives:</i> | Richtlinie über EMV 2004/108/EG
<i>EMC Directive 2004/108/EC</i>
RoHS-Richtlinie 2011/65/EU
<i>RoHS Directive 2011/65/EG</i> |
| 12) Datum/ Ort/ Name /Herstellerunterschrift:
<i>Date /Place/Name/ Authorized Signature:</i>
February 05, 2014; Glendale Heights IL, USA
Ms. Kathy DeKeyser | 13) Angaben zum Unterzeichner
<i>Title of Signatory: Senior Vice-President of Engineering</i> |

 8 Feb 14

OPERATION

INITIAL SYSTEM PREPARATION

Pressurizing the CO₂/Compressed Air System

The Helix unit is designed to operate on a CO₂/compressed air input pressure of 0.48-0.83 MPa (70-120 psig). A shutoff valve must be installed in the line to the Helix unit. Perform the procedure in Table 1 to pressurize the CO₂/compressed air system.

Table 1.

Step	Action
1	Open the CO ₂ /compressed air cylinder valve slightly to allow lines to slowly fill with gas. When lines are fully pressurized, listen and check for leaks. Open the CO ₂ /compressed air cylinder valve all the way until it back-seats itself (this prevents leaks from the valve).
2	Adjust the CO ₂ /compressed air cylinder regulator for the unit to between 0.48-0.83 MPa (70-120 psig) at the unit.
3	Check for CO ₂ /compressed air leaks by turning off the CO ₂ /compressed air supply to the unit and listening for leaks. Wait at least 3 minutes and check the CO ₂ /compressed air cylinder gauge to see if the pressure has dropped.
4	The system is now ready for operation.

Pressurizing the Water System

The Helix unit is designed to operate with a water inlet pressure of 0.48-0.83 MPa (70-120 psig)

Perform the procedure in Table 2 to verify the water connection to the unit.

 **WARNING:**

The unit must only be connected to a clean, potable water supply.

Table 2.

Step	Action
1	Turn on the water supply to the unit.
2	Check the system for leaks.
3	The water system is now ready for operation.

INITIAL UNIT SETUP

Hopper Sanitation

Upon installation, the ice hopper must be sanitized before the unit is started. For ice hopper sanitizing, perform the procedure in Table 3. After initial installation, the sanitizing procedure is run through the user interface Reference page number, etc.

Table 3.

Step	Action
1	Disconnect power cord from the unit, if connected.
2	Remove the cover from the top of the unit.
3	Unplug the quick disconnect attached to the hopper lid. photo
4	Use a 1/4" nut driver to loosen hopper lid bracket. Slide the bracket off of the hopper lid to gain access to the hopper. photo
5	Spray the inside of the hopper, agitator and the agitator lid with cleaning solution and wipe them dry with a clean cloth.
6	Spray the inside of the hopper, agitator and the agitator lid with sanitizing solution and allow the pieces to air dry.
7	Remove the clear front from the ice chute by lifting it straight up, as shown in Figure 3.
8	Spray the lid and clear ice chute with cleaning solution and wipe them dry with a clean cloth.
9	Spray the lid and clear ice chute with sanitizing solution and let air dry.
10	Reassemble the lid and clear ice chute.
11	Tighten the lid bracket and reattach the quick disconnect.

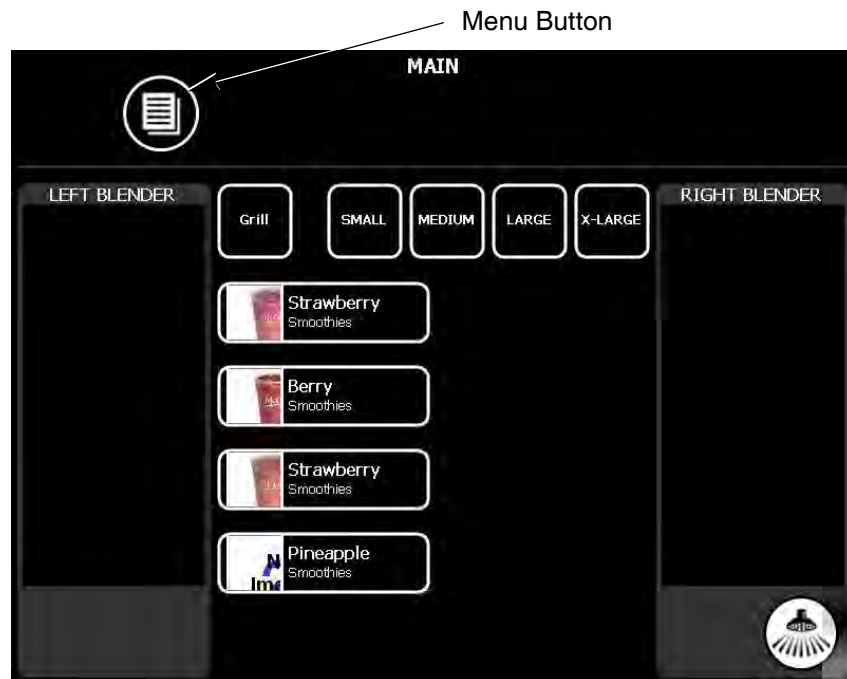


Figure 1.

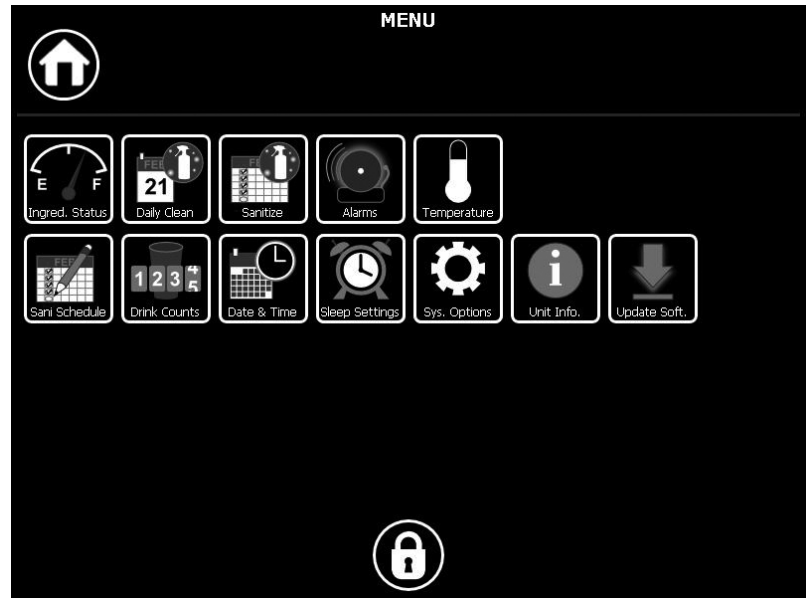


Figure 2.



Figure 3.



Figure 4.

Unit Startup

To start the unit, open the control panel by grabbing the lower right-hand corner and opening it. (See Figure 5.)



Figure 5.



CAUTION:

If the supply cord is damaged, it must be replaced by a special cord or assembly available from the manufacturer or its service agent.

Turn on the power switch located behind the control panel, as shown in Figure 6.



Figure 6.

The system now displays the Home Screen, shown in Figure 1.

System Sanitation

Before initially placing product into the cabinet, the unit must be sanitized to ensure there is no contamination of the product when it is placed in the unit.

The unit should be cleaned on a weekly basis (minimum) using the Sanitation Menu. The menu is accessed from the Menu Screen. The following list of supplies are needed for this operation:

- Clean Cloths
- Rubber gloves
- Spray bottle with cleaning solution
- Spray bottle with sanitizer solution
- 3 5-gallon buckets
- Sanitation funnel
- Sanitation spyder
- Ice collection tray

To sanitize the system, perform the procedure in Table 4.

Table 4.

Step	Action
1	From the Home Screen, press the Menu button in the upper left hand corner as shown in Figure 1.
2	In the Menu Screen, press the Sanitize button in the top center of the screen, as shown in Figure 7. This opens the Sanitize menu. Follow the instructions displayed on the left side of the screen.
3	Select the weekly product tab and press the Play button, as shown in Figure 8. The sanitization program steps through the rest of the procedure providing step-by-step instructions.

NOTE: During initial set up, all ingredient lines and blenders must be sanitized. When selected, the ingredient image turns grey.



Figure 7.



Figure 8.

Ingredient Sanitation

The ingredient sanitation is automatically started after selecting the weekly product tab. To sanitize the ingredients, perform the procedure in Table 5.

Table 5.

Step	Action
1	Wash and sanitize hands or use clean rubber gloves.
2	Select the Sanitization Selection screen, shown in Figure 7 on page 14.
3	Select the weekly product tab to sanitize ALL ingredient trays and lines.
4	Press the Play button to start the sanitation process. Follow the steps shown on the screen to complete the sanitation process.

Table 5.

Step	Action
5	Sanitization Preparation: Prepare three, 5-gallon buckets for the cleaning process as follows: Bucket #1: Fill the bucket with cleaning solution (100 ppm, Kay-5 cleaner/sanitizer) mixed as directed on the package. Bucket #2: Fill the bucket with 5 gallons of clean hot water (100° F. - 38° C). Bucket #3: Fill the bucket with sanitizer solution (100 ppm, Kay-5 cleaner/sanitizer) mixed as directed on the package.


Figure 9.

Blender Sanitation

The Blender Sanitization screen is accessed from the Sanitize screen. It will automatically follow the ingredient sanitation process.

To sanitize the blenders, perform the procedure in Table 6.

Table 6.

Step	Action
1	Wash and sanitize hands or use clean rubber gloves.
2	Ingredient sanitation is now complete, press Play to start blender sanitation.
3	Remove the cleaning hose from its storage space under the left-front side of the unit, inside the product compartment, as shown in Figure 11.
4	Sanitation Preparation: Prepare three, 5-gallon buckets for the cleaning process as follows: Bucket #1: Fill the bucket with cleaning solution (100 ppm, Kay-5 cleaner/sanitizer) mixed as directed on the package.. Bucket #2: Fill the bucket with five gallons of clean hot water (100° F. - 38° C). Bucket #3: Fill the bucket with sanitizer solution (100 ppm, Kay-5 cleaner/sanitizer) mixed as directed on the package.

Table 6.

Step	Action
5	Press the Play button to start the process. Follow the steps shown on the screen to complete the sanitation process.

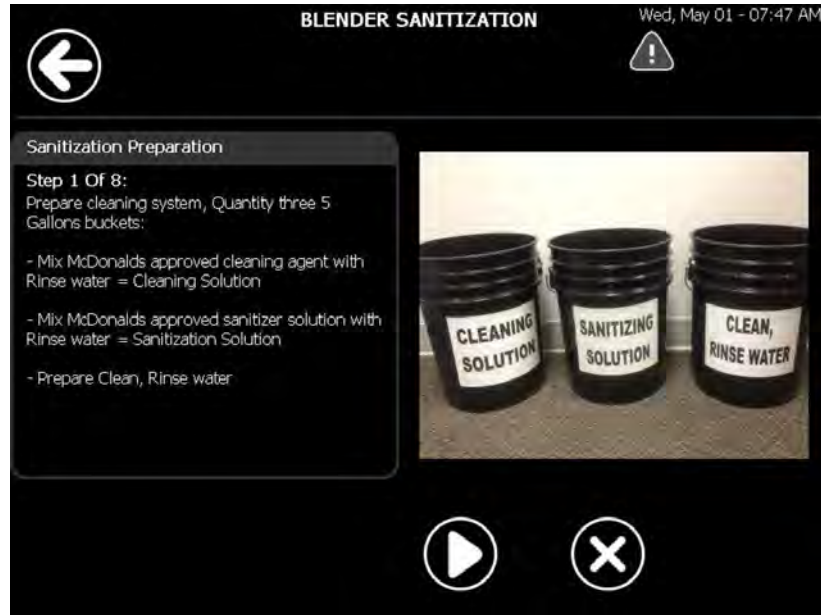


Figure 10.



Figure 11.

Ice Maker Sanitation

The Ice Maker Sanitization screen is accessed from the Sanitize screen. To sanitize the ice maker, perform the procedure in Table 7.

Table 7

Step	Action
1	Wash and sanitize hands or use clean rubber gloves.
2	Select the Ice Maker Sanitization tab, shown in Figure 12.

Table 7

Step	Action
3	Remove the cleaning hose from its storage space under the left-front side of the unit, inside the product compartment, as shown in Figure 11.
4	Sanitation Preparation: Prepare three, 5-gallon buckets for the cleaning process as follows: Bucket #1: Fill the bucket with sanitizer solution (100 ppm, Kay-5 cleaner/sanitizer) mixed as directed on the package. Bucket #2: Fill the bucket with five gallons of clean hot water (100° F. - 38° C). Bucket #3: Fill the bucket with sanitizer solution (100 ppm, Kay-5 cleaner/sanitizer) mixed as directed on the package.
5	Press the Play button to start the process. Follow the steps shown on the screen to complete the ice maker sanitation process.



Figure 12.

Sanitation Scheduler

The Helix software contains a Sanitation Scheduler that allows the user to set up an automated schedule for sanitizing the unit.

Pressing the Sani Scheduler button shows the current sanitation schedule settings.

Setting Sanitation Dates

The Sanitization Schedule allows each ingredient and blender to be scheduled for sanitization individually. This menu can be accessed from the Menu Screen in the second row, as shown in Figure 13. **All ingredient lines and blenders should be set to sanitize at least once a week. This menu requires a minimum of manager or supervisor permission to access it. It can also be accessed by service technicians.**

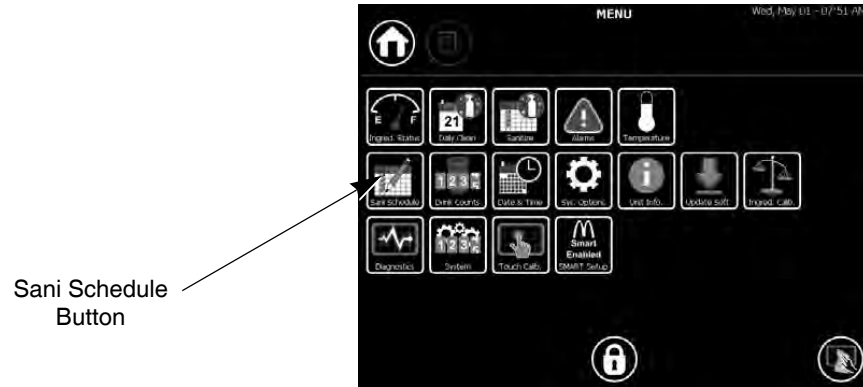


Figure 13.

To set the Sanitization Scheduler, perform the procedure in Table 8.

Table 8.

Step	Action
1	Select ingredients/blenders to schedule and then press the Play button.
2	Select the frequency of sanitation (Weekly or none.)
3	If applicable, choose the day that sanitation will take place. (See Figure 14.)
4	Choose the time of day for sanitation. (See Figure 14.)
5	Press the "Set" button (check mark) to save the settings. The arrows can be pressed to restore the defaults and the "X" can be pressed to cancel the changes.



Figure 14.

Preparing Replacement Product Bags

WARNING:

Syrup bags must not be connected or prepared until all ingredient lines have been sanitized and the unit has been pre-chilled to operating temperature (32-40° F). Refer to the System Sanitation section on page 13.

The Ingredient Status Screen is used to prepare the bags. The Ingredient Status Screen shows the location for each syrup bag in the cabinet. The level indicators show the amount of product in each bag. To prepare the system after replacing a product bag, perform the procedure in Table 9.

Table 9.

Step	Action
1	From the Main Screen, select the Ingredient Status Screen (Figure 15) by pressing the Menu button, shown in Figure 1 on page 10.
2	Place each bag/tray in its appropriate location, making sure that the bag connector is fully seated onto the stem in the back of the cabinet.
3	Select all ingredients that have been replaced and press the Play button (See Figure 16 and Figure 17).
4	Follow the on-screen instructions to finish preparing the bags in the unit.

NOTE: The bag should engage the fitting on the back wall. If product is leaking out, the connection did not seal and the bag should be reinserted.

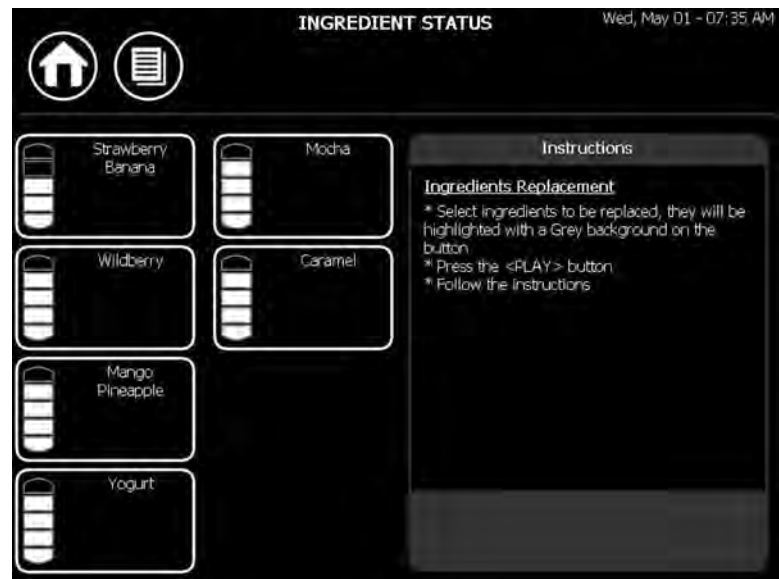


Figure 15.

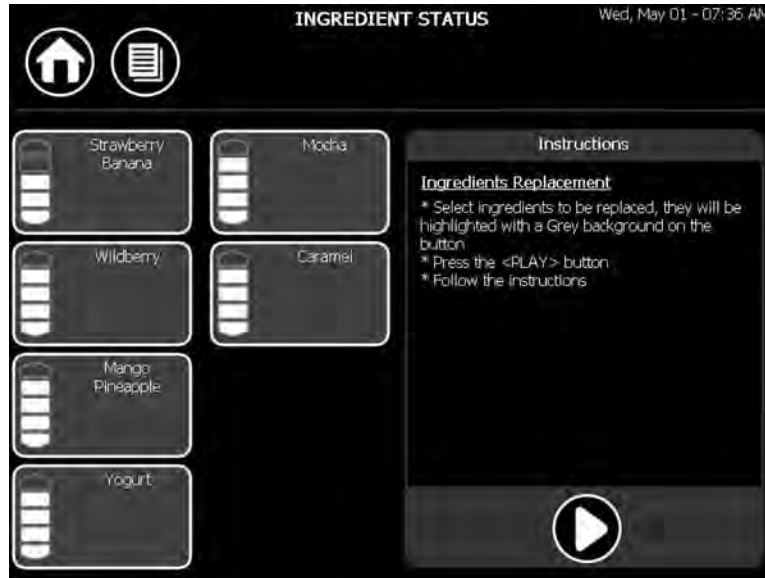


Figure 16.

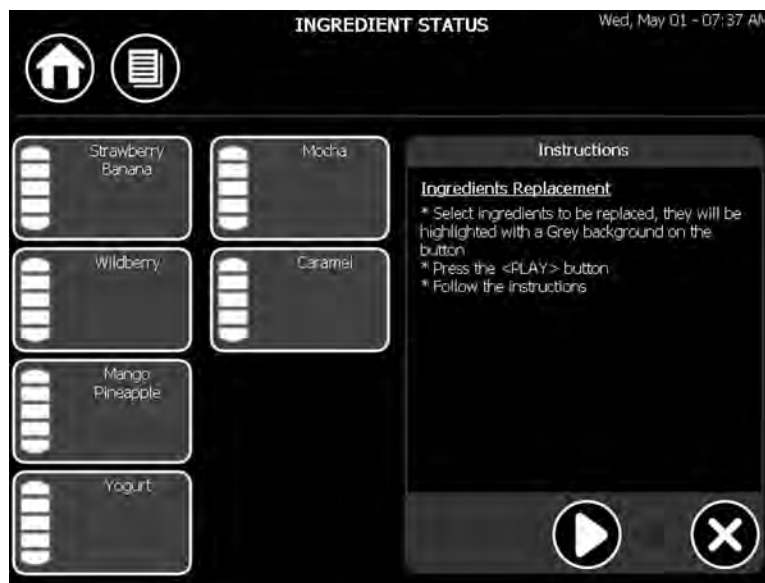


Figure 17.

Calibration

To begin normal operation, the unit must be calibrated for all ingredients. These procedures can be done by a manager or service technician. Refer to the installation manual (P/N 621058497INS) for calibration instructions.

Blender Operation

No separate process is required to prepare the blenders for operation. The blenders should be test operated to ensure they are working correctly before the unit is operated.

 **CAUTION:**

Do not run blenders dry. Use a cup of plain water for testing.

From the Home Menu, select a drink and drink size to be poured. This pours a drink and moves a blender up in preparation to blend. Once the blender shield has moved up, a drink can be put in the cup holder to blend.

DAILY OPERATION

Once the unit is installed, it should be left on and the Main Screen is displayed.

Each day, wash all external surfaces with a mild detergent solution and rinse with clean, potable water. Dry all external surfaces with a clean, soft, dry cloth. Remove the cup rest and wash it with the same detergent solution. Dry the cup rest thoroughly and replace it.

Unit Cleaning

The unit should be cleaned on a daily basis using the Daily Cleaning Menu. The menu is accessed from the Menu Screen. The following list of supplies are needed for this operation:

- Clean Cloths
- Rubber gloves
- Spray bottle with cleaning solution
- Spray bottle with sanitizer solution
- 2 clear cups and 2 red cups (supplied)

To complete daily cleaning, perform the procedure in the Unit Cleaning section.

Daily Cleaning Menu

There is a daily cleaning menu that is accessed from the Main menu by pressing the Sanitize button.

To initiate the daily cleaning process, perform the procedure in Table 10.

Table 10.

Step	Action
1	Wash and sanitize hands or use clean rubber gloves.
2	From the Main menu, press the Sanitize button.
3	Press the Menu button to access the Daily Clean screen, shown in Figure 18.
4	Press the Play button to start the process. Follow the steps shown on the screen to complete the cleaning process.

Table 10.

Step	Action
5	Supplies needed are as follows: Clean cloth Spray bottle with cleaning solution Spray bottle with sanitizer solution 2 medium size cups with cleaning solution 2 medium size cups with sanitizer solution

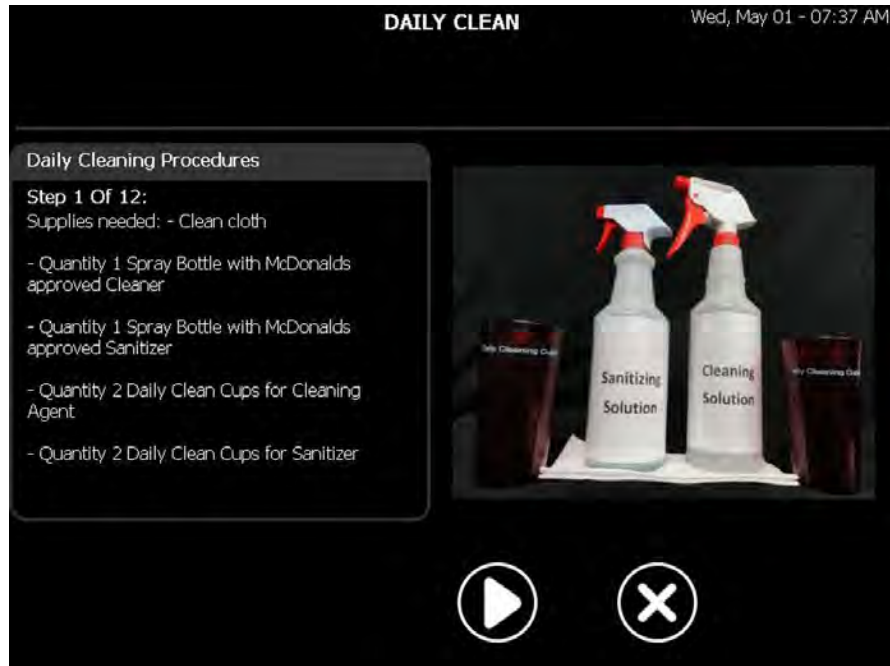


Figure 18.



CAUTION:

Never use abrasive or chlorine-based cleansers on the unit.

If there is a system malfunction, refer to Unit Startup section on page 12 and reset the switch.

Dispensing a Drink

To dispense a drink, perform the steps in Table 11.

Table 11.

Step	Action
1	Place the desired size cup into the cup stand under the dispense nozzle, as shown in Figure 19.
2	Match the drink size to the cup selected by pressing the correct size on the touch screen.
3	Select the desired flavor from the Main Screen, shown in Figure 20. When the button is pressed, the syrup and ice dispense.
4	When the unit is done dispensing, place it in the designated blender, as shown in Figure 21. (Screen indicates which blender to use.)
5	Press the Blend button (lower right or left corner of the screen) and wait for the blend cycle to finish. Blender will stop and lift blade.

Table 11.

Step	Action
6	When the blender guard raises, immediately remove the cup from the blender.
7	Press the Rinse button to automatically rinse the blender chamber.
8	Blender shield will rise when the unit is done rinsing.

NOTE: If the rinse button is not pressed within 60 seconds after blending a drink, the unit automatically lowers the shield and performs a rinse cycle on the blender. This can be disabled by a manager level or above in the settings menu.


Figure 19.

Figure 20.



Figure 21.

MAINTENANCE

⚠ WARNING:

Never use a water jet (power washer) to clean the exterior of the unit.

⚠ WARNING:

Do not store explosive substances, such as aerosol cans with a flammable propellant in this unit.

The Helix unit is capable of using syrups with particulate matter up to 1/8" in size.

REPLACING SUPPLIES

To replace a product bag, perform the procedure in Table 12.

Table 12.

Step	Action
1	Open the product door, shown in Figure 22.
2	Remove the tray containing the empty product bag, shown in Figure 23. Make sure to close the cabinet door after removing the tray.
3	Remove the bag from the tray by pulling the BIB connector up and unsnapping it from the tray.
4	Replace the product bag in the tray and snap the BIB connection into the tray.
5	Place the tray into the appropriate shelf and make sure the BIB connection is snug on the nozzle, as shown in Figure 24. Make sure the cabinet door is completely closed.



Figure 22.



Figure 23.

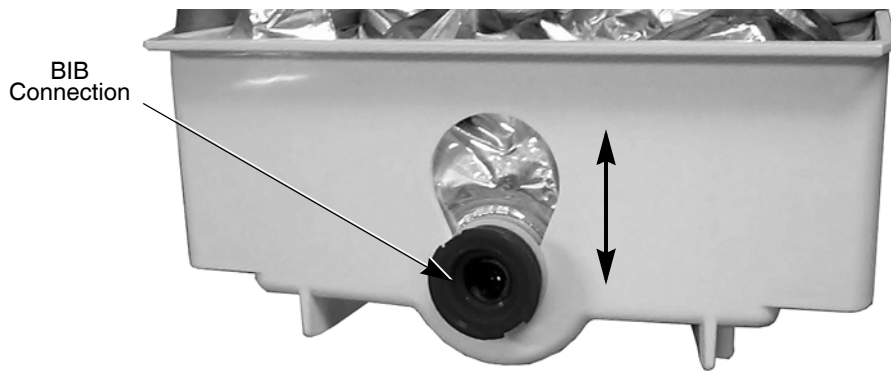


Figure 24.

Priming the New Product Bag

Whenever a product bag is replaced, the bag must be primed.

To prime a product bag, perform the procedure in Table 13.

Table 13.

Step	Action
1	When the new bag has been placed in the tray, press the Menu button on the Home Screen, shown in Figure 1 on page 10.
2	Place an empty cup in the cup holder, as shown in Figure 19 on page 23.
3	Press the Ingredient Status button on the Menu Screen, shown in Figure 25.
4	Select the bag that was replaced and then press the Arrow button and follow the steps shown on the screen to complete the priming process. (See Figure 26.)
5	Press the Home button to return to the Main Screen

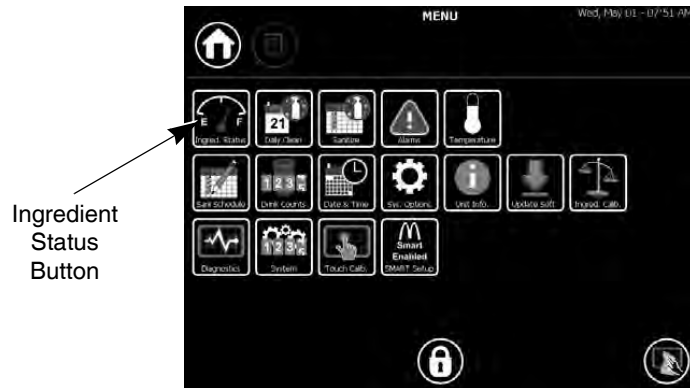


Figure 25.

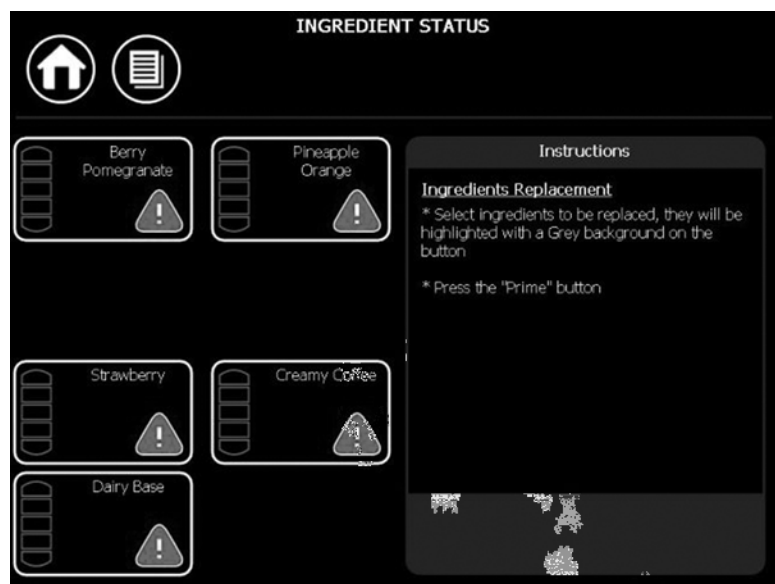


Figure 26.

TEMPERATURE MONITORING

Temperatures in the product cabinet is monitored by the system. This allows the operator to ensure that all products are acceptable to dispense and consume. See Figure 27 for the Temperature screen.

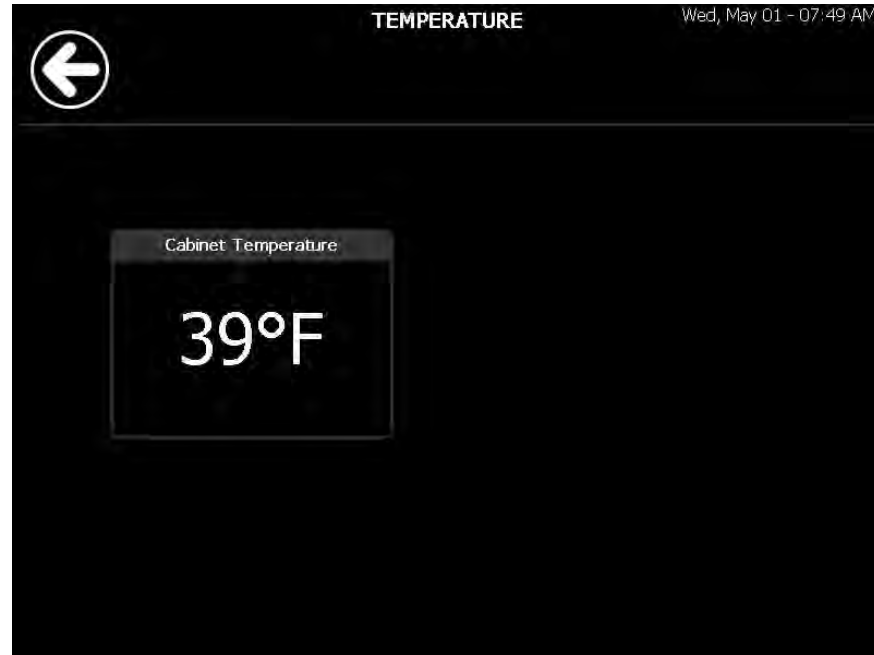


Figure 27.

Cabinet Temperature

The cabinet temperature should remain between 38 and 40° F (0.56 – 2.22° C).

When the cabinet reaches a temperature of 41° F (5° C) or higher, a red warning symbol appears. This means that the product cabinet is now above the recommended storage temperature.

If the cabinet temperature has a yellow warning symbol, make sure the cabinet door is completely closed and allow a short time for the temperature to cool down.

If the cabinet temperature has a red warning symbol, dispose of all product and contact a manager.

DATE AND TIME

The Date and Time menu allows a person to set the date and time for the real time clock display on the Main screen, shown in Figure 28.

Use the up and down arrows to set the Hour, Minute, AM/PM, Month, Day and Year. To save the settings press the check mark, or to cancel changes press the "X".

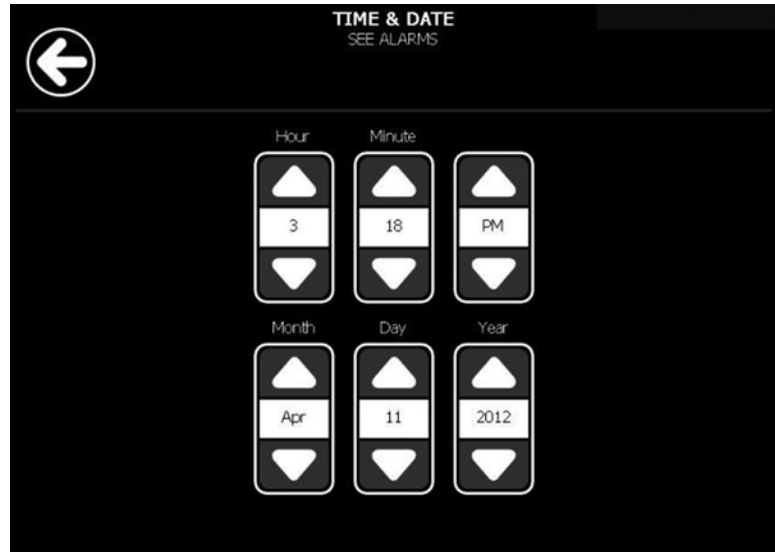


Figure 28.

DAILY MAINTENANCE

Preventive maintenance can increase the trouble-free life of the unit. Failure to perform preventive maintenance could void your equipment warranty.

On a daily basis, clean all external surfaces with a mild soap solution and rinse with clean water. Dry all external surfaces with a clean soft cloth. Remove the drip tray (if applicable) and wash with a mild soap solution. Dry the tray thoroughly and replace it.



CAUTION:

Do not use chlorine-based solutions on stainless steel surfaces

WEEKLY MAINTENANCE

The following procedures should be performed on a weekly basis:

- Weekly product sanitation
 - Product cabinet inspection
-

System Sanitation

Perform the procedure in the System Sanitation section on page 13. The unit requires sanitation at least once a week. More frequent sanitation may be required by local code.



Product Cabinet Inspection

Open the product cabinet and pull out the bottom two product trays. Check for any spilled product. Use cleaning solution and a clean cloth to remove any spilled product.

MONTHLY MAINTENANCE

The following procedures should be performed on a monthly basis.

- All weekly maintenance tasks
 - Condenser cleaning (ice maker and product cabinet)
 - Water feed reservoir inspection
 - Ingredient sanitation
 - Ice Maker sanitation
-

Condenser Cleaning

The condensers should be cleaned at least once a month (more often in harsh environments). To clean the condensers, use a soft brush, vacuum cleaner or blow out the condenser from the inside using compressed air.

SEMI-ANNUAL MAINTENANCE

The following procedures should be performed on a semi-annual basis.

- All weekly and monthly maintenance tasks
 - Inspect and service water system
 - Inspect tubing
 - Check for condensation
 - Check safety circuits
 - Check for vibration/noise
 - Inspect upper bearings on auger assembly
-

Water System Inspection

Check for water leaks in all of the tubing connections, water fittings and the lower ice maker water seal.

Drain Tube Inspection

Check the drain tubes for clogs and aged tubing. If tubes are stained or brittle, replace them with new tubing.

Condensation Inspection

Check for signs of condensation. Clean the area where necessary and replace insulation in the proper locations.

Refrigeration System Inspection

Visually inspect the refrigeration system for signs of wear or leaks. Call service if repairs are needed.

Overall Mechanical Inspection

Check unit for any unusual noise or rattles. Tighten any loose screws if necessary.

Auger Bearing Inspection

Check white upper auger bearings for wear. If bearings are less than 1/16" thickness, replace the bearing. Refer to Figure 29.

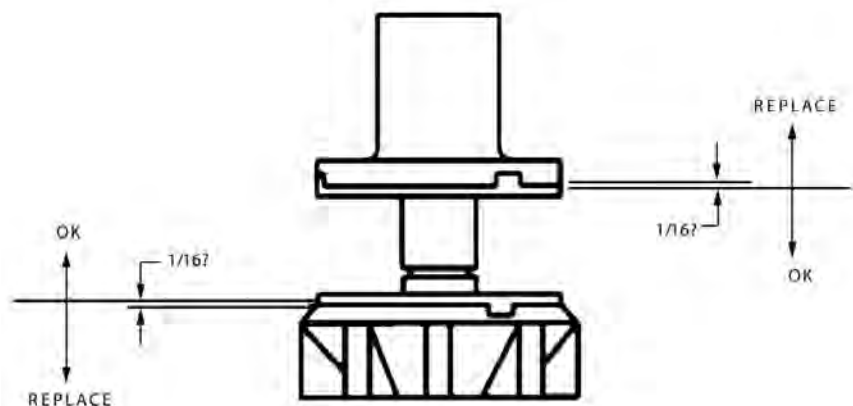


Figure 29.

ALARMS

The Alarms menu has two different screens. The Active Errors screen, shown in Figure 30, allows users to see what alarms are currently affecting the unit. The log file, shown in Figure 31, provides a history of the unit's performance and is intended for service technicians. To access the Alarm Status screen, press the Alarms button on the Menu screen.

ALARM STATUS

ALARM NAME	STATE	DATE	TIME	MODULE	NOTES
Expired - Strawberry	ALARM	04/11/12	03:16 PM	Dispenser	
Low - Berry Pomegranate	ALARM	04/11/12	03:16 PM	Dispenser	
Expired - Berry	ALARM	04/11/12	03:16 PM	Dispenser	

Figure 30.

ALARM STATUS (HISTORY)

ALARM NAME	STATE	DATE	TIME	MODULE	NOTES
Expired - Dairy Base	ALARM	04/11/12	03:16 PM	Dispenser	
Low - Strawberry	ALARM	04/11/12	03:16 PM	Dispenser	
Expired - Strawberry	ALARM	04/11/12	03:16 PM	Dispenser	
Low - Berry Pomegranate	ALARM	04/11/12	03:16 PM	Dispenser	
Expired - Berry	ALARM	04/11/12	03:16 PM	Dispenser	
Power Loss	ALARM	04/11/12	03:16 PM	System	

Figure 31.

Unit Level Alarms & Warnings

Alarms activated on the unit display on the main screen. Underneath the word "Main", the words "see alarms" flashes. This indicates that the alarm should be checked and resolved before operating the unit.

Sold Outs

Cabinet Ingredients Sold Out - The display shows a sold out condition for ingredients as a red warning symbol to indicate that the BIB container is empty. Any drinks using this ingredient are disabled on the Main screen.

Water Sold Out - If water is not present, a red warning symbol illuminates. Any recipe using water cannot be dispensed. Also, the blending chambers cannot be washed and the ice maker will not run. Management should be notified immediately.

CO₂/compressed air Sold Out - If CO₂/compressed air is not present, drinks and ice cannot be dispensed. Management should be notified immediately.

Ingredient Expired Warning

Ingredient Warning - An ingredient expiration warning is triggered 24 hours (1 day) before the product use by date. Expiration date of the product is based on the time value entered into the recipe. The expiration date is reset when a new product BIB is connected in the BIB rack.

TROUBLESHOOTING

TROUBLESHOOTING - CONTROLS

Problem	Probable Cause	Remedy
No activity at all	<ul style="list-style-type: none"> A. Unit unplugged / cable disconnected B. No power to branch circuit. C. Keypad bad or disconnected. D. Control Board bad. 	<ul style="list-style-type: none"> A. Make sure unit is plugged in and cord is connected in E-box B. Make sure fuse is good/installed or breaker is switched to "ON". C. Check for proper connection/replace keypad D. Replace Control Board
Front panel LEDs indicate unit on but no motor activity/will not respond	<ul style="list-style-type: none"> A. Software detected error condition B. 24VAC missing C. Bad or missing cable connection D. Control Board bad 	<ul style="list-style-type: none"> A. See error table . B. Check that faceplate is in proper mounted position and adjust as needed Check for excessive refrigeration pressure and correct Check connections and transformer in E-box and correct C. Connect or replace cable. D. Replace Control Board
No condenser fan or compressor	<ul style="list-style-type: none"> A. Software detected error condition B. Bad contactor or connections 	<ul style="list-style-type: none"> A. See error table document B. Check connections, contactor and transformer in E-box and correct
No condenser fan but compressor runs	<ul style="list-style-type: none"> A. Bad connections B. Bad condenser fan C. Bad contactor 	<ul style="list-style-type: none"> A. Check connections at contactor and fan and correct B. Replace C. Replace
No compressor but condenser fan runs	<ul style="list-style-type: none"> A. Bad connections B. Bad start relay C. Bad capacitor(s) D. Bad compressor E. Bad contactor 	<ul style="list-style-type: none"> A. Check connections at contactor, capacitors, start relay and compressor and correct B. Replace C. Replace D. Replace E. Replace
Product Bowl blades do not turn	<ul style="list-style-type: none"> A. Blades uncoupled from drive B. Bad / missing connections to hopper motor C. Control Board bad D. Bad Product Bowl motor 	<ul style="list-style-type: none"> A. Check that hopper product viscosity is within limits & correct as necessary B. Check connections & correct as necessary C. Replace Control Board D. Replace motor
Product does not dispense	<ul style="list-style-type: none"> A. Motor does not turn B. Bad connections to dispense switch C. Dispense switch bad or mis-located D. Control Board bad 	<ul style="list-style-type: none"> A. See next section B. Check connections / correct as needed C. Adjust/replace as needed D. Replace board

Motor does not turn at all	A. Face plate not in proper position or missing B. Product frozen solid C. Software detected error condition D. Bad connections. E. Faceplate switch bad or mis-located F. Control Board bad	A. Verify face plate is secure and in proper position for unit operation B. Clean out barrel and check that viscosity settings are correct for current product C. See error table document D. Check connections between E-Box, control board and correct as needed. E. Adjust or replace faceplate F. Replace
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TROUBLESHOOTING PRODUCT NOT COLD

Problem	Probable Cause	Remedy
Compressor not Running	A. Barrel not in Freeze or Refrigerate mode. B. No voltage to compressor. C. Bad start components. D. Compressor's thermal overload protector "open". E. Open or shorted compressor windings. F. Bad Control Board.	A. Select Freeze or Refrigerate. B. Check power at contactor L2 - L3, T2 - T3. C. Check components and wiring. D. Check resistance of compressor windings and check incoming line voltage. E. Check resistance of compressor windings. F. Troubleshoot, replace if necessary.
Compressor Running but not Cooling	A. Low refrigerant. B. Restricted condenser/filter. C. Condenser fan motor/blade defective. D. Liquid Line valves not operating. E. Defective compressor.	A. Repair leak and weigh in new charge. B. Clean or repair. C. Repair or replace. D. Check cables and connections to control board and repair or replace. E. Repair or replace.
Restricted Air Flow	A. Dirty filter. B. Dirty condenser. C. Damaged fins. D. Not enough "clearance" around unit.	A. Clean or replace filter. B. Clean condenser. C. Repair/replace if necessary. D. Ensure proper spacing around unit.
Fan Motor not operating properly	A. Bad connection B. Bad motor C. Cracked or bent fan blade	A. Check/connect B. Replace motor C. Replace fan blade
Liquid Line Valves not operating	A. Miswired. B. Defective coil. C. Valve mechanically bad. D. Defective control board or transformer.	A. Correct wiring. B. Replace coil. C. Replace valve. D. Check and replace.
No/Low Refrigerant	A. Leak.	A. Repair and weigh in new charge.
Thermistors/Reed Switches	A. Bad connection. AF. Bad sensor. AG. Sensor out of position. AH. Defective control board.	A. Correct wiring. B. Replace sensor. C. Reposition sensor and clip. D. Replace.



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