



Model C713

Operator Training

Temperature

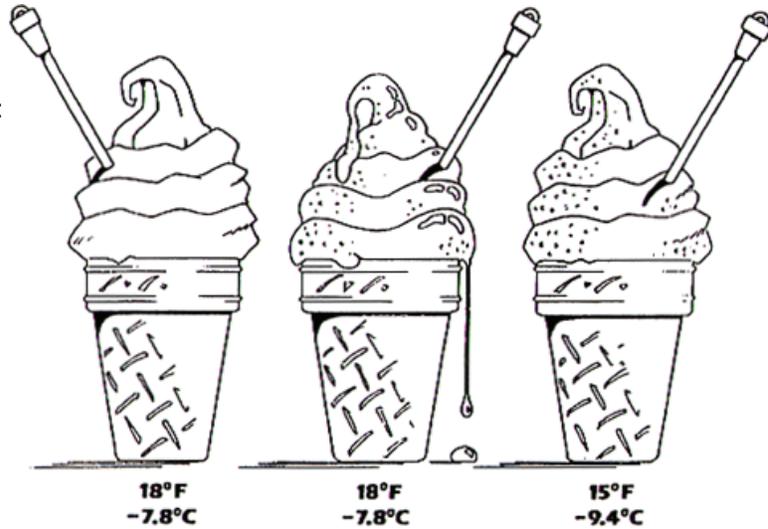
Temperature is a key factor in product appearance.

The recommended temperatures are:

Soft Serve: 16-18°F
(-7.8° to -8.8°C)

However, you can see in the illustration that a Soft Serve cone at the proper temperature can still appear drippy.

See the Troubleshooting guide



A seven minute freeze-down time is necessary to make frozen product (18° F/-7.8° C) from liquid mix (40° F/4.4°C).

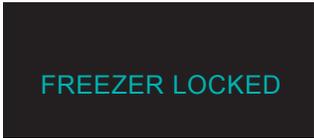
Once the product is frozen, subsequent refrigeration cycles are necessary. The machine will cease refrigeration for 10 minutes to maintain servable product during the day.

Product that is overbeaten is “broken down.” Broken down product is caused by longer than normal freeze times.

Longer than normal freeze times can be caused by:

- Worn scraper blades
- Insufficient air space around the freezer
- Dirty condensers or air filters
- Loss of refrigerant (refrigerant leak)

Hard Locks



FREEZER LOCKED

Hard locks are designed to insure product safety. The machine will go into this mode when the product mix quality becomes compromised.

Hard locks require that the machine be brush cleaned before it can return to the AUTO mode of operation.

Typical Reasons:

HPR>41F (5C) AFTER 4 HR - The mix temperature in the hopper was above 41°F (5°C) more than four hours.

BRL>41F (5C) AFTER 4 HR - The mix temperature in the freezing cylinder was above 41°F (5°C) more than four hours.

HPR>41F (5C) AFTER PF - The mix temperature in the hopper was above 41°F (5°C) more than four hours following a power failure.

BRL>41F (5C) AFTER PF - The mix temperature in the freezing cylinder was above 41°F (5°C) more than four hours following a power failure.

HPR>45F (7C) AFTER 1 HR - The mix temperature in the hopper was above 45°F (7°C) more than one hour.

BRL>45F (7C) AFTER 1 HR - The mix temperature in the freezing cylinder was above 45°F (7°C) more than one hour.

HPR>59F (15C) - The mix temperature in the hopper exceeded 59°F (15°C).

BRL>59F (15C) - The mix temperature in the freezing cylinder exceeded 59°F (15°C).

Solution:

Turn off machine, disassemble and clean.

Freezing Cylinder Assembly

Step 1

Before installing the beater drive shaft, lubricate the groove on the beater drive shaft.

Step 2

Slide the beater drive shaft boot seal over the small end of the beater drive shaft and engage into the groove on the shaft.

Step 3

Heavily lubricate the inside portion of the boot seal and also lubricate the flat end of the boot seal that comes in contact with the rear shell bearing.

Step 4

Apply an even coat of lubricant to the shaft. DO NOT lubricate the hex end.

Note: To ensure the mix does not leak out of the back of the freezing cylinder, the middle section of the boot seal should be convex or extend out from the seal. If the middle section of the boot seal is concave or extending into the middle of the seal, turn the seal inside out.

Step 5

Insert the beater drive shaft through the rear shell bearing in the freezing cylinder and engage the hex end firmly into the drive coupling.

Step 6

Before installing the beater assembly, check the scraper blades. If they are in good condition, take one of the scraper blades and slip it under the hook at the front of the beater. Wrap the blade around the beater, following the helix and pushing the blade down onto the helix as you wrap. At the back end of the beater, slip the blade under the hook.

Repeat this step for the second scraper blade.

Step 7

Holding the beater securely, slide the beater into the freezing cylinder about one-third of the way in. Looking into the freezing cylinder, align the hole at the rear of the beater with the flats on the end of the drive shaft.

Step 8

Slide the beater the remainder of the way into the freezing cylinder and over the end of the drive shaft. The beater should fit snugly but not so tightly that the beater cannot be turned slightly to engage the drive shaft.

Make sure the beater assembly is in position over the drive shaft. Turn the beater slightly to be certain that the beater is properly seated. When in position, the beater will not protrude beyond the front of the freezing cylinder.

Step 9

Repeat these steps for the other side of the machine.

Freezing Cylinder Assembly

Step 10

To assemble the freezer door, place the door gaskets into the grooves on the back of the freezer door. Slide the front bearings over the baffle rods. The flanged edges should be against the door. DO NOT lubricate the gaskets or bearings.

Step 11

Slide the two o-rings into the grooves on each prime plug. Apply an even coat of Taylor Lube to the o-rings and shafts.

Step 12

Insert the prime plugs into the holes in the top of the freezer door and push down.

Step 13

To install the freezer door, insert the baffle rods through the beaters in the freezing cylinders.

With the door seated on the freezer studs, install the handscrews. Use the long handscrews on the top and the short handscrews on the bottom. Tighten them equally in a criss-cross pattern to insure the door is snug.

Step 14

Slide the three o-rings into the grooves of each standard draw valve. Slide the H-ring and o-ring into the grooves of the center draw valve. Lubricate the H-ring and o-rings.

Step 15

Lubricate the inside of the freezer door spouts, top and bottom.

Step 16

Insert the draw valves from the bottom until the slot in the draw valves come into view.

Step 17

Slide the fork of the draw handles in the slot of the draw valves, starting from the right. Slide the pivot pin through each draw handle as they are inserted into the draw valves.

Note: This freezer features three adjustable draw handles to provide portion control, giving a better consistent quality to your product and controlling costs. The draw handle should be adjusted to provide a flow rate of 5 to 7-1/2 oz. (142 g. to 213 g.) of product by weight per 10 seconds.

To INCREASE the flow rate, turn the adjustment screw CLOCKWISE. Turn the adjustment screw COUNTER-CLOCKWISE to DECREASE the flow rate.

Sanitizing

Step 1

Prepare an approved 100 PPM sanitizing solution (examples: 2-1/2 gal. [9.5 liters] of Kay-5® or 2 gal. [7.6 liters] of Stera-Sheen®). USE WARM WATER AND FOLLOW THE MANUFACTURER'S SPECIFICATIONS.

Step 2

Pour the sanitizing solution over all the parts in the bottom of the mix hopper and allow it to flow into the freezing cylinder.

Note: You have just sanitized the mix hopper and parts; therefore, be sure your hands are clean and sanitized before going on in these instructions.

Step 3

Pour the sanitizing solution into the mix hopper.

Step 4

Brush the exposed sides of the hopper.

Step 5

Place the power switch in the ON position.

Step 6

Touch the WASH symbol. This will cause the sanitizing solution in the freezing cylinder to be agitated.

Step 7

With an empty pail beneath the door spouts, raise the prime plug.

Step 8

When a steady stream of sanitizing solution is flowing from the prime plug opening in the bottom of the freezer door, open the draw valve. Momentarily open the center draw valve to sanitize the center door spout. Draw off the remaining sanitizing solution.

Step 9

Once the sanitizer stops flowing from the door spout, touch the WASH symbol and close the draw valve.

Note: Be sure your hands are clean and sanitized before going on in these instructions.

Step 10

Lubricate the feed tube o-rings on the end with the small hole on the side. Stand the feed tube in the corner of the hopper.

Step 11

Repeat these steps for the other side of the machine.
