

# OPERATOR MANUAL

IMPORTANT INFORMATION, KEEP FOR OPERATOR

This manual provides information for:

# CapKold®

## **MODELS CKPF/3 CAPKOLD COOK- CHILL SYSTEMS PUMP-FILL STATION**

**THIS MANUAL MUST BE RETAINED FOR FUTURE REFERENCE. READ, UNDERSTAND AND FOLLOW THE INSTRUCTIONS AND WARNINGS CONTAINED IN THIS MANUAL.**

### **NOTIFY CARRIER OF DAMAGE AT ONCE**

It is the responsibility of the consignee to inspect the container upon receipt of same and to determine the possibility of any damage, including concealed damage. Unified Brands suggests that if you are suspicious of damage to make a notation on the delivery receipt. It will be the responsibility of the consignee to file a claim with the carrier. We recommend that you do so at once.

Manufacture Service/Questions 888-994-7636.

Information contained in this document is known to be current and accurate at the time of printing/creation. Unified Brands recommends referencing our product line websites, [unifiedbrands.net](http://unifiedbrands.net), for the most updated product information and specifications.

PART NUMBER 137164 REV. F (02/15)



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# IMPORTANT - READ FIRST - IMPORTANT

**WARNING:** Do NOT attempt to install, set-up or operate this machine before reading and understanding this manual and ALL accompanying manuals. KEEP ALL MANUALS FOR FUTURE REFERENCE.

**WARNING:** Be sure operators read, understand and follow operating instructions, cautions and safety instructions in this manual. Additional manuals may be supplied for specific sub-components of the CapKold CKPF/3 Mobile Pump/Fill Station. Be sure operators read, understand and follow ALL operating instructions, cautions and safety instructions in these additional manuals. Any potential user of this equipment MUST be trained in safe and correct operating procedures.

**WARNING:** When using this machine, ALL operating instructions, safety instructions and precautions MUST be followed and strictly adhered to.

**WARNING:** This machine is intended for use in the commercial transfer and packaging of food products, per the instructions contained in this manual. Other use could result in personal injury or damage to the equipment and will void ALL warranties.

**WARNING:** AVOID ALL direct contact with HOT equipment surfaces. Food products transferred through this machine are at temperatures as high as 212°F (100°C). Direct skin contact could result in severe burns.

**WARNING:** AVOID ALL direct contact with HOT food. Food products transferred through this machine are at temperatures exceeding 140°F (60°C) and in direct skin contact could produce severe burns.

**WARNING:** Use of any replacement parts other than those supplied by Unified Brands, or its authorized distributors voids ALL warranties and may cause bodily injury or equipment damage. Service performed by other than Unified Brands Authorized Service Agents will void ALL warranties.

**WARNING:** Turn electric power OFF and unplug the CKPF/3 unit BEFORE working on any internal components.

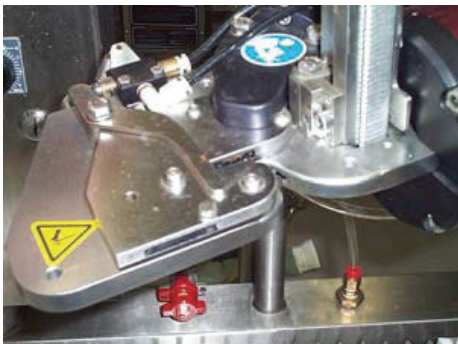
**WARNING:** Turn electric power OFF and unplug the CKPF/3 unit BEFORE performing and cleaning operation.

**WARNING:** AVOID contact with cleaning products and follow manufacturer's instructions, warnings and recommendations for using such products. Many cleaners and sanitizers are harmful to the skin, eyes, mucous membranes and clothing. Read warning and follow directions on the cleaner/sanitizer product label.

**CAUTION:** NEVER leave a chlorine sanitizer in contact with stainless steel longer than 30 minutes, before thoroughly rinsing off. Longer contact can cause corrosion.

**WARNING:** Do not use a fuse with a higher AMP rating than specified on the Wiring Diagram of the circuit.

**WARNING:** Never place fingers or other body parts in the grooves of the Tipper Tie clipper accessory where the clips seal the product casings.

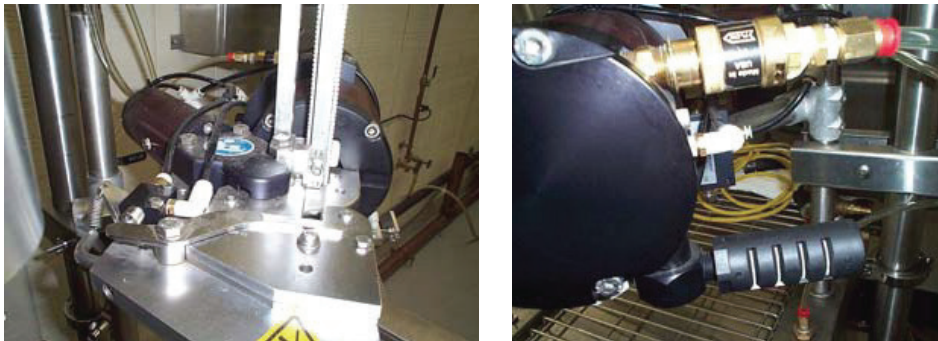


# IMPORTANT - READ FIRST - IMPORTANT

**WARNING:** Always turn the air switch to the OFF position and disconnect the air hose to the Tipper Tie clipper accessory when removing a clip jam. Always follow the manufacturer's instructions and use a screwdriver to REMOVE a clip jam. NEVER attempt to REMOVE a clip jam with your fingers.



**WARNING:** If a clip jams in the dies area of the Tipper Tie clipper accessory, DO NOT attempt to cycle the machine again until the jam has been cleared. Follow ALL safety procedures. Place the air valve in the OFF position and disconnect the air supply BEFORE attempting to REMOVE the clip or other obstruction from the die area. Use a screwdriver, NOT your fingers, to remove the jam.



**WARNING:** Disconnect both air hoses on the air-operated product dispensing valve BEFORE disassembly.



# IMPORTANT - READ FIRST - IMPORTANT

**WARNING:** The CapKold CKPF/3 Mobile Pump/Fill Station electrical power cord should NOT be allowed to rest on the floor in water or a high moisture environment.



**WARNING:** DO NOT operate the CapKold CKPF/3 Mobile Pump/Fill Station with the pump rotor housing cover removed, or without ALL bolts installed and properly tightened.



**WARNING:** DO NOT spray or hose down the CapKold CKPF/3 Mobile Pump/Fill Station Control Panel or Inverter with water.



**CAUTION:** When cleaning and working on the components of the CapKold CKPF/3 Mobile Pump/Fill Station, be careful of metal surfaces, components and housings that may still be HOT. DO NOT touch HOT surfaces as direct skin contact can result in severe burns.

# IMPORTANT - READ FIRST - IMPORTANT

**CAUTION:** When working on the rotor housing of the product pump or removing the rotors from the housing, be aware that the surfaces may be HOT. Use protective devices and remove rotors with a tool to avoid skin contact. Keep feet and other body parts clear of the rotor housing during rotor removal and installation.



**CAUTION:** REMOVE product tubing and rotors, BEFORE removing rotor housing from the unit.

**CAUTION:** CapKold CKPF/3 Mobile Pump/Fill Station MUST have a separate ground wire for safe operation

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# Equipment Description

## GROEN MODEL CKPF/3 MOBILE PUMP/FILL STATION



The CapKold CKPF/3 Mobile Pump/Fill Station is designed to rapidly and gently transfer food product from a steam-jacketed kettle into flexible plastic casings and other food containers. The base of the unit is a rectangular cabinet on locking casters.

A pedestal mounted control package is located on the left side of the deck of the cabinet. It allows fast and simple adjustment of pumping speed and volume. An air-operated product dispensing valve is mounted on a pipe frame over the right side of the cabinet deck, directly over a grate with sink and drain. An accessory clipper mounts on the pipe frame between the control panel and the product dispensing valve. It is used to close plastic casings filled with food product.

A foot switch is mounted under the front of the cabinet to control operation of the product dispensing valve. The product pump housing is mounted on the lower rear of the cabinet. It is driven by a motor and inverter located inside the cabinet.

### Standard Features:

1. All stainless steel construction
2. Rear-mounted positive displacement pump
3. Air-operated product flow control valve
4. Right-to-Left operator fill sequence
5. Full surface spill tray with drain and removable stainless steel grate
6. Four locking casters
7. 15-foot air hose; air regulator; air filter
8. UL and NSF listed; HACCP capable

### Integrated Control Package:

The CapKold CKPF/3 Mobile Pump/Fill Station control panel is pedestal-mounted to the fill station and is provided with a water resistant case and a clear, lockable cover to simplify clean-up and to protect the touch screen. The height of the control panel is designed to reduce operator fatigue and simplify changes of pump speed and volume settings for different products.

The standard operating controls include:

1. Manual, Metered or Continuous pumping – operator selectable
2. Pump Speed (0 to 20 gallons per minute – GPM) – operator input
3. Metered Volume (0.0 to 10 gallons in 0.01 gallon increments) – operator input
4. Foot-activated fill switch
5. Knee-operated and hand-operated STOP switches
6. Digital display of volume pumped per casing, total casings pumped and total volume pumped per batch

Additional controls provided for add-on options:

7. Temperature monitor and lock-out indicator with audible alert when product temperature drops below user preset limit (typically 180°F or 82°C).
8. Product Temperature Recorder

# Equipment Description

## OPTIONAL FEATURES AND ACCESSORIES

- Air-Operated Casing Clipper (Tipper-Tie)
- Product Temperature Assurance with lockout and visual/audible alert
- Product Temperature Recorder
- 2-section 3" Transfer Hose assembly (6-foot long) with fittings to connect to pump-fill station and kettle valve
- Additional 3" Transfer Hose section (3-foot long) with fittings
- High-volume air-eductor vacuum pump (for product vacuum packaging for cook tank production)
- Casing Bin Holder (mounts to side of station and holds empty casing bags)
- Pan Fill adaptors for 2-1/2", 4" and 6" hotel pans
- KIWI Label Maker (manual) with single set of letters and starter ink supply (casing content/product date labeling on Tyvek® tape labels)
- Data Max Labeler
- Prison Package

# Installation

## UNPACKING AND INSPECTION

The CapKold CKPF/3 Mobile Pump/Fill Station is a mobile cabinet mounted on short legs and lockable casters. It will arrive packed in a wooden crate. Carefully inspect the crate for any signs of damage and then carefully remove the unit from the crate, inspecting it further for any signs of damage. Notify the delivery agent immediately if damage is found and follow their instructions regarding submission of an insurance claim.

During unpacking, inspect all packing materials to ensure that no loose parts are inadvertently discarded.

Check the casters to ensure they are fully inserted in the leg sockets and that their locks are released; then move the station to its intended operation location.

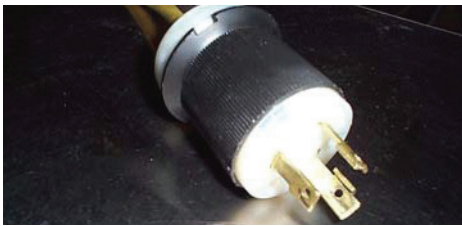
## CASING CLIPPER INSTALLATION



The CapKold CKPF Mobile Pump/Fill Station is intended for use with a Tipper Tie Casing Clipper installed adjacent to the fill valve. Locate the clipper unit and mounting hardware (which may have been packed and shipped separately). Mount the clipper to the CapKold CKPF/3 Mobile Pump/Fill Station as follows:

The clipper unit is air-operated and requires a source of compressed air regulated between 80 to 90 PSI, minimum. Typical operation of the clipper at 10 cycles per minute will require approximately 60 CFM (cubic feet per minute) of clean dry air. Insufficient supply of air will cause the clipper unit to malfunction.

## ELECTRICAL POWER REQUIREMENTS



**WARNING**  
THE RECEPTACLE AND CIRCUIT MUST  
BE PROPERLY GROUNDED.

The CapKold CKPF/3 Mobile Pump/Fill Station is supplied with a 15-foot air hose terminated with a quick disconnect fitting. It can be connected directly to the facility compressed air supply, or in some cases to an auxiliary compressed air outlet on the CapKold kettle.

Electrical power must be supplied to the CapKold CKPF/3 Mobile Pump/Fill Station through a 25-foot power cord attached to the cabinet and terminated with a three-prong, twist-lock plug. The plug requires a NEMA L6-30R receptacle (Hubbell™ 2621 supplied with Single-Phase, 30 Amp 220-240 Volt (50/60Hz) AC service. The unit will draw approximately 15 Amps in normal operation.

## CLEANING/SANITIZING FOR FIRST USE

Before operating the CapKold CKPF/3 Mobile Pump/Fill Station it is recommended that the unit be cleaned and sanitized for use. See the instructions starting on page 20.

# Start-Up



Move the CapKold CKPF/3 Mobile Pump/Fill Station adjacent to a CapKold kettle within 6'feet of the kettle outlet valve. Lock the casters on the pump/sill station  
Thoroughly wash, rinse and install the 3-inch sanitary-thread elbow to the underside of the pump housing. Orient the elbow as desired and tighten the 3-inch hex nut with the wrench supplied with the CapKold CKPF/3 Mobile Pump/Fill Station.

Connect one end of the 2-section 6-foot sanitary hose to the outlet of the elbow on the pump housing. Hand-tighten the 3-inch nut. Connect the other end of the sanitary hose to the 3-inch threaded elbow outlet under the CapKold kettle. This will be located directly above the air-operated drop down valve (if one is supplied) or immediately below the manual or air-operated ball valve (if one is supplied). Hand-tighten the 3-inch nut onto the elbow. Inspect the hose installation and adjust the position of the pump/fill station, if needed. Finally, **TIGHTEN BOTH 3-INCH NUTS WITH THE WRENCH SUPPLIED WITH THE UNIT.**

## NOTE

**SOME STYLES OF CAPKOLD KETTLES ARE SUPPLIED WITH 3" PRODUCT ELBOWS FITTED WITH TRI-CLAMP FLANGES IN LIEU OF 3" SANITARY THREADS. IN SUCH CASES THE 6-FOOT HOSE ASSEMBLY WILL BE SUPPLIED WITH A MATING TRI-CLAMP FLANGE AT ONE END. INSTALL THE HOSE TO THE ELBOW BY INSERTING A BEADED GASKET BETWEEN THE TWO FLANGES AND THEN COMPRESS THE FLANGES TOGETHER WITH A TRI-CLAMP.**

# Operation

The CapKold CKPF/3 Mobile Pump/Fill Station Control Panel is controlled by a modular HMC (human-machine controller). The HMC is a combination touch-screen HMI (human-machine interface) and a PLC (programmable logic controller). The Pump Fill Control System features language selection (English or French), motor speed control, bag totalizer, gallons/liters totalizers (language dependent), enable/disable the temperature assurance feature, temperature read out in °F or °C, and other user definable set points.

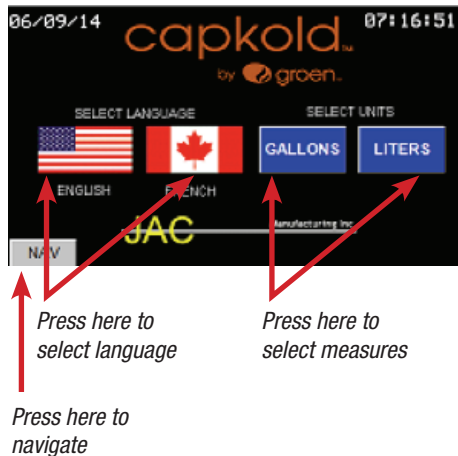
There are six User screens on the HMC display: Home, Mode, Pump Speed, Total, Maint, and Cal.

The HMC display also has two alarm screens: Low Temperature and Emergency Stop; and two pop-up menus: Navigation and Bag Fill Amount.

## Description of Displays:

### HOME DISPLAY

The Home Display will be the first window to show on a power-up cycle if the Emergency Stop button is not pressed. This display allows the user to select a Language by pressing on appropriate Flag. US = English and Canada = French. The default language on a power-up cycle is English.



The **NAV** button located on the lower left corner of every display allows the user to Navigate between Displays by pressing the button and making a selection.

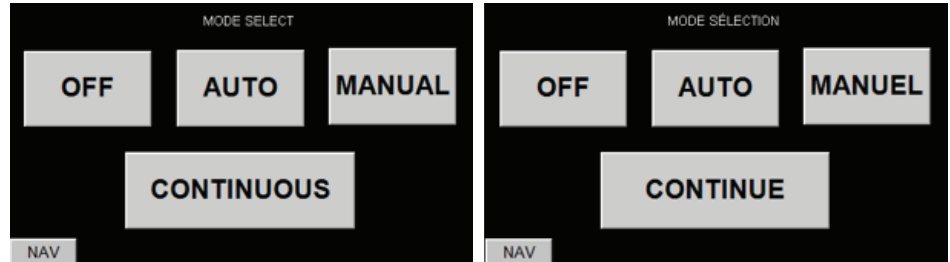
When the **NAV** button is pressed the Navigation Pop-Up Window will be displayed. This Pop-up is available on every display except on the Emergency Stop warning display. Press the appropriate Display title on the Navigation Pop-Up and the chosen display will appear. (**MAINT** display requires password entry)



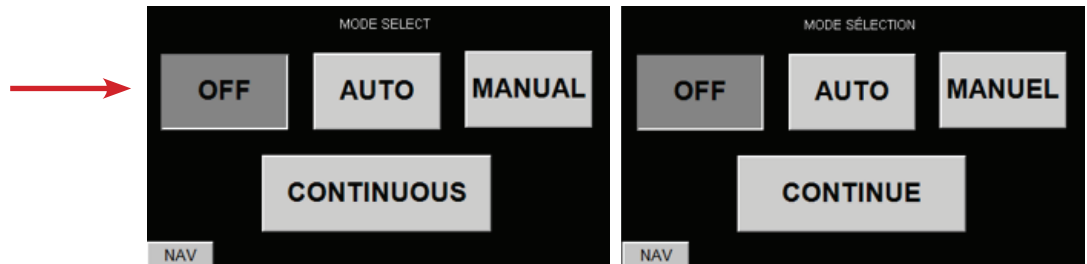
# Operation

## MODE SELECT DISPLAY

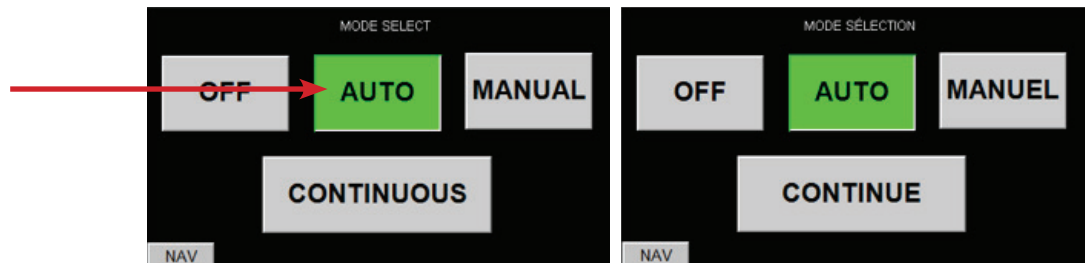
The **MODE SELECT** display allows the user to select between **OFF**, **AUTO**matic mode, **MANUAL** mode, and **CONTINUOUS** Mode.



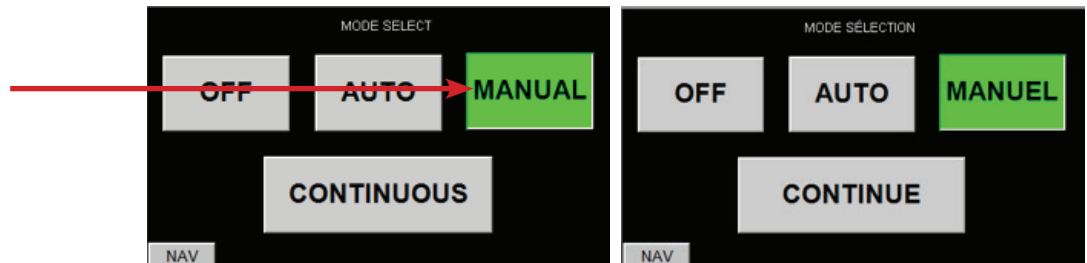
**OFF** = Turns off any Mode selection. The pump cannot be started when **OFF** is selected.



**AUTO** mode = Will turn on the pump at the desired speed when the foot switch is pressed until the desired amount per bag is reached.

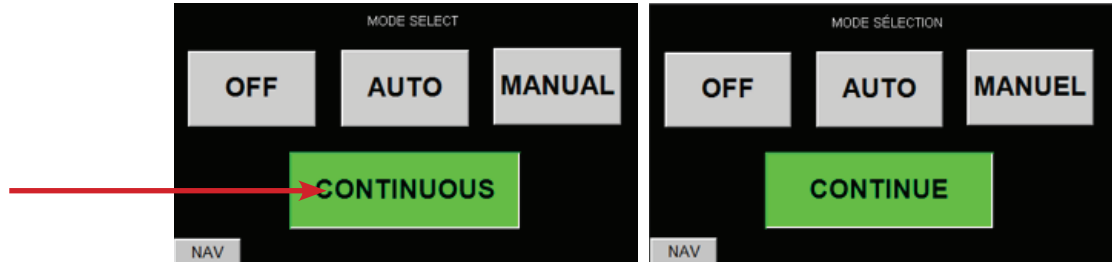


**MANUAL** mode = Will turn on the pump at the desired speed when the foot switch is pressed and will stop the pump when the foot switch is released.



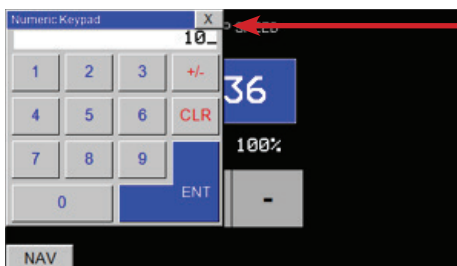
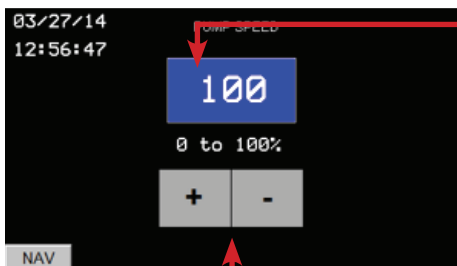
# Operation

**CONTINUOUS** mode = Will turn on the pump at the desired speed. Once the **CONTINUOUS** button is pressed the user must select the **OFF** button to turn off the Pump.



## PUMP SPEED DISPLAY

The Pump Speed Display allows the user adjust the speed of the pump two different ways. One way is by pressing the Numeric display. By pressing on the numeric display a keypad entry will pop-up allowing the user to enter 0 to 100%. The other way is by pressing the + and – buttons which will increase or decrease the speed in 1% increments.

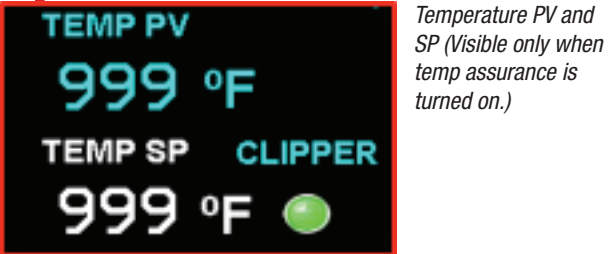
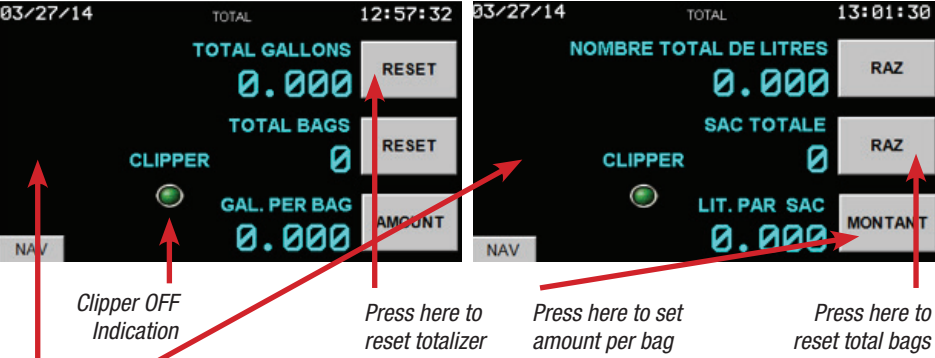


# Operation

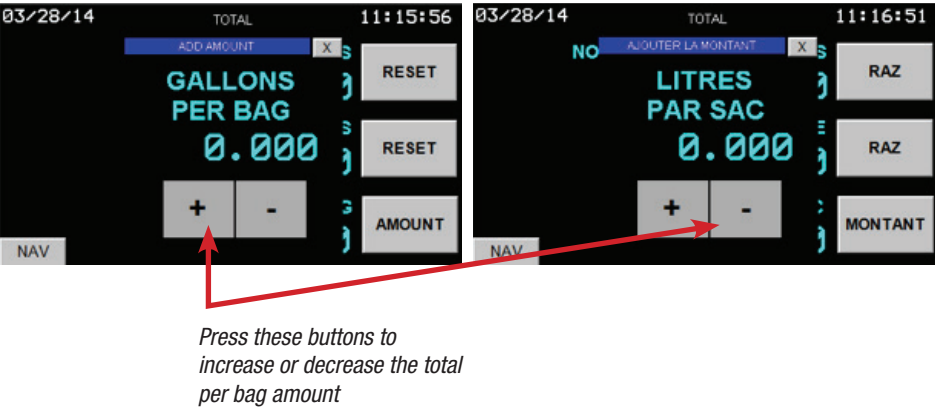
## TOTAL DISPLAY

**NOTE**  
**GALLONS ARE 0.250 AND LITERS ARE 0.946 PER PULSE. THESE VALUES ARE SET UP ON THE CAL DISPLAY AND MUST BE ENTERED BEFORE YOU CAN SET THE AMOUNT PER BAG. THE AMOUNT PER BAG MUST BE SET UP BEFORE THE PUMP WILL OPERATE IN AUTO MODE.**

The Total Display shows the total Gallons or Liters (Language dependent: English = Gallons, French = Liters) pumped, total bags pumped, amount per bag, Temperature PV in °F or °C if Temp Assurance is selected, Temperature SP in °F or °C if Temp Assurance is selected, and Clipper **OFF/ON** indication. This Display allows the user to reset total accumulated gallons or liters and total bags pumped, adjust the total amount per bag by pressing the **AMOUNT** button. When the **AMOUNT** button is pressed, the Amount per bag pop-up appears allowing the user to increment by the amount per pulse.



Add Amount pop-up will display when the **AMOUNT** button is pressed. The + or – buttons are pressed to increase or decrease the total per bag. The Gallons-per-Bag and Liters-par-Sac must be set up on the **CAL** display in order to set the amount per bag.



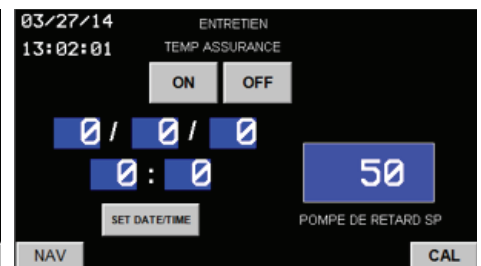
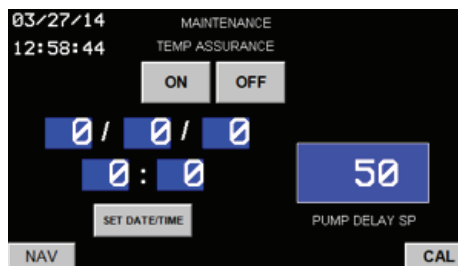
# Operation

## MAINT DISPLAY

The **MAINTENANCE** Display is Password Protected. The Default Password is 100. When the **MAINT** button on the Navigation Pop-up display is pressed a keypad will be displayed to enter the correct password. Once the correct password is entered the **MAINTENANCE** display is accessed.



When the **MAINTENANCE** Display is accessed the user will have the option to set the clock and date, turn Temp Assurance option on or off, set the Temp Assurance Low Temp Set Point, adjust the Product pump **ON** delay or Navigate to the password protected **CAL** Display.



### Set the Date and Clock

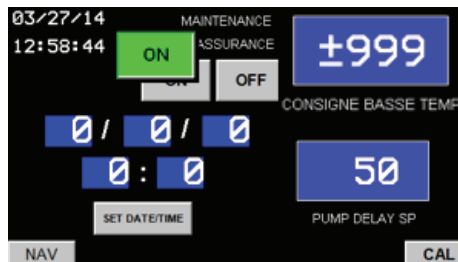
To set the date and clock press each number and enter a value on the keypad that will pop-up. Once all the fields have a number press the Set **DATE/TIME** Button. This will change the Date and Time only when all the fields have a number.

### Set the Pump ON Delay

To set the Pump **ON** delay press on the Numeric Graphic and enter the amount of time after the Product Valve Opens before the Pump begins. Default is 0.50 sec. This is set in Hundredths of a second.

### Turn On/Off Temperature Assurance

To turn on or off Temp Assurance simply press the **ON** or **OFF** button. When Temp Assurance is turned **ON** the Low Temp Set point appears. Enter the desired Low Temperature Setting by pressing on the numeric graphic and entering the set point in the pop-up keypad.



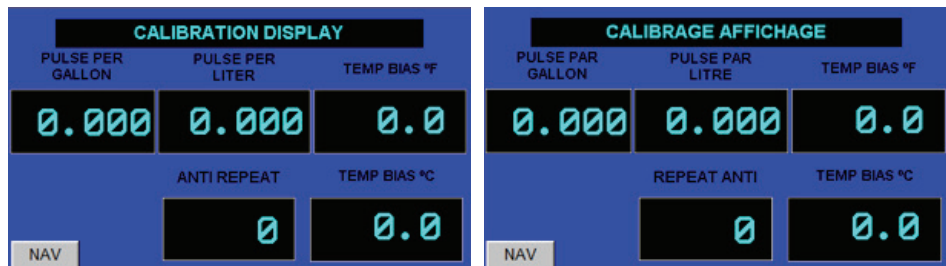
# Operation

## CAL DISPLAY

The **CAL** Display is Password Protected. The Default Password is 1055. When the **CAL** button located on the Lower Right corner on the **MAINT** display is pressed a keypad will be displayed to enter the correct password. Once the correct password is entered the **CAL** Display is accessed.



When the **CAL** display is accessed the User will be able to adjust the Pulse-per-gallon, Pulse per liter, Temperature Bias in °F and °C and adjust the anti-repeat timer. These settings should only be adjusted by qualified personnel.



### To Set the Pulse per Gallon

Press on the numeric graphic and enter the value into the pop-up keypad. 4 pulses = 1 Gallon so each Pulse is ¼-gallon or 0.250  
Enter 250 in the gallons keypad.

### To Set the Pulse-per-Liter

Press on the numeric graphic and enter the value into the pop up keypad. 4 pulses = 1 Gallon There are 3.784 liters in a gallon ( $3.784/4 = 0.946$ ) so each pulse is 0.946 liters.  
Enter 946 in the pop-up keypad.

**NOTE**  
THE CAPKOLD CKPF/3 MOBILE  
PUMP/FILL STATION CONTROLLER IS  
FACTORY CALIBRATED BY JAC MFG INC.

### To set the Temp °F or °C Bias

Press on the numeric graphic and enter the value + °F or °C into the pop-up keypad.

### To set the Anti-Repeat Timer

Press on the numeric graphic and enter the value into the pop-up keypad. Units are in hundredths of a second. This timer will not allow a second auto cycle for "X" amount of time if the foot switch is pressed and not released. If the foot switch is pressed and not released and the above time expires, then the pump will pump the next bag. Suggested setting of 500 is recommended which equals 5 seconds.

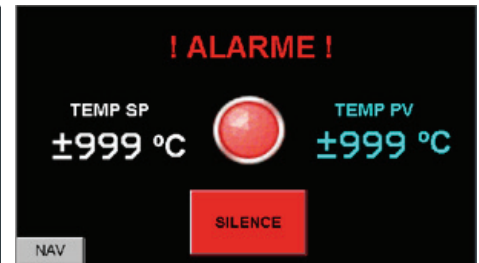
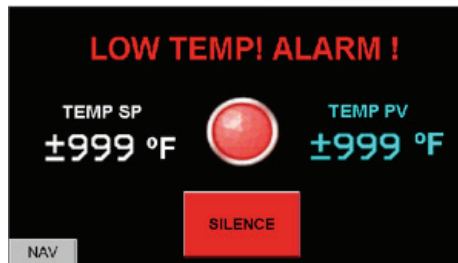
# Operation

## ALARMS

The CapKold CKPF/3 Mobile Pump/Fill Station comes with two alarm screens Low Temperature Alarm and Emergency Stop Pressed. The Low Temperature Alarm Screen will display when the alarm is triggered and the Emergency Stop Pressed display will only display when the Emergency stop button is pressed.

### Low Temperature Alarm Screen

This display is where the alarm silence button is located. Once the low temp alarm is triggered an alarm horn will sound and the low temperature alarm screen will display. The user can then silence the horn. Once silenced the NAV button will appear allowing the user to navigate to another display.



### Emergency Stop Screen

This display will pop-up every time and while the emergency stop button is pressed. It will disappear when the emergency stop condition has been cleared.



## COOK/CHILL OPERATION

The following steps are intended to give an overview of the typical steps employed in a cook/chill kitchen when a CKPF/3 Pump/Fill Station is used to fill and seal the contents of a steam-jacketed kettle into flexible casings, prior to safely chilling them for extended cold storage.

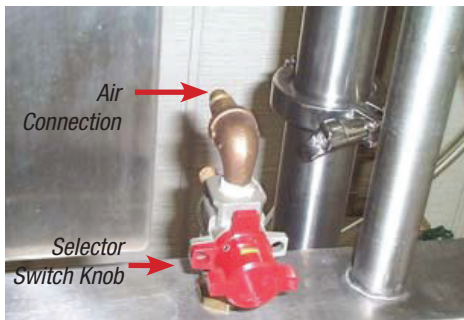
### Preparatory Steps:

1. Before starting the first batch in the kettle, thoroughly sanitize and rinse the interior and the kettle drain path through the product outlet valve, so that it is ready for connection to a CapKold CKPF/3 Mobile Pump/Fill Station at the end of the batch cycle.
2. Clean and sanitize the 2-Section 3" hose that will be used to connect the CapKold CKPF/3 Mobile Pump/Fill Station to the kettle product drain valve.
3. Clean and sanitize the product path through the pump inlet to the product outlet valve on the CapKold CKPF/3 Mobile Pump/Fill Station.

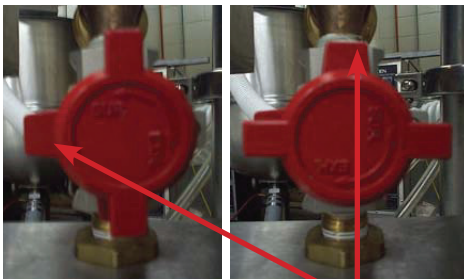
# Operation



Power Cord Plug



Air Valve



Indicator

Turn knob clockwise  
To turn air off

Turn knob counter  
clockwise to turn air on

## Pump Set-Up:

1. Connect the air hose on the CapKold CKPF/3 Mobile Pump/Fill Station to a compressed air service point.
2. Connect the power cord on the Pump/Fill Station to the 208/220 Vac **GROUND**ED receptacle on the left side pedestal on the kettle or to a 208/220 Vac, 30A **GROUND**ED receptacle on the wall. **NOTE:** The power cord is terminated with a three-prong twist-lock plug.
3. Connect the 2-Section 3" food transfer hose to the elbow outlet on the kettle product valve and the pump inlet elbow on the CapKold CKPF/3 Mobile Pump/Fill Station.
4. Load the Tipper Tie casing clipper magazine with clips; check the printer ink and label paper supplies, if applicable.
5. Turn the air valve to the **UP** position, making sure that the 4-position selector switch is in the **OFF** position.
6. Set the batch size:
  - Press the **NAV** button on the control panel and select the **TOTAL** display mode.
  - Press the **AMOUNT** button on the **TOTAL** display.
  - The **ADD AMOUNT** pop-up will appear. Press the + or – buttons on the pop-up to increase or decrease the gallons per bag (or litres per sac) amount. Recommended amount is 1.5 gallons per bag (6 litres per sac). **NOTE:** The adjustment and measurement process compensates for differences in viscosity between batches of different food products and ensures consistent bagging volumes.
  - Test the setting by selecting the **AUTO** button on the **MODE SELECT** display and placing a graduated measuring container below the product output valve. Depress the foot switch once and check the amount of product dispensed into the container. Return the product in the measuring container to the kettle.
  - Make incremental adjustments on the **ADD AMOUNT** pop-up until the correct volume is dispensed.
7. Pump warm-up: [This section allows the pump body to warm up and the rotors to expand so the station can pump product in uniform measured quantities.]
  - Select the **MANUAL** mode on the control panel.
  - Set a clean, empty container under the pump outlet spout.
  - Depress and hold the foot switch pedal until the container is almost filled with product. [To **STOP** the pump, simply take your foot off the switch pedal.]
  - Pour the contents of the container back into the kettle and repeat the filling steps as necessary until the pump is operating smoothly.
8. Pump product into bags:
  - Select the **AUTO** mode on the control panel.
  - Place a flexible packaging bag over the spout of the pump outlet valve.
  - Depress the foot switch once.
  - Withdraw the bag from the valve spout and squeeze the air out of the upper portion of the bag with one hand while holding the bag steady with the other. Twist the upper portion of the bag.
  - Place the upper portion of the bag into the clipper slot and gently pull toward you. (The clipper will clip the bag and cut off the top of the bag.) **NOTE:** The bagging process should produce a tight seal but a "loose" fill of the bag contents. This allows the contents to move around in the bag chiller, shortening the chill time. The bag should not be clipped near the product like a sausage casing, as this will impede the product chilling operation.
9. Place each bag of product into a water-bath chilling device and gently tumble or agitate for the recommended time needed for the product to reach a temperature of 40 °F (or 4 °C) or lower.

# Operation

## **Between Batches:**

- Remove any food product trapped inside the kettle that may affect the next batch of product. Thoroughly scrub and rinse the kettle and agitator at the end of each batch.
- Fill the kettle half-full or more and pump at the highest speed until the water runs clear through the hoses, pump and fill valve.
- Turn the rinse water off, continue to run the pump until the kettle is empty. Then turn the pump OFF and CLOSE the kettle drop-down valve (or ball valve).
- Start a new batch.

## **Thermal Assurance Operation (Option):**

- Thermal assurance is provided as an option to the pump/fill station. It allows operators to maintain a minimum product temperature of product delivered at the pump/fill valve to the packaging bag.
- The minimum temperature is set on the control panel [the default value is 180 °F (or 82 °C).] At a minimum temperature of 180 °F (or 82 °C) the delivered product is pasteurized.
- If the delivered product temperature falls below the set point, the air supply to the clipper is disabled and the clipper is not allowed to operate. To restore operation, check the heating condition of the kettle (it should have the steam source turned on) and then pump product into a clean container until the product entering the fill valve exceeds the set point. Return any product in the container to the kettle for reheating and bagging.
- The thermal probe for the temperature assurance feature is located in the tube feeding the fill valve.

# Equipment Cleaning/ Sanitization Procedures

## CLEANING/SANITIZING

All parts of CapKold equipment should be cleaned periodically with detergent and hot water, sanitized with water and a chlorine-based sanitizing agent (diluted to 200 ppm chlorine) and rinsed with clean water.

Before using an agitator kettle, it should be filled with water and an approved commercial sanitizing agent (diluted according to the manufacturer's directions), agitated for several minutes, pumped out via a CapKold CKPF/3 Mobile Pump/Fill Station, rinsed with clean water, and pumped out a second time to remove the sanitizer. This procedure will sanitize and prepare the kettle interior, the agitator, the 3" hose assembly, the pump assembly and the piping up through and including the product fill valve. Kettles without agitators (such as pasta kettles) only need the sanitizing solution emptied to a drain and then rinsed with clean water, before they are ready for use

## SYSTEM DISASSEMBLY & CLEANING

At the END of each day disassemble and thoroughly clean all of the components of the CapKold system with hot water and detergent.

### Agitated Kettles:

- Remove, clean and rinse the scraper blades, the blade holders, the drop down valve (or ball valve) and the outlet elbow fitting.
- Clean the kettle interiors with a brush and a hot water detergent solution or a high pressure spray hose.
- Clean the kettle exteriors with a brush and a hot water/detergent solution (**DO NOT USE A HIGH-PRESSURE SPRAY**).
- Wipe down the control consoles and piping boxes with a cloth and hot water/detergent solution and rinse with a second cloth and clean water.
- **DO NOT USE** stainless steel or other metal scrub pads, or other materials and implements that may scratch the kettle surface.

### Pasta Kettles:

- Remove, clean and rinse the drop down valve (or ball valve).
- Clean the kettle interiors with a brush and a hot water detergent solution or a high pressure spray hose. Rinse with clean water and drain.
- Clean the kettle exteriors with a brush and a hot water/detergent solution.
- Wipe down the piping boxes with a cloth and hot water/detergent solution and rinse with a second cloth and clean water.
- **DO NOT USE** stainless steel or other metal scrub pads, or other materials and implements that may scratch the kettle surface.

### Food Transfer Hose Assembly:

- Disconnect the hose from the kettle and the CapKold CKPF/3 Mobile Pump/Fill Station and separate into two 3" sections by removing the Tri-Clamp in the middle.
- Clean the interior of each hose section with a hot water/detergent solution and a 3" hose brush long enough to reach all interior surfaces of the hose. Scrub the outside of each hose section with the same hot water/detergent solution and a brush or scrub pad. Rinse the inside and outside of each hose section with clean water.
- The removable components, such as Tri-Clamps and Hex Nuts can be cleaned in a pot washing machine.
- **NOTE:** Gaskets and pump rotors must be washed by hand, and **NOT** in a pot washing machine.
- Reassemble the hose sections with the Tri-Clamp and beaded gasket.

# Equipment Cleaning/ Sanitization Procedures

## Pump/Fill Station:

- Wipe down all exterior and interior surfaces with a cloth moistened with detergent in a hot water solution. Rinse off the detergent with a second cloth moistened and frequently rinsed in hot water and then dry all surfaces with a third cloth.
- Disassemble the entire pumping path assembly from the 3” elbow on the underside of the pump housing to the product valve above the table. The components are connected with Tri-Clamps, gaskets and holding brackets that secure the tubing to a pipe support frame.
- Clean the piping components (except for the gaskets) in a pot washing machine and rinse thoroughly. Clean the gaskets and product valve by hand in a hot water/detergent solution and rinse thoroughly with clean water.
- Clean the pump housing and rotors as follows:

### Step 1:

Remove the pump housing cover by loosening the eight nuts. Carefully pull off the rotors and inspect the inside of the housing cavity. Hand wash the cavity, cover and rotors with a solution of hot water and detergent. Rinse the cavity, cover and rotors with clean, hot water and dry them with a clean cloth.

### Step 2:

Slide the rotors back onto the shafts, taking care to match them to the mating corners on each shaft. Place a new paper gasket on the pump housing (a new gasket is required each time you clean and re-assemble the pump).

### Step 3:

Place the pump cover on the pump housing with the edge stamped **TOP** uppermost. Install the eight nuts hand-tight. Tighten the nuts fully with the cross-wrench supplied with the pump/fill unit.

- Clean the pipe framework that the tubing and product valve is secured to with a cloth and hot water/detergent solution and then rinse with a clean cloth and clear water.
- Reassemble the piping components and product valve with the Tri-Clamps and gaskets and secure the assembly to the support pipe frame.

## Cleaning Tips:

- When you are finished with a kettle load and intend to do another load:
  - **CLOSE** the kettle outlet valve (drop down or ball), rinse the kettle interior with a high-pressure spray hose and brush down any particles the spray does not loosen.
  - **OPEN** the kettle outlet valve and set the pump/fill station to **CONTINUOUS**. The pump will run continuously and the kettle will empty through the pump. Wastewater will flow into the sink under the product valve, down the drain hose and out the rear of the pump/fill cabinet to a floor drain. **NOTE:** if you wish to reduce the BOD rating due to debris in the waste water, use a strainer or porous bag to remove the solids before they reach the floor drain. This procedure effectively strains solids out of the pumped cleanup water.
  - Rinse the kettle while continuously pumping, to ensure all particles and debris are removed and the interior is clean.
  - Turn **OFF** the pump and close the kettle valve – you are now ready for a new load.
- **DO NOT SPRAY ELECTRONIC CONTROLS** with a high pressure hose. The control console is water resistant, but **NOT** waterproof.
- It is recommend that you consult with your provider of commercial cleaning supplies on the proper chemicals to use in cleaning and sanitizing your CapKold CKPF/3 Mobile Pump/Fill Station and other CapKold equipment. The supplier will have direct contact with technical advisors who are knowledgeable in the best methods for cleaning and which chemicals are most suited for the water available in your specific location.

# Maintenance

The CapKold CKPF/3 Mobile Pump/Fill Station requires regular maintenance. Please refer to the schedule and pictures below:

Component	Schedule
<b>PUMP</b>	
Inspect Rotors for nicks, cuts or separation from the metal base	Daily
Inspect seals for integrity – no splits, cuts or frays	Daily
Check oil levels in the pump and drive gearboxes	Weekly
Change oil in the drive and pump gearboxes [Use Shell Turbo Oil 100, or equivalent]	Semi-annually
<b>TIPPERTIE CLIPPER</b>	
Inspect Oiler and add oil if required [Use light weight mineral oil]	Daily
Inspect air lines – should not be taught, pinched or bound	Daily
Inspect cut-off knife – no nicks or dullness	Monthly
Inspect Oiler drip rate – adjust, if necessary, to 1 drop per 6 strokes	Monthly
Inspect clipper for tightness of clip – fill a casing with water, clip closely (with little or no slack), and apply pressure to the casing (i.e. stand on the casing) – there should be no signs of leakage	Monthly

## PUMP HOUSING VIEWS



## AIR PRESSURE REGULATORS



## OILER



# Maintenance

**PRODUCT VALVE**



**OPERATOR FOOT SWITCH**



**INVERTER**



**PUMP MOTOR**



# Troubleshooting

The CapKold CKPF/3 Mobile Pump/Fill Station is designed to operate smoothly and efficiently when properly maintained. The following is a list of checks to make in the event of a problem. Wiring diagrams are furnished inside the service panel and later in this manual. If an item on the check list is marked with an (X), it means the work should only be performed by an Authorized Service Agent (ASA). Reference material for options to the CapKold CKPF/3 Mobile Pump/Fill Station are also included with this manual. Refer to the reference material instructions if problems arise.

SYMPTOM	WHO	WHAT TO CHECK
Unit will not pump.	User	<ul style="list-style-type: none"> <li>a. Pull the emergency STOP switch out</li> <li>b. Turn the air switch ON.</li> <li>c. Check to see if the cabinet lower front panel is correctly installed.</li> <li>d. Plug in the unit and connect the air lines.</li> <li>e. Prime the food transfer hoses with water.</li> <li>f. Check that valve on the kettle underside is OPEN.</li> <li>g. Check the control panel to make sure the pump/fill is in the AUTO, CONTINUOUS or MANUAL mode.</li> <li>h. Check the pump motor for damage (X).</li> <li>i. Check the drop-down/ball valve for damage (X).</li> </ul>
Tipper Tie clipper will not operate.	User	<ul style="list-style-type: none"> <li>a. Check for jammed clips and remove them.</li> <li>b. Turn the air switch ON.</li> <li>c. Check the air pressure – a minimum of 90 PSI is needed.</li> <li>d. Check the loader to see if there are clips.</li> <li>e. If the Temp Assurance option is installed, is the product temperature below the set point?</li> <li>f. Inspect the Tipper Tie for damage (X).</li> <li>g. Check the oil level in the lubricator.</li> <li>i. Check that the FRL is plugged in.</li> </ul>
Bags fill to fast/too slow.	User	<ul style="list-style-type: none"> <li>a. Adjust the fill volume on the control panel.</li> <li>b. Check food transfer hoses for blockage.</li> </ul>
Hoses leaking.	User	<ul style="list-style-type: none"> <li>a. Replace worn, damaged or missing gaskets.</li> <li>b. Tighten nuts and tri-clamps.</li> </ul>

# Suggested Spare Parts List

To obtain CapKold parts, contact your local Authorized Service Agency or contact the Unified Brands Technical Service (TS) department at 888-994-7636. The TS department can advise you on the contact for the nearest ASA and also determine if you are eligible for the CapKold Parts Direct program.

When requesting parts, please supply the model designation, serial number, voltage and phase information from the product label on your unit and the part number, part description and quantity from the table below.

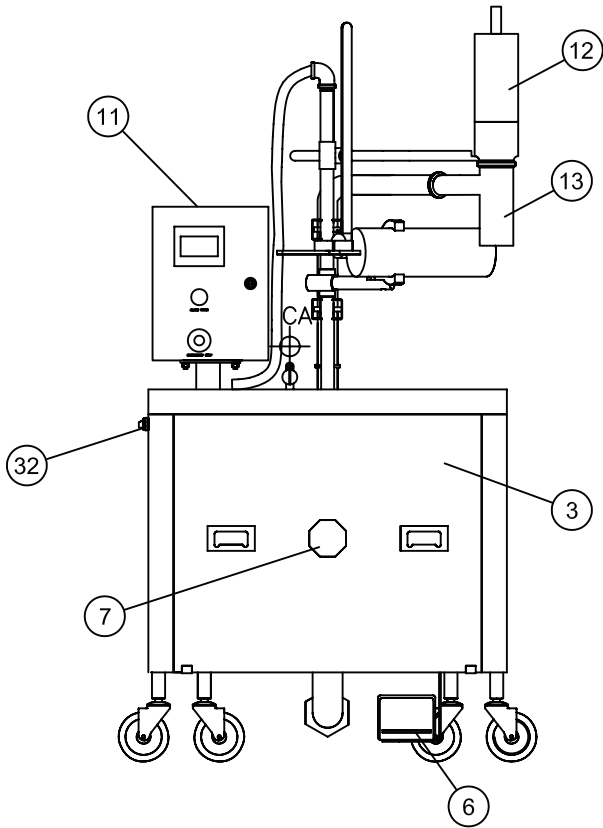
<i>Item</i>	<i>Part Description</i>	<i>CapKold P/N</i>	<i>Quantity</i>
<b>PRIMARY ITEMS</b>			
1	Shelf/Grate	129433	1
2	5" Swivel Caster	050462	4
3	Front Panel Assembly	115506	1
4	Clipper Mounting Kit	115517	1
5	Tipper Tie Clipper, Model SZ4135LG	144535	1
6	Foot Switch	005317	1
7	Knee Switch, Micro-Plunger	005329	1
8	Pump, Positive Displacement, Bevel Seat, #6	005324	1
8a	Stud, Long, #6 Pump	N103533	3
8b	Gasket, #6 Pump	005330	1
8c	O-Ring, #6 Pump	005887	4
8d	Shaft Seal, #6 Pump	005886	4
8e	Bearing Seal, #6 Pump	060108	2
8f	Rotor, Single Lobe, #6 Pump	027179	2
	Lip Seal Inserter Tool, #6 Pump	005340	1
	Wrench, Cross, #6 Pump	005339	1
	Wrench, Spanner, #6 Pump	N91459	1
9	Pump Drive Motor, 1.5 HP	120437	1
10	Inverter, 3 HP, Pump Speed Control	141918	1
10a	Thermal Overload Relay	171774	1
11	Control Panel Assembly	140101	1
12	Discharge Valve, Air-Operated	143072	1
13	3" Bagging Tube Assembly	172162	1
	2" ID Drain Hose Assembly	105864	1
<b>HOSE &amp; SANITARY PIPE CONNECTIONS</b>			
	3" Hex Wrench	005322	1
14a	3" Hex Nut, Sanitary, Acme Thread	003927	3
14b	3" Bevel Seat Gasket	005829	3
15a	2" Tri-Clamp, Sanitary	053786	6
15b	2" Tri-Clamp Gasket	016602	6
16a	3" Tri-Clamp, Sanitary	053338	2
16b	3" Tri-Clamp Gasket	053362	2
17a	Reducer, 3"-to-2" Tri-Clamp	115528	1
17b	90 Degree Elbow, 2"Tri-Clamp	014617	1
17c	14" Spool, 2" Tri-Clamp	143068	1
17d	18-3/4" Spool, 2" Tri-Clamp	172166	1
17e	9" Spool, 2" Tri-Clamp	172165	1
17f	90 Degree 3" Sweep Elbow, Acme Thread one end; Hex Nut other end	015656	1

# Suggested Spare Parts List

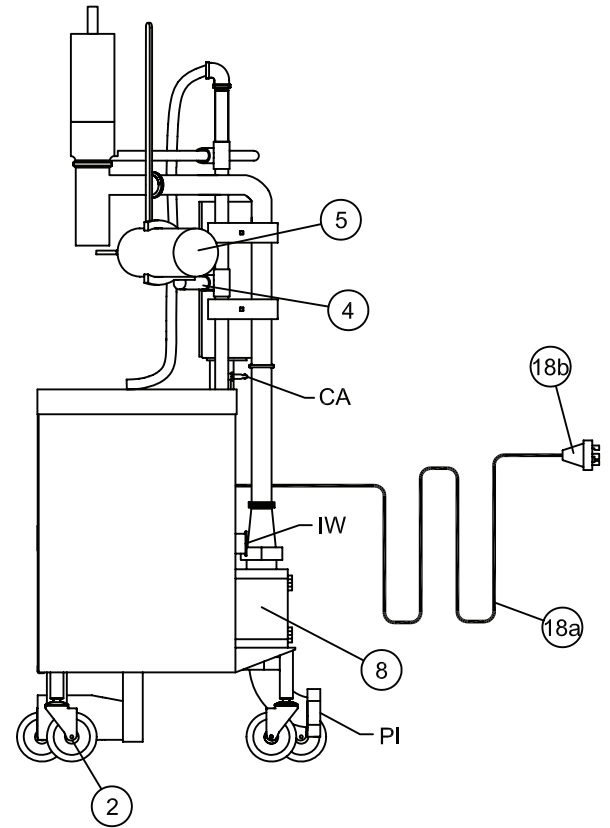
<i>Item</i>	<i>Part Description</i>	<i>CapKold P/N</i>	<i>Quantity</i>
<b>ELECTRICAL ITEMS</b>			
18a	Power Cord, 3-Conductor	097187	25 ft
18b	Plug, 3-Wire, 30A, Grounding	101030	1
<b>PNEUMATIC ITEMS</b>			
19	Solenoid Valve, Air, 5-Way, 2-Position	N110490	2
20	Regulator, 7-125 PSI	115533	2
21	Solenoid Valve, Air, 3-Way	115532	1
22	Muffler, Pneumatic	115555	3
23	Filter/Lubricator	115571	1
	Air Hose Assembly, 15-foot	073169	1
<b>TEMPERATURE ASSURANCE OPTION</b>			
24	Temperature Sensor, Flush Mount	115512	1
25	Temp Assure Mount, 2" T-C Spool, Modified	1158601	1
26	Cable, 3-Conductor, 18 Gauge	135042	24 in
<b>VACUUM EDUCTOR OPTION</b>			
27	Vacuum Gauge	N84184	1
28	Regulator, Air Pressure	084511	1
29	Pump, Vacuum Eductor	097114	1
30	Filter	097115	1
31	Valve, Air, 2-Way	097190	1
32	Air Valve Actuator	097191	1
33	Waste Tank Assembly	120412	1
33a	Tank Cover	120408	1
33b	Tank	120410	1
33c	Gasket	120411	1
<b>CONSUMABLE ITEMS</b>			
	Paper Gasket, #6 Pump [Box of 100]	110898	
	Oil, Gear Box, #6 Pump, 5 Gallons	099733	
	Lubricant, 4 Ounces	162519	
<b>ACCESSORIES</b>			
	3" Sanitary Hose, 2-Piece, Threaded Hex Nut both ends; 3" Tri-Clamp in middle	078842	
	3" Sanitary Hose, 2-Piece, Threaded Hex Nut one end; 3" Tri-Clamp in middle and other end		
	Casing Holding Bin Assembly	171592	
	Holding Bin (replacement)	171590	
	2-1/2" Hotel Pan Fill Tube Assembly	172096	
	4" Hotel Pan Fill Tube Assembly	172097	
	6" Hotel Pan Fill Tube Assembly	172098	

# Suggested Spare Parts List

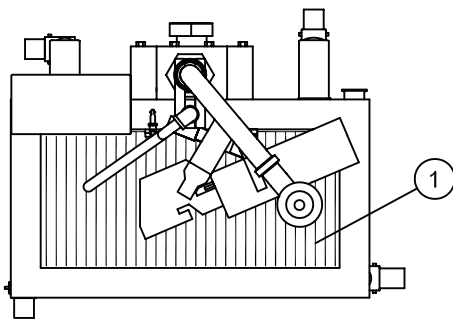
FRONT



RIGHT SIDE

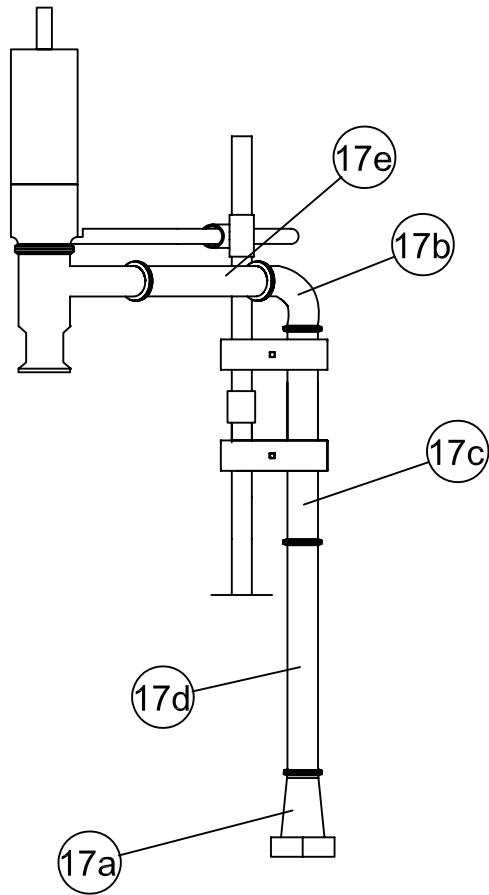


OVERHEAD

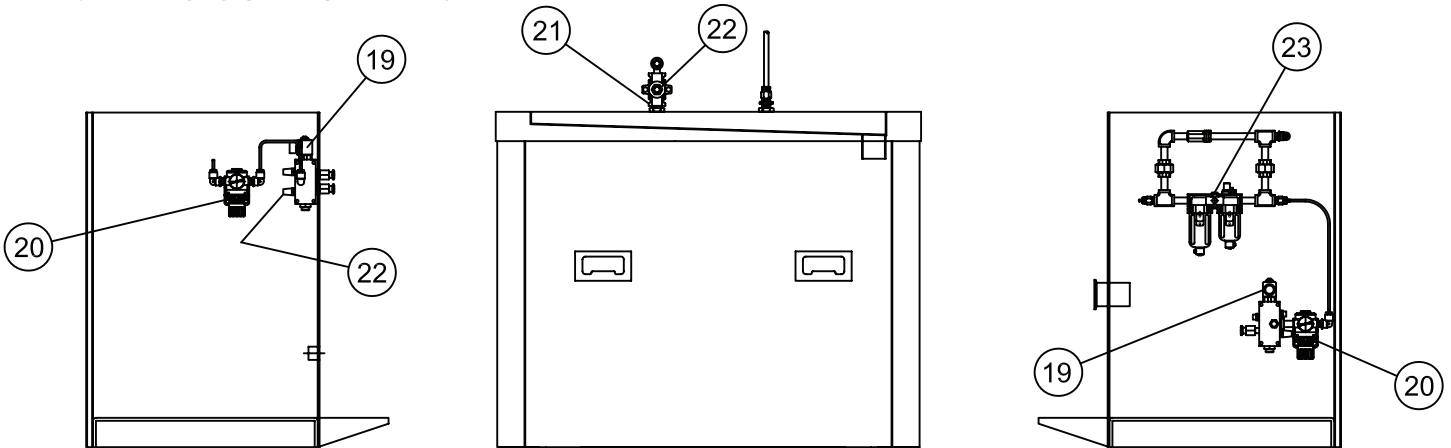


# Suggested Spare Parts List

## FILL TUBE ASSEMBLY - PUMP OUTLET - TO - PRODUCT FILL VALVE



## PNEUMATIC COMPONENTS



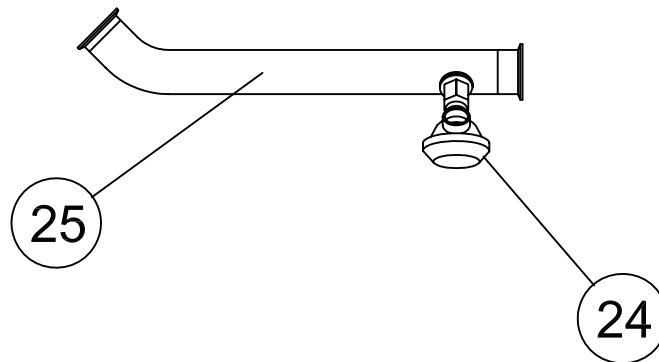
LEFT SIDE

FRONT VIEW

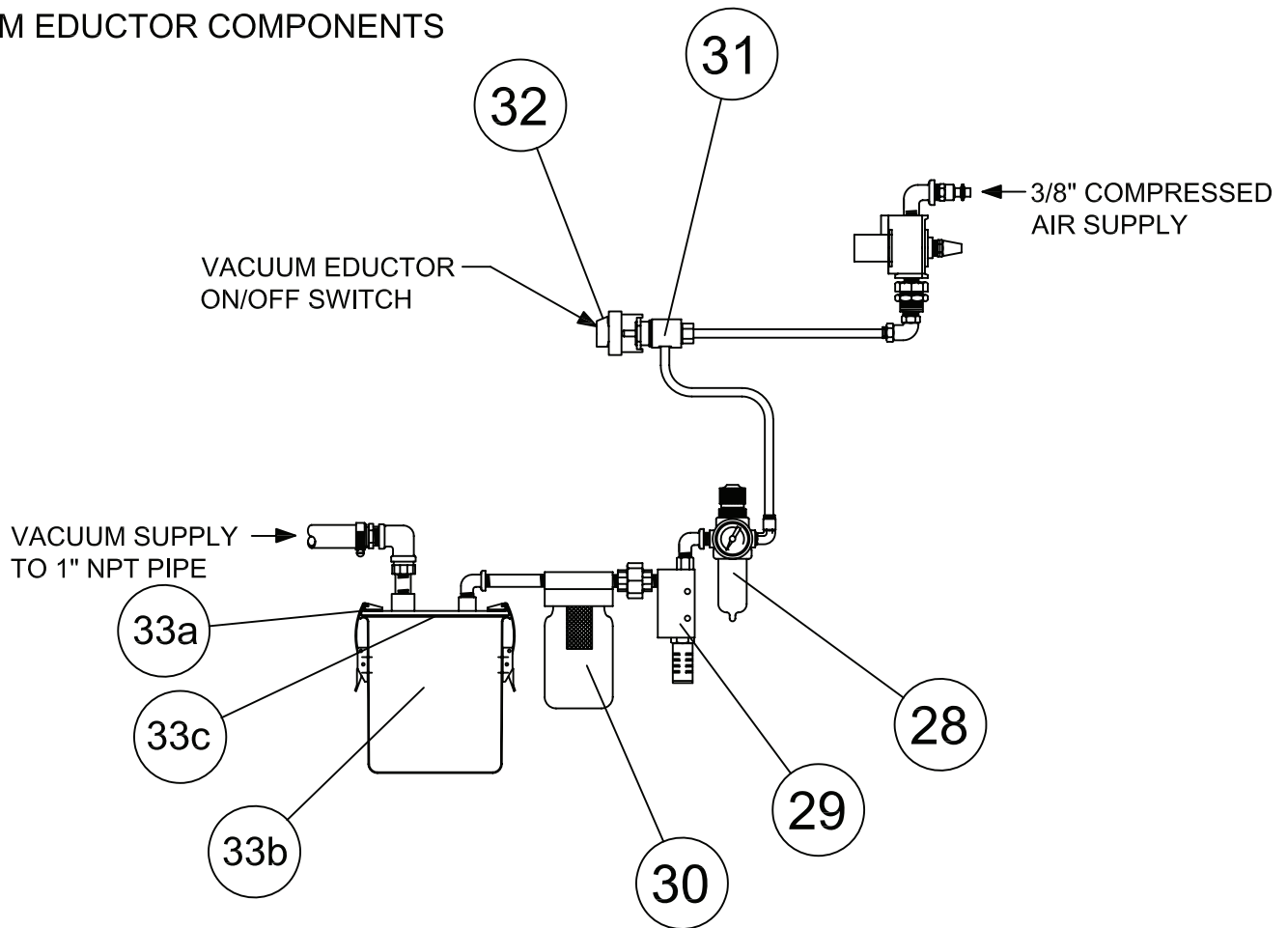
RIGHT SIDE

# Suggested Spare Parts List

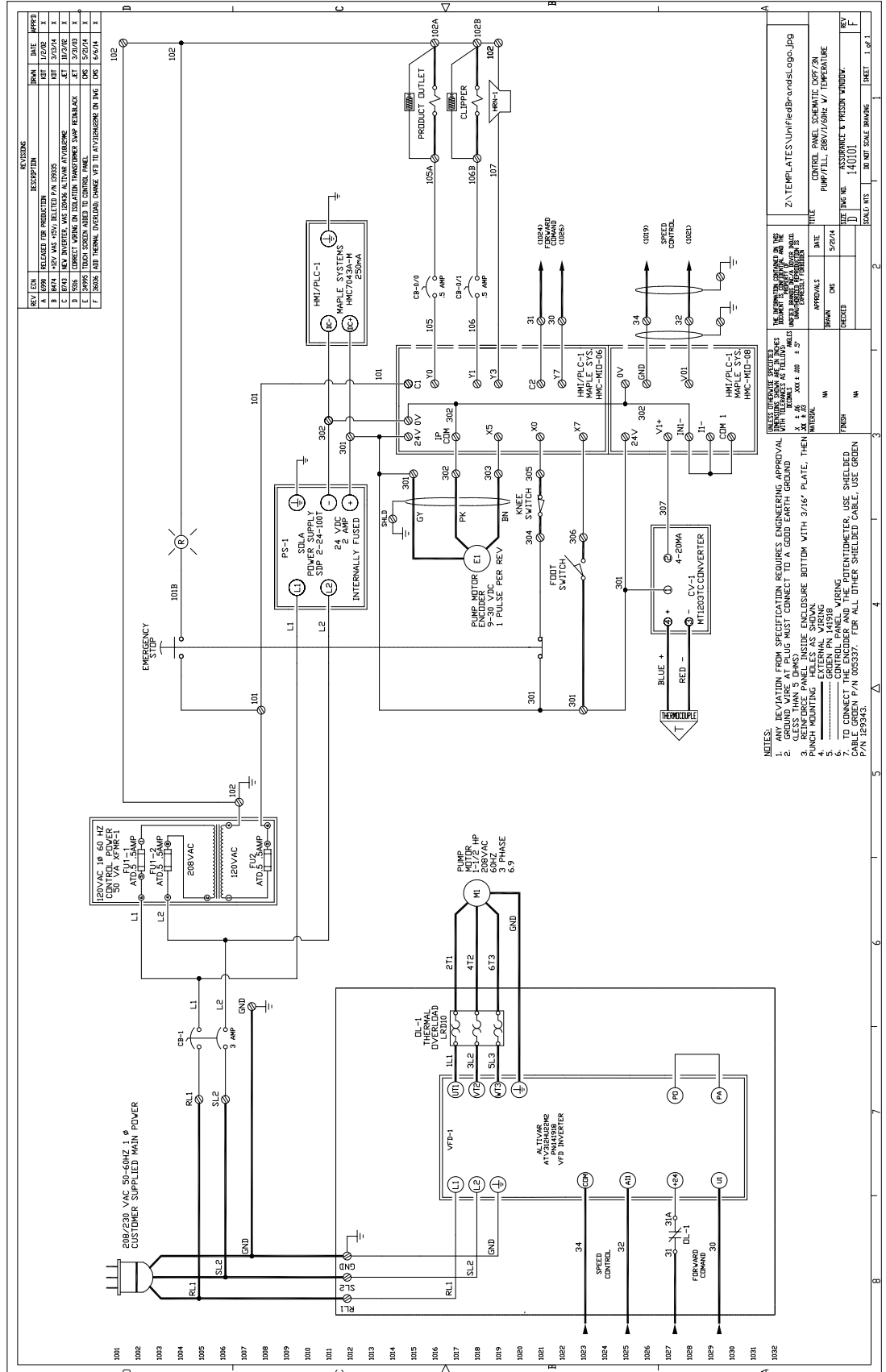
## TEMPERATURE ASSURANCE PROBE AND MOUNT



## VACUUM EDUCTOR COMPONENTS



# Wiring Schematic







1055 Mendell Davis Drive • Jackson MS 39272  
888-994-7636 • 601-372-3903 • Fax 888-864-7636  
[unifiedbrands.net](http://unifiedbrands.net)