

SPACEMAN USA
COMMERCIAL ICE CREAM & FROZEN BEVERAGE EQUIPMENT

SPACEMAN FROZEN BEVERAGE MACHINE TRAINING

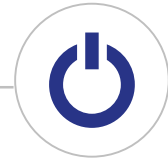
**use this training guide for Spaceman USA models:
6450, 6455H, 6490H, 6650, 6690H, 6695H, 6795H*



NOTES AND FUNCTIONS OF YOUR MACHINE



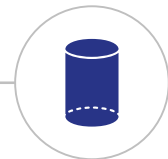
The machine you have purchased is a non carbonated frozen beverage machine. It is capable of producing a variety of frozen beverage products. All Spaceman USA Frozen Beverage machines are capable to freeze alcoholic beverages.



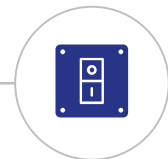
Most Spaceman beverage machines (*except for 6450 and 6650*) include refrigerated hoppers and a standby mode.



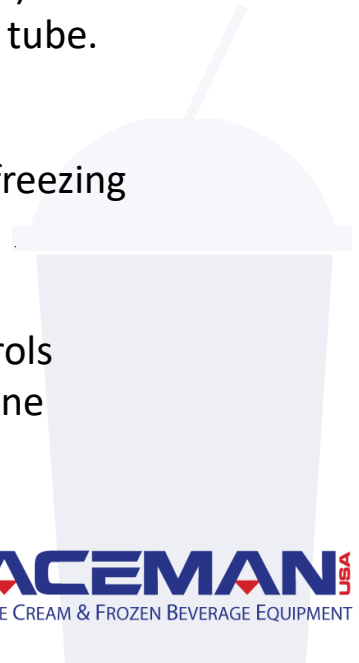
Product is poured into the hopper (product should be below 41°F) where it is kept until flowing into the freezing cylinder via the air tube.



Inside the freezing cylinder, the beater mixes the product while freezing to produce the final frozen beverage product.



On the front of the machine is an analog rocker switch that controls the function of the machine (off, wash, and cooling). Your machine may also include a lighted standby button and low mix light.



ROUTINE MAINTENANCE OPERATIONS



Clean and Lubricate Daily



Replace Wearable Parts Every
1 to 3 months*



Internal Cleaning Quarterly**

** Based on machine usage and cleaning intervals; a Tune-Up Kit is available with all wearable parts (O-rings, gaskets, etc.) except scraper blades*

*** Based on cleanliness of location and proximity to powder-based machines*



Tune-Up Kit

Spaceman USA Frozen Beverage Training
rev042219



For optimal machine performance and many years of efficiency and reliability from your machine, *Spaceman USA recommends cleaning and sanitizing the machine and its parts daily.* The machine comes equipped with a brush kit specifically designed to efficiently and properly clean the machine.

ROUTINE MAINTENANCE OPERATIONS



IMPORTANT:

Cleaning and sanitizing schedules are governed by state or local regulatory agencies and **MUST** be followed accordingly. Routine maintenance **MUST** be performed a minimum of once every 3 days.



CAUTIONS:

Do NOT run the machine without properly lubricating required parts.

Do NOT clean the machine with abrasive or toxic chemicals and cleaners. Doing so may cause damage to the stainless steel material.

ONLY use Spaceman-USA-included cleaning brushes and lubrication.

NEVER use metal objects to clean or operate the machine.

ALWAYS replace wearable parts a minimum of every 3 months.

ALWAYS prime machine prior to operating.

ALWAYS inspect parts for excess wear and damage.

DRAIN PRODUCT



NOTE

To expedite draining, turn off machine **30** minutes prior to soften product. To expedite process, keep a bucket nearby to temporarily store removed parts.



CAUTION

NEVER use warm water when rinsing the machine to prevent damage.

DRAIN PRODUCT

1



Turn power switch
to OFF Position

2



Remove hopper lid and
agitator (if present)

3



Place a bucket or other
container below draw
valve to capture product
as it drains

4



Turn power switch to
WASH

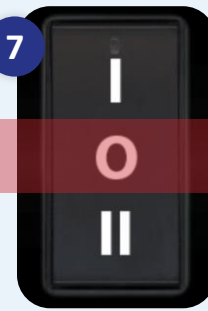
DRAIN PRODUCT



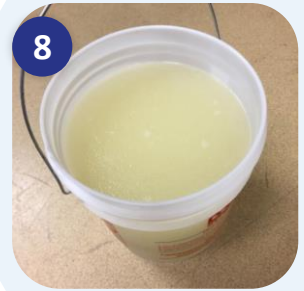
Move draw handle to OPEN position (RIGHT) until all product runs out



Move draw handle to CLOSED position (LEFT)



Turn power switch to OFF



Remove product and dispose or refrigerate it

DRAIN PRODUCT

Use COOL water and the large brush to scrub the sides and bottom of the hopper; *be VERY careful not to damage the low-mix sensor in the hopper*

Place a bucket or other container below the draw valve



Fill hopper with a minimum of 2 gallons of COOL water



Use the small brush kit to clean inside the feed tube at the bottom of the hopper



DRAIN PRODUCT

13



Turn power switch
to WASH

14



OPEN draw handle to
drain water and
remaining product;
CLOSE when finished

15



Turn power switch
to OFF

16



Repeat steps 9 to
14 until water
exiting the draw
valve is clear and
free of product

DISASSEMBLE



NOTE

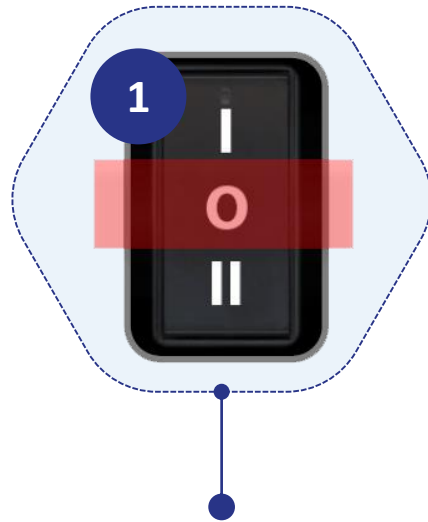
Prepare dishwashing area prior to disassembly, and use a bucket to temporarily store removed parts.



CAUTION

ALWAYS separate O-rings and gaskets from metal parts to prevent damage while washing.

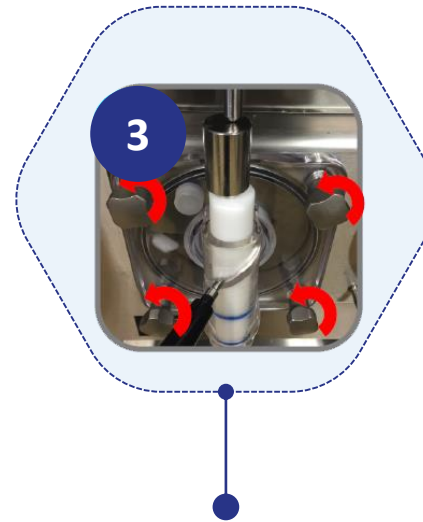
DISASSEMBLY



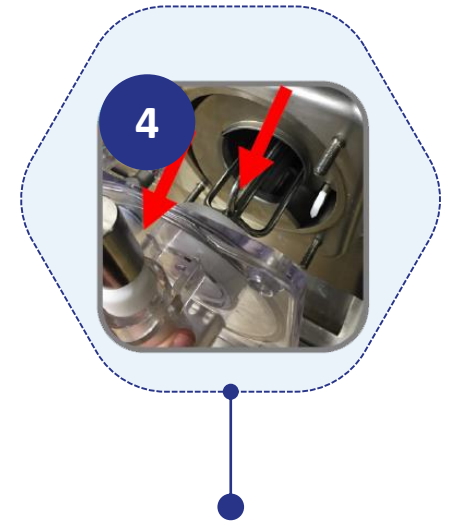
Verify the power switch is turned to OFF



Remove the torque arm, first pulling up out of the torque assembly and then down out of the flat sensor arm; **DO NOT LIFT UP ON CURVED SENSOR ARM**



Remove dispensing door hand-screws (4)



Remove dispensing door assembly, torque assembly (including torque guide), and beater assembly

DISASSEMBLY



Remove torque assembly O-ring using O-ring tool;
remove torque guide



Remove scraper blades (2) from beater assembly;
separate scraper blade clips (2) from scraper blades
**some new models will not have blade clips*



Remove dispensing door gasket using O-ring tool



Rotate draw valve until the flat part at the top is
perpendicular to the clear face of the dispensing door
(use towel if necessary)



"clip-less" blade



DISASSEMBLY

9



Remove ice buster

10



Remove draw valve, twisting it while removing

11



Remove draw valve O-rings (2) using O-ring tool

12



Unscrew and remove prime plug from dispensing door



DISASSEMBLY

Separate drive shaft
gasket from drive shaft



Use a towel to remove drive
shaft at the back of the cylinder

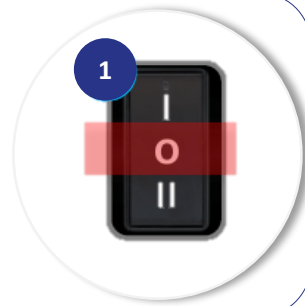


Remove front drip tray
and internal drip tray



WASH ALL PARTS

Verify power switches are in the **OFF** position



Thoroughly clean and dry the rear of the cylinder with the supplied black brushes and a clean, dry towel



Use the large brush and cool water to thoroughly clean inside the cylinder; *be sure to scrub the back of the cylinder and verify the cylinder is free of ALL product*



Gently clean and wipe down the outside of the machine

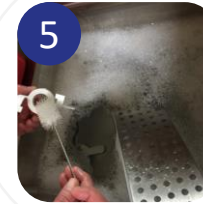


CAUTION:

Never wash parts in a dishwasher. **Always** hand-wash components with nontoxic, food-safe cleaners.

WASH ALL PARTS

Carefully and thoroughly clean all gaskets and O-rings removed from the machine; *be sure to wipe gaskets and O-rings to remove excess lubricant*



Carefully and thoroughly wash all parts removed from the machine using supplied brushes, as well as sponges, and clean towels; *when cleaning the dispensing door, clean the priming port with a small brush*



Verify all parts are clean and free of all food

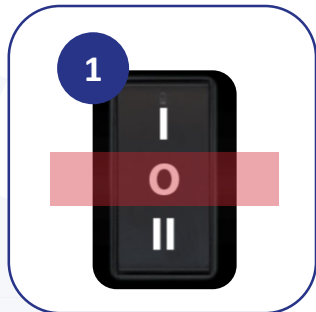
ASSEMBLE



CAUTION:

NEVER force the installation of any parts. All parts fit correctly without force. If parts don't seem to fit, remove all parts and repeat assembly.

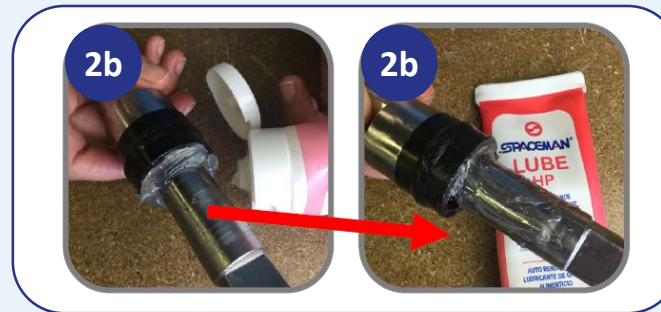
1. VERIFY MACHINE POWER SWITCH IS IN THE OFF POSITION



2. INSTALL DRIVE SHAFTS



Place drive shaft gasket on drive shaft



Seal gasket open space with Spaceman lubricant, extending onto drive shaft and **avoiding the top square part**



Insert drive shaft into rear shell bearing at the back of the cylinder, and turn it until the key engages firmly into the socket (when inserted correctly, the drive shaft will no longer turn 360°)

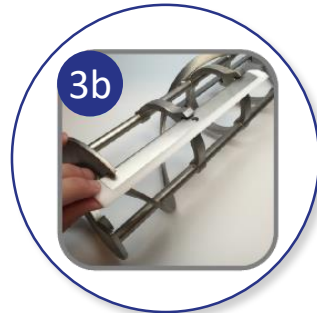
ASSEMBLE

3.

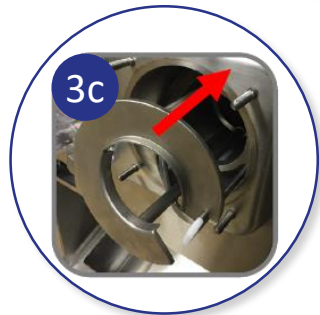
Install beater assemblies



Install scraper blade clip(s) onto scraper blade(s)



Fit scraper blades onto beater



Insert assembly into cylinder; turn assembly until it engages the drive shaft key and no longer turns 360°



ASSEMBLE

Important:

Failure to install **torque guide (4b)** will
Result in machine damage and noise!

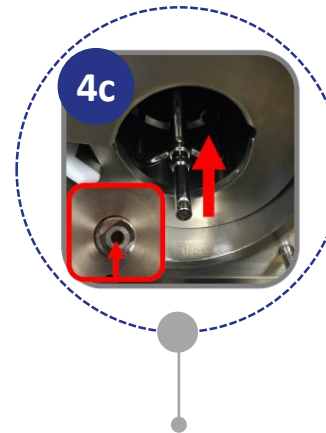
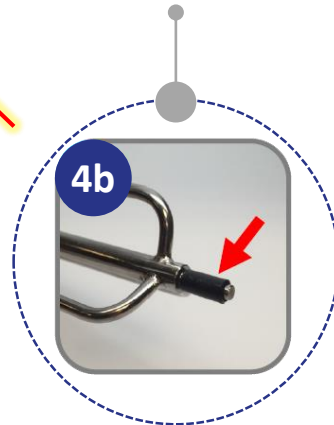
4. Install torque assembly

Place torque guide onto the short
end of the torque assembly; **DO
NOT lubricate this component**

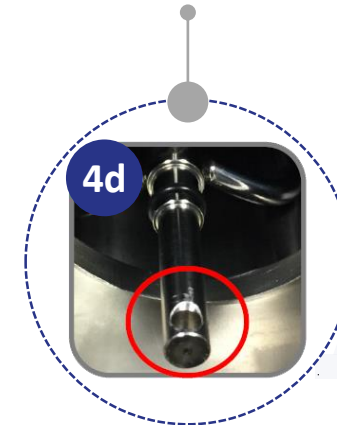
Rotate torque assembly so the
hole for the torque arm is
vertical, facing up and down



Place O-ring on torque
assembly, coating with
Spaceman lubricant



Insert torque assembly into
pilot hole in the center of the
drive shaft (torque guide first),
**ensuring that torque guide
DOES NOT fall off**



ASSEMBLE

5. Install dispensing door



Place O-rings (2) on draw valve, coating with Spaceman lubricant



Insert draw valve 7/8 way into the dispensing door from the top, *rotating as you install*



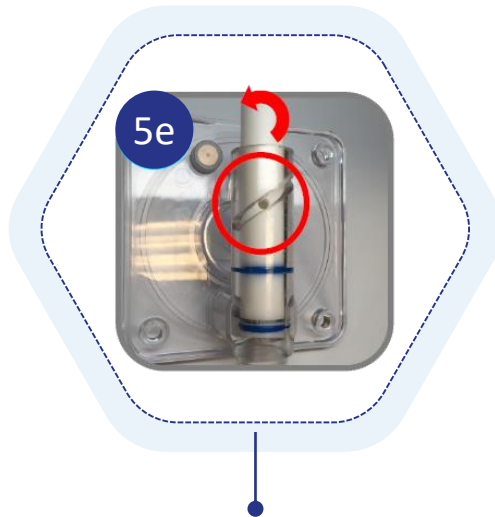
Turn draw valve so the flat portion at the valve top is perpendicular to the clear face of the dispensing door



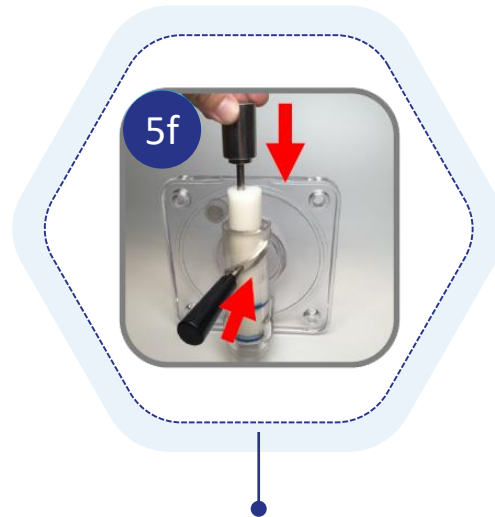
Insert ice buster through the dispensing spout at the bottom of the door and into the slot on the draw valve

ASSEMBLE

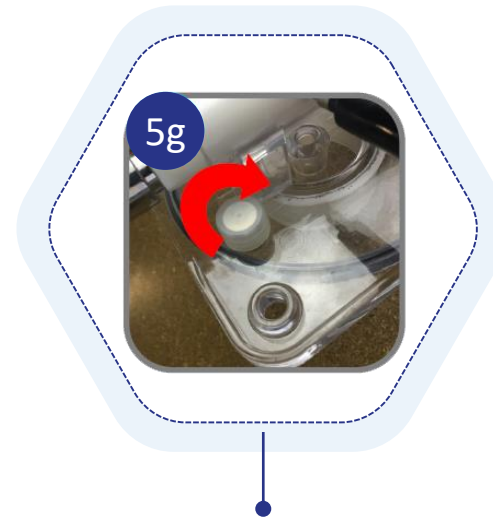
5. Install dispensing door



Rotate draw valve to lock ice buster in place; turn valve until the hole for the draw handle is accessible on front



Insert draw handle; secure in place with valve pin



Screw prime plug onto dispensing door



Place dispensing door gasket on door, coating with Spaceman lubricant

ASSEMBLE

5.

Install dispensing door



Place beater guide onto dispensing door, with flange flush with the back of the door. Some models will not include this part, please make sure to check accordingly.



Align door assembly with torque assembly and mounting bolts; carefully lift curved sensor arm out of the way, and install dispensing door until flush with machine; *if needed, gently wiggle dispensing door to get the beater guide to line-up correctly inside the beater; DO NOT force the dispensing door onto the machine*



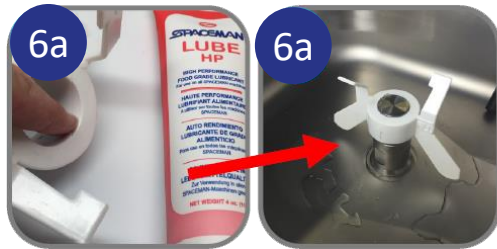
Lifting door up, tighten dispensing door hand-screws (4) in a cross-pattern



With tapered end down, install torque arm up through the flat sensor arm and then down into the torque assembly; torque arm should move freely back and forth; **DO NOT LIFT UP ON CURVED SENSOR ARM**

ASSEMBLE

6. *Install hopper assembly and drip trays*



**If machine has hopper agitator,
lubricate inside it and install with
arrow pointing up**



**Install hopper lid
and drip trays
(internal and front)**

SANITIZATION



IMPORTANT

After sanitizing the machine, **DO NOT** rinse or touch areas that have been sanitized. Product must be added immediately. If new product will not be added immediately, rinse machine with clean water and loosen door hand-screws to allow cylinder to air-dry. Sanitize machine before using again.

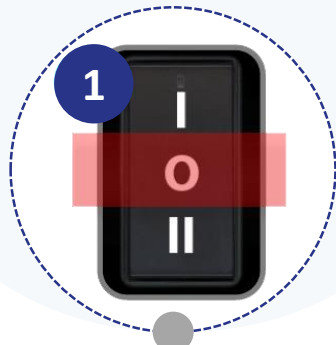


CAUTION

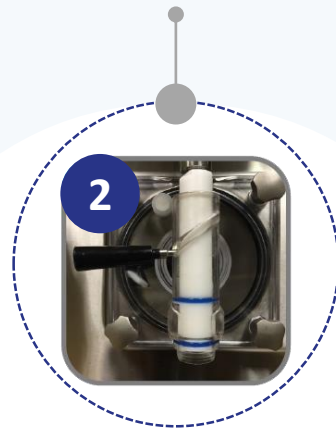
Always use food-grade, no-rinse sanitizer (Stera-Sheen green label or equivalent) to sanitize. If warm water is required to dissolve sanitizer, allow the solution time to cool before adding to machine.

SANITIZATION

Verify the draw valve
is in the CLOSED
position (LEFT)

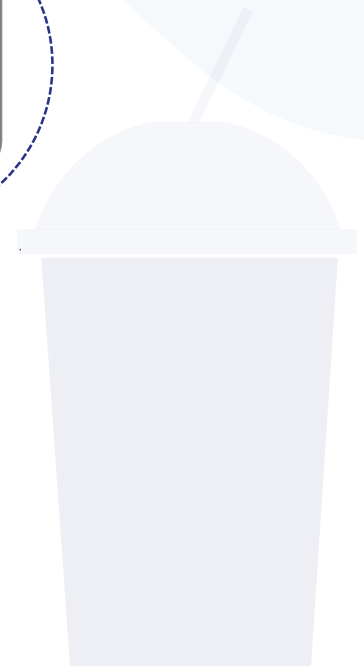


Verify assembly is
complete and machine
power is OFF



Mix a minimum of 2 gallons
of food-grade sanitizer in a
bucket or container

Pour food-grade sanitizer
solution into the hopper



SANITIZATION



Turn power switch to WASH



Allow solution to agitate
for 5 to 10 minutes;
*NEVER leave machine
on WASH for more than
10 minutes*



While agitating, gently
use a clean brush to scrub
and distribute sanitizer
solution along hopper
walls and hopper agitator
(if present)

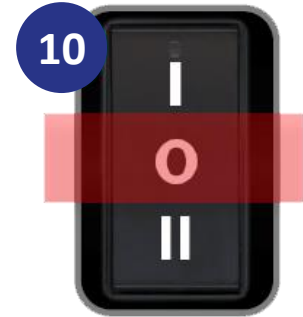
SANITIZATION



Place a bucket or container
below the draw valve



OPEN the draw valve
(RIGHT) and drain
solution from the
machine



Turn power switch
to OFF

FROZEN PRODUCT OPERATION

Important:

DO NOT dispense product with low mix.

Doing so WILL cause freeze up and damage to your machine.



NOTE



The **MIX LOW** light illuminates when the hopper is low on product mix and automatically turns off when machine is filled.

FROZEN PRODUCT OPERATION

ADD PRODUCT TO MACHINE



Verify machine has been recently sanitized (within 1 hour); if machine has **not** been recently sanitized, verify door hand-screws are tight, and perform sanitizing steps (Page 13)



Turn power switch to OFF



Thoroughly mix and prepare at least 2 gallons of product according to manufacturer instructions; mix should be cool and smooth (free of large chunks)



Place a bucket or container below the draw valve

FROZEN PRODUCT OPERATION

ADD PRODUCT TO MACHINE



OPEN draw handle (RIGHT)



Pour 0.25 gallons of product into the hopper; sanitizer will start to flow out of the draw spout



Once sanitizer has been purged from the machine and a steady stream of product is flowing from the spout, CLOSE draw handle (LEFT)

FROZEN PRODUCT OPERATION

ADD PRODUCT TO MACHINE



Pour remaining product into the hopper



Open the prime screw (counter-clockwise) on the front of the dispensing door and allow the cylinder to fill with product to the desired level; *cylinder must be at least 75% full to operate*



Close the prime screw and tighten completely



Replace hopper lid

FROZEN PRODUCT OPERATION

FREEZE PRODUCT



Verify cylinder is full of mixed product



Turn power switch to FREEZE and verify STANDBY mode is off (see below)



The motor will begin to agitate the product, and the cooling system will begin to freeze the product



Freezing product takes approximately 10 minutes; product is at the adjusted viscosity when the flat sensor arm is switched to the RIGHT



When the product reaches the desired viscosity, it is ready to dispense

MACHINE POWER RESET



IMPORTANT

Machine shuts down automatically if cylinder experiences freeze-up (usually because the viscosity is set too high for the selected product to prevent motor damage. Use the green reset button on the machine's back panel to return the machine to normal operation.



PROPER MACHINE RESET

1. Turn power switch to OFF
2. Firmly press green reset button
3. Wait 15 to 20 minutes.
4. Turn power switch to WASH
5. Observe machine performance



CAUTION:

If machine makes any abnormal noise during reset, immediately turn power switch OFF and contact service team.



NOTE:

If machine doesn't turn on, turn power switch OFF, wait 30 minutes, and repeat steps 1 to 4. If problem persists, contact service team.

FROZEN PRODUCT OPERATION

DISPENSE PRODUCT



OPEN

OPEN draw handle
(RIGHT) until the desired
amount is dispensed



CLOSE

CLOSE the draw
handle (LEFT) when
finished dispensing

FROZEN PRODUCT OPERATION

STANDBY MODE



IMPORTANT

- When the machine will **NOT** be utilized for several hours, place it in **STANDBY** mode to conserve electricity and reduce product loss.
- In **STANDBY**, product remains below 41°F in both the cylinder and hopper, but will **NOT** be frozen.

To enter STANDBY mode:

(Light may be amber in color)



- Press STANDBY indicator light on front of machine. Light may be amber color.
- Light illuminates green when machine is in STANDBY mode.

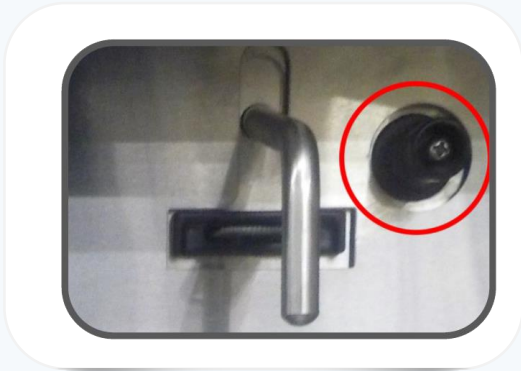
To exit STANDBY mode:



- Press STANDBY indicator light on front of machine, and green light will de-illuminate.
- Allow 5 to 10 minutes for machine to begin freezing again.

FROZEN PRODUCT OPERATION

ADJUST PRODUCT CONSISTENCY



- The viscosity adjustment screw, located above the draw handle, controls the firmness of dispensed product. The higher the viscosity, the more firm the product. Viscosity settings should **NOT** need continuous adjustment.
- To adjust product consistency, use a #2 Phillips-head screwdriver to turn the viscosity adjustment screw. Make small adjustments each time, and allow at least 10 to 15 minutes between adjustments to evaluate product firmness.



Increase viscosity (more firm):

- Turn viscosity adjustment screw clockwise.
- Turn a maximum of two full turns per adjustment.



Decrease viscosity (less firm)

- Turn viscosity adjustment screw counter-clockwise.
- Turn a maximum of two full turns per adjustment.



WARNING

STOP turning viscosity adjustment screw if you feel any increase in resistance to prevent damage.

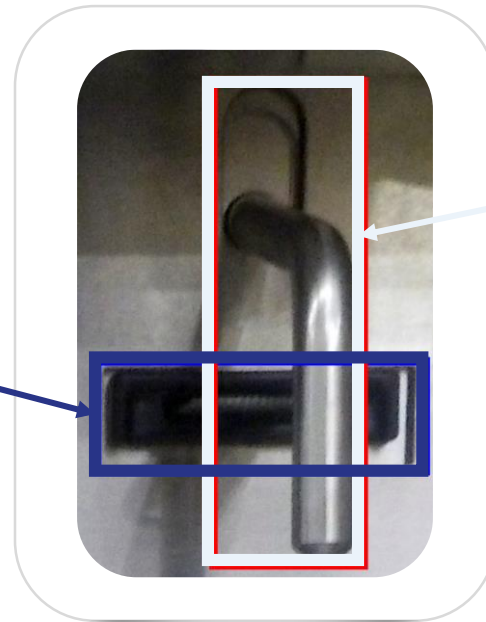
FROZEN PRODUCT OPERATION

MANAGE SENSOR ARMS



Located directly above the draw valve, this arm tells the machine when product is being dispensed and how firm the product is. Beater and cooling systems are turned on and off based on information from the sensor arms.

- Flat arm moves left and right and tells machine when product is at desired consistency.
- Switched RIGHT means consistency is correct. Switched LEFT or IN THE MIDDLE means consistency is not yet correct.



- Curved arm moves up and down and tells machine when product is being dispensed.
- It moves UP when draw handle is in the OPEN position.