

4.8 BEVERAGE EQUIPMENT:

4.8.6.3 ICED CAPPUCCINO MACHINE

Taylor MODEL: 390

LOCATION:

Front of House

WHEN CLEANED:

Daily, Weekly, Monthly, Seasonal

TOOLS/SUPPLIES REQUIRED:

- Salmon Cloth
- 2 or 3-Compartment Sink
- Sink Detergent
- Sanitizer
- Food Grade Lubricant (Taylor Lube or Dow Corning 111)
- 2 Clean, Sanitized Pails (one for product, one for cleaning)
- Paper Towel
- Cleaning Brushes
- O-Ring Remover
- Iced Cappuccino Parts Tray
- C-Safe Circuit Breaker Lockout Kit



White Bristle (Gong Brush) – TDL #71091
Use on Hopper, Parts Tray, Rear Drip Pan, Beater, Front Bearing, Front Drip Tray, Freezing Cylinder

Black Bristle – TDL Kit #71092
Use on Rear Shell Bearing

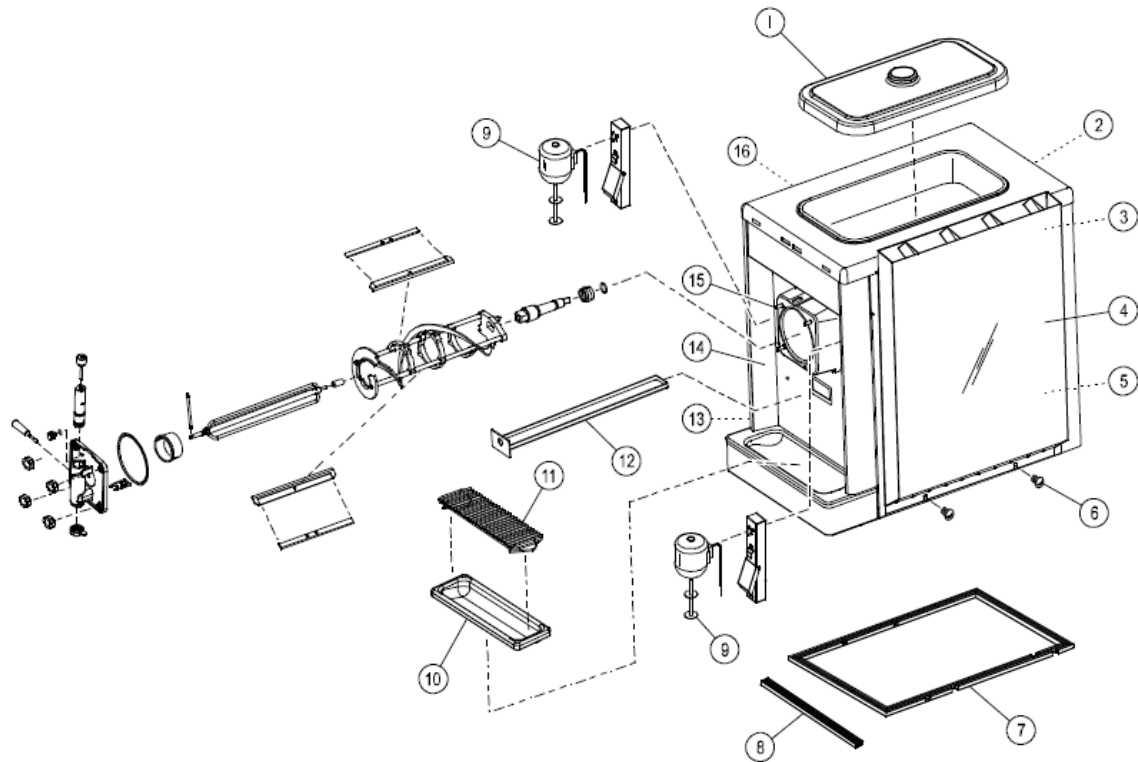
White Bristle – TDL Kit #71092
Use on Product Entry Ports in back of Freezer Door, Scraper Blade, Draw Handle, Drive Shaft, Drive Shaft Seal

O-Ring Remover Tool – TDL Tune-Up Kit #78116

Double Ended – TDL Kit #71092
Use on All O-Rings, All Holes in Metal Parts, O-Ring Grooves on All Parts, Core in Draw Valve, Prime Plug Port Hole in Freezer Door, Retaining Pin, Door Stud Nuts.

4.8 BEVERAGE EQUIPMENT:

OPERATOR PARTS IDENTIFICATION

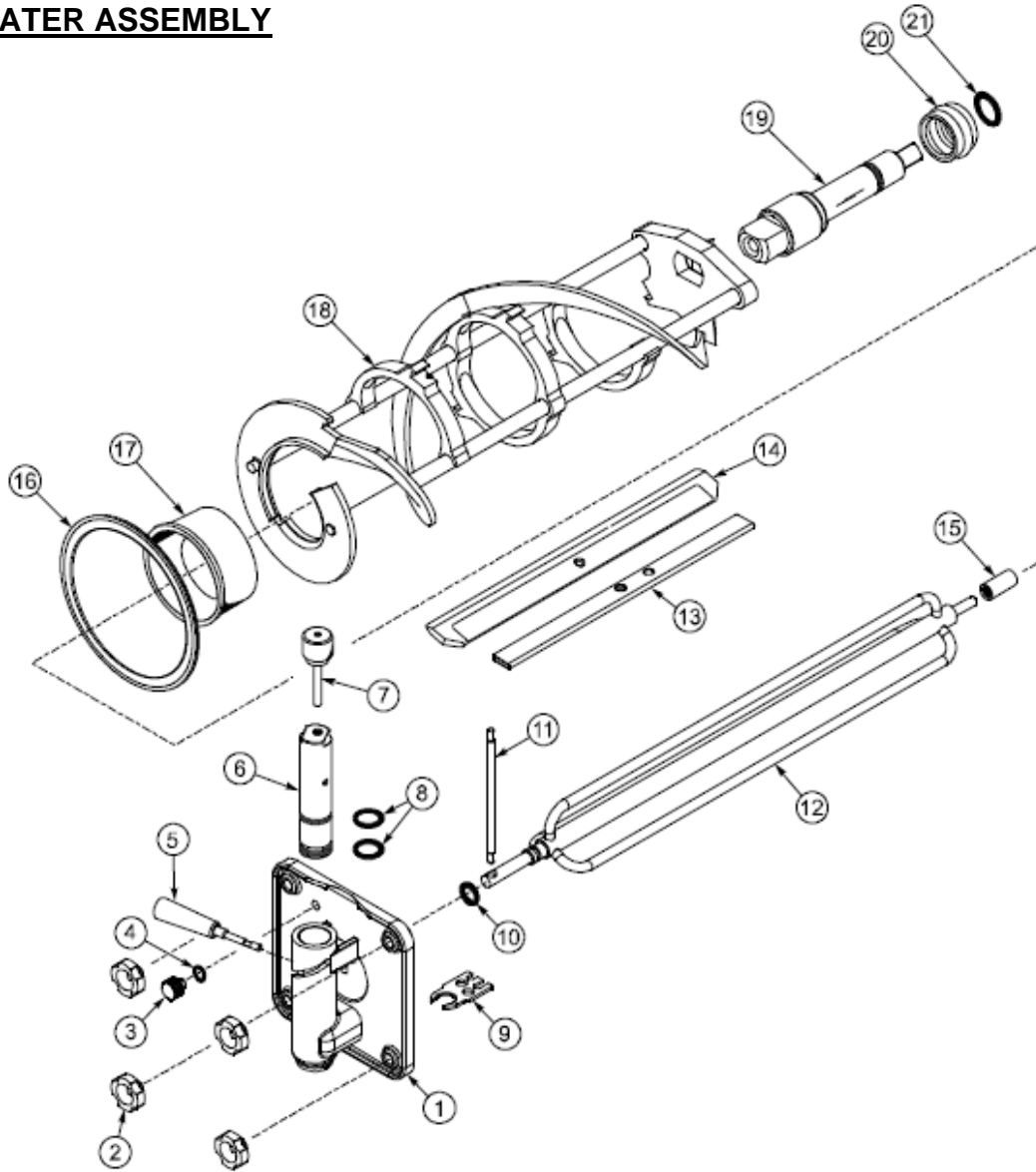


Item	Description	Part Number
1	Hopper Cover	X51152
2	Rear Panel	047008
3	Top Side Louver	051192
4	Air Duct	X53073-1
5	Right Side Panel	X52595
6	Screw	011694
7	Base Pan Gasket	050947
8	Base Pan Gasket Insert	051150
9	Spinner	X66023-27
10	Drip Tray	046275
11	Wire Splash Shield	046177
12	Drip Pan	035034
13	Side Panel (Lower Left)	050935
14	Front Spinner Panel	X66589
15	Nose Cone Stud	013496
16	Left Side Panel (Upper)	042317

This unit has a 20 quart (18.9 Litre) mix hopper and the freezing cylinder holds 7 quarts (6.6 Litres) of Iced Cappuccino Mix (equivalent of three batches total).

4.8 BEVERAGE EQUIPMENT:




BEATER ASSEMBLY



Item	Description	Part Number	Item	Description	Part Number
1	Freezer Door	X50990	12	Torque Assembly	X14488
2	Stud Nut	029880	13	Scraper Blade Clip	046238
3	Prime Plug	050405	14	Scraper Blade	046237
4	O-Ring (.563 OD x .070W)	043758	15	Guide Bearing	014496
5	Draw Handle	X47384	16	Door Gasket	014030
6	Draw Valve	047734	17	Front Bearing	013116
7	Valve Handle Pin	X25929	18	Beater Pin Support	X46233
8	O-Ring (1"OD x .139W)	018550	19	Beater Shaft	035418
9	Ice Buster	047735	20	Beater Shaft Seal	032560
10	O-Ring (.291 ID x .080W)	053100	21	O-Ring (7/8 OD x .139W)	025307
11	Torque Arm	014500			

4.8 BEVERAGE EQUIPMENT:

1. Power Switch

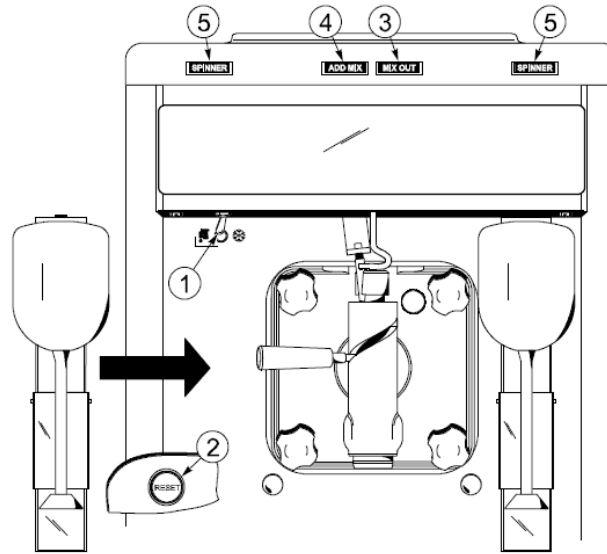
-  = "WASH" key
-  = "OFF"
-  = "ON/AUTO" key

The center position is "OFF". The "ON/AUTO" (or FREEZE) position activates the beater motor and the refrigeration system. The "WASH" position activates the beater motor only.





2. Reset Button



The reset button is located in the left side panel. The reset protects the beater motor from an overload condition. If an overload occurs, the reset mechanism will trip. To properly reset the freezer, place the power switch in the "OFF" position. Press the reset button firmly. Place the power switch in the "WASH" position and observe the freezer's performance. Once satisfied, place the control switch back in the "AUTO" position.



3. Mix Out and 4. Add Mix Indicator Lights

ON		
OFF		

The "ADD MIX" indicating light is located on the front of the machine. The indicator light will flash and an audible tone will sound when the mix hopper has a low supply of product. Refill the hopper as soon as possible.

The "MIX OUT" indicating light is located on the front of the machine. The indicator light will flash to indicate that the mix hopper is empty and the mix supply needs to be replenished. To prevent damage to the unit, refrigeration discontinues automatically.

5. Spinner Indicator Lights

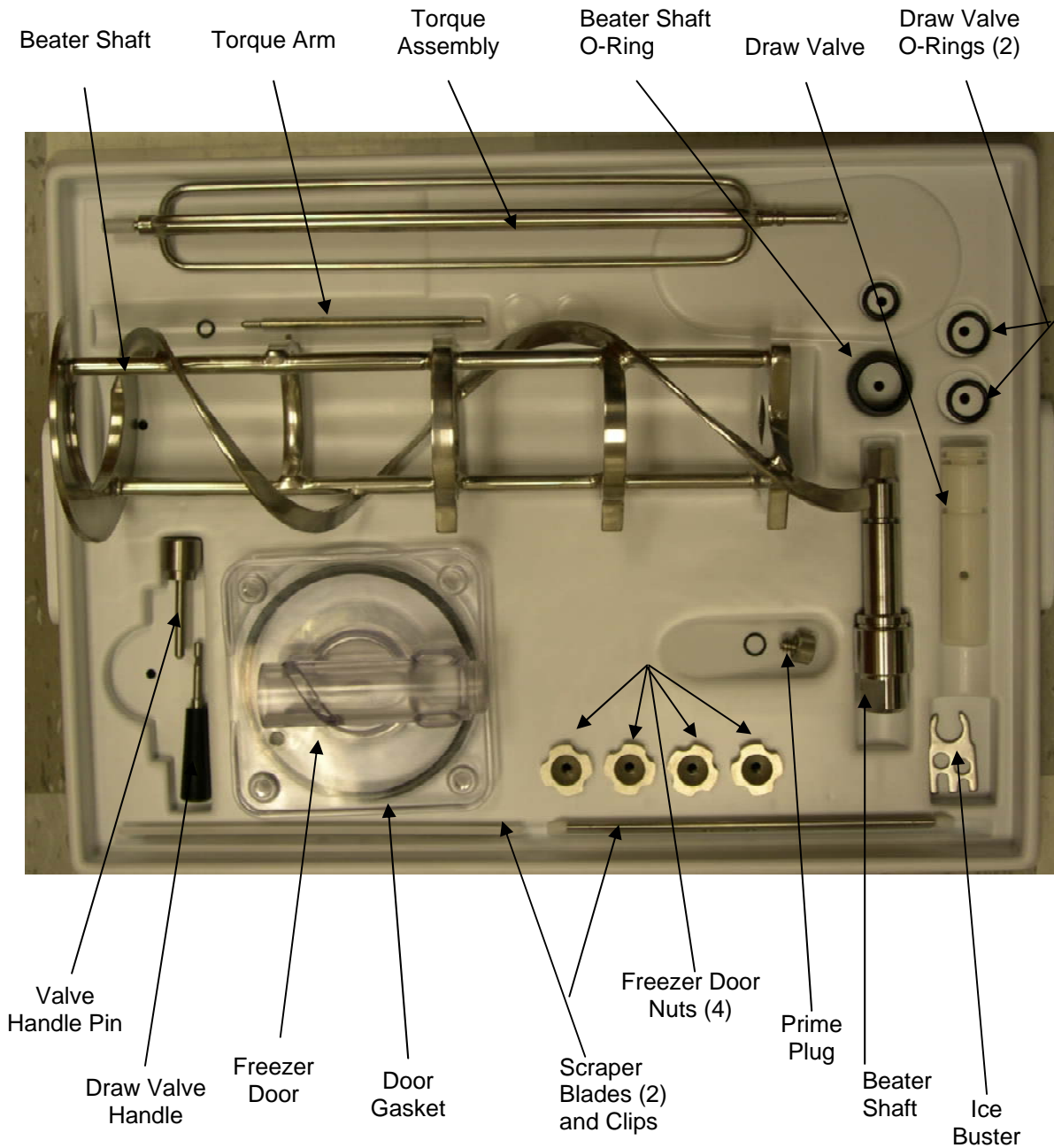
ON	
OFF	

The spinner indicator lights are located on the front of the machine, one above each spinner assembly. The spinner indicator lights are activated by pressing the respective spinner motor switches. The lights illuminate for 15 seconds, indicating the proper blend time.

4.8 BEVERAGE EQUIPMENT:

TAYLOR 390 PARTS TRAY

Place parts in the assigned area when cleaning the machine

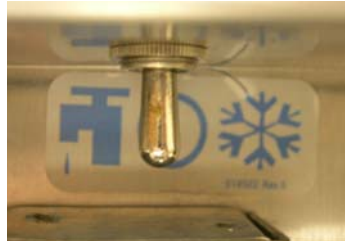


4.8 BEVERAGE EQUIPMENT:

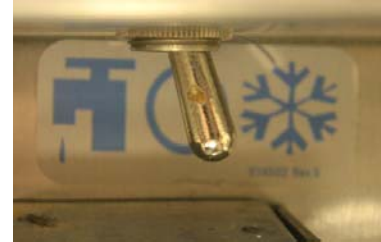
HOW CLEANED:



WASH POSITION - Faucet



“OFF” POSITION - Circle



FREEZE POSITION - Snowflake

Daily Maintenance

1. At least once per hour and more frequently when the machine is in heavy use, the spinners should be sanitized by filling a container with a solution of Sanitizer and spin it out thoroughly.

NOTE: Ensure that the spinners have stopped completely before removing the container of sanitizer.



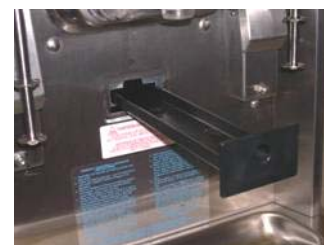
Spinner Blades

2. For any built-up Iced Cappuccino residue on the spinner blades, switch the unit to the OFF position and use a clean and sanitized Salmon cloth and a solution of Sanitizer to clean the spinners.
3. Switch the unit back to the FREEZE position when cleaning is complete to ensure that the product in the freezing cylinder does not thaw or liquefy.
4. Remove the drip tray and splash shield from the unit. Wash, rinse, sanitize and air dry in a 2 or 3-compartment sink at least once per shift or as often as needed.



5. Clean the front of the Iced Cappuccino machine and fascia with a clean and sanitized Salmon cloth and a solution of Sanitizer. Wipe down all exterior surfaces of the unit at least once per shift.

NOTE: If the drip pan is filled with an excessive amount of mix, it is an indication that the drive shaft O-Ring, seal or both should be replaced or were not properly lubricated.



4.8 BEVERAGE EQUIPMENT:

Weekly Maintenance:

COMPLETE BREAKDOWN CLEANING

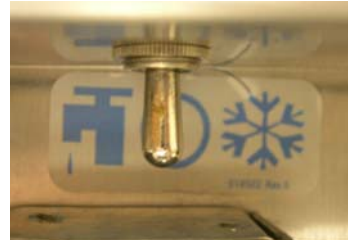
NOTE: To assist in reducing the freezing time after refilling, prepare three batches of Iced Cappuccino Concentrate and place in the refrigerator to chill.

Draining Product from the Freezing Cylinder

1. Place the control switch in the “WASH” position approximately 10 to 15 minutes prior to cleaning to allow the frozen product to soften.
2. Remove the hopper cover. Take to the sink for cleaning.



3. Place a pail under the door spout and move the draw handle to the right. When all product stops flowing from the door spout, move the draw handle to the left and place the control switch in the “OFF” position. Discard product.



Rinsing

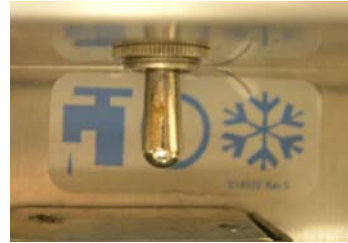
4. Place the large white gong brush into the hopper and pour two gallons (7.6 liters) of cool, clean water onto the brush bristles to avoid splashing. Using the white bristle brush, scrub the mix hopper and mix level sensing probes. Use the small white bristle brush to clean the mix inlet hole.



MIX INLET HOLE →

4.8 BEVERAGE EQUIPMENT:

With a mix pail beneath the door spout, place the control switch in the “WASH” position and move the draw handle to the right. Drain all the rinse water from the freezing cylinder. When the rinse water stops flowing from the door spout, move the draw handle to the left and place the control switch in the “OFF” position. Repeat this procedure until the rinse water being drawn from the freezing cylinder is clear.



Disassembly



NOTE: BE SURE THE CONTROL SWITCH IS IN THE “OFF” POSITION.
Failure to do so may cause injury from electrocution or hazardous moving parts.

5. Lockout the Iced Cappuccino Machine at the circuit breaker.
6. Carefully remove the torque arm and loosen the four stud nuts.



7. Remove the four stud nuts from the freezer door. Insert two fingers behind the draw valve and then gently pull the freezer door forward off of the unit.

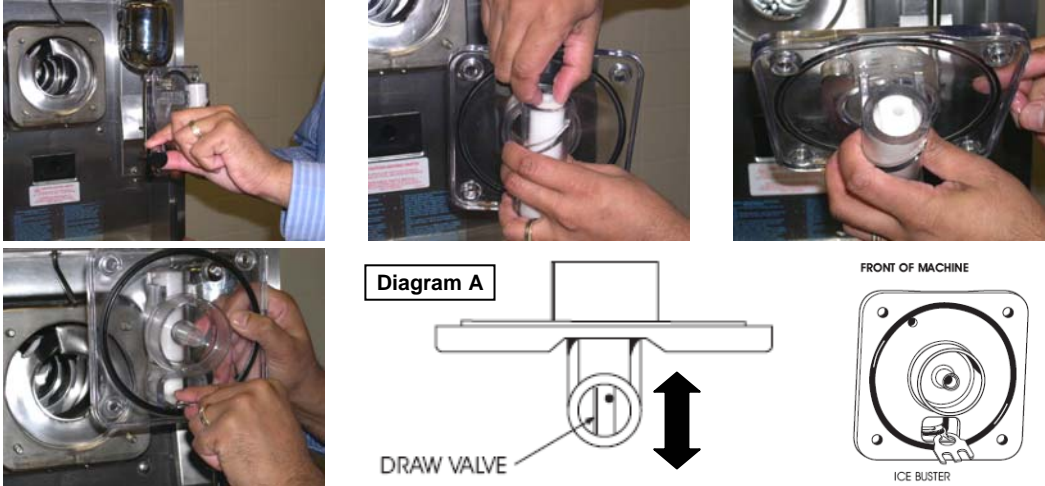


8. Remove the torque assembly from the freezing cylinder and dismantle all parts from the freezer door. Remove the front bearing and valve handle pin.



4.8 BEVERAGE EQUIPMENT:

9. Pull the draw handle out and re-align the draw valve position so that it is perpendicular to the freezer door (see Diagram A) to unlock the ice buster.



10. Using your index finger, push up on the bottom of the draw valve to remove it from the freezer door.



11. Using a dry Salmon cloth or paper towel, apply pressure in an upward direction until the O-Ring pops out of its groove. With the other hand, push the top of the O-Ring forward and it will roll out of the groove and can be easily removed. Carefully use your fingers to roll the O-Ring off the end of the draw valve. Repeat process for the second O-Ring.

NOTE: If preferred, the O-Ring Remover Tool can be used to take off the O-Rings from both the draw valve and the beater shaft (as shown).



12. Remove the door gasket from the freezer door.



4.8 BEVERAGE EQUIPMENT:

13. To remove the beater assembly from the freezing cylinder, place your hand underneath the beater and grasp the scraper blade. Remove the scraper blades from the beater and take these parts to the sink for cleaning.



14. Use a Salmon cloth to absorb any water inside the freezing cylinder. Place your hand into the back of the freezing cylinder; grasp the beater shaft and pull straight out towards you to remove. Remove the beater shaft seal and O-Ring from the beater shaft. Use a Salmon cloth and the black bristle brush to clean the interior surfaces and back of the freezing cylinder.



15. Remove the drip pan, front drip tray and splash shield and take all parts to the 2 or 3-compartment sink for cleaning. Wash, rinse and sanitize all parts.



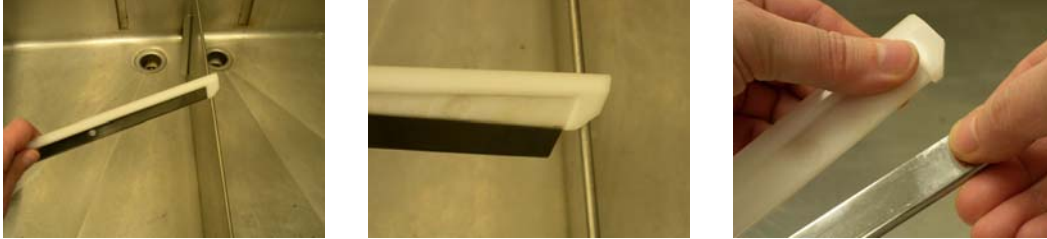
Brush Cleaning

16. Using the black bristle brush, clean the rear shell bearing at the back of the freezing cylinder.



4.8 BEVERAGE EQUIPMENT:

17. To remove the scraper blade from the metal scraper blade clip, gently tap the tapered end of the scraper blade on the edge of the sink. This will loosen the metal clip for easy removal and improved cleaning.



18. Thoroughly brush clean all disassembled parts making sure all lubricant and product residue is removed. Place all the cleaned parts on a clean parts tray or a clean and dry surface to air dry.

NOTE: O-Rings should be inspected on a weekly basis for cracks, nicks or tears. Always replace any parts which are damaged before reassembly.

ASSEMBLY:

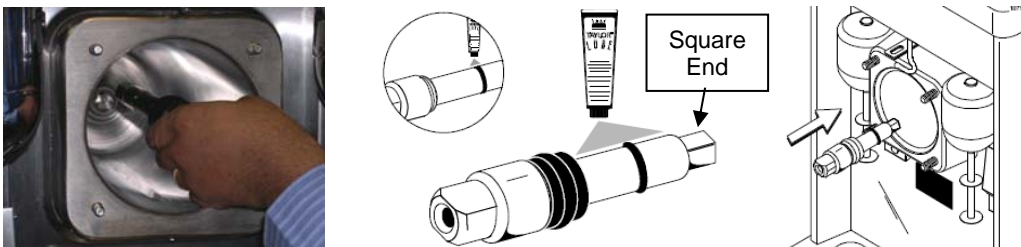
1. To reassemble the beater drive shaft, slide the beater shaft seal onto the beater shaft until it snaps into place and then slide the O-Ring into the first groove. Lubricate the groove, O-Ring and beater seal (as shown below).

NOTE: DO NOT lubricate the square end of the beater drive shaft. Fill the inside portion of the seal with 1/4" more lubricant and evenly lubricate the flat side of the seal that fits onto the rear shell bearing.



2. Install the drive shaft into the freezing cylinder, square end first, and into the rear shell bearing until the seal fits securely over the rear shell bearing. Be certain the drive shaft fits into the drive coupling without binding.

NOTE: Use your index finger to wipe off any excess lubricant at the contact point of the shaft seal and rear freezing cylinder



4.8 BEVERAGE EQUIPMENT:

- Before installing the beater assembly, check the scraper blades for any nicks or signs of excessive wear. If any nicks are present or if the blade is excessively worn, replace both blades. If blades are in good condition, install the scraper blade clip over the scraper blade. Place the rear scraper blade over the rear holding pin (positioning the knife edge to the outside). Holding the blade on the beater, turn it over and install the front blade the same way. Holding the blades in position, insert the beater assembly into the freezing cylinder and slide into 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 (**HINT**: Align the edge of the beater perpendicular with the top left stud nut screw).



- To install the torque assembly, slide the guide bearing onto the rear (short) end of the torque rotor; install the O-Ring on the front (long) end of the torque rotor and lubricate. Place the torque assembly into the freezing cylinder ensuring that the hole in the front end of the torque rotor shaft is facing up.



- Begin assembling the freezer door. Place the reversible door gasket onto the freezer door and then slide the front bearing onto the hub ensuring that the flanged end is touching the door.



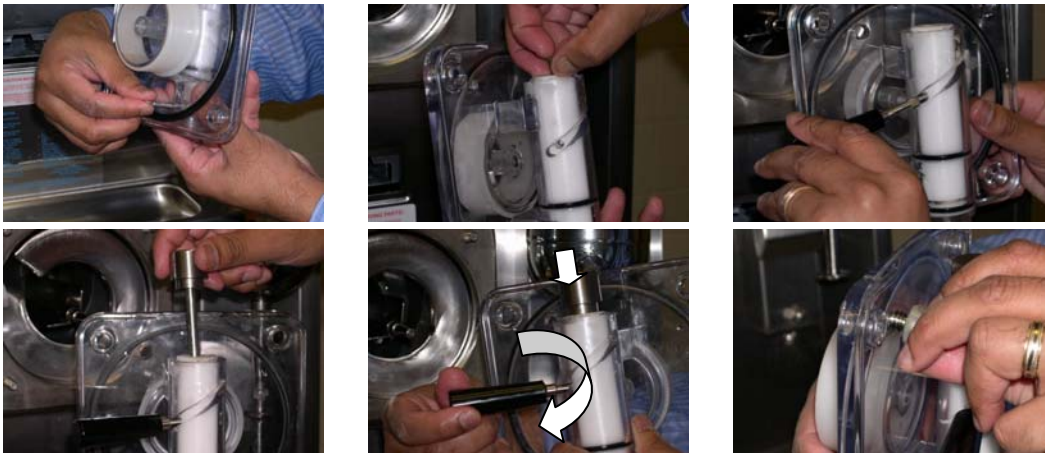
4.8 BEVERAGE EQUIPMENT:

- To assemble the door with the ice buster, install the O-Rings on the draw valve and lubricate. Insert the draw valve into the door spout, leaving approximately 1/2" of the valve sticking out the top of the door and ensuring that the hole for the handle is positioned on the left side and rotate the draw valve so the flats on the top of the draw valve are perpendicular to the door face (Diagram A on Page 9).



- Insert the ice buster through the door spout and into the slot located just above the lower O-Ring. With the ice buster in place, rotate the draw valve to allow installation of the draw handle. This will lock the ice buster in place. With the draw valve handle in place, install the draw valve pin and rotate the draw valve handle to allow the draw valve pin to fall into place. Insert the prime plug into the freezer door, but do not tighten fully (needs to be open to allow excess air to escape during hopper filling).

NOTE: Do not lubricate the door gasket or front bearing.

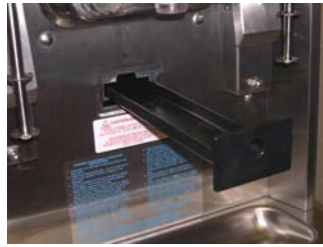


- To install the freezer door, place the front end of the torque rotor into the hole in the center of the door. Position the door onto the four studs on the front of the freezing cylinder and push the door into place. Insert the torque arm between the draw valve spout supports and into the hole in the torque assembly. Replace the four stud nuts onto the studs and tighten them equally in a criss-cross pattern to insure the door is snug. **DO NOT** over-tighten.



4.8 BEVERAGE EQUIPMENT:

9. Slide the long drip pan into the hole in the front panel.



10. Install the front drip tray and the splash shield under the door spout.



11. Ensure that the control switch is in the “OFF” position and then remove the lockout equipment from the circuit breaker.

Sanitizing

12. Prepare two gallons (7.6 liters) of a 200 ppm solution of sanitizer.
 13. Place the large white gong brush into the hopper and pour the sanitizing solution onto the brush bristles allowing it to flow into the freezing cylinder. Ensure that the prime plug is finger tight (closed). While the solution is flowing into the freezing cylinder, brush clean the mix hopper, mix inlet hole and mix level sensing probes.



14. Place the control switch in the “WASH” position. This will cause the sanitizing solution in the freezing cylinder to be agitated. Allow the solution to agitate for five minutes.



15. Place an empty mix pail beneath the door spout and move the draw handle to the right. Remove all of the sanitizing solution. When the sanitizer stops flowing from the door spout, move the draw handle to the left and place the control switch in the “OFF” position.



4.8 BEVERAGE EQUIPMENT:

16. Using the dispensed Sanitizing solution and a clean Salmon cloth, sanitize all exterior surfaces of the Iced Cappuccino machine.



NOTE: When the sanitizing process is complete, open the prime plug (but do not remove completely) on the freezer door.

Priming

17. Retrieve the Iced Cappuccino mix from the refrigerator which was prepared in advance to chill. **Never use frozen rerun mix.**
18. Carefully pour the prepared Iced Cappuccino Mix into the hopper and allow it to flow into the freezing cylinder. You will hear the air escaping through the prime plug hole. With an empty Stainless Steel Cylinder beneath the door spout, move the draw handle to the right. Dispense approximately 2 oz of the mix to force out any remaining sanitizing solution and then move the draw handle to the left. Discard the dispensed (waste) Iced Cappuccino Mix.



19. Continue to fill hopper with the Iced Cappuccino Mix. When the product in the freezing cylinder reaches the level of prime plug, close the prime plug to prevent leakage. Resume filling the hopper with the Iced Cappuccino Mix (minimum two or maximum three batches) until the hopper is full.



20. Place the hopper cover into position. Move the control switch in the "FREEZE" position. When the unit cycles off, the product will be at serving viscosity (approximately seven minutes).





4.8 BEVERAGE EQUIPMENT:

Monthly Maintenance:

1. Check rear shell bearing for signs of wear (excessive mix leakage in the drip pan) and be certain it is properly cleaned.
2. Dispose of O-Rings or seals that are worn, torn or fit too loosely and replace with new ones.



Semi -Annual Maintenance:

1. Tune-up Kits are available and all parts should be installed twice annually (Before Peak Season - March and End of Season - October).

Part Description	Quantity	390 Tune-Up Kit TDL #78116
Front Bearing 2 1/2" Inside Diameter	1	x
Guide Bearing 13/16" Long	1	x
Gasket -Door 5.109"ID x 5.630OD	1	x
O-Ring .291 ID x .080W	1	x
O-Ring 7/8 OD x .139W	1	x
O-Ring 1"OD x .139W	2	x
Drive Shaft Boot Seal	1	x
Tool - O-Ring Removal	1	x
Scraper Blade	2	x
O-Ring .563 OD x .070W	1	x
Lubricant	1	x

NOTE: In order to maximize performance and efficiency of the unit, all parts should be replaced three times annually even if they do not appear to be worn, torn or damaged.

2. Rotate scraper blades to allow both sides of the knife edge to wear evenly. This will contribute to self-sharpening and help maintain fast efficient freezing.
NOTE: Scraper blades must be replaced semi-annually, but should be carefully inspected for nicks or other damage after three months if the unit is used in high volume stores.
3. Carefully inspect the bristles on all cleaning brushes (replace if necessary).
NOTE: All brushes should be replaced on an annual basis.

Please contact TFI Canada Toll Free at 1-800-387-2529 if you have any questions or concerns relating to this product.

Press #1 for Parts and #2 for Service