

EXTRACTOR™

MODEL TBS-21A

- ▶ ICED TEA BREWER
- ▶ ICED TEA / COFFEE BREWER



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Specifications

Versions

The TBS-21A is available in two versions, determined by the software and the start switch configuration:

- ▶ Iced Tea Only version – Start switch is selectable between “FULL” or “HALF” batches.
- ▶ Iced Tea / Coffee version – Start switch is selectable between “ICED TEA” or “COFFEE”.

Requirements

- ▶ **Water Requirements:**
20-75 psig, 1.5 gpm
Cold water only
- ▶ **Electrical:** See electrical configuration chart.
- ▶ **Paper Filters:** 15” X 5 ½ ” Product # F001

Weights and Capacities

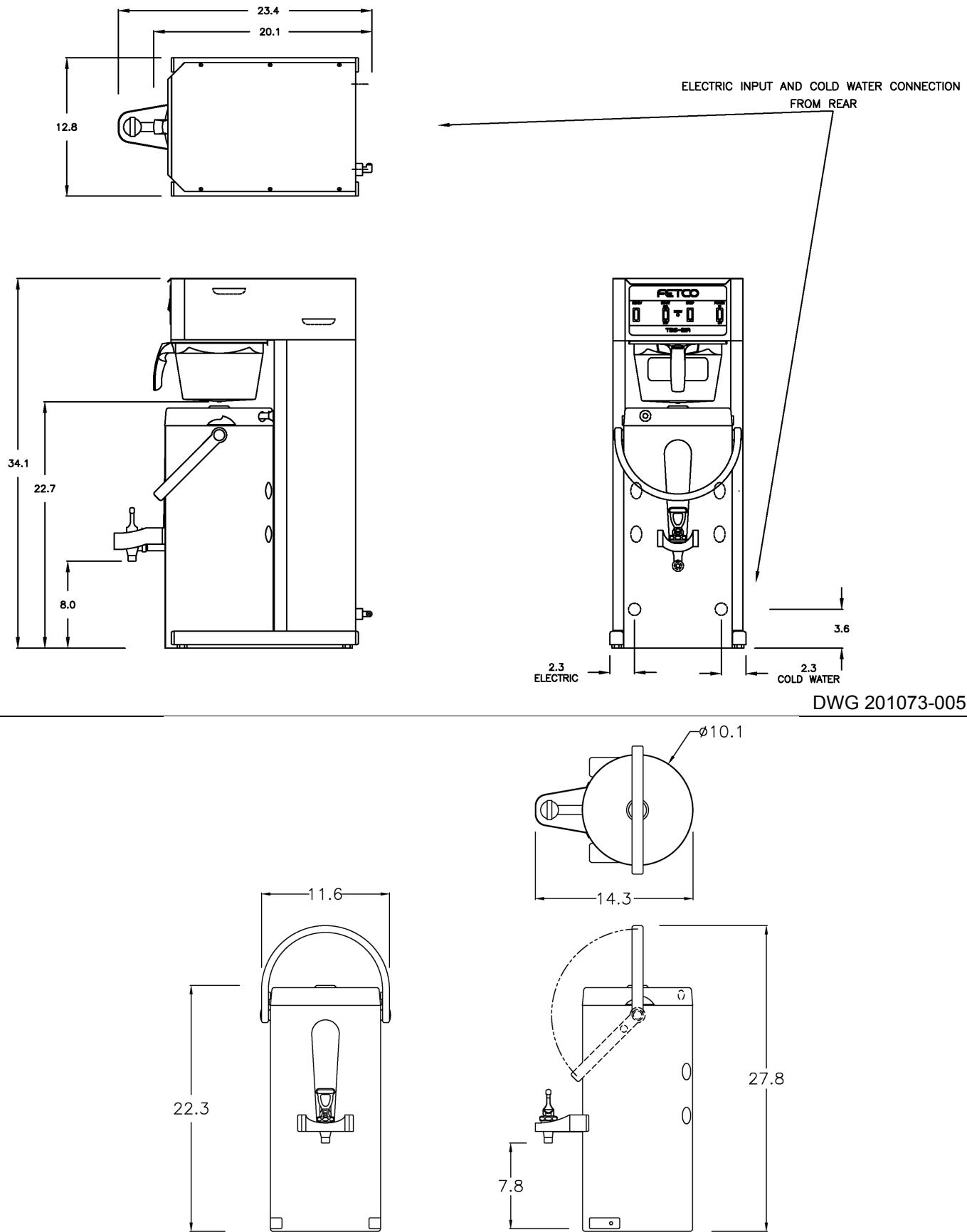
Brewer Weight (empty)	Water Tank Capacity	Brewer Weight (filled)	Dispenser Weight (empty)	Dispenser Capacity	Dispenser Weight (filled)	Total Weight Brewer & Dispenser Filled
40.0 lbs.	2.3 gal.	59.1 lbs.	11.0 lbs.	3.0 gal.	36.0 lbs.	95.1 lbs.
18.1 kg	8.7 liters	26.8 kg	5.0 kg.	11.3 liters.	16.3 kg.	43.1 kg.

Electrical Configuration and Brewing Efficiency

Electrical Config. Code	Heater Configuration	Voltage (AC)	Phase	Wires	KW	Maximum Amp draw	Batches Per Hour**
E21016	1 X 2.1KW	120	single	2 + ground	2.2	18.0	6

**Batches per hour are based on standard factory settings.

Dimensions & Utility Connections



Installation

(For Qualified Service Technicians Only)

Keys To A Successful Installation

If not installed correctly by qualified personnel, the brewer may not operate properly and damage may result. Damages resulting from improper installation are not covered by the warranty. Here are the key points to consider before installation:

Electrical:

- ❖ The electrical diagram is located on the inside of the cover.
- ❖ The installation must comply with applicable federal, state, and local codes having jurisdiction at your location. Check with your local inspectors to determine what codes will apply.

Plumbing:

- ❖ This equipment is to be installed to comply with the applicable federal, state, or local plumbing codes.
- ❖ The water line must be flushed thoroughly prior to connecting it to the brewer to prevent debris from contaminating the machine. A water filter is strongly recommended.
- ❖ Never connect the brewer to a hot water supply. **Cold water only.**
- ❖ Verify that the water line will provide at least 1.5 gallons per minute

General:

- ❖ Utilize only qualified beverage equipment service technicians for installation. A Service Company Directory may be found on our web site, <http://www.fetco.com>.

Installation Instructions

Brewer Setup

1. Review the Dimensions for the unit you are installing. Verify that the brewer will fit in the space intended for it, and that the counter or table will support the total weight of the brewer and dispenser when filled.
2. Place the brewer on the counter or stand.
3. When the brewer is in position, level it front to back and side to side by adjusting the legs.



Warning: Legs are to be adjusted for leveling the brewer only. Do not use for height adjustment or extend them higher than necessary.

Water Connection

1. Water inlet is a 3/8 inch male flare fitting.
2. The brewer must be connected to a **cold water supply only**. Hot water must never be used.
3. Install a water shut off valve near the brewer to facilitate service. If an in-line water filter is used, it should be installed after the water shut off valve and in a position to facilitate filter replacement.
4. Flush the water supply line and filter **before** connecting it to the brewer.
5. Verify that the water line will provide at least 1.5 gallons per minute, and that the water pressure is between 20 and 75 psig.
6. Use a wrench on the factory fitting when connecting the incoming water line. This will reduce stress on the internal connections and reduce the possibility of leaks developing after the install has been completed.

Electrical Connection

1. Verify that the actual voltage at the electrical service connection is compatible with the specifications on the brewer's serial number label.
2. The temperature and water tank fill level are pre-set at the factory. There is no need to turn off the heaters during the installation process. The heaters are disabled by the control board until the tank is full of water. The heating process will start automatically when the tank has filled.



Warning: To prevent electrical shock, this unit must be properly grounded.

Final Setup

1. Turn on the incoming water supply line and inspect both inside and outside of the brewer for leaks in all fittings and tubes
2. Turn on the incoming power.
3. Turn on the brewer's main power switch.
4. Within 6 seconds, the hot water tank will begin filling until the water is sensed by the probe at the top of the tank.
5. The heaters will be disabled by the control board until the tank is full.
6. The brewer will be ready for operation as soon as the ready light comes on to signify that the water tank is up to temperature. The time required to reach brewing temperature will vary according to the electrical configuration ordered.
7. Review the Operating Instructions. Brew one full batch (water only) to confirm proper fill levels. See the programming instructions to adjust batch settings.
8. Re-attach the covers after one final inspection for leaks. Look closely in the top of the brewer at the dispense fittings during this inspection.

Operator Training

Review the operating procedures with whoever will be using the brewer. Pay particular attention to the following areas:

1. Don't remove the brew basket until it has stopped dripping.
2. Make sure the dispenser is empty before brewing into it.
3. Show how to attach covers, close, and or secure the dispensers for transporting.
4. Show the location and operation of the water shut off valve as well as the circuit breaker for the brewer.
5. Steam from the tank will form condensation in the vent tube. This condensation will drip into and then out of the brew baskets. 1/4 cup discharging overnight is possible. Place an appropriate container under the brew basket when not in use.
6. We recommend leaving the power to the brewer on overnight. The water tank is well insulated and will use very little electricity to keep the tank hot. Leaving the brewer in the on position will also avoid delays at the beginning of shifts for the brewer to reach operating temperature.

Operating Procedures

1. Turn brewer power switch to the on position

- The power switch will illuminate to indicate that the brewer has power and is operational.
- When the **ready light** illuminates, the brewer is fully up to temperature. The amount of time required to gain full operating temperature will vary depending on voltage and the temperature of the incoming water.

2. Prepare the brew basket.

- Place a paper filter in the brew basket. Pour the appropriate amount of tea or coffee into the paper filter, and distribute it evenly. The amount used will depend on your personal tastes and the recommendation of your supplier.
- Slide the brew basket into place. A brew basket sensor will prevent the brewer from operating if the brew basket is not all the way in. The **ready light** will blink a few times when the brew switch is pressed to indicate this error.

3. Place the tea dispenser or coffee dispenser with brewing stand in position under the brew basket.

- Make sure the dispenser is empty. Overflowing may result if it is not completely empty when the brew cycle begins.
- When brewing tea, ensure that the dilution spout is inserted into the back of the dispenser
- When brewing tea, ensure that the dispenser is pushed all the way in, so that the dispenser body is pressing the sensing switch. (*Iced Tea Only Version*: The sensing switch may be disabled for using a non standard tea dispenser. See # 59 in Diagnostics section.)
- *Iced Tea / Coffee Version only*: The dispenser sensing switch will prevent coffee from being brewed if the tea dispenser is in place and vice versa.

4. Start the brew cycle.

- Start a brew cycle by pressing the start switch.
Iced Tea Only Version: The switch has 2 positions, FULL and HALF.
Iced Tea / Coffee Version: The switch has 2 positions: ICED TEA and COFFEE.
- The brew light will blink during the brew cycle and the drip delay, indicating that hot liquid may still be dripping from the brew basket and that cold water may be flowing into the back of the tea dispenser through the dilution tube. Do not move the dispenser until the brew light has gone out.
- CAUTION! Do not remove the brew basket until dripping from the bottom of the brew basket has stopped. Carefully remove the brew basket while inspecting the inside of the basket for hot liquid that may have been trapped or has not finished draining.
- To interrupt the brew cycle at any time, press the stop switch. This will reset all functions.

Programming

- ▶ Turn the power switch off.
- ▶ Remove the control board cover, located behind the dispenser.
- ▶ Turn the power switch on.
- ▶ Hold the **SET** button for 5 seconds, until the display reads SET.
- ▶ Next, the display will show the software version Example: **0.30**
- ▶ Press **SET**. The first parameter number will be displayed briefly, followed by the current setting.
Example: 1.0 = Batch 1 brew volume, 3.0 gallons
Use the **UP** and **DOWN** buttons to adjust the setting.
- ▶ Press **SET** again. The next parameter will be displayed briefly, followed by the current setting.
Example: 1.1 = Batch 1 extract percentage, 25%
Use the **UP** and **DOWN** buttons to adjust the setting.
- ▶ Continue this way until all parameters are programmed.
See the chart below for an explanation of each parameter.
- ▶ Important! To save your changes and return to operating mode, you must hold **SET** for 5 seconds until the display reads STB.

Display

SET

0.30

1.0

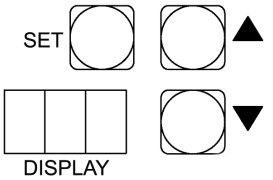
3.0

1.1

25

STB

CONTROL BOARD



The display shows the actual water temperature when not in Programming mode.

Batch Settings – Iced Tea Only Version

(See next page for Iced Tea / Coffee version)

	Parameter	Name	Range	Increment	Default Setting	Comment
	0.0	Software Version				
Batch 1 - Full	1.0	Batch Volume	1.0 – 3.2 gal.	0.1	3.0 gal.	
	1.1	Extract %	1% - 50%	1%	25%	Not to exceed 1 gal.
	1.2	Pulses	1 – 25	1	1	
	1.3	Brew Time (If 1.2 > 1)	2:00 – 15:00 minutes	10 sec.	4:00 min.	
	1.4	Dilution During Brew (If 1.2 > 1)	0 - 1		0	0 = no 1 = yes
	1.5	Dilution Delay (If 1.4 = 0)	0 – 15:00 min.	0:10	3:00 min.	
	1.6	Drip Delay	0:10 – 15:00 min.	10 sec.	3:00 min.	
Batch 2 - Half	2.0	Brew Volume	1.0 – 3.2 gal.	0.1	1.5 gal.	
	2.1	Extract %	1% - 50%	1%	25%	Not to exceed 1 gal.
	2.2	Pulses	1 – 25	1	1	
	2.3	Brew Time (If 2.2 > 1)	2:00 – 15:00 minutes	10 sec.	4:00 min.	
	2.4	Dilution During Brew (If 2.2 > 1)	0 - 1		0	0 = no 1 = yes
	2.5	Dilution Delay (If 2.4 = 0)	0 – 15:00 min.	0:10	1:30 min.	
	2.6	Drip Delay	0:10 – 15:00 min.	10 sec.	1:30 min.	

Batch Settings – Iced Tea / Coffee Version

(See previous page for Iced Tea Only version)

	Parameter	Name	Range	Increment	Default Setting	Comment
Batch 1 Iced Tea	0.0	Software Version				
	1.0	Batch Volume	1.0 – 3.2 gal.	0.1	3.0 gal.	
	1.1	Extract %	1% - 50%	1%	25%	Not to exceed 1 gal.
	1.2	Pulses	1 – 25	1	1	
	1.3	Brew Time (If 1.2 > 1)	2:00 – 15:00 minutes	10 sec.	4:00 min.	
	1.4	Dilution During Brew (If 1.2 > 1)	0 - 1		0	0 = no 1 = yes
	1.5	Dilution Delay (If 1.4 = 0)	0 – 15:00 min.	0:10	3:00 min.	
Batch 2 Coffee	1.6	Drip Delay	0:10 – 15:00 min.	10 sec.	3:00 min.	
	2.0	Brew Volume	0.1 – 1.0 gal.	0.1	0.8 gal.	
	2.2	Pulses	1 – 25	1	8	
	2.3	Brew Time (If 2.2 > 1)	2:00 – 15:00 minutes	10 sec.	4:00 min.	
	2.6	Drip Delay	0:10 – 15:00 min.	10 sec.	1:00 min.	

Temperature Settings

Parameter	Name	Range	Increment	Default Setting	Comment
3.0	Water Temp. (°F)	180°F - 211°F	1°F	205°F	
4.0	Brew at Set Temperature	0 - 1		1	0=Will brew at any temperature. 1=Will brew only at set temperature.
5.0	Enter Diagnostics	0 - 1		0	0 = no 1 = yes

Diagnostics

Address	Description	Range	Default	Comment
50	Water Level in Tank	0 - 1		Tests if water is touching probe. 0 = Tank is less than full 1 = Tank is full
51	Tank Temperature	32°F - 212°F		Displays current tank temperature.
52	Brew Switch, top (Full batch or iced tea)	0 - 1		Press switch to test. Display should toggle between 0 and 1.
53	Brew Switch, bottom (Half batch or coffee)	0 - 1		Press switch to test. Display should toggle between 0 and 1.
54	Brew Basket Sensor	0 - 1		To test, slide the brew basket in and out. Display should toggle between 0 and 1. 0 = Brew basket in. 1 = Brew Basket out.
55	Dispenser Sensor	0 - 1		Press switch to test. Display should toggle between 0 and 1.
56	Display Recent Errors			Scroll to display the 5 most recent errors.
57	Master Clear Errors	0 - 1	0	Clears errors stored in memory. (See #56) Clears error code 050 and 051.
58	Reset Defaults	0 - 1	0	Changes all settings to default factory settings. 0 = Do not reload defaults 1 = Reload all default settings
59	Dispenser Sensor (Choice not available on Iced Tea / Coffee version)	0 - 1	1	0=Will brew with or without dispenser in place. 1=Will brew only if dispenser is in place.
60	Enter Relay Test	0 - 1	0	

Relay Test

Tests the individual relays which control various components.
Use the UP or Down button to actuate the relays.



Warning: During these tests, hot water may be dispensed from the valve being tested.

90	Fill Valve	
91	Dilution Valve	
92	Brew Valve	
93	Ready Light	
94	Brew Light	
95	Heater Triac	To protect the heaters, this test will work only if the tank is full.

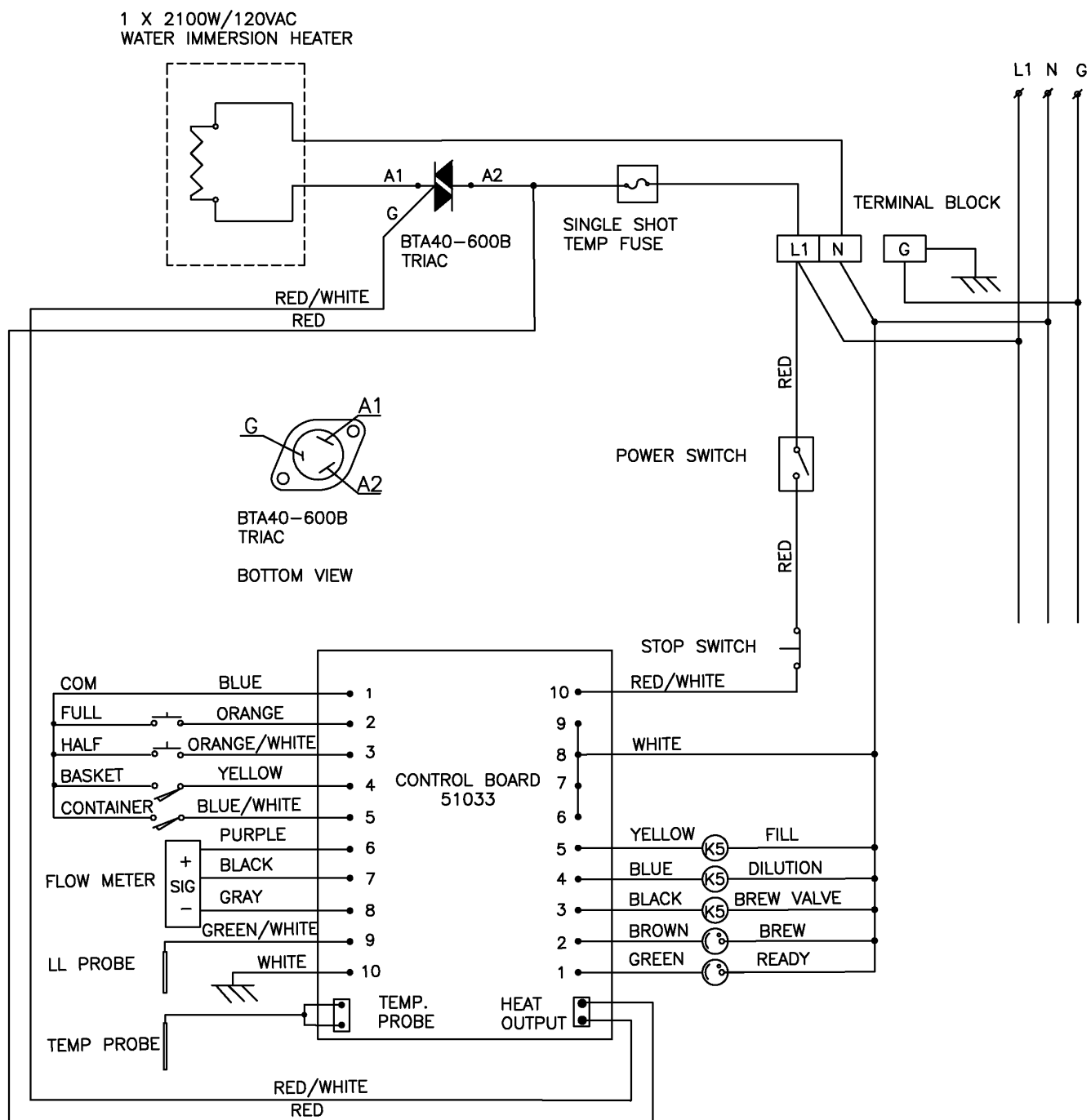
Error Codes

001	Software - System Reloaded Defaults	100	Initial Fill Error (> 10 minutes)
003	Internal CPU or Board Error	101	Error On Refill (> 2 minutes)
050*	Shorted Temperature Probe	102	Unwanted Fill
051*	Open Temperature Probe	200	Flat Line Temperature / Shorted Heater
060	Flow Meter Error	201	Open Heater
075	Brew Basket Sensor Open	255	Stuck Switch
076	Container Sensor Open		

To reset error codes, turn the power switch off and on.

Error 050 and 051 must be reset through the Master Clear function – see address #57 in Diagnostics.

Wiring Diagram



DWG 401169-002

Cleaning & Maintenance

Brewer

Daily: Wipe the area above the brew basket to remove coffee and tea residue.

Daily or Weekly: The spray plate should be removed and cleaned to remove hard water deposits. In areas with extremely hard water, it may be necessary to do this daily. Weekly cleaning may be sufficient in some areas.

When cleaning the spray plate, make sure that each hole is completely free of mineral deposits. A toothpick may be used for cleaning out the holes. Never use metal objects or abrasives on the spray plate's Teflon coating.

Tea Dispenser

- ▶ The dispenser liner should be cleaned and sanitized daily using a commercial tea dispenser cleaner/sanitizer.
 - ▶ Do not scratch the plastic liner by using abrasive products or tools.
 - ▶ Never leave tea in the dispenser overnight.
1. Add the recommended amount of sanitizer for 3 gallons to the empty dispenser.
 2. Brew a complete batch with water only into the dispenser and let the solution sit for the recommended amount of time
 3. Empty the dispenser through the faucet.
 4. Lift the liner out of the dispenser and remove the faucet by unscrewing the wing nut.
 5. Disassemble the faucet by unscrewing the nut below the handle.
 6. Use the enclosed brush to clean out the faucet shank and the exposed surfaces of the faucet parts.
 7. Thoroughly rinse the liner, faucet parts, and dispenser cover with warm water.
 8. Re-assemble the faucet, attach it to the liner, and place it into the dispenser body. Do not over tighten the wing nut.
 9. Wipe the stainless steel body with a damp cloth.

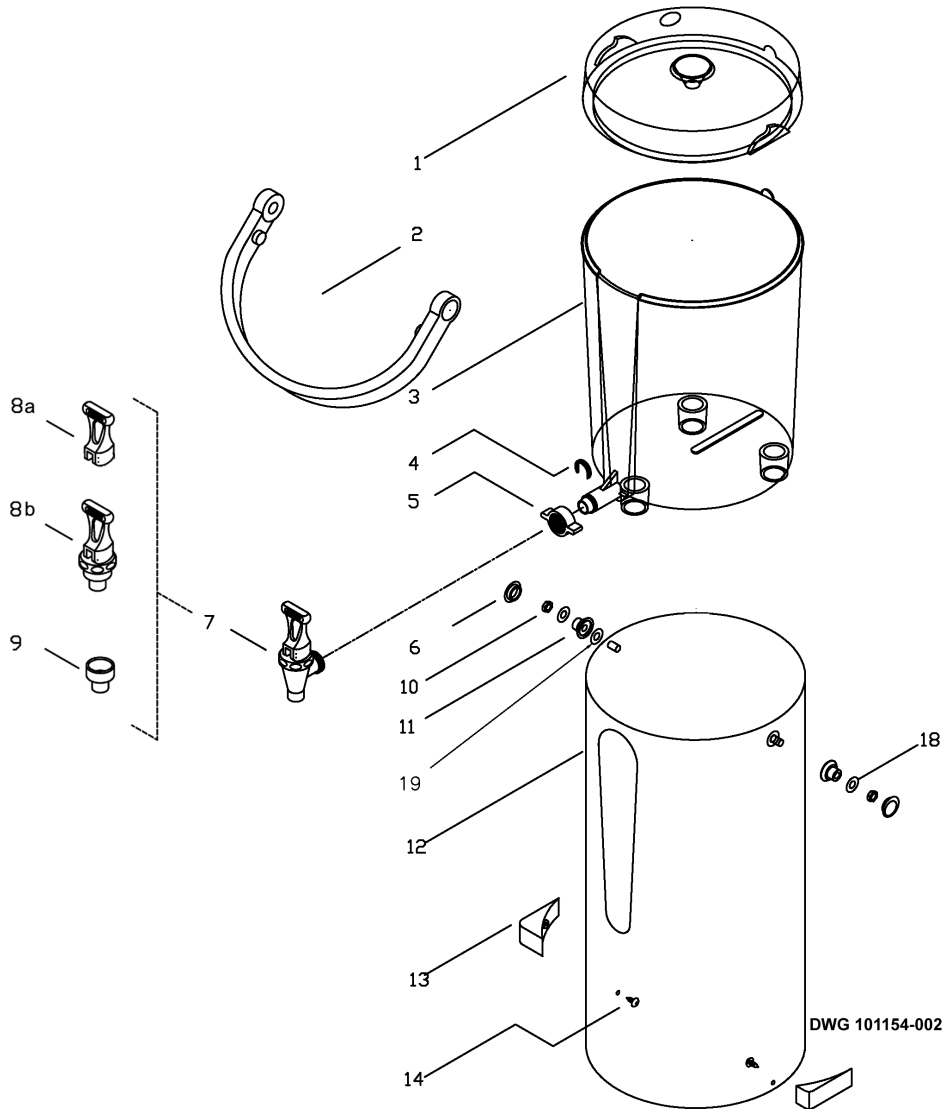
Care of Stainless Steel

(These procedures were developed by NAFEM and Packer Engineering.)

1. **Use the proper tools. Don't use; steel pads, wire brush, or scrapers**
When cleaning your stainless steel products, take care to use non-abrasive tools. Soft cloths and plastic scouring pads will not harm the steel's passive layer. Stainless steel pads can also be used but the scrubbing motion must be in the direction of the manufacturer's polishing marks. Step 2 tells you how to find the polishing marks.
2. **Clean with the polish lines.**
Some stainless steels come with visible polishing lines or "grain." When visible lines are present, you should always scrub in a motion that is parallel to them.
When the grain cannot be seen, play it safe and use a soft cloth or plastic scouring pad.
3. **Use alkaline, alkaline chlorinated or non-chloride containing cleaners.**
While many traditional cleaners are loaded with chlorides, the industry is providing an ever increasing choice of non-chloride cleaners. If you are not sure of your cleaner's chloride content contact your cleaner supplier. If they tell you that your present cleaner contains chlorides, ask if they have an alternative. They probably will. Also, avoid cleaners containing quaternary salts as they also can attack stainless steel and cause pitting and rusting.
4. **Keep your equipment clean.**
Use alkaline, alkaline chlorinated or non-chloride cleaners at recommended strength. Clean frequently to avoid build-up of hard, stubborn stains.
5. **Rinse, Rinse, Rinse.**
If chlorinated cleaners are used you must rinse, rinse, rinse and wipe dry immediately. The sooner you wipe off standing water, especially when it contains cleaning agents, the better. After wiping the equipment down, allow it to air dry for the oxygen helps maintain the stainless steel's passivity film.
6. **Never use hydrochloric acid (muriatic acid) on stainless steel.**

Dispenser Parts

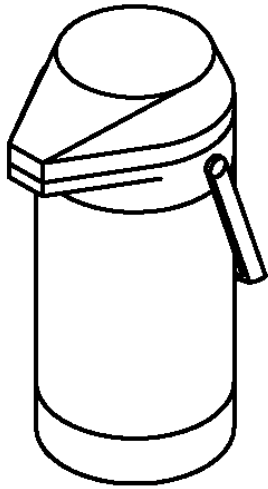
ITD-30 Dispenser
Product Number D031



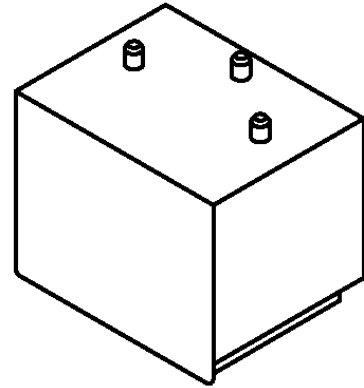
ITEM	QTY	PART NO.	DESCRIPTION
1	1	23088	COVER, ITD-30
2	1	23089	HANDLE
3	1	23087	LINER, ITD-30
4	1	71036	FAUCET C RING
5	1	71081	FAUCET WING NUT
6	2	23090	PLUG
7	1	71071	FAUCET, COMPLETE, ITD-30
8a	1	71028	FAUCET HANDLE, BLACK
8b	1	71037	FAUCET UPPER ASSY., BLACK HANDLE
9	1	71035	FAUCET SEAT CUP
10	2	84029	HEX NUT, 5/16-18 S.S.
11	2	13036	HANDLE PIVOT
13	2	23091	DISPENSER-GUIDE
14	2	82079	SCREW, #10 X 1/2" PHIL. TRUSS HD. TAPPING
18	2	83019	5/16" S.S. FLAT WASHER
19	2	83062	0.312" X 0.688" X 0.048" FLAT WASHER

Airpot & Stand (Iced Tea / Coffee Version)

Product Number D041
3.0 Liter Stainless Steel Lined Lever Airpot



Product Number A095
Airpot Brewing Stand

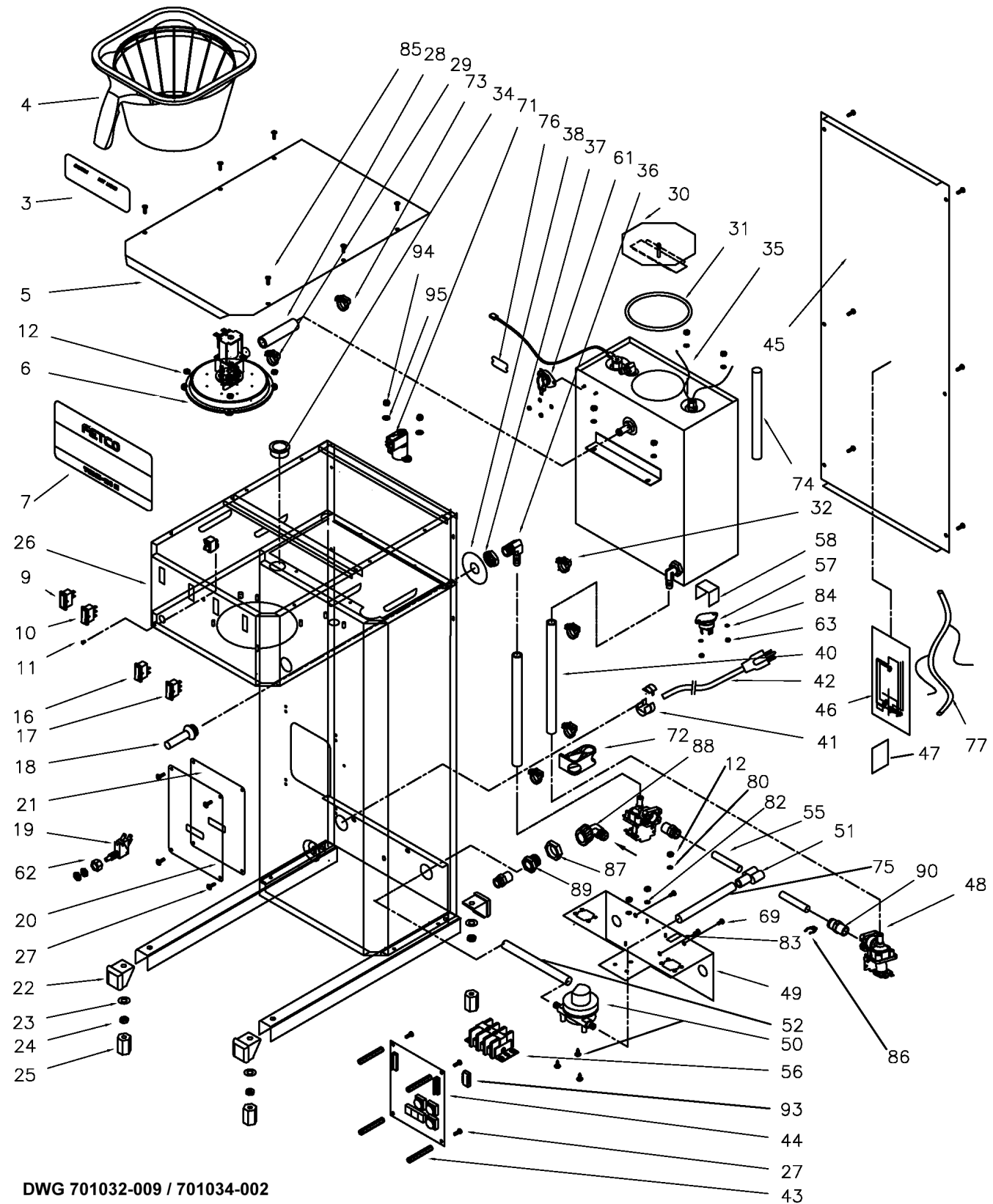


Replacement Parts

<u>PART #</u>	<u>DESCRIPTION</u>
71082	LID, LEVER TYPE
99024	TUBE ASSY.

Brewer Parts

Figure 1



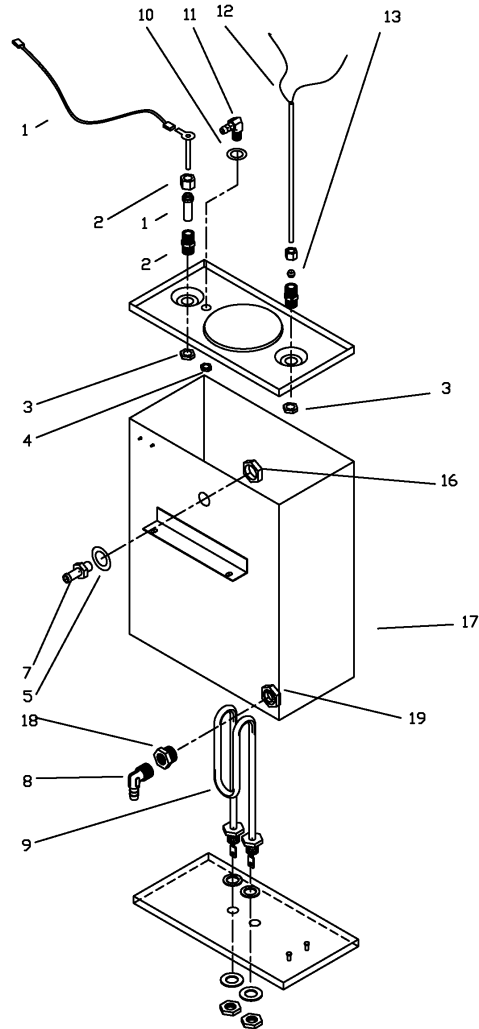
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Parts List – Figure 1

ITEM	QTY	PART NO.	DESCRIPTION
3	1	46011	BREW BASKET WARNING DECAL
4	1	101178	BREW BASKET ASSY., 0.206" DIA. HOLE (STANDARD - ICED TEA) (SEE FIGURE 4)
4	1	101165	BREW BASKET ASSY., 0.280" DIA. HOLE (STANDARD - COFFEE) (SEE FIGURE 4)
4	1	101179	BREW BASKET ASSY., 0.161" DIA. HOLE (OPTIONAL - ICED TEA) (SEE FIGURE 4)
5	1	01511	TBS-21A TOP COVER
6	1	102080	SPRAY HOUSING ASSY. (SEE FIGURE 3)
7	1	45070	OVERLAY, TBS-21A Iced Tea only version
7	1	45071	OVERLAY, TBS-21A Iced Tea / Coffee version
9	1	58064	READY LAMP 120VAC
10	1	58072	START SWITCH, 240V
11	1	58067	BREW LAMP, 120V
12	13	84022	#8-32 S.S. HEX NUT
16	1	58062	STOP SWITCH 240V
17	1	58063	SWITCH, POWER, 240VAC, 110V LAMP
18	1	13070	TBS-21A DILUTION FITTING
19	1	58016	SWITCH, DISPENSER SENSING
20	1	46030	TBS-21A CONTROL PANEL LABEL
21	1	01533	TBS-21A CONTROL COVER
22	4	23075	TBS-21A LEG SUPPORT END CAP
23	4	83019	5/16 FLAT WASHER
24	4	84015	5/16-18 HEX NUT
25	4	21066	TBS-21A LEG
27	4	82004	#6-32 x .625" SCREW
28	1	25036	.5 I.D. X .75 O.D. X 5.75" L SILICONE TUB
29	1	86020	NYLON HOSE CLAMP .750 MIN .875 MAX DIA
30	1	102013	TANK COVER ASSEMBLY
31	1	24002	TANK COVER GASKET
32	4	86007	NYLON HOSE CLAMP MIN.593, MAX .656
34	1	86032	HEYCO 1 INCH HOLE SNAP BUSHING
35	1	104022	TBS-21A TANK ASSEMBLY (SEE FIGURE 2)
36	1	31128	3/8 FLARE 1/4 MPT , HOSE BARB ELBOW
37	1	33007	7/16 DISPENSE TUBE LOCKNUT
38	1	03289	TBS-21A DILUTION TUBE WASHER
40	2	25066	COLD WATER AND DILUTION SILICONE TUBE .375 I.D. X .610 O.D. X 17 L.
41	1	86012	.875 X .840 STRAIN RELIEF BUSHING
42	1	63019	TBS-21A POWER CORD 20AMPS, 120VAC
43	4	15006	TBS-21A CONTROL PANEL STANDOFF
44	1	K020	CONTROL BOARD REPLACEMENT KIT, TBS-21A (INCLUDES CONTROL BOARD AND #102172 DIGITAL TEMP PROBE ASSY)
45	1	01513	TBS-21A BACK COVER
46	1	401169	TBS-21A WIRING DIAGRAM
48	2	57006	FILL VALVE, S-53N, 1.35 GPM, 120VAC
49	1	03300	TBS-21A VALVES/FLOWMETER BRACKET
50	1	57081	FLOWMETER (DIGMESA)FF JG 50 3/8" WITH MTG SCREWS
51	1	25068	TWO WAY DIVIDER 3/8" TUBE O.D.
52	1	25073	TBS-21A L1 TUBE
55	2	25074	TBS-21A L2 TUBE
56	1	52050	CURTIS BT-3 TERMINAL BLOCK

57	1	59008	TRIAC 40A 600V
58	1	03297	TRIAC HEAT SINK (SEE NOTES)
61	1	53064	SINGLE SHOT THERMOSTAT (TRIAC VERSION)
62	1	21063	DILUTION SWITCH STAND-OFF
63	4	84001	#6 NUT
64	2	25067	3/8" TUBE MALE CONNECT.
69	3	82006	#10-32 3-8 PHILIPS SCREW
71	1	101158	BREW BASKET SENSOR ASSY
72	1	86030	TANK DRAIN CLAMP
73	1	86038	HEYCO CLAMP
74	1	25072	TBS-21A VENT TUBE .5" X .25" X 8.5"
75	1	25075	TBS-21A L3 TUBE
76	1	03233	LIMITING THERMOSTAT BRACKET
77	1	402005	HARNESS
80	1	83035	#8 LOCK WASHER
82	6	32026	# 8 INTERNAL TOOTH WASHER
83	1	44004	"GROUND" LABEL
84	4	83039	# 6 INTERNAL TOOTH WASHER
85	16	82053	# 6 - 32 x 1/2
86	6	86043	3/8" LOCKING CLIP
87	1	31151	1/2 MPT LOCK NUT
88	1	31164	3/8 X 1/2 FPT FEMALE 90 DEG. ELBOW
89	1	31165	3/8 FPT X 1/2 MPT BUSHING
90	3	25067	3/8" TUBE MALE CONNECT.
93	1	59009	SOFTWARE CHIP FOR TBS-21A ICED TEA ONLY VERSION (USE ONLY WITH OLD STYLE CONTROL BOARDS WITH RED LED DISPLAY)
93	1	59010	SOFTWARE CHIP FOR TBS-21A ICED TEA / COFFEE VERSION (USE ONLY WITH OLD STYLE CONTROL BOARDS WITH RED LED DISPLAY)
94	2	84030	#8-32 HEX NYLON-INSERT LOCKNUT
95	2	83040	#8 S.S. FLAT WASHER

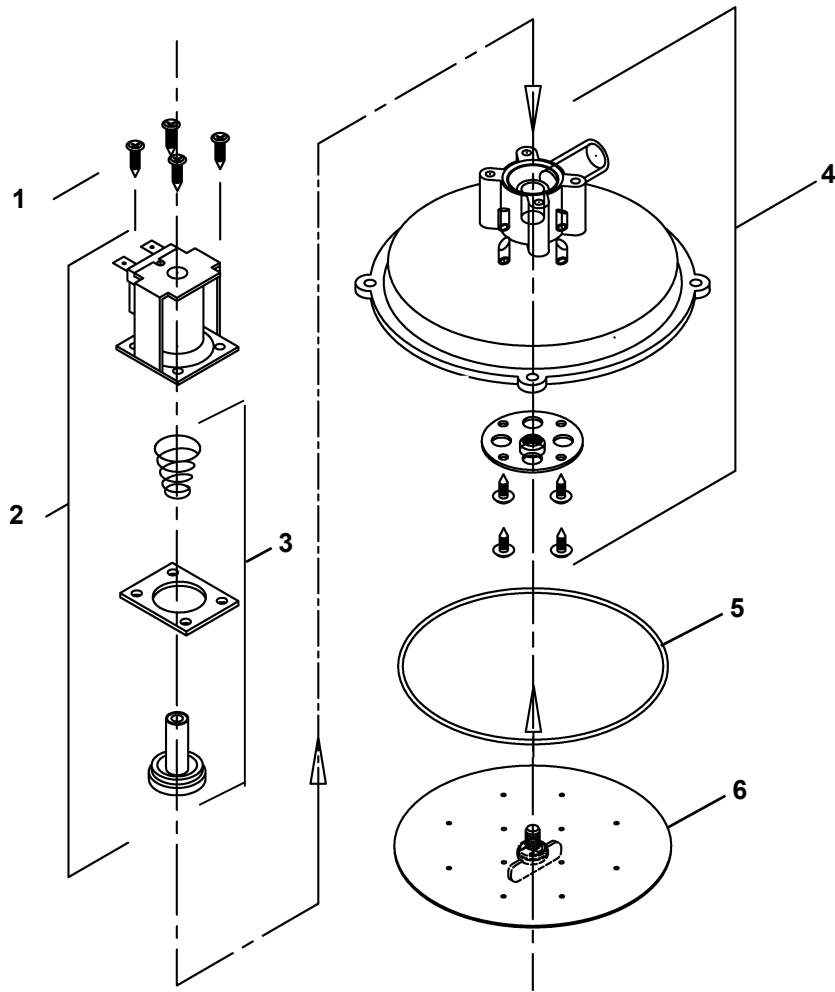
Figure 2 – Tank Assembly



DWG 102044-001

ITEM	QTY	PART NO.	DESCRIPTION
1	1	102151	WATER LEVEL PROBE ASSY
2	1	31129	3/8" TUBE X 1/4"MPT COMPRESION CONNECTOR
3	2	31117	1/4" LOCKNUT
4	1	31116	1/8" LOCKNUT
5	1	83043	.688 I.D. X 1.1250 O.D. FLAT WASHER
7	1	31071	1/2" HOSE BARB X 3/8" MPT
8	1	31128	3/8" HOSE BARB X 1/4" MPT 90 DEG. ELBOW
9	1	53050	2100W 120V HEATING ELEMENT
10	1	83041	.412 X .812 FLAT WASHER
11	1	31005	1/4"HOSE BARB X 1/8"MPT 90 DEG.ELBOW
12	1	54022	8.0", 50K OHM TEMPERATURE PROBE (USE ONLY WITH OLD STYLE CONTROL BOARDS WITH RED LED DISPLAY)
12	1	102172	8.0" DIGITAL TEMPERATURE PROBE ASSY. (USE ONLY WITH NEW STYLE CONTROL BOARD WITH GREEN LED DISPLAY. INCLUDED WITH #K020 CONTROL BOARD REPLACEMENT KIT.)
13	1	31036	1/4" COMP. X 1/4"MPT CONNECTOR
16	1	31118	3/8" LOCKNUT
17	1	004026	TANK WELDMENT
18	1	31021	.75" -16 X .25" FSPT HEX HEAD BUSHING
19	1	84007	.75" x 16 S.S. NUT

Figure 3 – Spray Housing Assembly

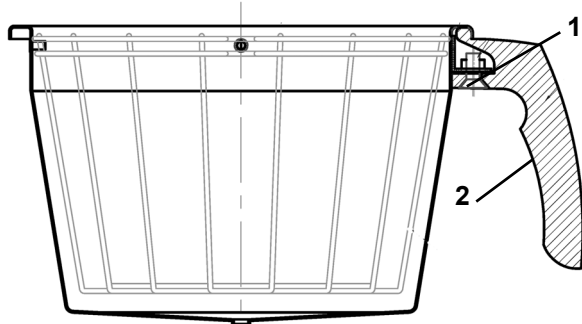


ITEM #	QTY	PART NO	DESCRIPTION
1	4	82112	#8 X 3/4" PAN HD. PHIL. T.S. 18-8 S.S. SCREW
2	1	57047	COIL ASSY. REPAIR KIT, DSV-11, 120 VAC
2	1	57071	COIL ASSY. REPAIR KIT, DSV-11, 240 VAC (EXPORT VERSION ONLY)
3	1	57073	VALVE REBUILD KIT, DSV11
4	1	102082	SPRAY HOUSING ASSY.
5	1	24054	O-RING 4.237" I.D.
6	1	102081	SPRAY PLATE ASSY., 4 7/8" DIA.

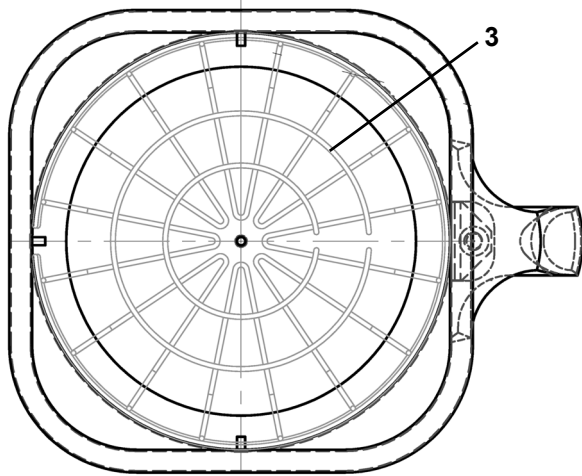
Figure 4 – Brew Basket Assembly, 16” X 6”

FOR ICED TEA: PART # 101178 - BREW BASKET ASSY. WITH 0.206” DIA. HOLE (STANDARD)
 PART # 101179 - BREW BASKET ASSY. WITH 0.161” DIA. HOLE (OPTIONAL)

FOR COFFEE: PART # 101165 - BREW BASKET ASSY. WITH 0.280”. DIA HOLE



ITEM	QTY	PART #	DESCRIPTION
1	1	82096	HANDLE SCREW
2	1	23117	BREW BASKET HANDLE, BLACK
3	1	9006	WIRE INSERT, 16 X 6
NOT SHOWN		F001	PAPER FILTERS, 15" X 5.5" 500 PER CASE



COLOR BREW BASKET HANDLES

PART #	DESCRIPTION
23106	BREW BASKET HANDLE, GREEN
23107	BREW BASKET HANDLE, ORANGE
23148	BREW BASKET HANDLE, RED

