High Volume Powdered Beverage Dispenser

Operation and Instruction Manual

for

Model GB5M5.5-IT-U-DB

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Model GB5M5.5-IT-U-DB

GMCW™
GRINDMASTER • CECILWARE™

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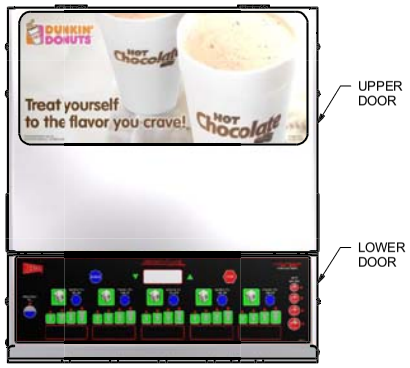
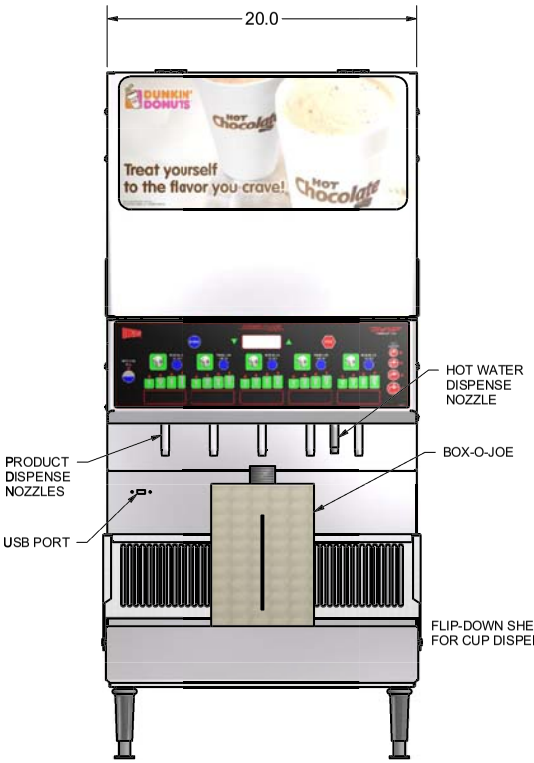
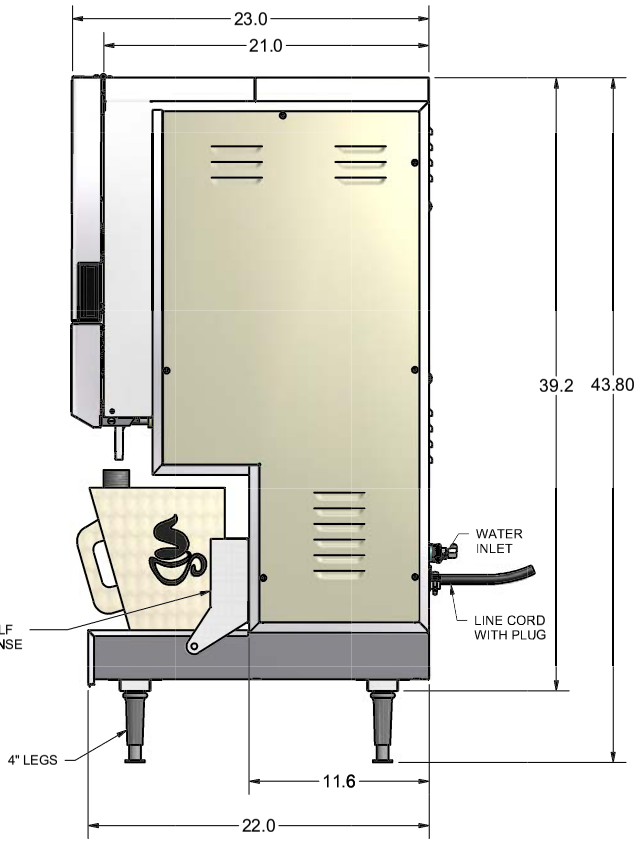






MODEL NO: GB5M5.5-IT-U

High Volume Powdered Beverage Dispenser

Available as an Option:
Box-O-Joe Guide
Drip Pan Guide

Electrical Specifications

Model No	Phase	Volts	KW	No. of Heaters	Amps	Hz	Receptacle NEMA	Circuit Breaker
GB5M5.5-IT-U-DB	1	240	6.25	1	30	50/60	L14-30R	30A
	1	208	5.2	1	30	50/60	L14-30R	30A

NEMA L14-30R

4' long line cord with plug (NEMA L14-30P) is supplied

Mechanical Specifications

Model No	Height*	Depth	Width	Hoppers	Tank	Art Area	Ship Weight
GB5M5.5-IT-U-DB	30.25"	23.12"	20"	(5) 7.5 lb.	8.0 gal.	18.5" x 15.12"	160 lbs.

*Add 4" minimum if using 4" legs

Water Inlet Connection

The equipment is to be installed to comply with the applicable Federal, State, or Local Plumbing Codes having jurisdiction. In addition:

1. A quick disconnect water connection or enough extra coiled tubing (at least 2x the depth of the unit) so that the machine can be moved for cleaning underneath.
2. An approved back flow prevention device, such as a double check valve to be installed between the machine and the water supply. The unit is equipped with a 1/4" flare water inlet fitting.

Highly Recommended

A WATER SHUT-OFF VALVE and A WATER FILTER, preferably a combination Charcoal/Phosphate Filter, to remove odors and inhibit lime and scale build up in the machine. Note: In areas with extreme hard water, a water softener must be installed in order to prevent a malfunctioning of the equipment and in order not to void the warranty.

Unpacking Instructions

Carefully unpack the GB machine and inspect immediately for shipping damage. Your GB machine was shipped in a carton designed to give it maximum protection in normal handling. It was thoroughly inspected before leaving the factory. In case of damage, contact the shipper, not Grindmaster-Cecilware.

Startup Procedure

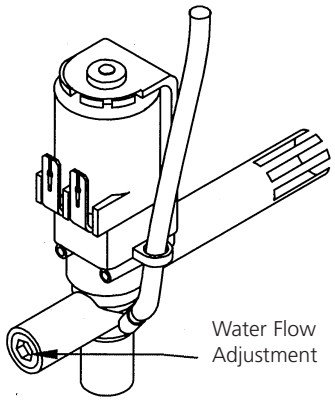
1. Connect the 1/4" copper waterline to the 1/4" flare water inlet fitting of the valve.
2. Plug the power cord into a proper receptacle.
3. Flip down lower door, activate the power switch (toggle up). The tank will start filling. Allow approximately 10-15 minutes for the tank to fill.
4. Allow approximately 20-30 minutes for the water to reach a preset temperature of 185°F. The heat up time will depend on the water inlet temperature, the input voltage, and the wattage of the elements in the machine.
5. Place container under nozzle and press dispense switch. The machine will dispense water at the rate of 1.2 oz. per second for the Box-O-Joe and the cup sizes. Repeat several times for each dispense switch to check for consistent output.
6. While the tank is heating up, remove the hoppers, load them with the products, and reposition them back in the machine. When the LCD screen reads: READY, the tank has reached its brew temperature and the machine is ready to dispense.

Product Out Detection System

Five (5) sensors are used to ensure that there is sufficient product in the hoppers. The location of the sensors are as follows: one behind each of the 5 hoppers. If at any time the system will not dispense when pressing the "Box" button, check the status of each of the sensors to see if refilling is necessary.

Adjustments

Dispense Mode	Dispense Valve	Hot Water Flow Rate
Box-O-Joe	L467A	Factory Set At 1.2 oz/sec.
Cup	L467A	Factory Set At 1.2 oz/sec.



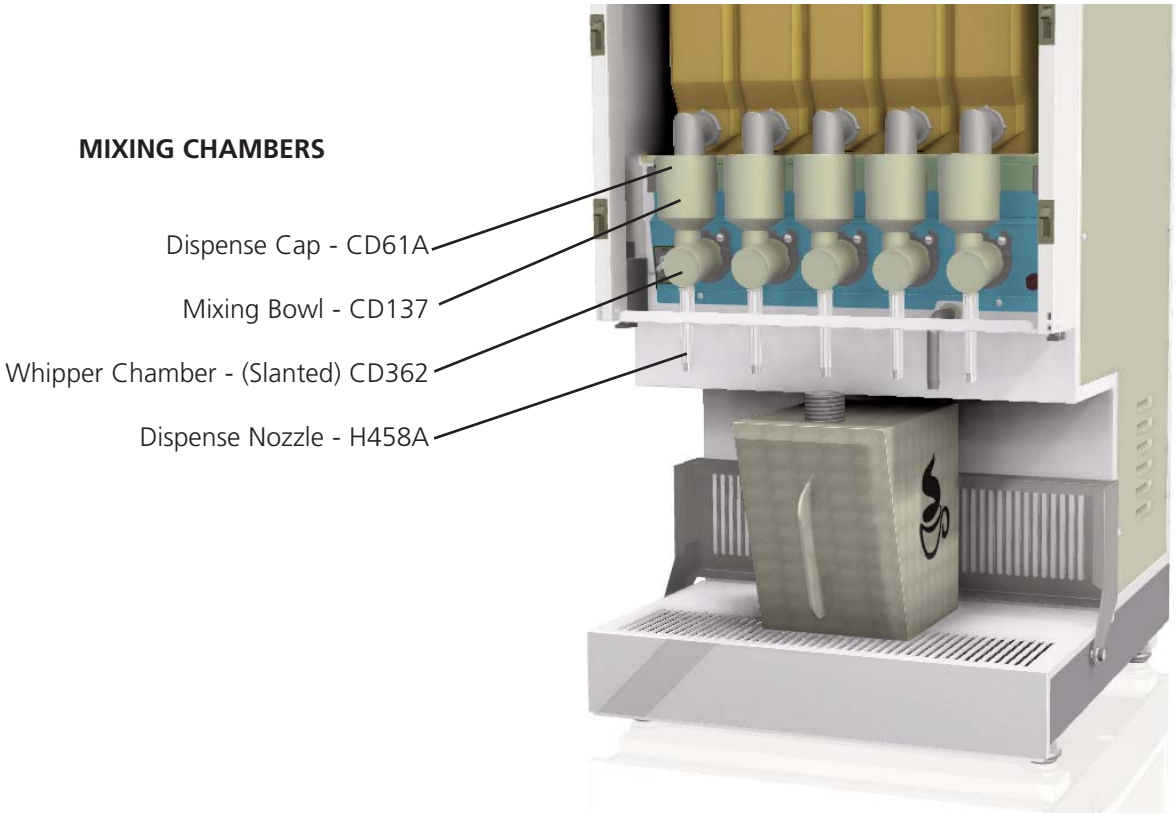
Note: To access the water dispense valves, lift up the upper door, remove the hoppers and the window panel.

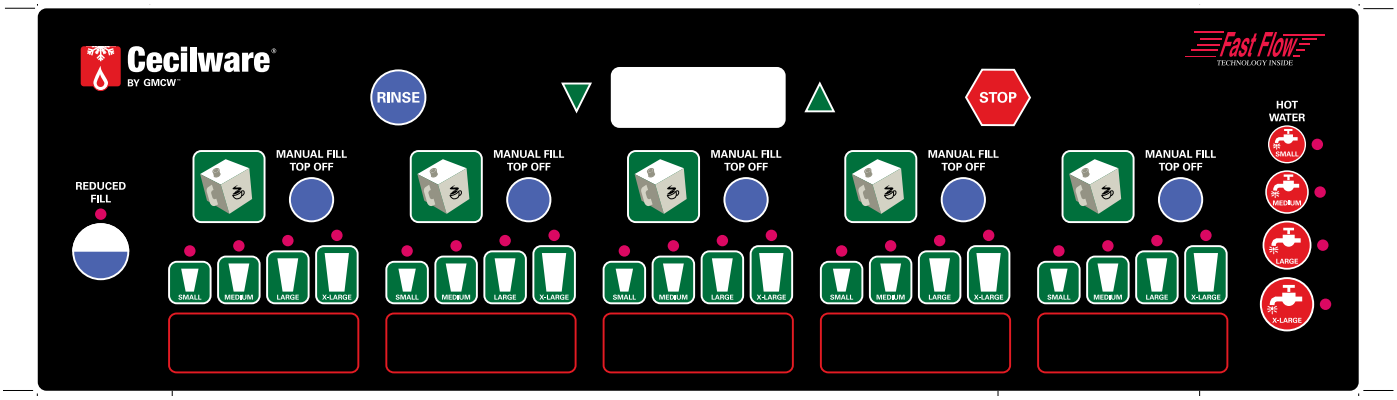
To Adjust Hot Water Flow Rate:

1. The dispense valves are mounted on the hot water tank.
2. Locate the adjustment screw on the valve.
3. Using Allen key or flat screwdriver rotate, 1/4 turn at a time, clockwise to increase water flow.
4. Check water flow output after each 1/4 turn.

Water Level Controls

Under normal conditions and operation, the water level in the tank should not drop more than 1/2" from the probe. If it does, the tank is not refilling fast enough. Check the water line and the water filter as they may need cleaning or replacing. Water inlet valve part number - L462A. Water level probe part number - K402Q.





Finished Product Serving Sizes (Pre-Set at the Factory)

	Small	Medium	Large	Extra Large	Box-O-Joe
All Flavors	8.0 oz.	11.5 oz.	15.7 oz.	19.1 oz.	37 oz.

Reduced Fill Value (Pre-Set at the Factory)

Product Strength

	Small	Medium	Large	Extra Large	Box-O-Joe
All Flavors	1.7. oz	2.2 oz.	2.9 oz.	2.7 oz.	N/A

These units have **variable speed control auger motors** [CD460 with variable speed of 10 to 160 RPM].
The gram throw is factory preset at 6 gr./oz.
TO CHANGE DRINK STRENGTH SEE PROGRAMMING INSTRUCTIONS.
The water flow rate adjustment for the dispense valve should remain fixed.
Note: The water flow rate should not exceed 1-1.2 oz./sec. (see hot water flow rate adjustments, page 5).

Dispensing Instructions

Cup Dispensing

1. Bring cup shelf to the "Down" position.

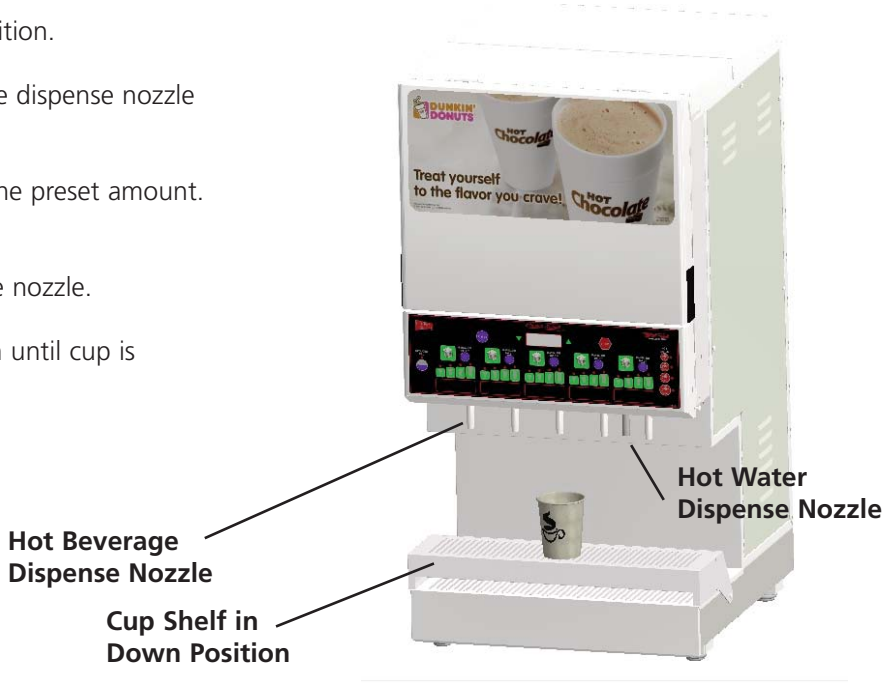
2. Place the appropriate cup under the dispense nozzle and press any of the preset sizes.

3. Press button and cup will fill with the preset amount.

Hot Water Dispensing

1. Place cup under hot water dispense nozzle.

2. Press and hold "Hot Water" button until cup is approximately 2/3 full.



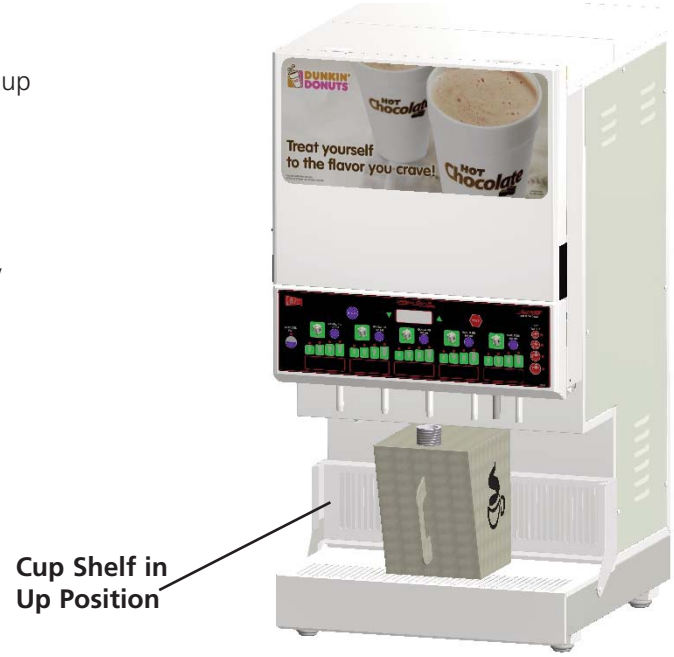
Box-O-Joe Dispensing

1. Get empty "Box-O-Joe"

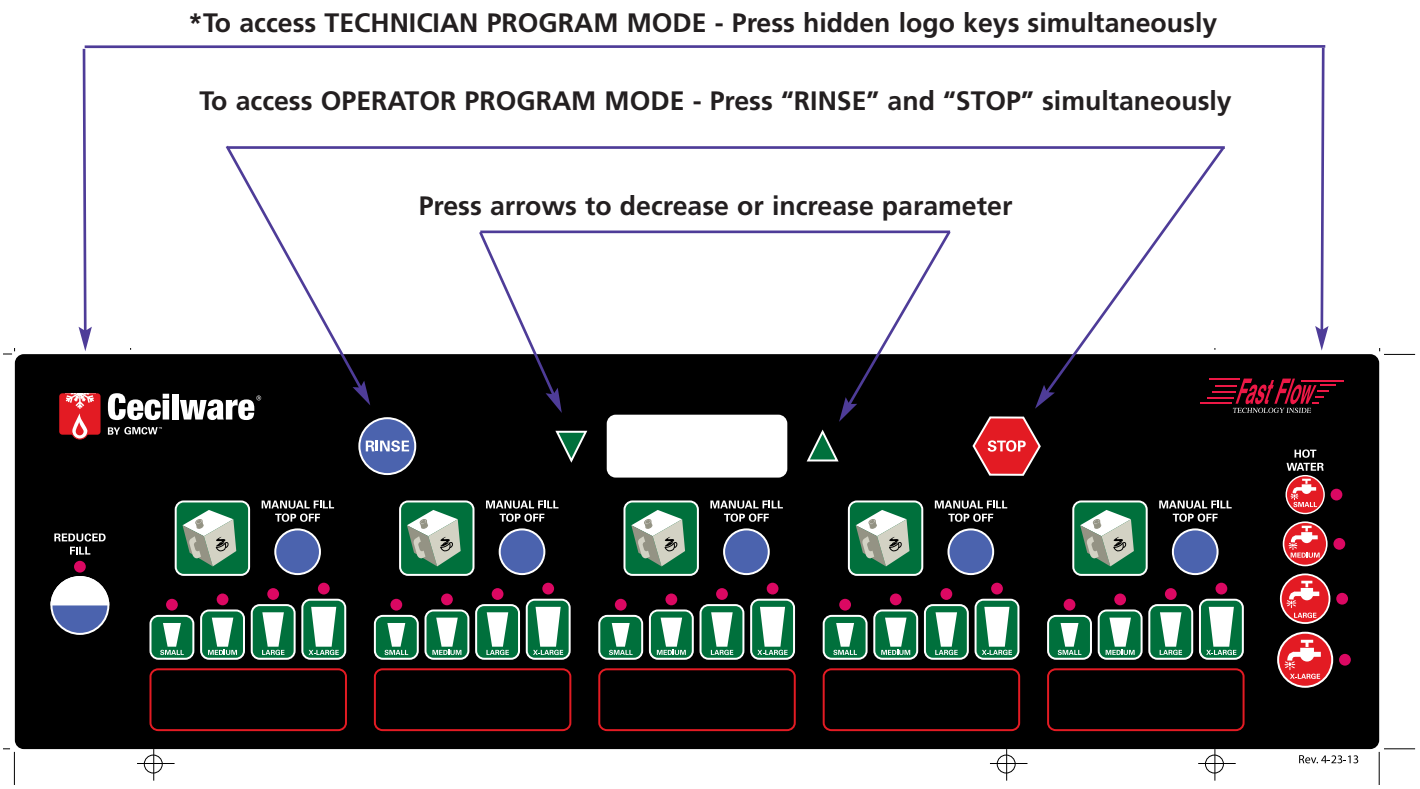
2. Lift the cup shelf to the "Up" position and line up "Box-O-Joe" with the dispense nozzle.

3. To dispense hot beverage into box, select "Box-O-Joe" button.

4. Follow instructions on the teach aid supplied by Dunkin' Brands to complete.



Programming Instructions



Touchpad No. NS67A-C

Modes of Operation

1. Initializing Mode – This mode is only active during the first few seconds after a "power-on" or system reset. The main function of this mode is to configure the system using the previously saved operating parameters.

2. Normal Mode – This mode becomes active immediately after initializing mode has completed its tasks. The main functions of this mode are to monitor and report system status and control dispensing.

3. Rinse Mode – This mode becomes active when the rinse key is depressed with any dispense key. The main function of this mode is to allow the operator to initiate an individual rinse for all mixing chambers.

4. Operator Program Mode – This mode becomes active when the rinse and the stop keys are simultaneously pressed for more than 1.5 seconds while in normal mode. The main function of this mode is to allow access to the gram throw, serving size, hopper status and clock settings parameters. Pressing the rinse or stop keys individually allows operator to scroll through available parameters. Pressing the rinse and the stop keys simultaneously again will return the touchpad to normal mode.

5. Technician Program Mode – This mode becomes active when both the hidden logo keys are simultaneously pressed for more than 1.5 seconds while in normal mode. The main function of this mode is to allow access to all the system parameters. Pressing the rinse or stop keys individually allows the operator to scroll through all parameters. Pressing both the hidden logo keys simultaneously again will return the touchpad to normal mode.
   *__Technician Program Mode accessed by qualified service personnel only.__

Parameter Definitions for System Software

1. **Grand Total** – This parameter indicates the total amount of water dispensed for the entire machine. The grand total does not include rinse dispenses. The maximum grand total value is 16,777,216 ounces; after which the value will begin again from zero. This parameter cannot be reset to zero.
   The default setting for this parameter will reset Grand Total setting to zero.

2. **Dispense Total** – This parameter indicates the total amount of water dispensed for a mixing chamber. The dispense total does not include rinse dispenses. The maximum dispense total value is 16,777,216 ounces; after which the value will begin again from zero. This parameter cannot be reset to zero.
   The default setting for this parameter will reset all Dispense Total settings to zero.

3. **Dispense Counter** – This parameter indicates the total number of cups dispensed for a selected serving size. The dispense counter does not include rinse dispenses. The maximum dispense counter value is 49,999; after which the value will begin again from zero. In technician program mode this parameter can be reset to zero by simultaneously depressing the keys.
   Default Values have no effect on this parameter.

4. **Serving Size** – This parameter determines the amount of water dispensed for each cup size when the dispense mode is set to portion control.
   The default settings are: SM 8.0 oz. MED 11.5 oz. LG 15.7 oz. X-LG 19.1 oz. Portable Box 37.0 oz.

5. **Reduced Fill** – This button, when pressed, will reduce each of the (4) cup sizes by a preset amount.
   The default settings are: SM 1.7 oz. MED 2.2 oz. LG 2.9 oz. X-LG 2.7 oz.

6. **Refill Dwell Time** – This parameter sets the time the inlet valve delays opening to refill tank when low water is indicated. **The default setting is 15 seconds.**

7. **Gram Throw** – This parameter determines the ratio of product to water during a dispense for a selected hopper. The units of measure for gram throw are proportional to auger turns per ounce of water. At a fill constant of 1.00 ounces per second the maximum gram throw is 100 and the minimum gram throw is 20. The maximum and minimum values are scaled proportional to a fill constant of 1.00 ounces per second. For example: if the fill constant is set to 1.3 ounces per second, the maximum gram throw would be (100*1.0)/1.3 = 77. This prevents the user from requesting a gram throw that is beyond the capability of the auger motor. Auger start and stop times have no effect on this parameter.
   The default setting for this parameter will reset all gram throw settings to factory specs.

8. **Auger Start Time** – This parameter sets the time that the auger starts to turn relative to the activation (opening) of the dump valve. A positive value indicates an auger starting at some time after the opening of the dump valve. A negative number indicates an auger starting at some time before the opening of the dump valve. The minimum auger start time = (-3.0) seconds. The maximum auger start time is 3.0 seconds.
   The default value for this parameter is 0.6 seconds.

9. **Mixer Start Time** – This parameter sets the time that the mixer starts to turn relative to the activation (opening) of the dump valve. A positive value indicates a mixer starting at some time after the opening of the dump valve. A negative number indicates a mixer starting at some time before the opening of the dump valve. The minimum mixer start time = (-3.0) seconds. The maximum mixer start time is 3.0 seconds.
   The default value for this parameter is 0.3 seconds.

10. **Auger Stop Time** – This parameter sets the time that the auger stops turning relative to the de-activation (closing) of the dump valve. A positive value indicates an auger stopping at some time after the closing of the dump valve. A negative number indicates an auger stopping at some time before the closing of the dump valve. The minimum auger stop time = (-3.0) seconds. The maximum auger stop time is 3.0 seconds.
    The default value for this parameter is 0.3 seconds.

Parameter Definitions for System Software (continued)

11. **Hopper Status** – This parameter determines whether a selected hopper is turned ON or OFF. If a hopper is ON then the auger motor, mixer motor, and dump solenoid status checking is enabled and the hopper is allowed to dispense. If a hopper is OFF then auger motor, mixer motor, and dump solenoid status checking is disabled and the LED's of the dispense keys related to that hopper will turn OFF thus indicating that the hopper will no longer dispense.
    The default setting for this parameter is ON.

12. **Auger Status** – This parameter determines whether the auger motor of the selected Hopper is turned ON or OFF. If an auger motor is ON then dispenses from the selected hopper will include powder (product). If an auger motor is OFF then dispenses from the selected Hopper will not include powder (product). This is a temporary parameter and is reset to the default setting at "power-on".
    The default setting for this parameter is ON.

13. **Mixer Status** – This parameter determines whether mixer of the selected hopper is turned ON or OFF. If mixer is ON then dispenses from the selected hopper will mix and will include water. If mixer is OFF then dispenses from the selected hopper will not mix and will not include water. This is a temporary parameter and is reset to the default setting at "power-on".
    The default setting for this parameter is ON.

14. **Dump Status** – This parameter determines whether dump of the selected hopper is turned ON or OFF. If dump is ON then dispenses from the selected hopper will mix and will include water. If a dump is OFF then dispenses from the selected hopper will not mix and will not include water. This is a temporary parameter and is reset to the default setting at "power-on".
    The default setting for this parameter is ON.

15. **Product Sensor** - Reading – This parameter provides a readout whether the selected product sensor is FULL or EMPTY.

16. **Product Sensor** - Status – This parameter determines whether the product sensor corresponding to the hopper selected is turned ON or OFF.
    The default setting for this parameter is ON.

17. **Low Product Warning** – This parameter determines if the low product warning system is ON or OFF. In the ON mode, a low product condition in any hopper will cause a warning to display indicating which hopper is affected but not stop that hopper from dispensing.
    The default setting for this parameter is ON.

18. **Low Product Lockout** – This parameter determines if the low product lockout system is turned ON or OFF. In the ON mode, a low product condition in any hopper will cause a warning to display indicating which hopper is affected, and that hopper will no longer dispense until it is refilled with product.
    The default setting for this parameter is ON.
    NOTE: If the low product condition occurs during a dispensing, it will complete the selected dispense amount and discontinue further dispense.

19. **Clock Settings** – This parameter provides a readout of the current date and time (TIME, DAY, MONTH and YEAR). Need to set correct date and time at the beginning life of the machine.

20. **Keypad Status** – This parameter provides a readout of the input data being transmitted to the processor.

21. **Default Values** – Resets all parameters to FACTORY SETTINGS. This parameter can be activated by simultaneously depressing the up and down arrow keys on touchpad.

Sanitizing, Cleaning, and Refilling Hoppers

Sanitizing: All food dispensing units should be sanitized periodically. All parts to be sanitized must be cleaned first.

To prepare a sanitizing solution: ADD 2 TSP. OF LIQUID BLEACH (5.25% CONCENTRATION) TO 1 GALLON OF WATER AT ROOM TEMPERATURE (70°- 90°F).
Note: Always start with an unopened bottle of bleach since the solution from an opened bottle has a short life span.
- Soak all parts for a minimum of 3 min. in the sanitizing solution.
- Let all sanitized parts drain and dry naturally. DO NOT WIPE THEM DRY.
- Before using the sanitized unit (or parts) with food stuffs, rinse all parts thoroughly with water. Water pipe connecting and fixtures directly connected to a potable water supply shall be sized, installed, and maintained in accordance with Federal, Sate, and Local codes.

Care for Stainless Steel
- Stainless steel surfaces that come in contact with food substances, MUST BE CLEANED EVERY DAY. When cleaning stainless steel, only a Ph neutral cleaner is to be used.
- Use nylon or brass brushes (not steel wire brushes) for removing food deposit. Many food products contain acids, alkaloids, or other substances which corrode stainless steel.

Cleaning
1. Turn the power switch to OFF.
2. Remove the drip tray with grill and empty the contents.
3. Wash and let dry the tray and grill (use a mild dishwasher detergent).
4. Wash and let dry the dispense area.
5. Turn the power switch to ON.

Cleaning the Hoppers
1. Open the cabinet door.
2. Take the hopper out of the cabinet.
3. Pull off the elbow chute and remove the hopper cover.
4. Unscrew the auger gear clockwise while holding steady the auger inside the hopper. Take out the auger, agitator wheel, and spring.
5. Rinse each item thoroughly.
6. Let all items dry and reassemble.

Filling the Hoppers
1. Open the cabinet door.
2. Fill each hopper with the correct product.
3. Reposition hoppers in the hopper compartment making sure the hoppers are properly seated.

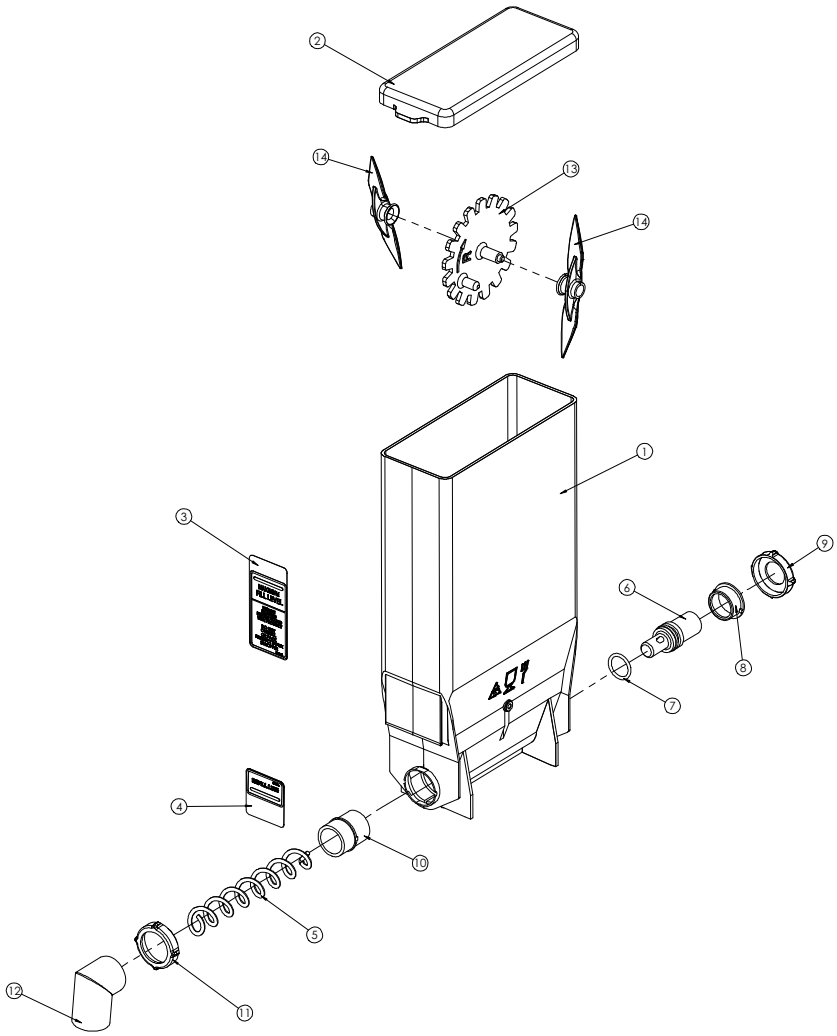
Flushing the Whipper Chamber
1. Complete rinse is initiated by simultaneously pressing blue rinse button and any drink dispense buttons.

Removing and Cleaning the Whipper Chambers
1. Remove the dispense cap by pulling it forward and at the same time twisting it clockwise.
2. Grab and pull the mixing bowl out of the mixing bowl socket.
3. Grab and twist the whipping chamber clockwise and pull it off the mounting plate.
4. Pull the whipper blade off the motor shaft. Notice the flat keyway on the shaft and the matching keyway inside the Whipper blade shaft. It is important that these two keyways are lined up when re-assembling the components.
5. Twist the mounting plate clockwise and pull it off the motor shaft.
6. Slip off the o-ring from the whipper chamber mounting plate and clean o-ring and o-ring seat.

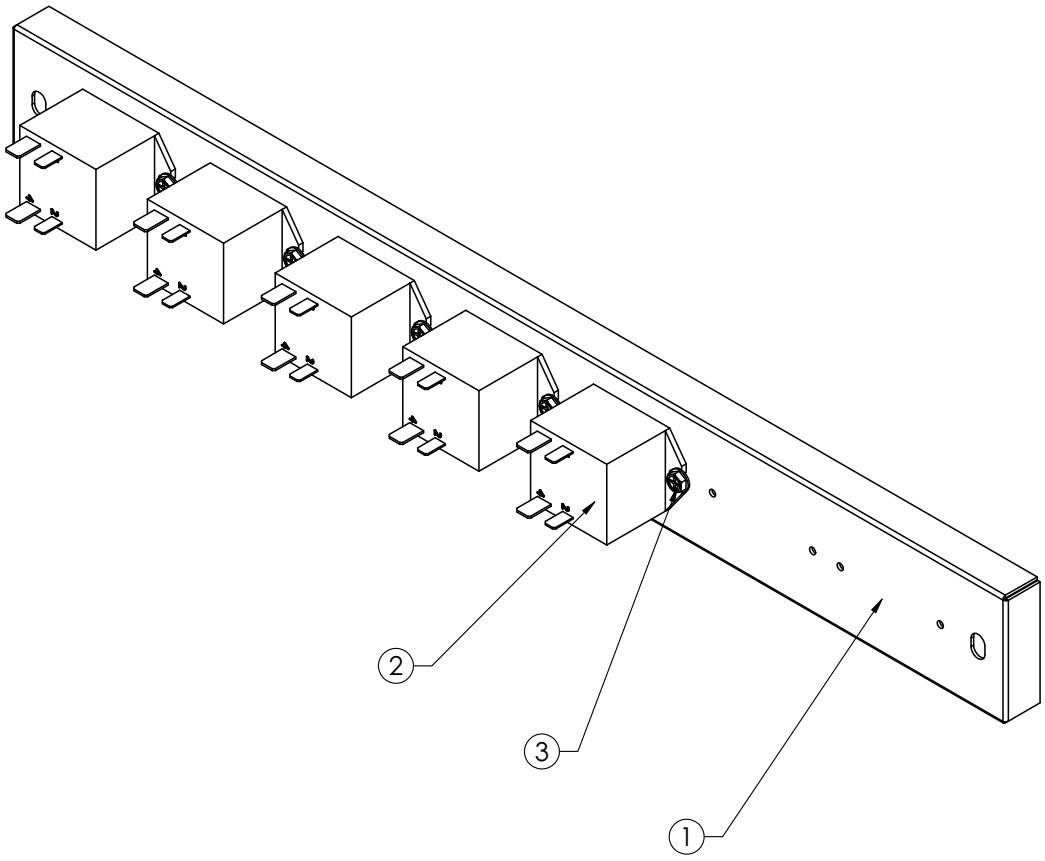
Troubleshooting Guide

WARNING: To reduce the risk of electrical shock, unplug the dispenser power cord before repairing or replacing any internal components of the unit. Before any attempt to replace components be sure to check all electrical connections for proper contact.

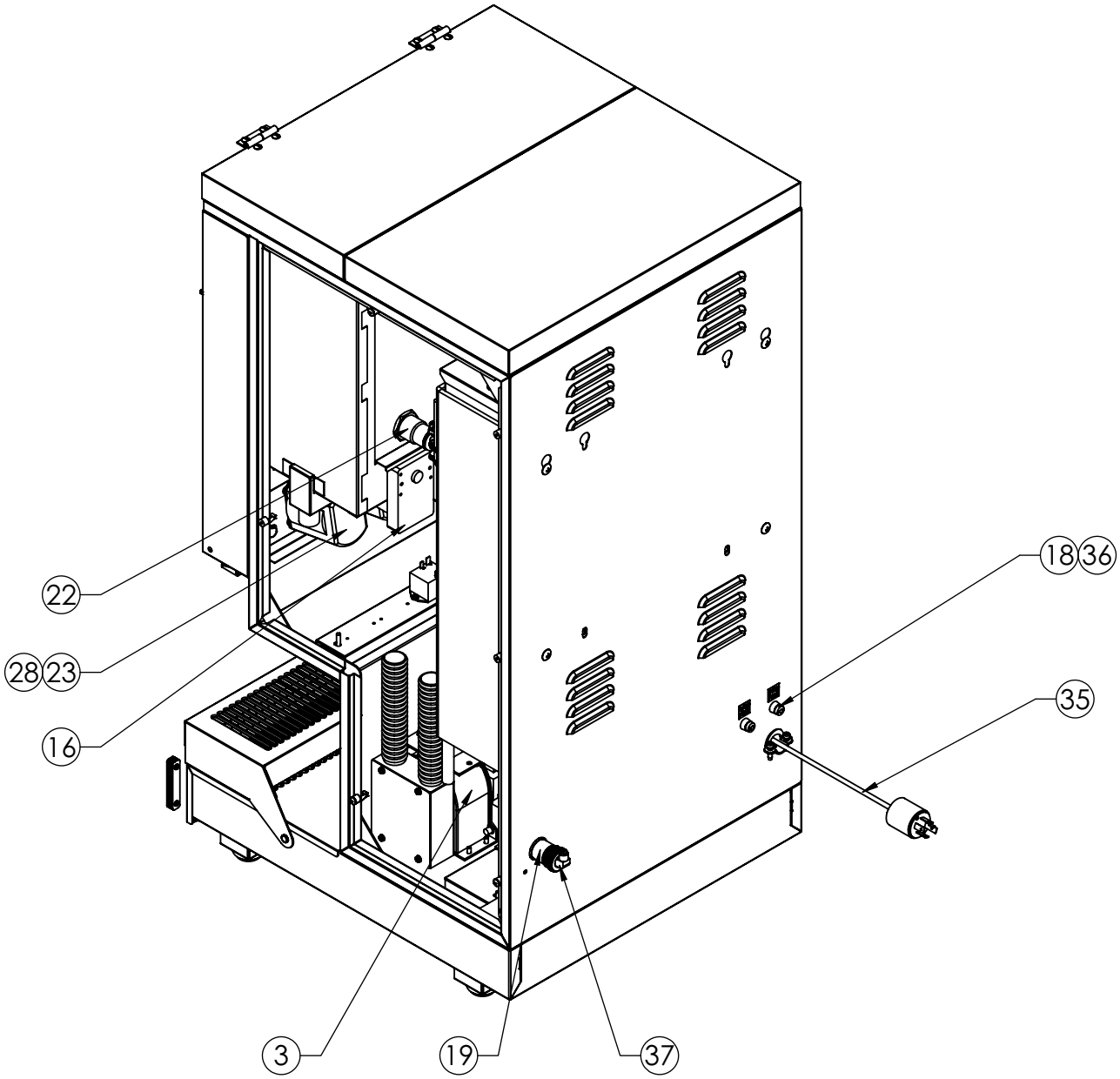
Problem	Probable Cause	Remedy
Light Display Not Lit. No power	a) Dispensing unit unplugged b) No power from main board or power switch	a) Reconnect dispensing unit b) Check for loose wire to main board or to power switch
No water when rinse switch is ON	a) Water supply OFF b) Clogged inlet screen (water inlet valve) c) Inoperative water inlet valve d) Loose electrical connection	a) Turn water ON b) Disconnect water line and clean inlet screen c) Check connection. If needed, replace valve d) Check all electrical connections
No product when dispense button is pressed	a) No product in hopper b) Auger not working c) Damaged, loose, or missing agitator gear d) Inoperative auger motor e) Hopper outlet clogged f) Faulty coupling	a) Add product b) Engage hopper/nut motor gear c) Replace agitator gear d) Check connections of motor. If needed, replace such components e) Clean hopper and check cartridge heater f) Replace damaged coupling components
Water does not shut off. Water keeps dispensing	a) Leaking solenoid (water inlet valve) b) Inoperative switches on touch pad. c) Inoperative rinse switch - touch pad d) Clogged/stuck water dispense valve	a) Clean/check fittings of valve. Replace valve if needed. See "water inlet valve test" b) Check touch pad connections. Replace touch pad if needed c) Check connection. If needed, replace valve d) Clean/unclog water dispense (dump) valve. Replace dispense valve if inoperative
No water is going into tank at all	a) Water inlet valve malfunction b) Probe malfunction	a) Check solenoid valve. Replace if necessary, See "water inlet valve test" b) Check probe. Replace if necessary, See "probe test"
Water will not stop flowing into tank	a) Water level probe malfunction b) Solenoid (water inlet valve) malfunction	a) Check probe, replace if necessary. See "probe test" b) Check solenoid. Replace if necessary, See "water inlet valve test"
Water is not heating up in the water tank	a) Temperature setting is incorrect b) Loose connection to heating element c) Heater is burned out or defective	a) Set temperature at 195°F. (see programming instructions) b) Make sure all wires are tight c) Replace the heater
Water drips from mixing chamber	a) Leaking water dispense valve b) Too much water in tank c) Mixing chamber clogged d) Water inlet valve blocked by scales	a) Replace water dispense (dump) valve b) Dispense some water from the tank c) Clean mixing chamber d) Replace or clean valve seat
Cold drink	a) Run out of hot water b) Temperature setting is incorrect c) Loose electrical connection d) Bad heating element or heater is burned out	a) Allow time for water in tank to heat after filling. b) Set temperature at 195°F (see programming instructions) c) Check all electrical connections for contact. d) Replace heater
Drink too strong	a) Water flow too low b) Product throw too high	a) Adjust water flow rate b) Adjust gram throw (see programming instructions)
Drink too weak	a) No product in hopper b) Product throw too low c) Water flow too high	a) Add product b) Adjust gram throw (see programming instructions c) Adjust water flow rate
Drink not whipped	a) Whipper blade missing b) Loose electrical connection to motor c) Whipper motor defective	a) Replace whipper blade b) Check electrical connections to motor c) Replace whipper motor
Dispenser repeats cycle	a) Touch pad defective b) Power (dispense) relay stuck	a) Replace touch pad b) Replace relay
Noise coming from mixing chamber	a) Whipper blade not properly aligned or missing	a) Check blade alignment. If needed, replace blade and mixing chamber
Grinding noise coming from unit	a) Hopper not properly engaged in back, or hopper not seated properly	a) Check the mating between the auger motor's gear and hopper's coupling/nut. Also check pin in base. Pin must be dropped into hole in base.
Banging or clicking noise coming from hoppers	a) One or more hoppers are empty or almost empty	a) Fill hoppers with product



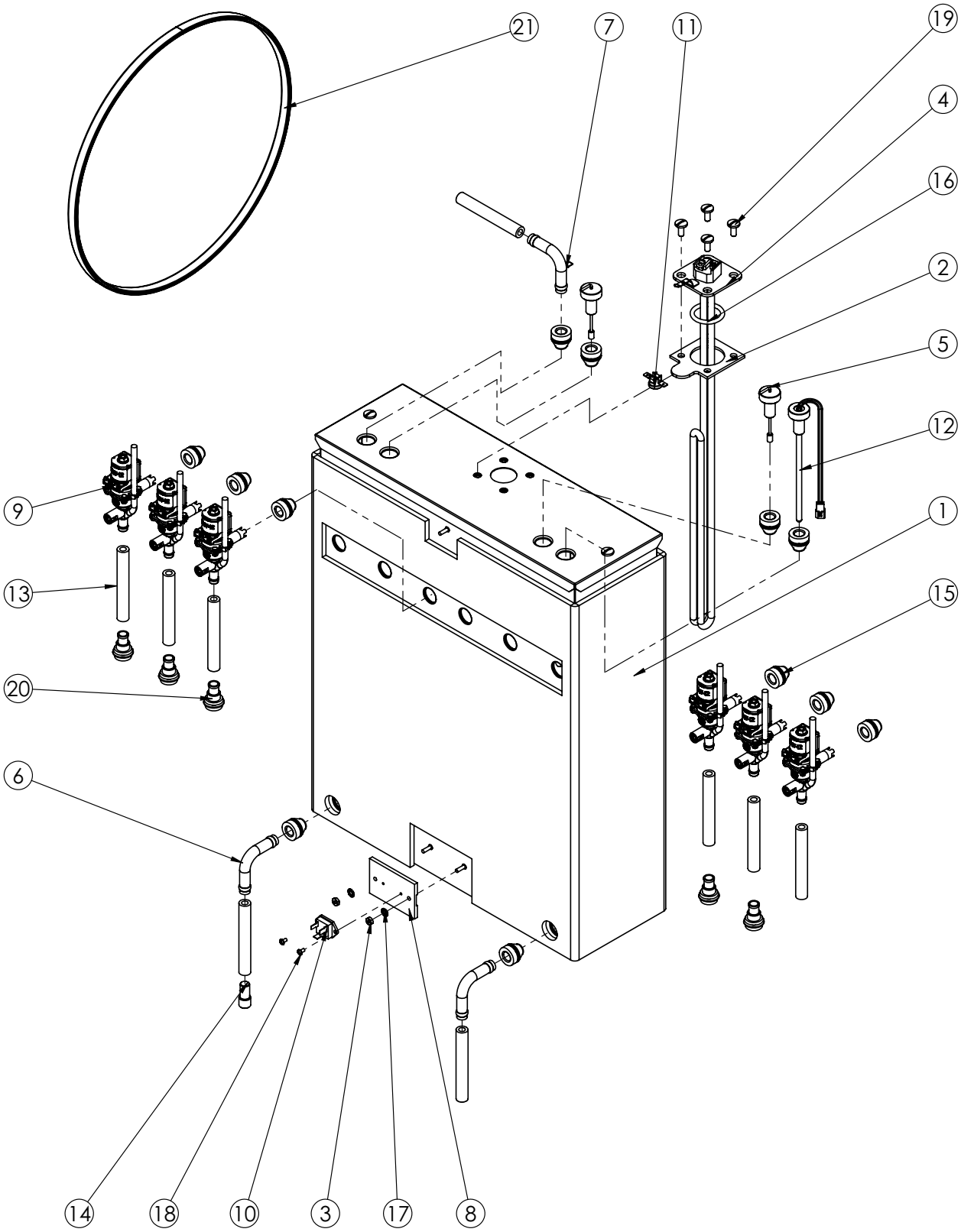
Parts List			
ITEM	PART NO.	DESCRIPTION	QTY
1	210-00196	HOPPER, 6.5 LB. BODY ONLY	1
2	210-00198	LID, 6.5 LB. HOPPER	1
3	NA38A	LABEL MAX FILL LEVEL	1
4	NP93A	LABEL REFILL LINE	1
5	CD101	AUGER WIRE 22.5	1
6	CD469	PLASTIC AUGER DRIVE	1
7	CD470	AUGER O-RING	1
8	CD446	AUGER BUSHING	1
9	CD447	RETAINING NUT REAR	1
10	CD277	BUSHING AUGER	1
11	CD278	NUT RETAINING 101	1
12	CD70A	CHUTE SHORT	1
13	210-00197	PINWHEEL, 6.5 LB. HOPPER	1
14	210-00135	AGITATOR, 6.5 LB. HOPPER	2



Parts List			
ITEM	PART NO.	DESCRIPTION	QTY
1	TH49A	RELAY BRACKET	1
2	B129A	RELAY, 120VAC (SPST 15A)	5
3	P422A	SCR #6-32X3/8" SL HWH T/F	10



Parts List			
ITEM	PART NO.	DESCRIPTION	QTY
3	RW31C	HOUSING BLOWER ASSEMBLY	1
16	CD460	24V DC AUGER MOTOR	5
18	CH247	FUSE HOLDER - GB5MF	2
19	L462A	VALVE INLT 120V .75 GPM	1
22	L641Q	LEVEL SENSOR - CAPACITIVE	5
23	CD350	MOTOR WHIPPER	5
28	CD468	WHIPPER IMPELLER - 2 FLATS	5
35	CE202	LINE CORD, 4' L14-30P NEMA	1
36	CH246	FUSE - 2 AMP GB5MF	2
37	K491A	HOSE NUT ASSEMBLY (3/4" AMERICAN THREADS)	1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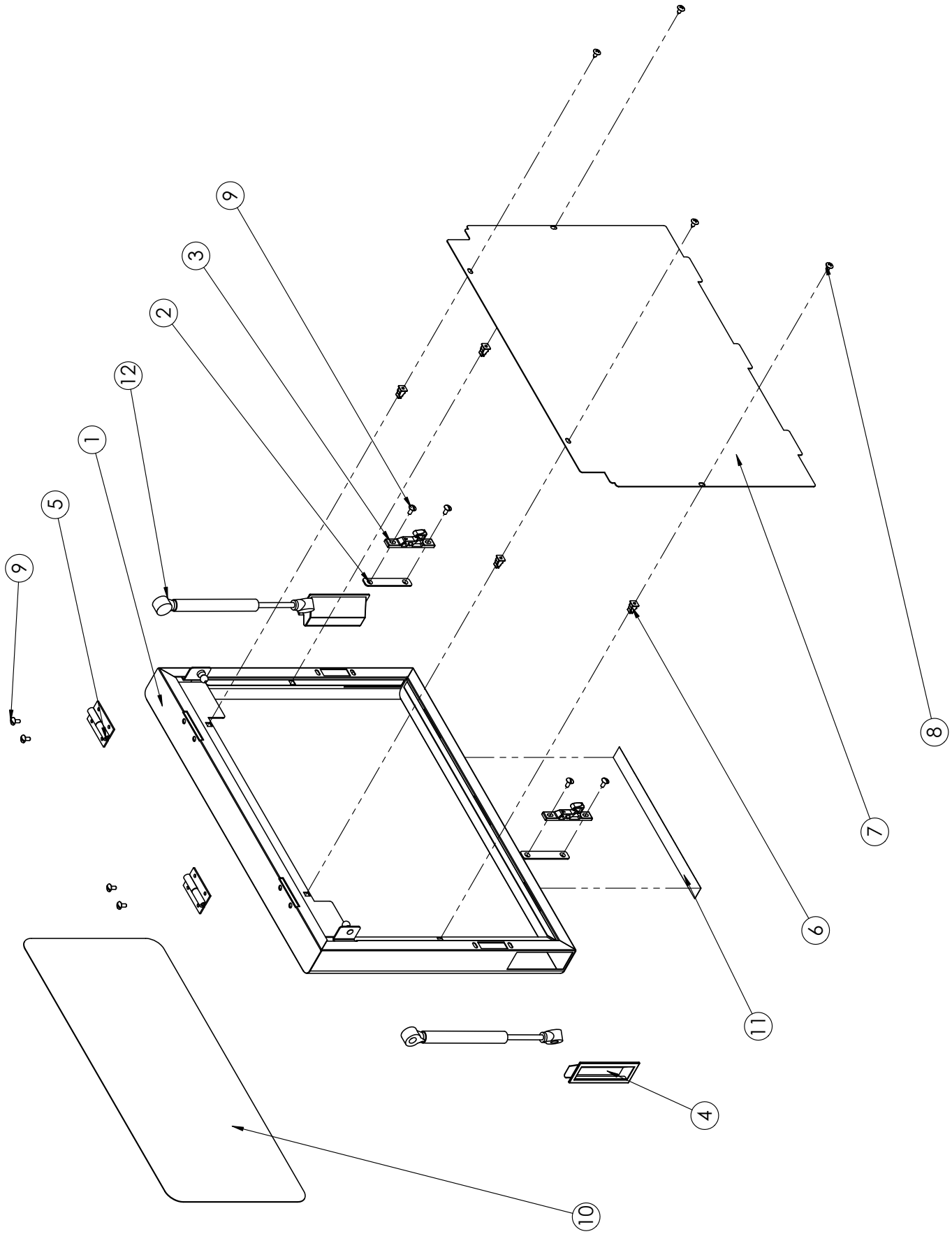
Parts List			
ITEM	PART NO.	DESCRIPTION	QTY
1	TH83Q	TANK SUB-ASSEMBLY	1
2	K661A	HEATSINK, HI-LIMIT	1
3	P010A	NUT #8-32 HX 18-8 SS	2
4	G281Q	ELEMENT 230V 6KW-WELD W/CLIP	1
5	K402Q	LEVEL CONTROL SENSOR	2
6	K525A	90 DEGREE ELBOW 1/2" TUBING SS	2
7	K525Q	OVERFLOW ELBOW SUB-ASSEMBLY	1
8	K770A	HEAT SINK, COPPER BAR	1
9	L467A	VALVE DUMP 120V-8MM	6
10	L623A	TRIA C HEATER 35 AMP	1
11	L656A	SWITCH, HI LIMIT CUT OUT - GB/HDW/JAVA	1
12	L742Q	THERMISTOR PROBE 6.5" GB-IT/J2	1
13	M324A	SILICONE TUBING	9
14	M391A	PLUG-DRAIN-GB	1
15	M461A	SEAL SILICONE 12MM - GB/QB	12
16	M773A	O RING 1.25"	1
17	P072A	WSH #10X.205X.025 EXT STR LCK CAD PLT	2
18	P182A	SCR #6-32 X 1/4 PH PN SS	2
19	P465A	SCR 1/4"-20X1/2" SL TH SS	4
20	CD67A	SOCKET MIXING CHAMBER, CLEAR	5
21	MB64A	SILICONE GASKET, TANK	1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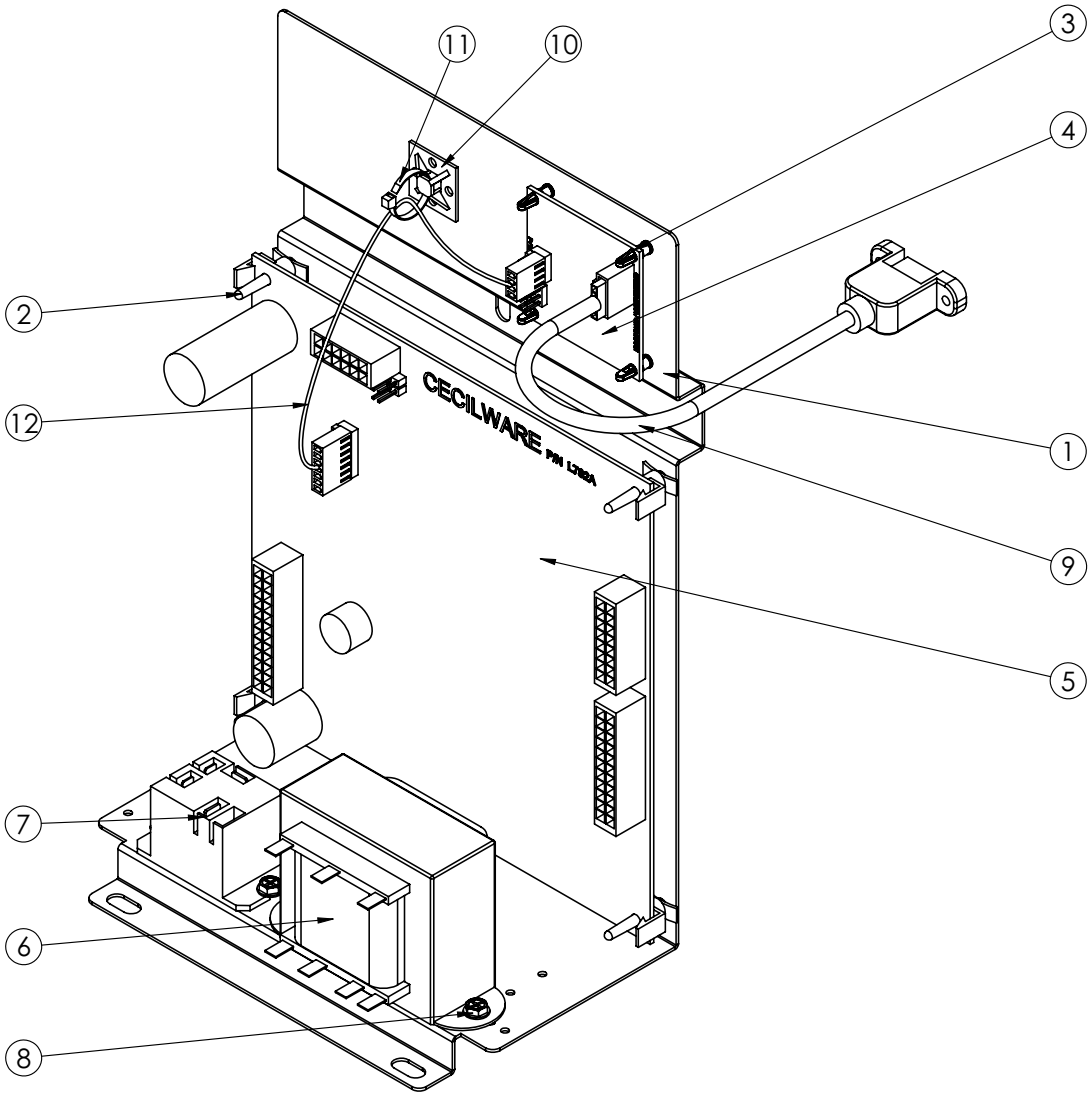
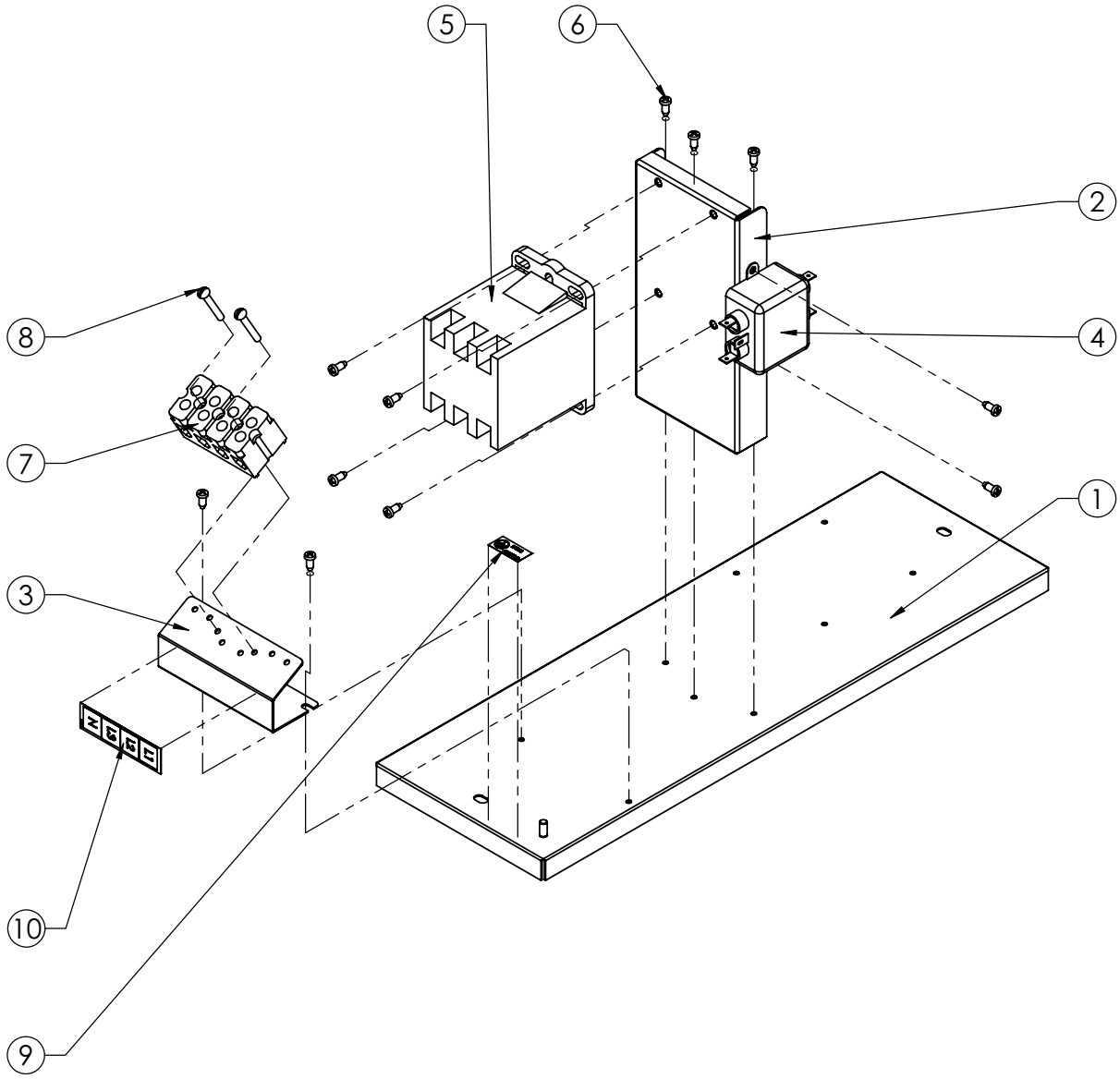
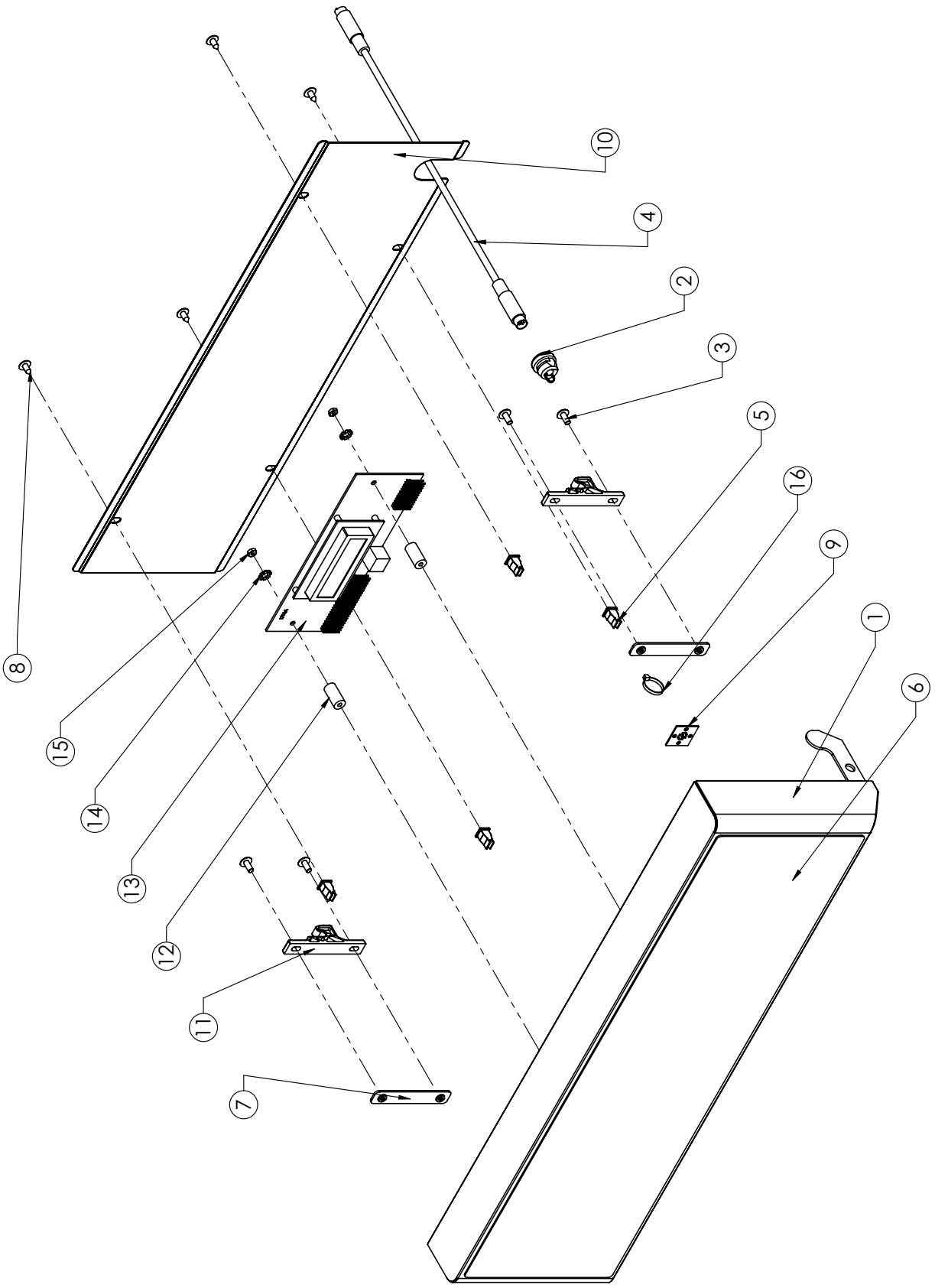
Parts List			
ITEM	PART NO.	DESCRIPTION	QTY
1	TH79Q	UPPER DOOR ASSEMBLY SUB ASSEMBLY	1
2	SD08A	NUT PLATE FOR LATCH	2
3	M705A	DOOR LATCH COMPLETE (SNAP)	2
4	M894A	PULL POCKET #P2-41 BLK	2
5	P402S	HINGE, STAINLESS STEEL RIGHT - JG2/3	2
6	M408A	ANCHOR, #8 NYLON SCREW	4
7	TH80A	INSIDE UPPER DOOR PANEL	1
8	P505A	SCR #8X3/8" PH TH T/A SMS SS	4
9	A4054	SCR #8-32X3/8" SL TH 18-8 SS	8
10	NS65A	LABEL, DUNKIN UPPER DOOR	1
11	NK93A	CAUTION LABEL, BLK-YEL 3/4 INCH	1
12	P607A	GAS SPRING 20LB	2



Parts List			
ITEM	PART NO.	DESCRIPTION	QTY
1	Ti35A	CONTROL BOARD BRKT W/USB	1
2	M686A	SUPPORT CIRCUIT BOARD	4
3	MB63A	STANDOFF, PC BOARD (0.089 MTG)	4
4	L797A	PC BOARD W/USB PORT	1
5	L782A	6-CHANNEL CONTROL BOARD	1
6	CH332	TRANSFORMER CL2	1
7	B190A	SAFETY RELAY 24VDC SPDT	1
8	P422A	SCR #6-32X3/8" SL HWH T/F	4
9	CH562	USB CONNECTOR CABLE	1
10	B165A	CABLE TIE MOUNT	1
11	86600	TIE, WIRE, 4" NYLON	1
12	CH567	USB ACCESS BOARD MAIN BOARD ADAPTER CABLE	1



Parts List			
ITEM	PART NO.	DESCRIPTION	QTY
1	TH73Q	COMPONENT CHASSIS SUB-ASSEMBLY	1
2	TH50Q	CONTACTOR BRACKET SUB-ASSEMBLY	1
3	RU14A	TERMINAL BLOCK BRACKET	1
4	L728A	FILTER CORCOM EMI - GBIT/GB5MF	1
5	CG12A	CONTACTOR SQUARE D 120V COIL	1
6	P166A	SCR #8-32 X 3/8 PH PN T/F ZNC	11
7	B017A	TERMINAL BLOCK-220V/3PH-4	1
8	P038A	SCR #8-32 X 1 3/16 SL RH	2
9	N276A	LABEL EARTH/GROUND	1
10	NP79A	LABEL TERMINAL BLOCK	1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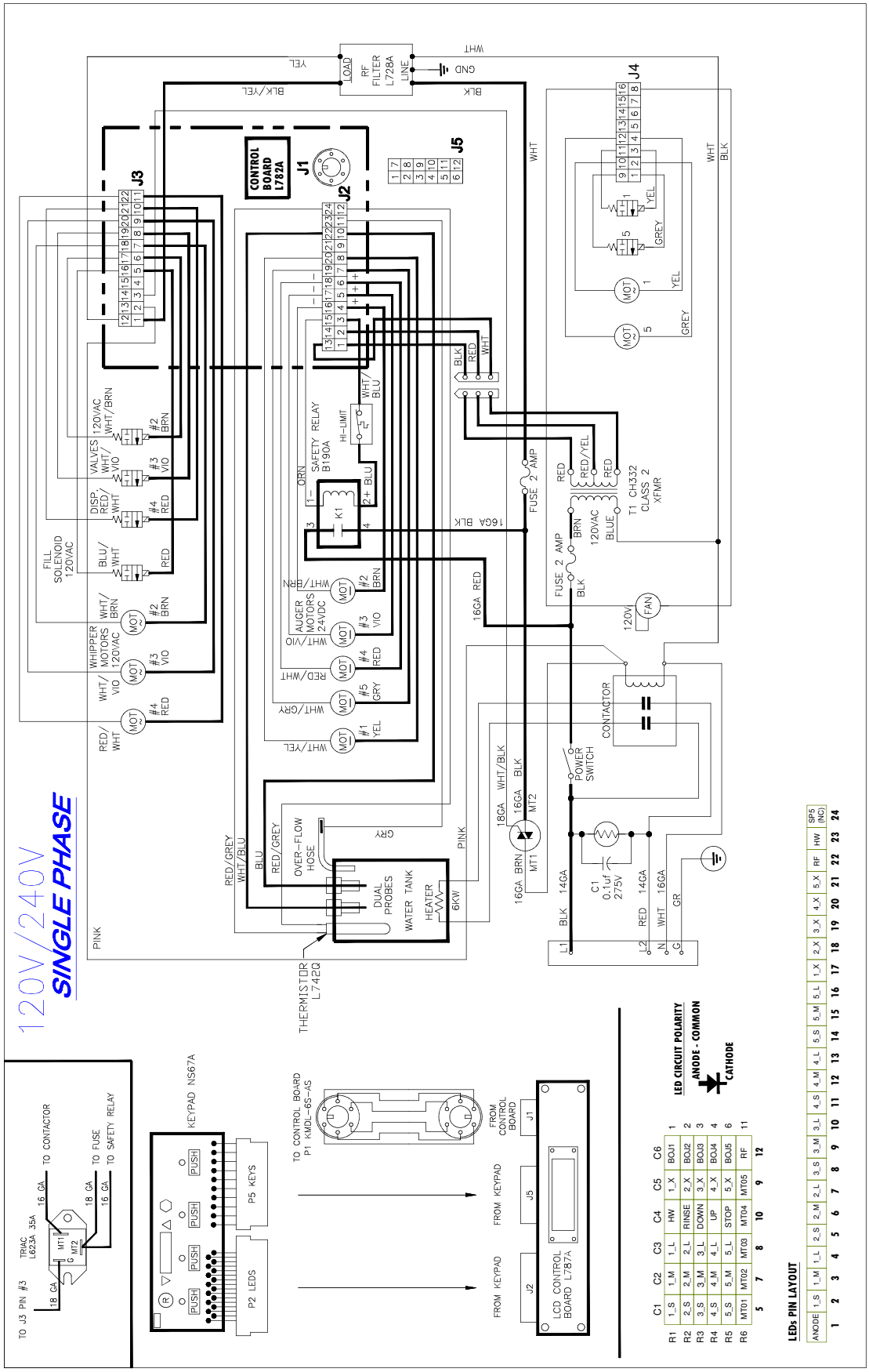
Parts List			
ITEM	PART NO.	DESCRIPTION	QTY
1	TH88Q	LOWER DOOR SUB ASSY	1
2	B238A	STRAIN RELIEF STRAIGHT	1
3	A4054	SCR #8-32X3/8" SL TH 18-8 SS	4
4	CH392	CONNECTOR DOOR CABLE	1
5	M408A	ANCHOR, #8 NYLON SCREW	4
6	NS67A	TOUCH PAD LABEL	1
7	SD08A	NUT PLATE FOR LATCH	2
8	P505A	SCR #8X3/8" PH TH T/A SMS SS	4
9	B165A	CABLE TIE MOUNT	1
10	TH89A	INSIDE DOOR MOUNT	1
11	M705A	DOOR LATCH COMPLETE (SNAP)	2
12	MB67A	SPACER, NYLON, #6 X.750"L	2
13	L796A	LCD BOARD	1
14	P072A	WSH #10X.205X.025 EXT STR LCK CAD PLT	2
15	03006	NUT, 6-32 X .250 X .094, HEX, ZINC PLATED	2
16	86600	TIE, WIRE, 4" NYLON	1


120V/240V
SINGLE PHASE
CONTROL BOARD L782A
J1
J2
J3
J4
J5
RF FILTER L728A
LOAD
LINE
GND
YEL
WHT
BLK
BLK/YEL
SAFETY RELAY B190A
HI-LIMIT
K1
ORN
BLU
WHT/BLU
BLK
RED
WHT
FUSE 2 AMP
T1 CH332 CLASS 2 XFMR
120VAC
BLUE
BRN
RED
RED/YEL
FILL SOLENOID 120VAC
BLU/WHT
DISP. RED/WHT
VALVES WHT/VIO
120VAC WHT/BRN
#2 BRN
#3 VIO
#4 RED
WHIPPER MOTORS 120VAC
WHT/BRN
WHT/VIO
RED/WHT
AUGER MOTORS 24VDC
WHT/BRN
WHT/VIO
RED/WHT
WHT/GRY
WHT/YEL
#1 YEL
#5 GRY
GREY
120V
FAN
CONTACTOR
POWER SWITCH
18GA WHT/BLK
16GA BLK
16GA BRN
MT1
MT2
C1 0.1uf 275V
14GA
16GA
RED
WHT
GR
L1
L2
N
G
THERMISTOR L742Q
OVER-FLOW HOSE
RED/GREY
WHT/BLU
BLU
GRY
PINK
DUAL PROBES
WATER TANK
HEATER 6KW
TO J3 PIN #3
TRIAC L623A 35A
TO CONTACTOR
TO FUSE
TO SAFETY RELAY
18 GA
16 GA
KEYPAD NS67A
PUSH
P5 KEYS
P2 LEDS
TO CONTROL BOARD P1 KMDL-6S-AS
FROM KEYPAD
FROM CONTROL BOARD
LCD CONTROL BOARD L787A
LED CIRCUIT POLARITY
ANODE - COMMON
CATHODE
LEDs PIN LAYOUT

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0613 Form # CW-301-03
Part # NS66A