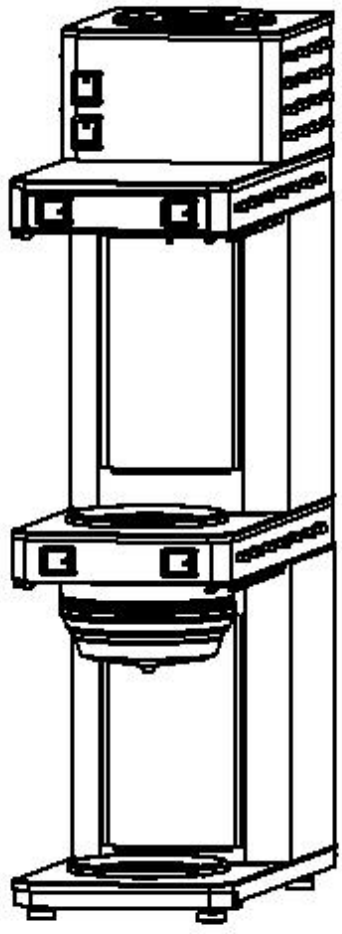
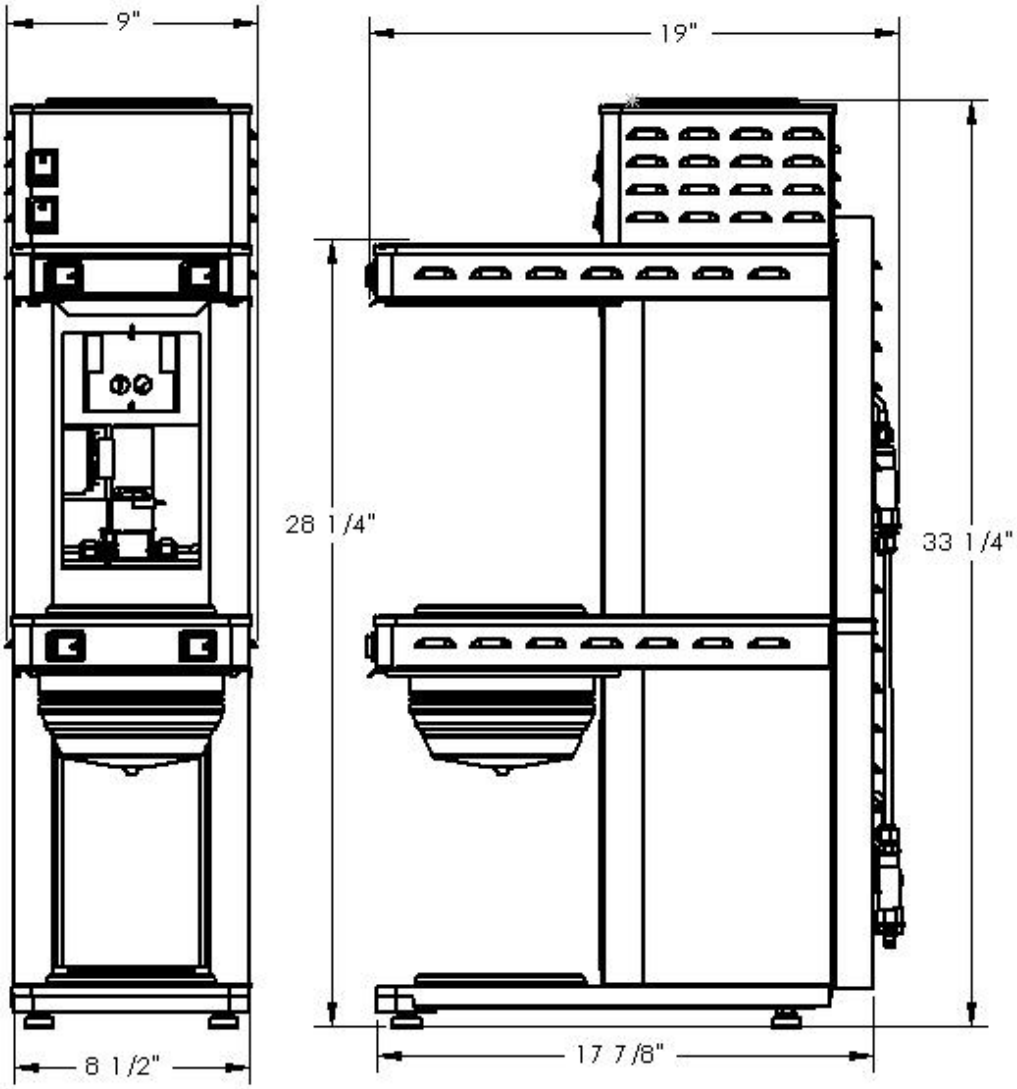
DUAL BREWER AUTOMATIC
DB2A

INSTALLATION, OPERATION, AND TROUBLESHOOTING MANUAL FOR
DB2A AUTOMATIC BREWER WITH WARMERS & POUR-OVER

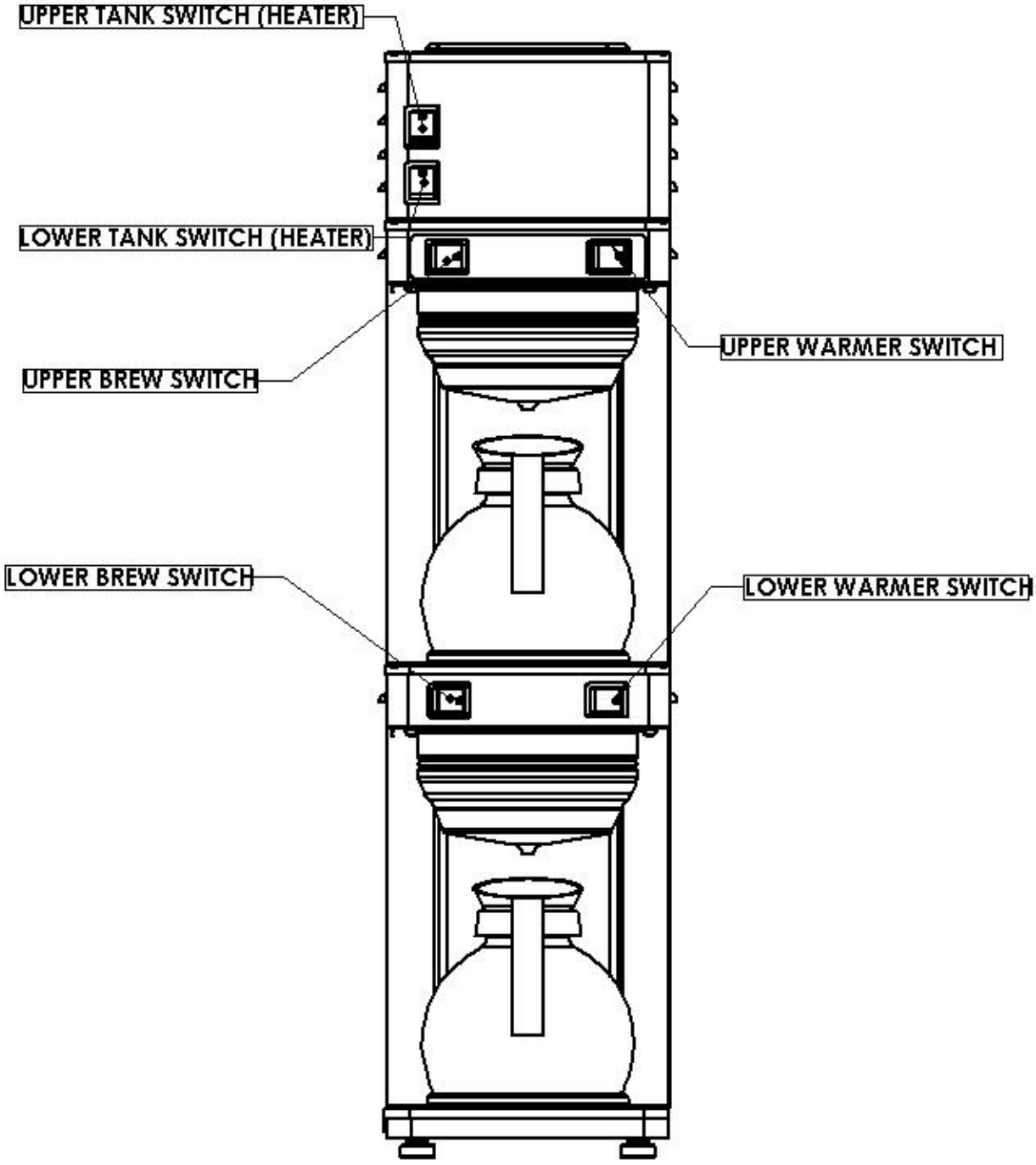


Model DB2A
8-1/2 W x 18 D x 33 H
4700 Total Watts, 23.3 AMPS
120/208 V
Ship Wt approx. 54 LB's
Decanters Not Included

DB2A
DIMENSIONAL SPECIFICATIONS



DB2A
CONTROL SWITCH
LOCATIONS



PLUMBER'S INSTALLATION INSTRUCTIONS

CAUTION:Disconnect Power to brewer before proceeding with plumbing installation.

1) Attach water line to bottom PDS valve , rear of brewer .

2) Flush water line before installing brewer. Brewer should be connected to COLD WATER LINE for best operation.

3) Water pressure should be at least 40 lbs. For less than a 25 ft run, use 1/4" copper tubing and connect to 1/2" or larger water line. For longer runs, use 3/8" copper tubing & connect to 1/2" or larger water line and provide an adapter fitting for connection to the brewer. **A dedicated water line is necessary for this machine.**

4) If installed with saddle valve, the valve should have a minimum of 1/8" port hole for up to 25 ft run, and 5/16" port hole for over 25 ft runs.

5) **Manufacturer recommends connecting to copper tubing.**

INSTALLATION INSTRUCTIONS
UPPER TANK SWITCH
WARNING: - Read and follow installation instructions before plugging or wiring in machine to electrical circuit. Warranty will be dbvoid if machine is connected to any voltage other than that specified on the name plate.

FILL BREWER TANK WITH WATER BEFORE TURNING TANK THERMOSTATS OR HEATER SWITCHES ON !

1) **Brewer is shipped with thermostat turned OFF**, (full counter-clockwise position). Plug or wire in machine to appropriate voltage as noted on the brewer serial tag. Serial tag is located on side of brewer.

2) Adjust timer to deliver desired amount of water (Timer is located behind front access panel). To brew into a regular 64 oz. decanter little adjustment should be needed. Turn timer dial clockwise to increase volume of water, and counter clockwise to decrease volume.

3) Place the decanters under brew baskets, turn on bottom two warmers, and using brew switches brew three brew cycles or until water starts to drain into decanters.

4) Turn on tank heater switches. Allow 10 to 15 minutes for water in tank to heat to brewing temperature. (Additional water may drip from brew baskets on initial expansion of water in the tanks). This will not occur thereafter.

5) After water has reached brewing temperature, thermostat will click off, heating noise will stop. Empty decanters and depress brew start switches and run a cycle of water to remove expanded water from tanks. (Brew cycle may be canceled by turning the warmer rocker switch back to the OFF position.)

6) Run one cycle for each tank to check for the proper temperature setting with an accurate thermometer. Take the temperature of this water at a point below the brew basket opening, at the start of the brew cycle and when the decanter is half full. Recommended temperature of the water is approximately 195 F. Adjust brew volume by adjusting the brew timer up or down .

7) **In higher altitude locations (5000 feet above sea level) the thermostat may have to be adjusted lower to prevent boiling.**

8) Water volume may need readjustment after brewing a decanter of coffee. (See next page)

COFFEE PREPARATION PROCEDURES

1) Place filter into brew basket.

2) Put the proper amount of coffee into the filter.

3) Slide the brew basket into holder.

4) Place empty decanter on warmer located directly under the brew basket and turn corresponding warmer switch to ON position.

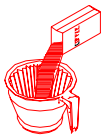
5) Press “Brew” switch, switch will beep, and amber light will blink.

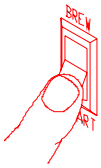
6) Hot water will be delivered through the sprayhead. This distributes the hot water evenly over the coffee bed within the brew basket. The coffee brew will drain from the brew basket into the decanter below.

7) The resultant coffee brew should be crystal clear and have the desired properties attainable through excellent extraction.

8) TURN OFF WARMER WHEN NOT IN USE. (Red light indicates warmer is on.)

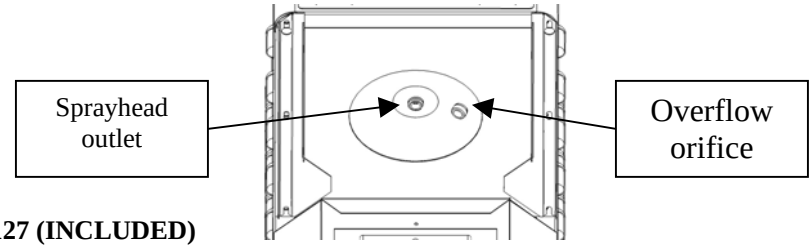
9) To clean brew basket simply remove from brew rails and dump filter into waste basket. The brewing process, as described above, can now be started again.





DELIMING

To prevent liming problems in tank fittings remove sprayhead and insert deliming spring all the way into the tank. When inserted into tank properly, no more than ten inches of the spring should be visible at the sprayhead fitting. Saw back and forth five or six times. This will keep fittings open and clear of lime. In hard water areas this should be done everyday. This process takes approximately one minute. In all areas the sprayhead should be cleaned at least once a week. Where bad liming has already occurred, a new complete tank assembly may be installed. **Deliming spring will not go in overflow orifice. (see diagram below)**



DELIMING SPRING PN 120127 (INCLUDED)

WARRANTY

Refer to Warranty Agreement between TDL Group, BBC Sales, and Newco Enterprises.

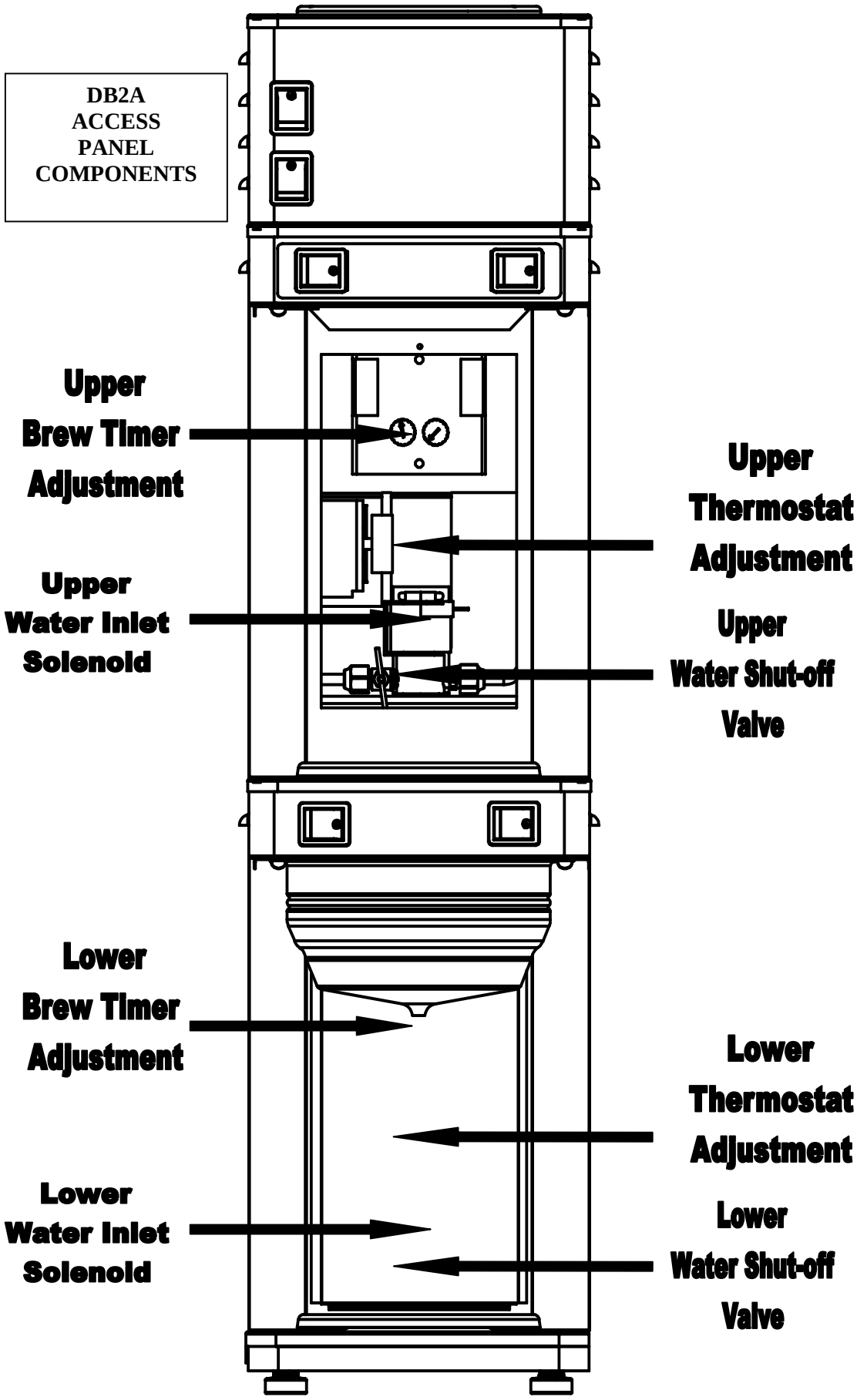
TROUBLE SHOOTING GUIDE

SYMPTOM	POSSIBLE CAUSE	WHAT TO CHECK	REMEDY
CAN'T START BREW CYCLE	1. No water.	1. Incoming water lines & water shut off valve.	1. Be sure water shut off is open.
	2. No power.	2. Fuse or circuit breaker. Power cord and plug connections.	2. Replace or reset circuit protector
	3. Warmer switch not on	3. Switch is on and lighted red, continuity	3. If warmer switch does not make and break contact, replace warmer switch.
	4. Brew start switch.	4. Switch continuity. (Normally closed.)	4. If brew start switch does not make and break contact, replace brew start switch.
	5. Timer or timer harness.	5. Wire leads to solenoid and white 3-pin connector.	5. Make sure these connections are tight. If so, and all else checks out OK, replace timer.
	6. Solenoid valve.	6. (A) Voltage at solenoid valve terminals. Start a brew cycle and check for 120 volts AC. (B) If voltage is present at terminals, check for water at line pressure on the inlet side of solenoid valve.	6. (A) If voltage is not present at terminals, refer to steps 2 through 5. (B) If voltage is present at terminals and water at line pressure is present on the inlet side of the solenoid, but not present on the outgoing side, replace solenoid.
NO HOT WATER	1. Tank heater.	1. Check the voltage at the tank heater terminals. Voltage should be as indicated on the serial tag (on rear of brewer.)	1. (A) If correct voltage is present at the tank heater terminals and water in tank is not being heated, replace the tank heater. (B) If voltage is not present at the tank heater terminals refer, to step 2. (C) If incorrect voltage is present at the tank heater terminals, check voltage at outlet.
	2. Hi-limit thermostat or main thermostat.	2. Check the voltage between the VIOLET/RED wire on the tank element and the incoming terminal (VIOLET/BLACK) on tthe hi-limit thermostat, then the outgoing terminal (VIOLET/BLACK) on the hi-limit thermostat.	2. (A) If voltage is present on the incoming terminal of the hi-limit thermostat, but not on the outgoing terminal, replace the hi-limit thermostat. (B) Check voltage at the terminal blocks. If voltage is not present check outlet or circuit breaker. (C) If voltage is not present on the incoming terminal of the hi-limit thermostat, replace the main thermostat.
DRIPPING	1. Not siphoning properly.	1. Water should flow freely from the sprayhead.	1. (A) Clean sprayhead holes. (B) Check tightness of sprayhead tube. (C) See "DELIMING" , Page 5.
	2. Solenoid valve not seating properly.	2. Solenoid valve assembly.	2. Be sure spring is in place and any particles are cleaned from valve seat. If valve seat is worn or mutilated, replace solenoid valve.
STEAMING OR SPITTING AROUND FUNNEL	1. Main thermostat.	1. Thermostat points stuck or out of calibration.	1. (A) Adjust thermostat. (B) Thermostat should be calibrated or replaced.
	2. High altitude.	2. Located above 5,000 feet.	2. See "INSTALLATION INSTRUCTIONS", Page 4..
WATER KEEPS RUNNING	1. Solenoid valve.	1. Refer to "DRIPPING", Step 1.	1. Refer to "DRIPPING", Step 1.
	2. Start switch.	2. Remove wires from switch and check continuity.	2. If start switch does not make and break contact, switch should be replaced.
	3. Timer	3. Solid state timers are not repairable. If timer will not shut off, replace timer.	3. Replace timer.

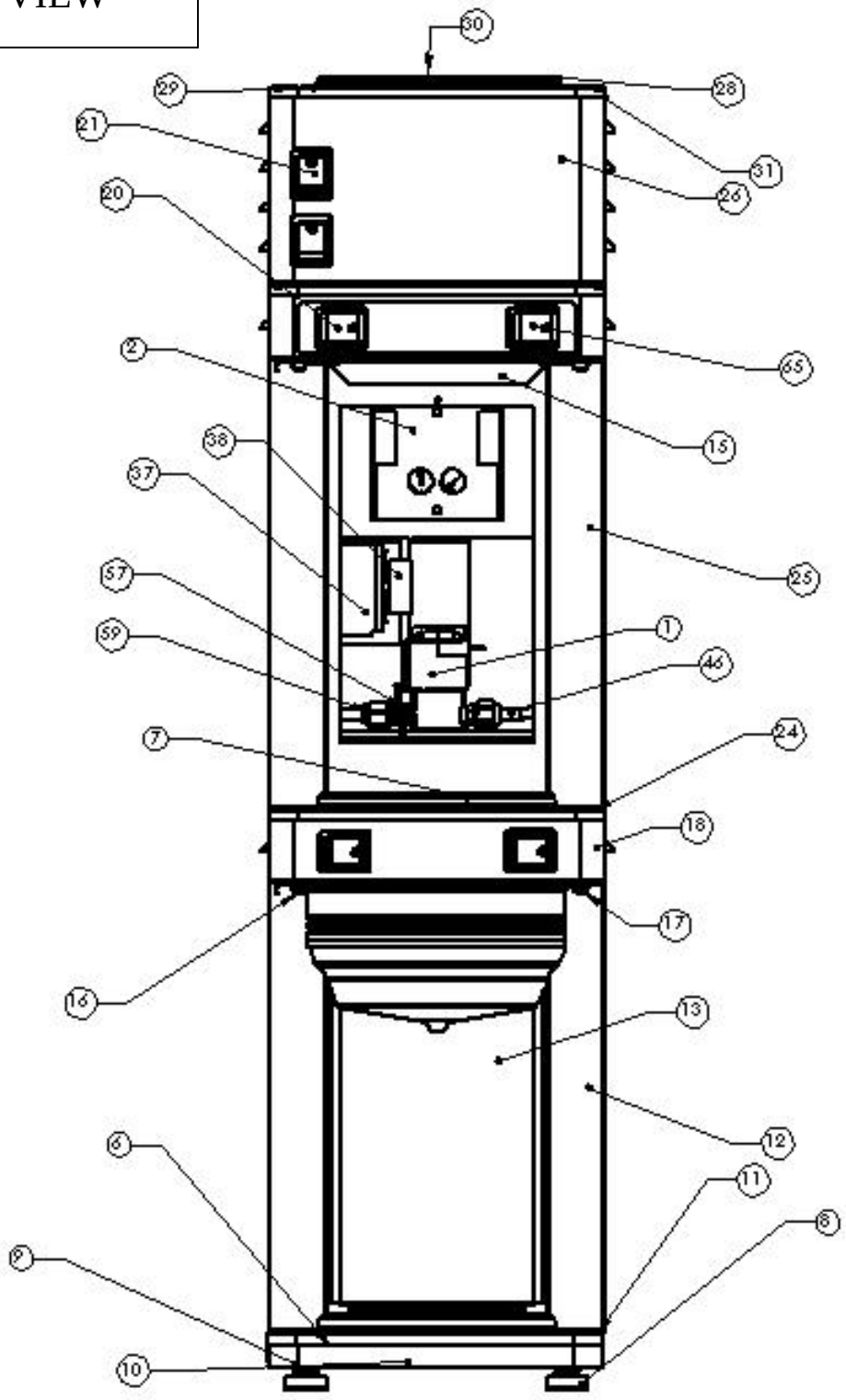
TROUBLE SHOOTING GUIDE

SYMPTOM	POSSIBLE CAUSE	WHAT TO CHECK	REMEDY
IRREGULAR YIELD	1. Not siphoning properly.	1. Refer to "DRIPPING", Step 1.	1. Refer to "DRIPPING", Step 1.
	2. Timer.	2. Timer consistency. Time several brew cycles.	2. If times are irregular, replace timer.
	3. Fluctuating water pressure.	3. Water pressure.	3. If pressure fluctuates 10-20 PSI during operation of brew cycle, add a pressure regulator to inlet side of brewer, set to lowest pressure level registered. Adjust timer to yield correct water level.
	4. Solenoid valve.	4. Refer to "DRIPPING", Step 2.	4. Refer to "DRIPPING", Step 2.
	5. PDS valve	5. Possible defective flow control.	5. Replace PDS valve .
DRY COFFEE REMAINING IN BREW BASKET AFTER BREWING	1. Filters.	1. Are correct filters being used.	1. Insert correct filter.
	2. Not siphoning properly.	2. Refer to "DRIPPING", Step 1.	2. Refer to "DRIPPING", Step 1.
	3. Improper loading of the brew basket.	3. Filter and coffee in brew basket.	3. Filter should be centered in the brew basket and coffee bed should be level.
WEAK COFFEE	1. Filters.	1. Are correct filters being used.	1. Insert correct filter.
	2. Not siphoning properly.	2. Refer to "DRIPPING", Step 1.	2. Refer to "DRIPPING", Step 1.
	3. Improper loading of brew basket.	3. Filter and coffee in brew basket.	3. Filter should be centered in brew basket and coffee bed should be level.
SOLENOID CHATTER OR HOWLING	1. Brewer connected to hot water line.	1. Incoming water line.	1. Brewer should be connected to cold water line.
	2. Vibration.	2. If brewer is on a metal stand or counter, neither the bottom pan nor copper tubing to the brewer should touch the counter.	2. Adjust as necessary.
	3. High water pressure.	3. Water pressure on incoming line.	3. If water pressure is over 90 PSI install a pressure regulator and adjust to 50 PSI.
	4. Water hammer.	4. Incoming plumbing.	4. This is not the fault of the brewer and can usually be corrected by rearranging some plumbing or adding an air chamber to the incoming water line.
	5. 60 cycle vibration.	5. Nut on top of solenoid.	5. Nut should be tight. Tighten as required.
COLD WARMER STATION	1. Warmer - defective.	1. Voltage at warmer terminals should be 120 volts AC.	1. If voltage is present on terminals, but warmer will not heat, replace warmer.
	2. Warmer ON/OFF Switch.	2. If voltage is not present on warmer terminals, check continuity of switch.	2. If switch does not make and break continuity when turned off, replace switch.
	3. Bad harness.	3. Check connections between harness and switch, and between switch and warmer.	3. All connections should be tight.

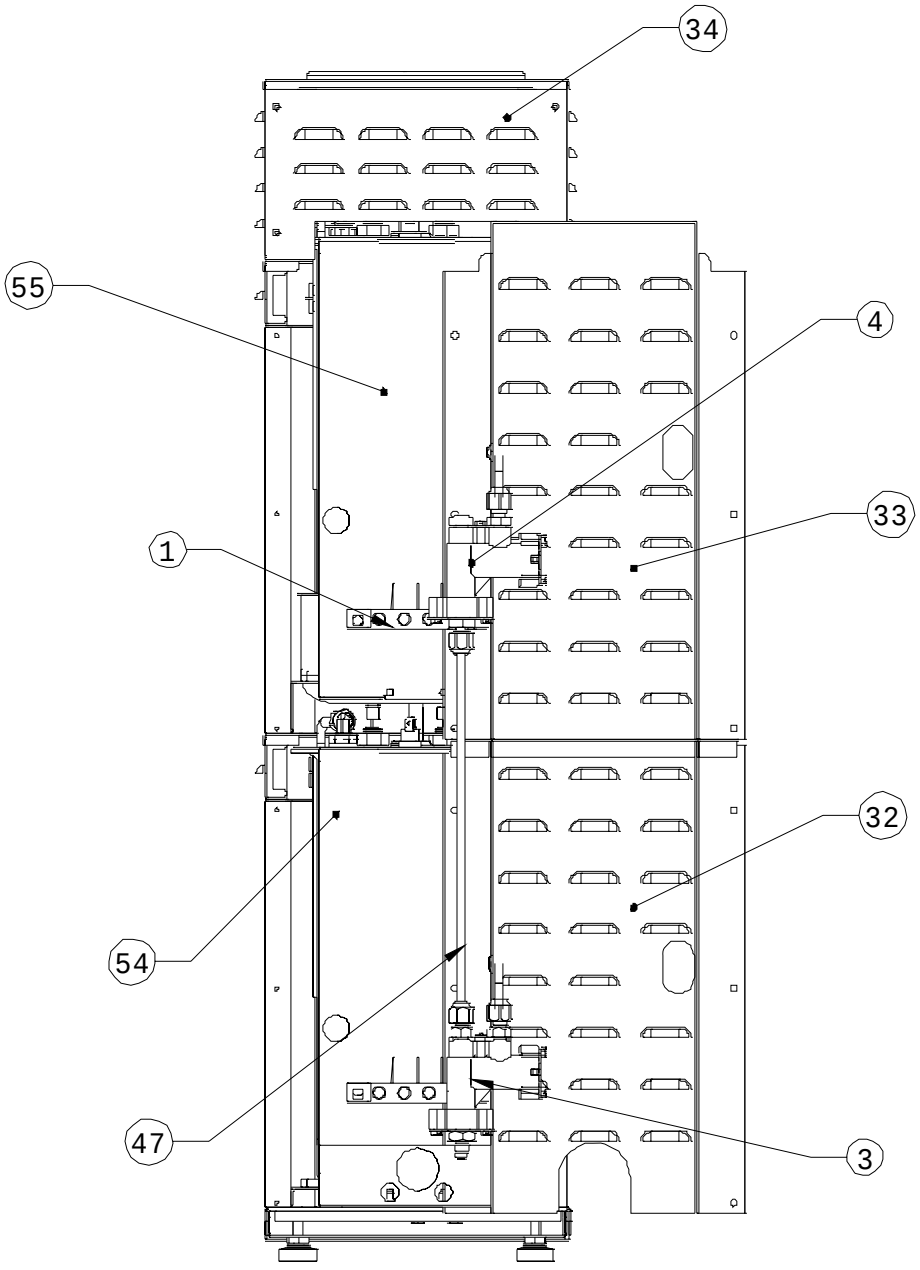
DB2A ACCESS PANEL COMPONENTS



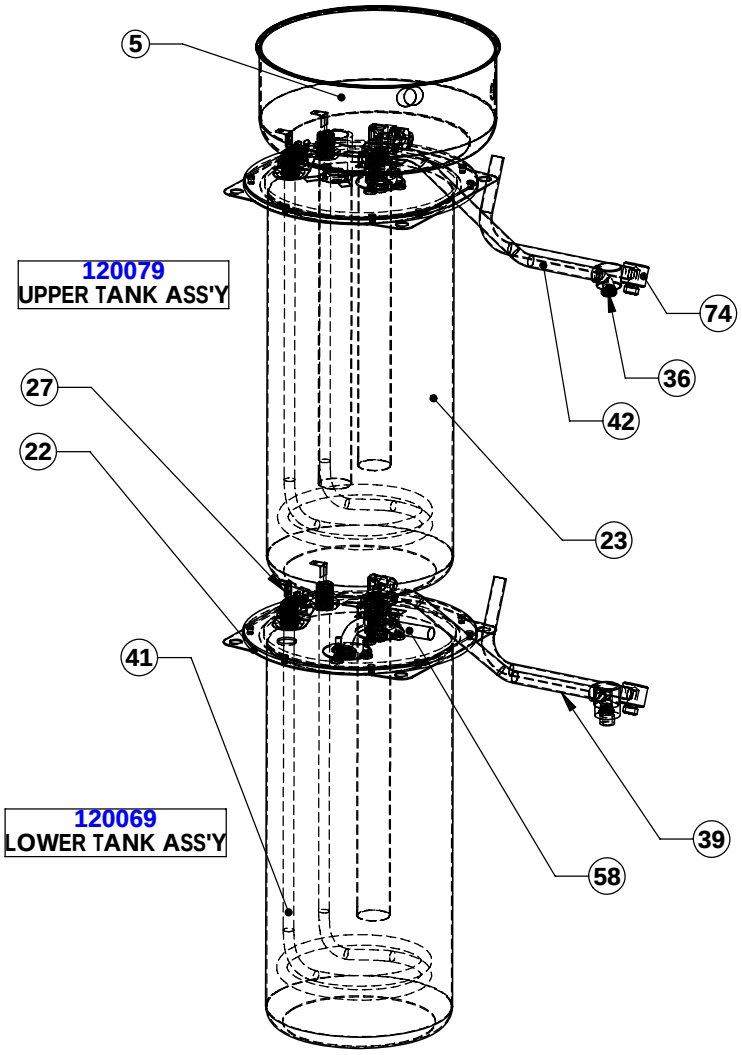
REPLACEMENT
PART DIAGRAM
FRONT VIEW



REPLACEMENT
PART DIAGRAM
REAR VIEW



REPLACEMENT PART DIAGRAM WATER TANKS



PARTS LISTING

* NOT SHOWN IN DIAGRAMS

ITEM #	PART #	DESCRIPTION	ITEM #	PART #	DESCRIPTION
1	100250	VALVE,SOLENOID (SKINNER)	38	100043	KNOB,THERMOSTAT (102299)
2	110190	BREW TIMER	39	120071	SPHD TUBE ASY,LOWER,DB3A
3	110304	PDS VALVE, LOWER TANK	40	120075	TUBE ASSY,VENT,DB3A
4	110305	PDS VALVE, UPPER TANK	41	120126-10	ELEMENT MAIN 3000/2250W 240/208V
5	120048	PAN,REC,PUNCHED,DB3A	42	120106	SPHD TUBE ASY,UPPER,DB3A
6	120049	BASE ASSY,DB3A	43	120109	TERMINAL BLOCK SCREW/TAB
7	100010	PLATE,WARM ASSY BLK	44	120089	TUBE ASSY, FILL
8	111377	FOOT,APPLIANCE,3/8-16 X 1	45	120153	BASKET, SS, SMALL, FRENCH LBL
9	111667	NUT,3/8-16 JAM,ZPS	46	120088	TUBE ASSY,SOLENOID,DB3A
10	120050	BASE BOTTOM,DB3A	47	120090	TUBE ASSY,PDS TO PDS,DB3A
11	120051	BASE TOP,DB3A	48	120092	HARN,UPPER WARMER,DB3A *
12	120052	COLUMN,LOWER,DB3A	49	120093	HARN,POWER,LOWER,DB3A *
13	120053	PLATE,ACCESS,DB3A	50	120094	HARN,POWER,UPPER,DB3A *
14	120109	BLOCK,TERMINAL SCREW TAB	51	120095	HARN,MAIN,UPPER,DB3A *
15	120055	PLATE,BREW,SPTWLD,DB3A	52	120096	HARN,MAIN,LOWER,DB3A *
16	120057	RAIL,BREW,LH,DB3A	53	120097	BRACKET,SOLENOID,DB3A
17	120058	RAIL,BREW,RH,DB3A	54	120098	BRACKET,LOWER,INLET,DB3A
18	120059	WRAPPER,SPTWLD,DB3A	55	120099	BRACKET,UPPER,INLET,DB3A
19	120091	HARN,WARM&TIMER SWI,DB3A	56	151590	CORD ASY,240V,30A,CM BAR *
20	781431	SWITCH,BREWER START- AMBER	57	201128	VALVE, SHUTOFF 1/4 FLARE
21	781870	SWITCH. TANK POWER, GREEN	58	120075	TUBE, ASS'Y, VENT, LOWER TANK
22	704221	GASKET,TANK SILICONE	59	201991	SOLENOID VALVE REPAIR KIT*
23	704119	TANK,ONLY,K-STYLE	60	120127	DELIMING SPRING (WITH BALL)*
24	120061	BASE/COVER,TOP,DB3A	61	100187	WARMER ELEMENT*
25	120062	COLUMN,MIDDLE,DB3A	62	100008	WARMER PLATE*
26	120114	COLUMN,UPPER,DB2A	63	120079	UPPER TANK ASS'Y
27	111593	THERMO,MAN,RESET,R/AG/TAB	64	120069	LOWER TANK ASS'Y
28	100015	DISH, POUR-IN ASSY S/S	65	781432	SWITCH, WARMER, RED
29	100019	PLATE, POUR-IN S/S	66	101429	#6 COMBO HD SCREW-COVERS*
30	100180-1	COVER,ASSY W/CHAIN BLK	67	100065	#6-32 SCREW-BREW RAILS.*
31	120065	COVER,DB3A	68	100160	SCREW, 4-40 X 5/8- WARMER PLATE*
32	120066	PANEL,LOWER BACK,DB3A	69	110666	SCREW, 6-32, THERMOSTAT MTG*
33	120067	PANEL,MIDDLE BACK	70	100055	SCREW, 4-40 X 3/8, POUR-IN CVR*
34	120068	PANEL,UPPER BACK,DB3A	71	100613	10-32 SCREW, SOLENOID MTG.*
35	120085	BRACKET,COMPONENT,DB3A	72	511027	SCREW, 8-32 X 3/8, BODY & BRKT*
36	100025	GASKET,SPRAYHEAD	73	781544	SCREW, 8-32 X 1/2, TERM BLK MTG*
37	107134	THERMOSTAT,SUN ASY ,201	74	120146	OVERFLOW TUBE ASS'Y

DBA2 WIRING DIAGRAM