

BREWING SYSTEMS FOR COFFEE AND ICED TEA
BLOOMFIELD MODEL #8781BC

OWNER'S MANUAL

OPERATING & MAINTENANCE INSTRUCTIONS

MANUFACTURED

BY

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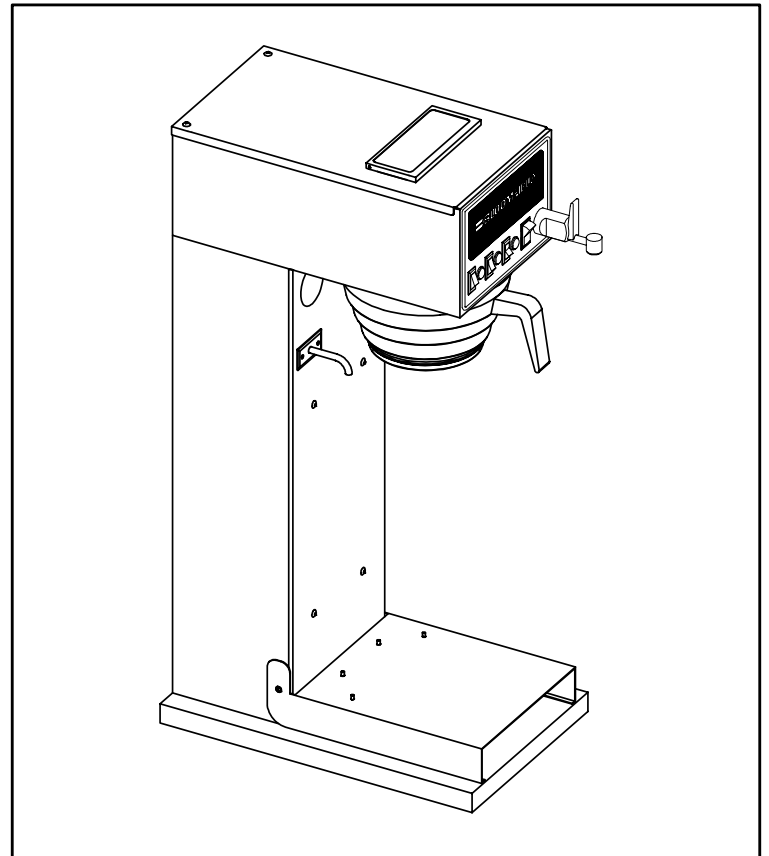
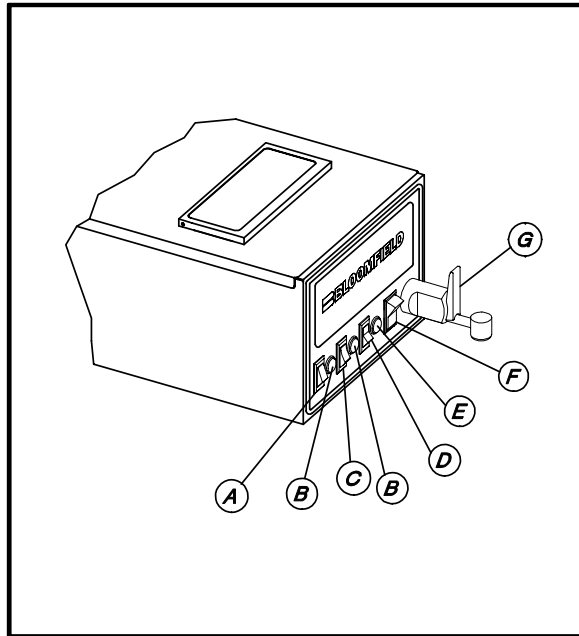


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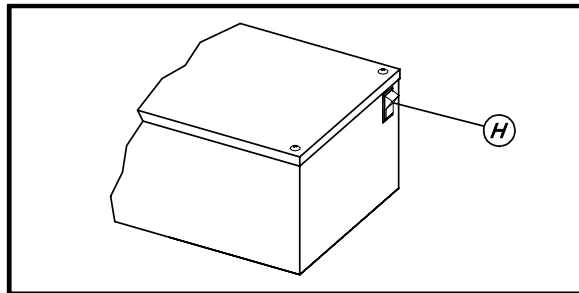
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FRONT VIEW



- A. TEA VOLUME SELECTOR SWITCH DETERMINES THE VOLUME OF TEA BREWING
- B. RED PILOT LIGHT INDICATES THE BREWING MODE (TEA OR COFFEE)
- C. BREW SWITCH ACTIVATES THE BREWING CYCLE
- D. STOP BREW SWITCH ALLOWS BREW CYCLE TO BE STOPPED AT ANY TIME
- E. READY TO BREW LIGHT INDICATES PROPER WATER TEMPERATURE TO ASSURE OPTIMUM COFFEE FLAVOR
- F. COFFEE/TEA SELECTOR SWITCH ENERGIZES EITHER THE COFFEE OR TEA SOLENOID. MODE IS INDICATED BY RED PILOT LIGHT
- G. HOT WATER FAUCET ALLOWS OPERATOR TO DRAW WITHOUT AFFECTING COFFEE TASTE OR BREWING CYCLE

REAR VIEW



- H. TANK HEATER SWITCH ALLOWS MAIN TANK HEATING ELEMENT TO BE TURNED OFF OVERNIGHT OR DURING SLOW PERIODS

The INTEGRITY BREWERS have been designed with adjustment flexibility to cover a wide spectrum of customer needs. Adjustments on the running thermostat and inlet timer are simple adjustments easily accomplished by the purchaser, but NOT COVERED UNDER ANY WARRANTY SERVICE AGREEMENT.

Brewers must be installed in accordance with installation instructions in the owner's manual for the warranty to be valid.

WARNING: Do not plug in or energize this unit until installation instructions are read and followed.

MODEL 8781BC COFFEE/TEA BREWER INCLUDES

- One Coffee Brew Chamber
- One Tea Brew Chamber
- One Brew Cover for Tea Brewing
- One Dip Tube for Tea Brewing
- One Line Strainer

PRE-INSTALLATION INSTRUCTIONS

(Guide to the initial installation and tank filling sequence)

1. Check the tank heater switch to be sure it is in the "OFF" position. The switch is located on the rear panel of the unit (see Figure 1 on page 2). It must remain "OFF" until tank filling procedure has been read and followed.
2. Connect water supply to unit (see connection water on page 4).
3. Plug unit into electrical source (240 volt, 30 amp service).
4. Coffee/Tea Selector Switch in coffee mode, slide coffee brew chamber into place and place empty container under it.
5. Turn on water.
6. Press Brew Start switch, wait two (2) minutes and repeat.
7. After water stops, remove, empty and replace container.
8. Take an empty decanter. Hold decanter under hot water faucet and open faucet drawing off 1/2 decanter of water. This avoids "spitting" from faucet due to trapped air in the water coil.
9. Now turn the tank heater switch to the "ON" position.

Water in the tank will start heating. Initial heating time will be approximately 12 minutes. The green Ready to Brew light will turn on when water reaches brewing temperature.
10. When green Ready to Brew light turns on, be sure empty container is in place, then push the Brew Start switch. The unit should deliver 60 ounces of water. If after completion of the cycle, the unit does not deliver 60 ounces of water, proceed as follows:
11. Turn timer adjustment knob: CLOCKWISE to increase volume, or COUNTER-CLOCKWISE to decrease volume.
12. Remove plug button on the front panel for access to timer adjustment. Start a brew cycle, repeat adjustment procedure until desired water volume (60 ounces) is achieved. The timer will automatically be adjusted for the tea brewing volumes.

ELECTRICAL INSTALLATION

Unit requires a power source capable of supplying: 240 volt, AC, 60 Hertz, Single Phase, 30 Amp. service.

The unit is shipped from the factory with a 3-wire, 2-pole polarized power cord and cap attached.

Initial heating time, when starting, will be approximately 12 minutes. The GREEN signal light will turn on when water reaches brew temperature.

CONNECTING WATER SUPPLY LINE TO UNIT

WARNING: Do not plug in or energize this unit until installation instructions are read and followed.

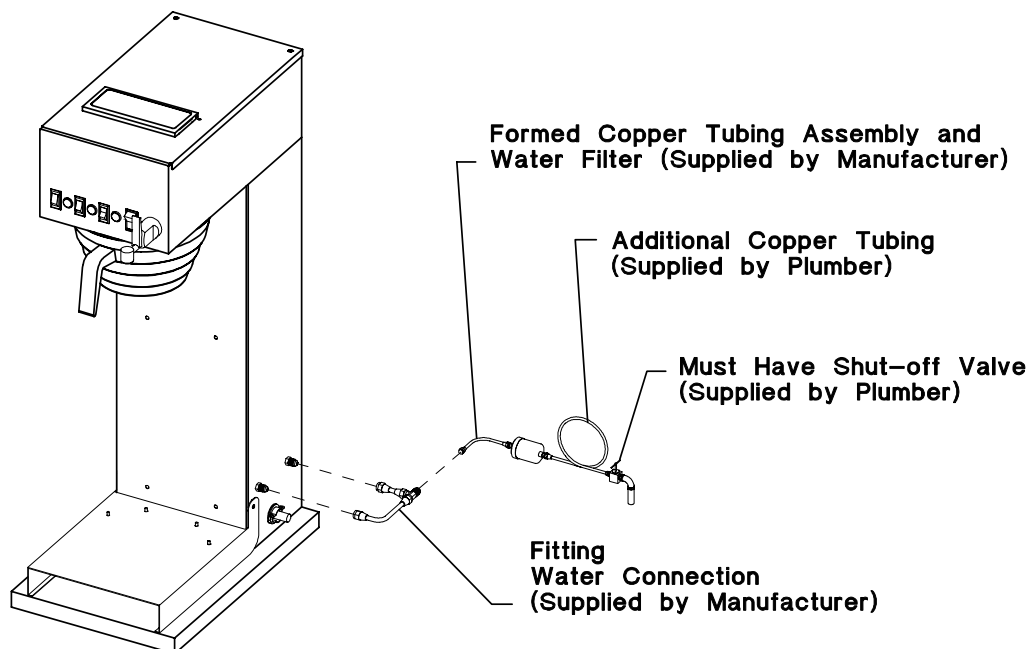
Unit must be installed on a water line with a pressure between 20 PSI and 90 PSI. If water pressure varies greatly or does not fall into this range, a pressure regulator should be installed.

CONNECTING WATER SUPPLY TO UNIT:

NOTE: Line connections to machine must conform to local codes.

IMPORTANT: Flush water line before installing machine. Machine should be connected to COLD WATER LINE.

AUTOMATIC BREWER is supplied with water line strainer and copper manifold, which has to be installed between the machine and water supply line. Observe arrow on strainer for direction of flow. For installation, use 1/4" copper tubing and fittings. A water shut-off valve must be installed in the supply line (not included).



BREWING COFFEE

1. Place one (1) paper filter into coffee brew chamber. Add your choice of ground coffee. Shake brew chamber to level off the coffee, slide brew chamber into place. Tea/Coffee Selector Switch in coffee mode. Coffee system light will come on.
2. Place empty container on lower base.
3. When green Ready to Brew light comes on, press brew start switch.
4. When coffee stops dripping out of brew chamber, remove coffee brew chamber and discard filter and coffee grounds. (CAUTION: DO NOT REMOVE THE BREW CHAMBER UNTIL BREW CYCLE IS COMPLETE.)
5. When green Ready to Brew light turns on again, the brewer is ready for another cycle.

BREWING TEA

1. Select the tea volume by using the "volume select switch" for either 1 gallon or 3 gallons. Tea/Coffee Selector Switch must be in the Tea mode.
2. Place one (1) paper filter into tea brew chamber. Add your choice of tea. Shake brew chamber to level off the tea, slide tea brew chamber in place.
3. Check to see that dispenser brew cover is properly located to accept dilute water spout flow and brew chamber drain flow.
4. When green Ready to Brew light comes on, press brew start switch.
5. Diluted water will begin to flow immediately into dispenser. Brewed tea will begin to flow from brew chamber in about 20 seconds and continue for approximately 9 to 10 minutes in the 3-gallon mode. Make sure drip-out is complete before removing brew chamber.
6. Remove tea brew chamber and discard filter and tea grounds. (CAUTION: DO NOT REMOVE THE BREW CHAMBER UNTIL BREW CYCLES IS COMPLETE.)
7. If for any reason there is a need to stop the brewing cycle before its completion, press the "Brew Stop" switch.

Important: Timer adjustment should be made in the coffee mode.

The brewer is factory pre-set to deliver 60 ounces in the coffee mode. The timer will automatically be adjusted for the tea brewing volumes.

TIMER ADJUSTMENT

1. Slide coffee brew funnel into rails.
2. Remove large plug button on the front panel of the unit.
3. To INCREASE volume, turn knob slightly CLOCKWISE; to DECREASE volume, turn knob slightly COUNTER-CLOCKWISE.
4. Check for required volume. Repeat if needed until desired volume is attained.

TEA BREW WATER VOLUME ADJUSTMENT

1. Turn the handle of the needle valve CLOCKWISE to INCREASE the ratio. This causes more water to be diverted to the dilute flow and less to the brew. A COUNTER-CLOCKWISE rotation will do the opposite.
2. Adjustments must be made in 1/8 turn increments to avoid drastic changes. One (1) full turn in either direction is the maximum advised.
3. Water flow from spray disc and dilute spout should be measured separately to determine that the desired ratio has been achieved. (CAUTION: TURN OFF TANK HEATER AND ALLOW BREWER TO COOL BEFORE CHECKING WATER FLOW.)

NOTE: IF THE FLOW FROM SPRAY DISC IS VERY WEAK AND SLOW IN STARTING, THE RATIO ADJUSTMENT MADE IS STARVING THE BREW WATER FLOW.

IF, HOWEVER, WATER FLOWS FROM VENT TUBE, THEN THE RATIO OF WATER FOR BREWING IS TOO GREAT.

4. After desired adjustments have been made, a complete brew should be made to insure quality of finished product.

SERVICE INSTRUCTIONS

TO REMOVE THE FRONT PANEL OF UNIT:

1. Remove the four (4) screws securing front panel to unit and lift off panel.
2. Then remove two (2) shoulder screws on the side of the unit and lift off shelf.

RUNNING THERMOSTAT ADJUSTMENT:

CAUTION: Disconnect cord from electric outlet or turn off power at source.

1. Loosen two (2) screws from top cover.
2. Slide cover back and lift off.
3. Turn thermostat adjusting shaft **CLOCKWISE** to **INCREASE**, **COUNTER-CLOCKWISE** to **DECREASE** temperature. For proper operation of the unit and optimum extraction, the thermostat should cycle off between 190 and 200 degrees Fahrenheit.

TO CHECK TEMPERATURE:

1. Using a Mercury Thermometer

- A. Remove brew chamber and spray head.
- B. Leave empty container on lower base.
- C. Leave empty container on lower base.
- D. A stream of hot water will come out of brewer. Place the bulb of the thermometer into the stream and read the temperature.

2. Using a Dial Thermometer

- A. Wait until ready light comes on.
- B. Disconnect brewer from electrical outlets.
- C. Remove top cover.
- D. Remove vent tube from tank lid.
Place dial thermometer into water and read the temperature.

IMPORTANT: Tank thermostat should be adjusted so that water temperature never exceeds 203 Degrees Fahrenheit.

CAUTION: Parts must be replaced by a qualified service technician.

TO REMOVE TANK LID ASSEMBLY FROM THE UNIT:

CAUTION: Disconnect brewer from electrical outlet or turn off power at source and turn off water supply.

1. Remove two (2) screws from rear of top cover.
2. Slide cover back and lift off.
3. Pull out inlet elbow, vent tube and water inlet hoses from basin pan.
4. Remove basin pan.
5. Remove one (1) copper tube connection at needle valve A. Water faucet connection at faucet.
6. Disconnect all wires from thermostat, hi-limit thermostat and heating element.
7. Pull two (2) spring clips off of tank lid.
8. Remove cover assembly from tank by lifting it out.

TO REPLACE THERMOSTAT:

CAUTION: Disconnect brewer from electrical outlet or turn power off at source.

1. Remove two (2) screws from rear of top cover. Slide cover back and lift off.
2. Disconnect all wires from thermostat only.
3. Loosen two (2) screws securing thermostat to bracket.
4. Loosen and free jam nut from pass-through fitting that secures the thermostat sensing bulb into the top of the cover.
5. Lift out thermostat, sensing bulb and thermostat gasket from the cover.
6. Reassemble using reverse procedure.

TO REPLACE HEATING ELEMENT:

1. Remove tank lid assembly (see Steps 1 through 9 of "To Remove Tank Lid Assembly") from the unit.
2. Remove two (2) hex nuts and pull heating element from mounting holes in cover.

To Replace Water Coil:

1. Remove tank lid assembly (see Steps 1 through 9 of "To Remove Tank Lid Assembly") from the unit.
2. Remove two (2) nuts and pull water coil from mounting holes in cover.

IMPORTANT

- A. When re-mounting a thermostat sensing unit through the cover, be sure a new seal washer is placed below the fitting on the sensing unit. Push the sensing unit into the mounting cover fitting, and tighten the locking nut enough to ensure there is no water leakage. Extreme tightening is not necessary.
- B. When replacing heating element assembly or water coil, you should also replace seal gaskets. (Do not over tighten hex nuts.)
- C. Before setting cover assembly into tank, make sure tank cover gasket is properly seated in the flange of the cover.

TO REPLACE READY, TEA AND COFFEE LIGHTS:

CAUTION: Disconnect cord from electrical outlet or turn off power at source.

1. Using a thin screw driver, pry out light from mounting holes, disconnect leads.
2. Replace light following reverse procedure.

TO REPLACE SWITCHES:

CAUTION: Disconnect cord from electrical outlet or turn off power at source.

1. Using a thin screw driver, pry out light from mounting holes, disconnect leads.
2. Replace switch following reverse procedure.

TO REPLACE TIMER:

CAUTION: Disconnect cord from electrical outlet or turn off power at source.

1. Remove front panel.
2. Remove knob and three (3) screws holding timer to bracket.
3. Disconnect timer wires.
4. Replace timer following reverse procedure.

TO REMOVE COFFEE SOLENOID VALVE:

CAUTION: Disconnect cord from electrical outlet or turn off power at source.

1. Turn off water supply.
2. Remove water connection and copper manifold from inlet fitting of the brewer and brass nut.
4. Remove front panel.
5. Remove flare connection from bottom side of shelf.
6. Remove hose at outlet side of adapter fitting.
7. Pull solenoid forward slightly and lift up to release it from the holding bracket.
8. Remove wires from solenoid coil.
9. Replace solenoid valve assembly by following reverse procedure.

TO REPLACE TEA SOLENOID VALVE:

CAUTION: Disconnect cord from electrical outlet or turn off power at source.

1. Turn off water supply.
2. Remove front panel.
3. Remove flare connection and copper manifold plus brass hex nut at input of solenoid valve.
4. Remove hose at needle valve on tea solenoid.
5. Remove hose at output of tea solenoid valve.
6. Pull solenoid forward slightly and lift up to release it from the holding bracket.
7. Remove wires from solenoid coil.
8. Replace solenoid valve assembly by following the reverse procedure.

CLEANING THE SPRAY HEAD:

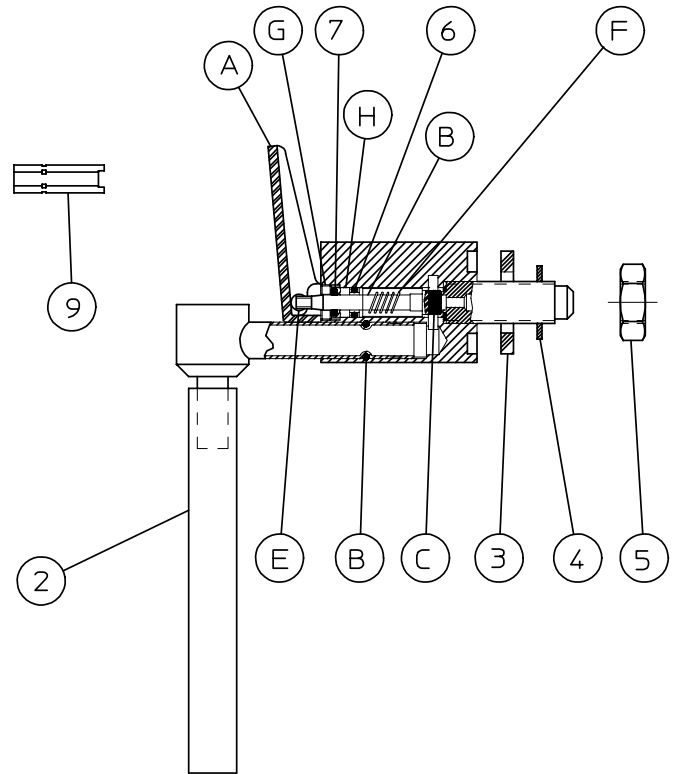
CAUTION: Let brewer cool.

1. Remove brew chamber.
2. Rotate spray head ears out of locking cup by pushing up as you rotate it out of locking grooves.
3. Clean lime and wipe oil from both sides of spray head.
4. Clean entire area over the brew chamber with a damp cloth.
5. Replace spray head, making sure that spray head gasket is in place in cup.
6. Spray head tabs must be in the UP position. Rotate fully into locking grooves.

HOT WATER FAUCET

Faucet replacement parts list

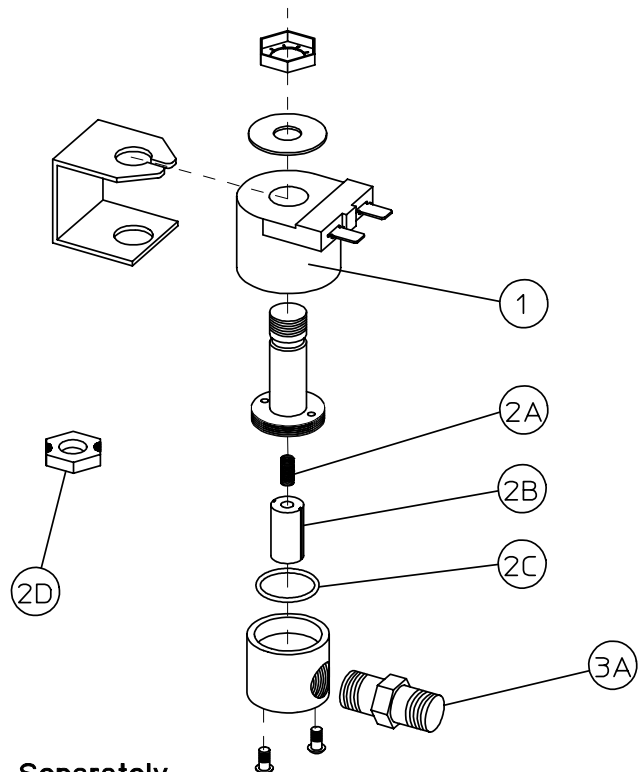
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|----|-----------|---------------------------------|
| 1. | 8851-275 | Repair Kit (Sold as Kit Only) |
| A. | Included | Handle (Color-Red) |
| B. | " | Valve-Stem |
| C. | " | Valve Disc |
| D. | " | "O" Ring - #6, #7 & #8 |
| E. | " | Tee Nut |
| F. | " | Spring |
| G. | " | Guide |
| H. | " | Bushing |
| I. | " | Instruction Card (Not Shown) |
| 2. | 8551-275B | Stream Straightener (Not Shown) |
| 3. | 8551-100A | Washer Rubber |
| 4. | 8551-100B | 7/16 External Tooth Lock Washer |
| 5. | 8551-100C | Hex Lock Nut |
| 6. | 8551-200B | "O" Ring Stem Seal 5/16" O.D. |
| 7. | 8551-200A | "O" Ring Seal 1/4" O.D. |
| 8. | 8551-200C | "O" Ring Spout Seal 3/8" O.D. |
| C. | 8551-275A | Valve Disc |
| 9. | 8551-200E | Adapter Tool - Service Wrench |



COLD WATER ENTRANCE SOLENOID VALVE

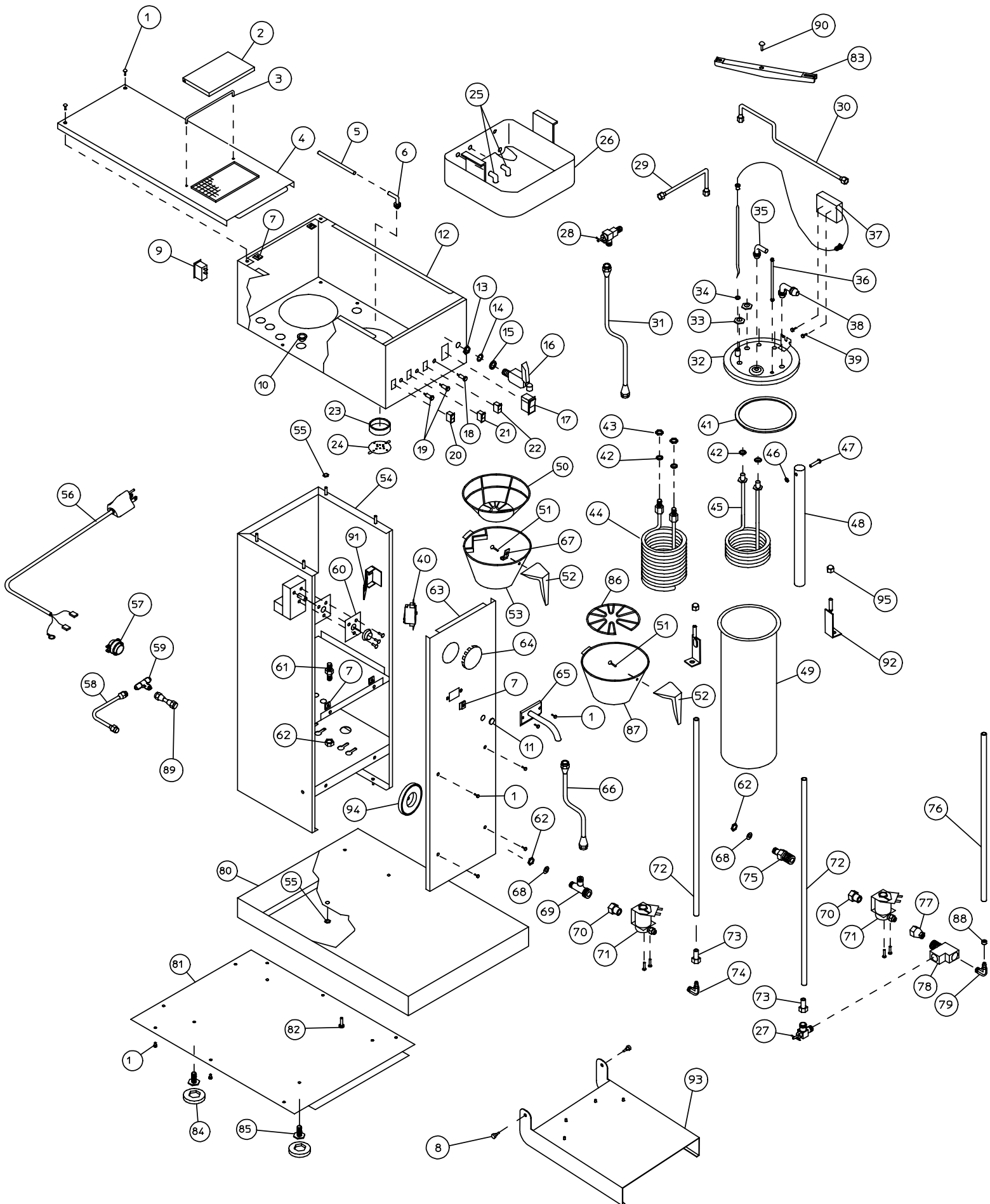
Part no. 8726-1 (consists of Valve and Flow Control)
Solenoid Valve Replacement Parts (for Black Coil Valve)

- | | | |
|----|------------|-----------------------|
| 1. | 8541-120K | Solenoid Repair Kit |
| A. | Included | (2A) Spring |
| B. | " | (2B) Plunger |
| C. | " | (2C) Seal Ring |
| 2. | 8541-120JS | Solenoid Repair Kit |
| A. | Included | (2A) Spring |
| B. | " | (2B) Plunger |
| C. | " | (2C) Seal Ring |
| D. | " | (2D) Service Wrench |
| 3. | 8541-120KS | Solenoid Overhaul Kit |
| A. | Included | (2A) Spring |
| B. | " | (2B) Plunger |
| C. | " | (2C) Seal Ring |
| D. | " | (2D) Service Wrench |
| E. | | (3A) Flow Control |
| 4. | 8541-120F | (3A) Flow Control |
| 5. | 8541-120WS | (2D) Service Wrench |



No Kit Parts Sold Separately

8781BC EXPLODED VIEW



PARTS IDENTIFICATION

(MODEL NO. 8781BC)

ITEM	SERVICE #	DESCRIPTION	QTY
1	8543-52	SCREW PHL SS 8X3/8	16
2	8543-46	HINGE COVER	1
3	8543-49	HINGE WIRE	1
4	8781-67	BASIN COVER WELDED ASSY	1
5	8781-1	WATER OUTLET TUBE	1
6	8043-13	SPRAY ELBOW	1
7	8543-23	NUT TINNERMAN	16
8	82093	SCREW SHOULDER #10-32 X 1/2	2
9	8528-40	SWITCH ROCKER	1
10	8543-69	HEYCO BUSHING	7
11	8033-60	BUTTON PLUG	1
12	81826	BASIN WELDED ASSEMBLY	1
13	8551-100C	NUT HEX LOCK	1
14	8551-100B	WASHER 7/16" EXTERNAL TOOTH	1
15	8551-100A	WASHER	1
16	8551-250	FAUCET ASSY	1
17	8781-52	SWITCH COFFEE TEA	1
18	8738-2	PILOT LIGHT GREEN 250V	1
19	51157	PILOT LIGHT RED 250V	2
20	8781-19	SWITCH TEA VOLUME SELECT	1
21	8707-55	SWITCH BREW ROCKER	1
22	8812-72	SWITCH BREW STOP	1
23	8543-42	GASKET SPRAY HEAD	1
24	8543-44	DISC SPRAYER	1
25	8540-30	ELBOW	2
26	8781-61	BASIN PAN ASSY	1
27	8514-26	VALVE NEEDLE SEAT	1
28	8572-26	NEEDLE VALVE ASSY	1
29	8781-57	FORMED INLET TUBE ASSY	1
30	8781-33	TUBE FAUCET	1
31	8781-53	TUBE COPPER UPPER	1
32	8514-68	TANK COVER SUB ASSY	1
33	8043-28	NUT HEX 1/2-20	2
34	8512-41	WASHER SEAL	1
35	8043-11	ELBOW OUTLET	1
36	8043-15	TUBE VENT	1
37	8512-51	THERMOSTAT	1
38	8043-8	INLET ELBOW	1
39	3-100	SCREW 6-32 X 1/4	2
40	8552-50	HI-LIMIT THERMOSTAT 240V	1
41	8043-12	GASKET TANK COVER	1
42	8043-30	GASKET HEATING ELEMENT	4
43	8941-21	NUT HEX 7/16-20 BRASS	2
44	8540-6	HOT WATER COIL ASSY	1
45	8716-1	ELEMENT HEATING 3500W 240V	1
46	8543-74	NUT HEX 4-40	1
47	8543-73	SCREW PAN 4-40 X 1 1/2	1
48	8043-24	TUBE INLET TUBE	1
49	8043-10	TANK BODY	1
50	8706-9	RACK WIRE BREW CHAMBER COFFEE	1
51	8707-3	SCREW HEX 10-32 X 5/16	2
52	8707-2	HANDLE BLACK	2
53	9102-57	CHAMBER BREW COFFEE	1
53A	9102-41	BREW CHAMBER ASSY COFFEE	1
54	81771	BODY WELDED ASSY	1
55	8942-92	NUT KEP 8-32	17

ITEM	SERVICE #	DESCRIPTION	QTY
56	81829	CORD & CAP ASSY	1
57	57748	FITTING CONDUIT STRAIGHT 3/8	1
58	8540-4	TUBE FORMED INLET	1
59	8706-97	FITTING UNION TEE	1
60	8781-12	TIMER DUAL	1
61	8812-57	FITTING UNION 1/4 X 1/4	1
62	8710-10	NUT HEX BR 7/16-20 X 1/8	3
63	81774	PANEL FRONT	1
64	8706-75	BUTTON PLUG 2 INCH	1
65	8812-5	WATER SPOUT ASSY	1
66	81825	TUBE LOWER COPPER	1
67	8812-73	CLIP BREW BASKET	1
68	8881-8	WASHER FLAT	2
69	8551-35	FITTING INLET TEE	1
70	8706-102	FITTING REDUCER ADAPTOR	2
71	8726-1	SOLENOID VALVE 240V	2
72	8781-45	TUBE WATER INLET 28 1/2 IN	2
73	8941-20	FITTING ADAPTOR	2
74	8541-48A	FITTING 90 ELBOW	1
75	8541-93	FITTING INLET	1
76	8781-54	HOSE SPOUT CONN 22 IN	1
77	8596-1240	REDUCER 1/4 X 1/8 FPT RED	1
78	8812-55	FITTING PIPE TEE	1
79	8812-56	FITTING MALE HOSE BARB	1
79A	81823	SOLENOID VALVE ASSY TEA	1
80	8812-68	BASE WELDED ASSY	1
81	8812-75	BOTTOM PANEL ASSY	1
82	7506-39	SCREW PAN PHL SS 8-32 X 1/2	1
83	8043-5	STRAP HOLD DOWN	1
84	8033-55	LEG LEVELER	4
85	8033-56	CAP LEVELER	4
86	8812-77	RACK WIRE BREW CHAMBER TEA	1
87	8812-760	CHAMBER BREW TEA	1
87A	8812-76	BREW CHAMBER ASSY TEA	1
88	8810-70	WASHER RESTRICTOR	1
89	81818	TUBE ASSY STRAIGHT	1
90	8043-47	SCREW PAN 10-32 X 1	1
91	8718-48	BRACKET HI-LIMIT	1
92	8781-69	TANK BRACKET ASSY	2
93	81776	ADAPTOR SHELF	1
94	81824	MAGNET 25 LBS	1
95	8043-506	NUT ACORN 8-32 SS	2

WARRANTY

For a period of one (1) year from date of installation, all defective parts on Bloomfield equipment will be replaced free of charge, providing parts did not become defective through accident, neglect, improper installation, mishandling or damage in transit. The service necessary to replace these defective parts will also be free of charge, provided this service is performed by an authorized BLOOMFIELD service station, wherever authorized service is available.

BREWER WARRANTY VOID IF:

Other than genuine Bloomfield replacement parts are used.

Brewer is plugged into voltage other than specified on serial plate.

Tank heating element is energized before water tank is filled.

Recommended Bloomfield servicing procedures are not followed.

HOW TO ORDER

Individual users and owners must order replacement parts through their distributors or the local authorized service station.

Terms: Prices, terms, designs, materials, weights, specifications and dimensions for equipment or parts are subject to change without notice.

Service Information – To obtain service assistance, in addition to that contained in this manual, call BLOOMFIELD'S TOLL FREE NUMBER (800) 621-8556 (IN NEVADA (702) 345-0444).

Be prepared to give the Model and Serial Numbers of your brewer, as well as the problem and the trouble-shooting steps already taken, to the service technician when calling for assistance.

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