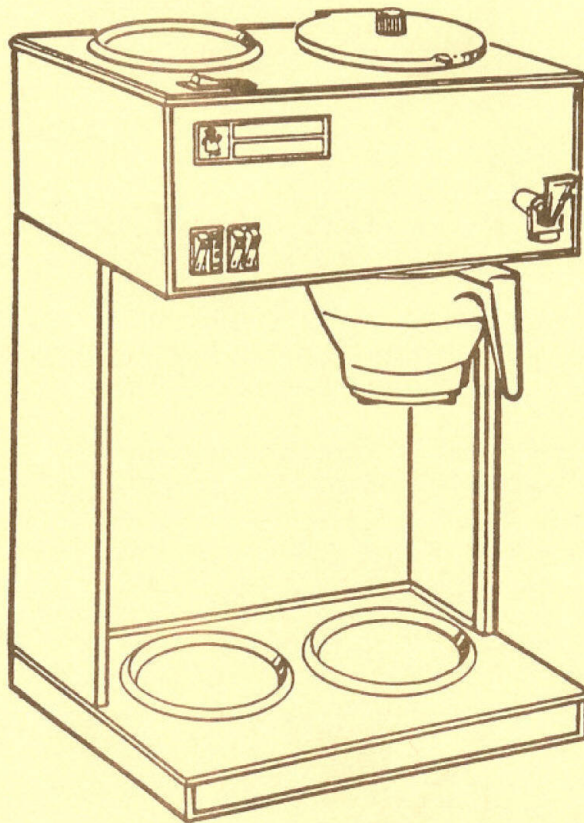


BREWMATIC®

SERVICE MANUAL

MODELS:

1033052, 1033057
1033053, 1033060



DIPLOMAT VI

AUTOMATIC COFFEE BREWER WITH FAUCET

THESE MACHINES SHOULD BE SERVICED ONLY BY QUALIFIED SERVICE PERSONNEL. IF YOUR MACHINE DOES NOT FUNCTION PROPERLY, UNPLUG AND CALL YOUR LOCAL BREWMATIC REPRESENTATIVE OR THE BREWMATIC CUSTOMER SERVICE DIVISION AT 213-233-8204 OR TOLL FREE AT 800-421-6860. THERE ARE NO USER-SERVICEABLE PARTS INSIDE. DO NOT OPEN THE MACHINE. FAILURE TO OBSERVE THESE RESTRICTIONS WILL VOID THE WARRANTY AND COULD CAUSE RISK OF INJURY OR DAMAGE.

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BREWMATIC COMPANY

IMPORTANT NOTICE
FOR SERVICE PERSONNEL

1. ONLY BREWMATIC AUTHORIZED REPLACEMENT PARTS SHOULD BE USED. Part substitutions could create a fire hazard and the danger of personal injury. Disconnect unit before servicing.
2. DO NOT BY-PASS ANY SAFETY MECHANISMS, such as the automatic temperature limit control with reset button. Brewmatic Company requires that safety devices be in place and functioning at all times to guard against a fire risk.
3. When replacing electrical wiring, in part or in whole, use only like rated terminals and wires of the same gauge and insulation covering.
4. Any modification or alteration to the unit will result in voiding the safety listings. Brewmatic Company will not approve of any unauthorized changes to its basic design.
5. BREWMATIC COMPANY DOES NOT RECOMMEND, AND WILL NOT FURNISH ANYONE WITH INFORMATION FOR CHANGING THE ELECTRICAL RATING OF ANY EQUIPMENT MANUFACTURED BY BREWMATIC COMPANY.
6. When calling with service questions have model number, serial number, voltage, wattage, phase and date of purchase available. Electrical information may be obtained from the nameplate located on the side, back or bottom of the unit.
7. This manual is furnished only to qualified service personnel for the repair of Brewmatic equipment.

Information, parts and specifications are subject to change without notice.

Due to periodic reviews and changes in standards, listings and approvals may change at any time. For current listing and approval information contact Brewmatic.

Qualified service personnel should be acquainted with all Brewmatic equipment. Service manuals and information on any unit are available upon request.

Brewmatic Customer Service. 213-233-8204 or 800-421-6860.

SPECIFICATIONS

MODEL: 1033057 (Was 1033052)
DESCRIPTION: Diplomat VI Automatic, 2 Sta., W/Faucet
DIMENSIONS: 16"w x 20-3/8"h x 9"d
SHIPPING WEIGHT: 19 lbs.
SHIPPING CUBE: 2.6 cu. ft.
VOLTS: 120
AMPS: 12.5
WATTS: 1490
HZ: 60
PHASE: 1
POWER CORD: 6 ft., 3 wire, grounded.
PLUG: NEMA Standard 5-15P. Furnished and attached.
RECEPTACLE REQUIRED: NEMA Standard 5-15R. Not furnished.
WATER CONNECTION: 1/4" Flare.
LISTINGS: NSF

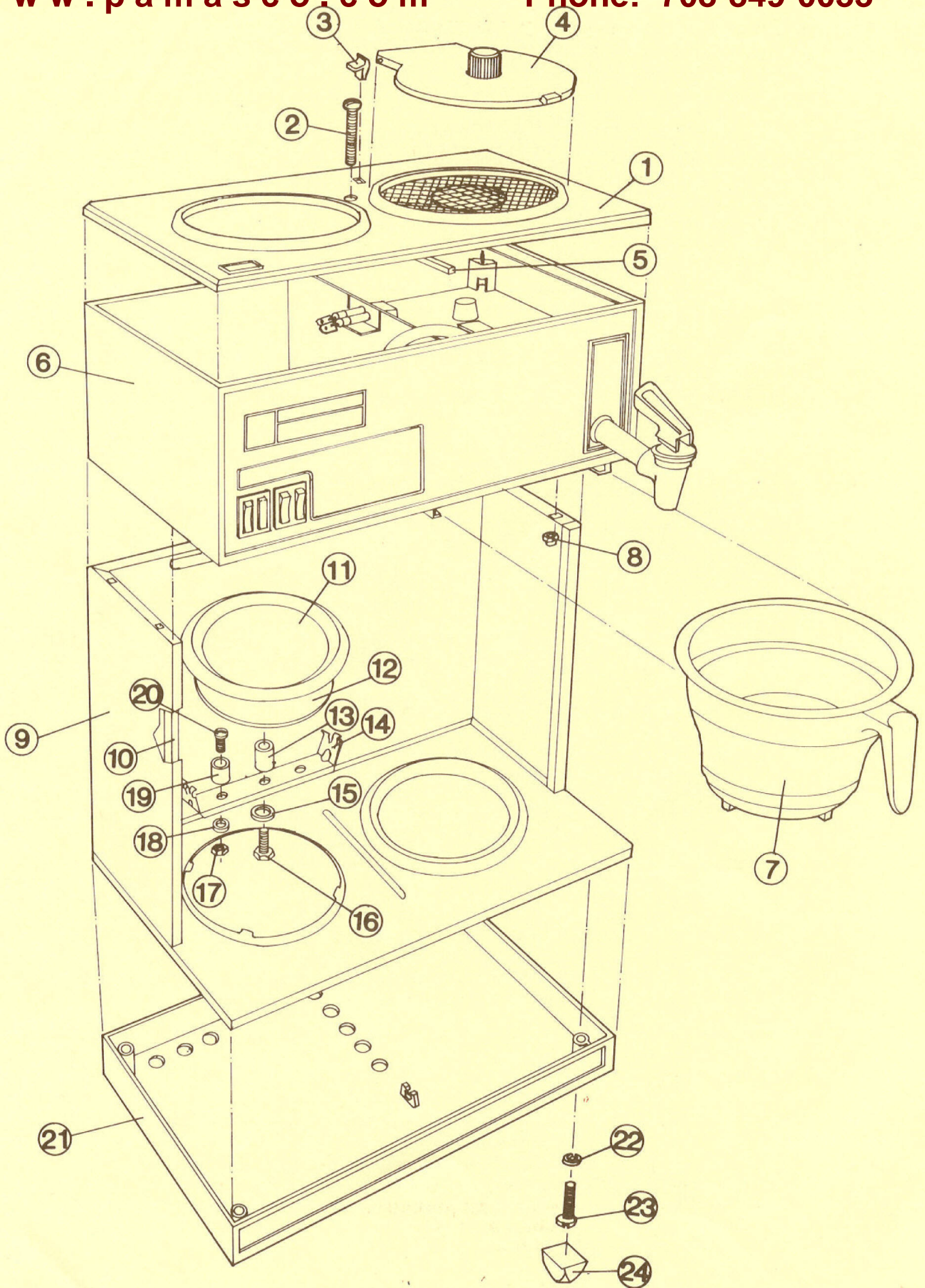
MODEL: 1033060 (Was 1033053)
DESCRIPTION: Diplomat VI Automatic, 3 Sta., W/Faucet
DIMENSIONS: 16"w X 20-3/8"h X 9"d
SHIPPING WEIGHT: 20 lbs.
SHIPPING CUBE: 2.6 cu. ft.
VOLTS: 120
AMPS: 13.2
WATTS: 1580
HZ: 60
PHASE: 1
POWER CORD: 6 ft., 3 wire, grounded.
PLUG: NEMA Standard 5-15P. Furnished and attached.
RECEPTACLE REQUIRED: NEMA Standard 5-15R. Not furnished.
WATER CONNECTION: 1/4" Flare.
LISTINGS: NSF

OPTIONAL:

1030801, 3 Station top cover.
1100550, 36 Cup dispenser.
1800512, Reservoir warmer. For 1100550 Dispenser
1040603, 3" Extension. Raises Diplomat 3"

ADDITIONAL INFORMATION:

BREWING TEMP. 182° to 186° Maximum. Adjustable.
THERMOSTAT: Adjustable. + -
HI-LIMIT: Manual Reset. Not Adjustable.
FLOW CONTROL: .5 GPM
LIQUID LEVEL CONTROL: 2 Minute fault timer built-in. Not Adjustable.
WATER LEVEL ADJ.: Probe, Adjustable. + - .
USES FILTER PAPER #: 9906208



PART LIST
FINAL ASSEMBLY
DIPLOMAT VI AUTOMATIC COFFEE BREWER W/FAUCET

ITEM	PART NO.	DESCRIPTION
1.	1030856	Top Cover, 2 Station, (W/Cover and Hinges)
	1030801	3 Station Top Cover Assy., Complete
2.	9003131	Screw, Flat Head, #6-32 x 1-3/4"
3.	1040062	Hinge Insert
4.	1039027	Cover Kit, (Includes Cover & 2 Hinges)
5.	6000282	Gasket, Top Cover
6.	1031234	Housing Assy., Complete, (W/O Reservoir)
7.	6000225	Brew Cone, Plastic
8.	9205104	Nut, Lock, #6-32
9.	1030711	S/S Wrap Sheet
10.	1030439	Channel
11.	6001007	Porcelain Pan, (W/O Element)
12.	1039032	Element Replacement Kit, (W/O Porcelain Pan)
13.	6000578	Spacer, PTC Element
14.	6004021	Bracket, Element Pan
15.	9303115	Washer, Lock, W/Internal Tooth, 5/16"
16.	9010115	Hex Head Screw, 5/16" - 18 X 3/4"
17.	9201145	Nut, Hex, #8-32
18.	9303121	Washer, Lock, #8
19.	9905350	Spacer, Small
20.	9001107	Screw, #8-32 x 1/2"
21.	6000481	Stove Shell
22.	9303119	Washer, Lock, #6
23.	9001228	Screw, #6-32 x 1-1/4"
24.	9906472	Foot, Black, 1/2"

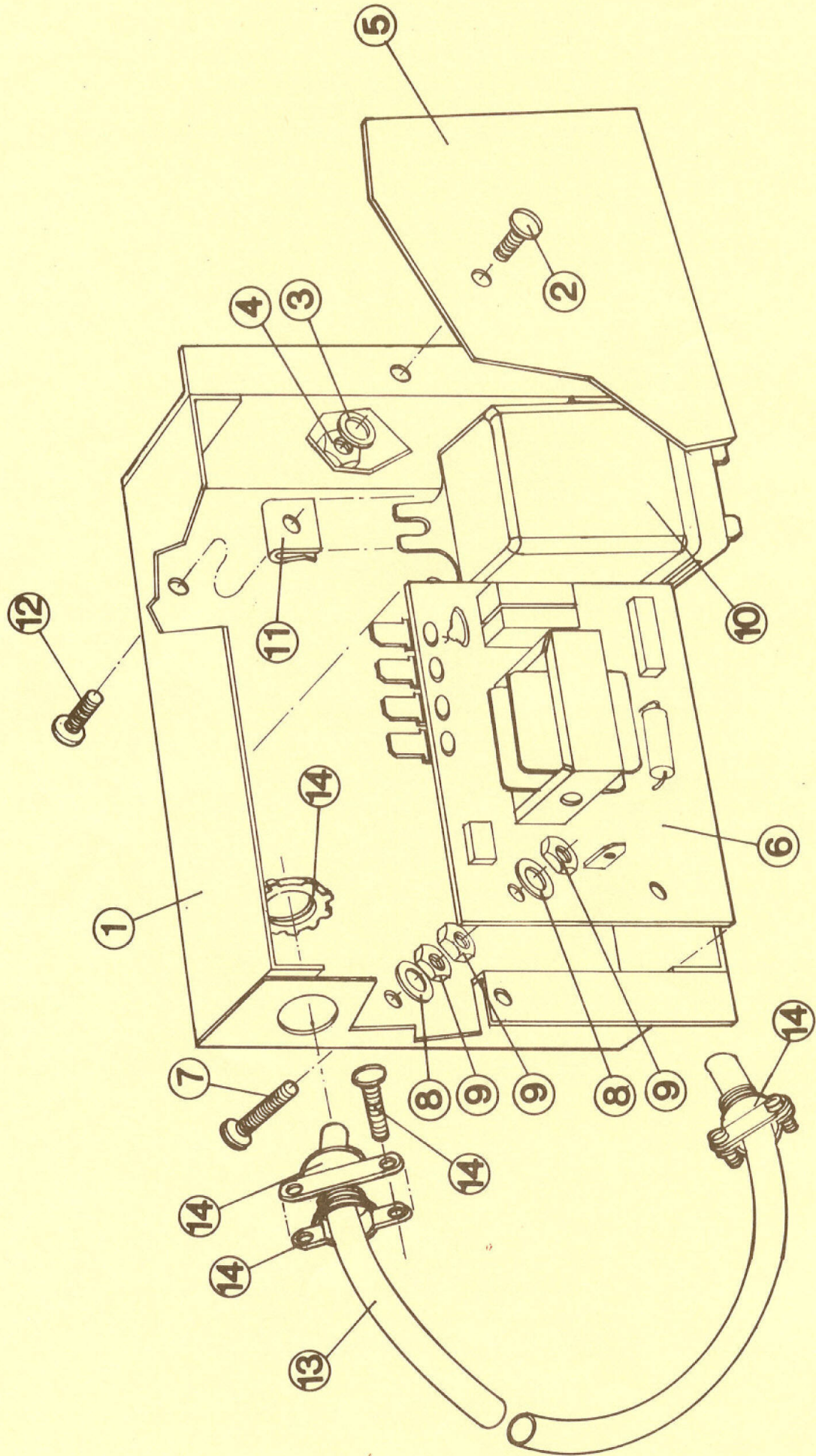
NOT SHOWN:

25. 6003091 Element Pan Assy., Complete,
(W/Items 11 Thru 20)

ALSO AVAILABLE:

26. 9919445 Clean-Out Spring
27. 1031236 Liquid Level Control Box, Complete,
(See Separate sheet for parts list)

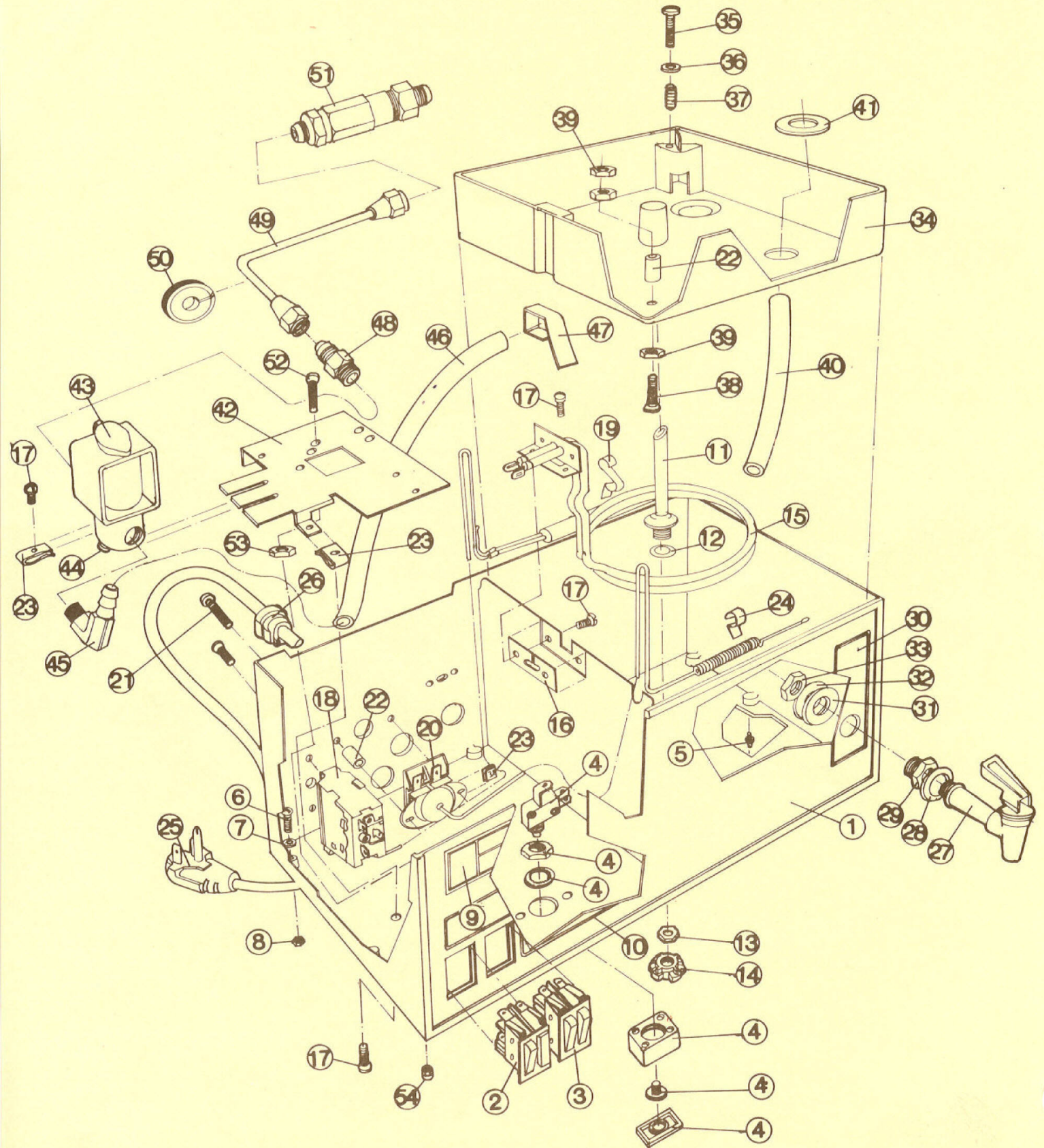
NOTE: Porcelain pan with silicone warmer attached, part #6003034, has been discontinued. For replacement warmer see items 11 & 12 above.



PART LIST
LIQUID LEVEL CONTROL BOX
DIPLOMAT VI AUTOMATIC COFFEE BREWER W/FAUCET

ITEM	PART NO.	DESCRIPTION
1.	1040628	Liquid Level Control Box, (Box Only)
2.	9001229	Screw, #6-32 x 7/16"
3.	9301118	Washer, Lock, #6
4.	9201113	Nut, Hex, #6-32
5.	1030711	S/S Wrap Sheet, (Shown For Reference Only)
6.	9912165	Liquid Level Control, W/Fault Timer
7.	9001142	Screw, #6-32 x 7/8"
8.	9303103	Washer, Lock, #6
9.	9201113	Nut, Hex, #6-32
10.	9918267	Relay
11.	9914285	Nut, Push-On, #6
12.	9001226	Screw, #6-32 x 5/16"
13.	1031238	Cable Assembly
14.	9903458	Cable Clamp

NOTE: Liquid level control box is to be installed on rear of wrap sheet with items 2, 3 & 4. Cable is attached to housing with cable clamp, item 14. See wiring diagram for wiring instructions.



PART LIST
HOUSING ASSY.
DIPLOMAT VI AUTOMATIC COFFEE BREWER W/FAUCET

ITEM	PART NO.	DESCRIPTION
1.	1040638	Housing, Auto. Diplomat VI, W/O Controls
2.	9919452	Switch, Power with Brew-light
3.	9919451	Switch, Double Warmer
4.	9919408	Switch, Start
5.	6000514	Mid-Hex Screw, #6-32
6.	9001142	Screw, Ground, #6-32 x 7/8"
7.	9303121	Washer, Lock, #8
8.	9201152	Nut, Hex, #6-32
9.	1040618	Nameplate, Diplomat VI Automatic
10.	9904283	Decal, Operating Instructions
11.	1030790	Siphon Tube, Metal
12.	6000325	Washer, Flat
13.	9202122	Nut, 1/8"-27
14.	1040143	Spray Head, Plastic, Extended Brew, White
15.	9905266	Immersion Element, 120v 1300w
16.	6000274	Gasket, Immersion Element
17.	9001226	Screw, #6-32 x 5/16"
18.	9920450	Thermostat
19.	6000363	Clip, Thermostat Bulb
20.	9920459	Hi-Limit Thermostat
21.	9001136	Screw, #6-32 x 1"
22.	1040010	Spacer
23.	9914285	Nut, Push-On, #6
24.	6000364	Clip, Hi-Limit Thermostat Bulb
25.	9903435	Power Supply Cord
26.	9902283	Strain Relief Bushing
27.	9906425	Faucet
28.	9301190	Washer, Durabla
29.	9902311	Bushing
30.	1040433	Decal, Faucet Warning
31.	9301109	Washer, Durabla
32.	9301169	Washer, Flat
33.	9914281	Nut, Bushing
34.	1031245	Reservoir Assy., Complete, (W/Items 22 & 35 Thru 39)
35.	9001142	Screw, Brew Probe, #6-32 x 1"
36.	9301103	Washer, Flat, #8
37.	9919377	Spring, Brew Probe
38.	9003130	Screw, Faucet Probe, #6-32 x 1-1/2"
39.	9201113	Nut, Hex, #6-32
40.	9920414	Silicone Tube, Overflow, 5-5/8"

(Over)

PART LIST
HOUSING ASSY.
DIPLOMAT VI AUTOMATIC COFFEE BREWER W/FAUCET

(Continued)

ITEM	PART NO.	DESCRIPTION
41.	6000524	Overflow Disc, Plastic
42.	1040175	Bracket, Fill System
43.	9922229	Solenoid Valve
44.	9001162	Screw, Valve, #10-32 x 3/8"
45.	9906416	Fitting, Elbow
46.	9920383	Silicone Tube, Fill, 12"
47.	1040171	Clip, Silicone Tube
48.	9903103	Fitting, Connector, Male
49.	1031010	Tube Assy., Inlet
50.	9907199	Grommet, Rubber
51.	9906421	Flow Control, .5 GPM
52.	9003128	Screw, Flat Head, #6-32 x 5/8"
53.	9201112	Nut, Hex #6-32
54.	9204104	Nut, Cap, #8-32
NOT SHOWN:		
55.	9303103	Lock Washer, #6, (for Ground Wires) (Canadian Models only)
56.	9201113	Hex Nut, #6-32, (for Ground Wires) (Canadian Models only)
57.	9001228	Screw, #6-32 X 1-1/4", (Hi-limit Ground Screw) (Canadian Models only)
ALSO AVAILABLE:		
58.	9919399	Seat Cup, (For 9906425 Faucet)
59.	9906435	Flow Control Washer, .5 GPM, CJ
60.	9500016	Valve Repair Kit, (For 9922229 Valve)
61.	1031235	Fill System Assy., Complete

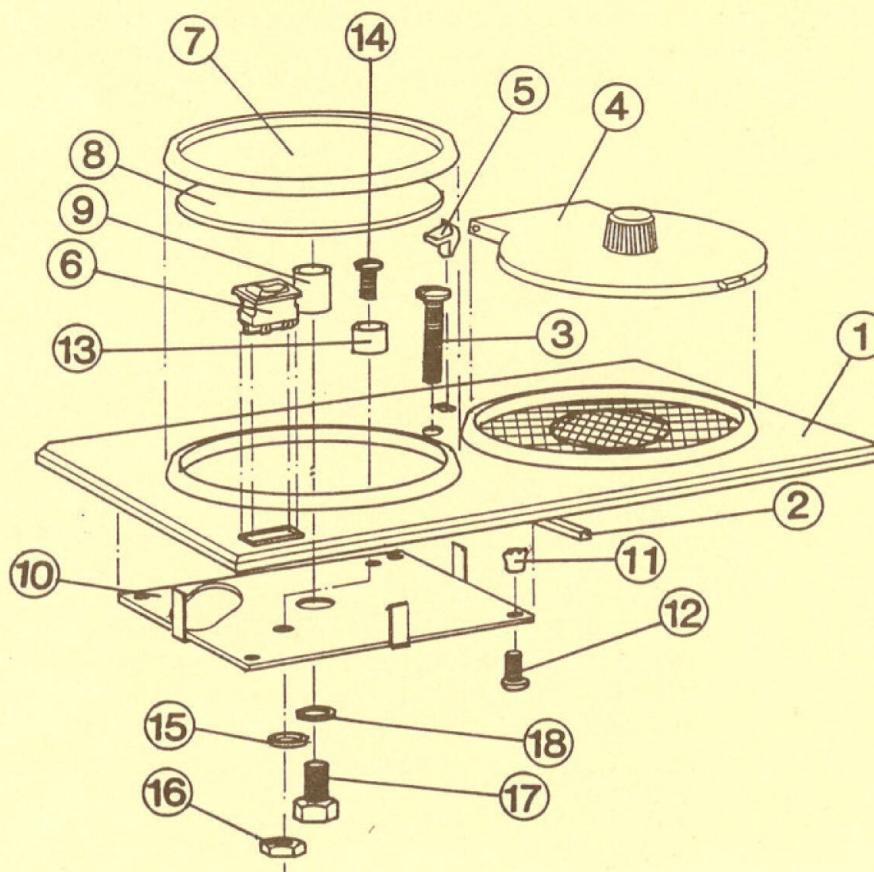
PARTS LIST
1030801 3 STATION CONVERSION TOP COVER ASSY.

ITEM	PART NO.	DESCRIPTION
1.	1030993	Top Cover, (W/O Element, W/Cover & Hinges)
2.	6000282	Gasket, Top Cover
3.	9003131	Screw, Flat Head, #6-32 x 1-3/4"
4.	1039027	Cover Kit, (W/Cover & 2 Hinges)
5.	1040062	Hinge Insert
6.	9919348	Rocker Switch
7.	6001007	Porcelain Pan, (W/O Warmer Element)
8.	1039037	3 Station Element Kit, (W/O Porcelain Pan) (W/Items 9, 10, 13, 14, 15, 16 & Instructions)
9.	6000582	Spacer, Large
10.	1030445	Reflector Plate
11.	9906398	Fastener, On-Sert
12.	9005135	Screw, #6 x 3/8"
13.	6000590	Spacer, Small
14.	9001107	Screw, #8-32 x 1/2"
15.	9303121	Washer, Lock, #8
16.	9201145	Nut, Hex, #8-32
17.	9010121	Hex Head Screw, 5/16" - 18 x 1/2"
18.	9303115	Lock Washer, 5/16" W/Int. Tooth

ALSO AVAILABLE:

19. 9916218 Clean Out Plug, (Used On Some Older Models)

NOTE: Porcelain pan with silicone warmer attached, part #6003034, has been discontinued. For replacement warmer see items 7 & 8 above.



INSTRUCTIONS TO INSTALL 1030801 3 STATION TOP COVER
ON DIPLOMAT COFFEE BREWERS

WARNING:

READ THESE INSTRUCTIONS COMPLETELY BEFORE ATTEMPTING TO INSTALL TOP COVER.

INCORRECT INSTALLATION OR OPERATING PROCEDURES WILL VOID WARRANTY AND MAY DAMAGE THIS EQUIPMENT.

THIS UNIT MUST BE ELECTRICALLY GROUNDED TO PREVENT ELECTRIC SHOCK OR INJURY TO THE OPERATOR.

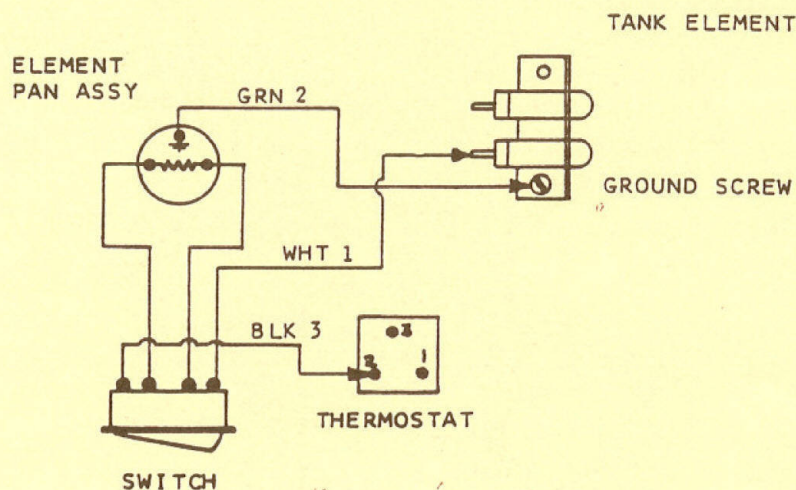
UNPLUG AND ALLOW BREWER TO COOL BEFORE INSTALLING THIS TOP COVER.

1. To remove the existing 2 station top cover remove the top cover screw from center of top cover. Using the handle end of a screwdriver, tap up firmly under the edge of the top cover on one side of the brewer. The top cover is a snap fit and should pop free. While holding the free side up slightly, tap up firmly on the other side.

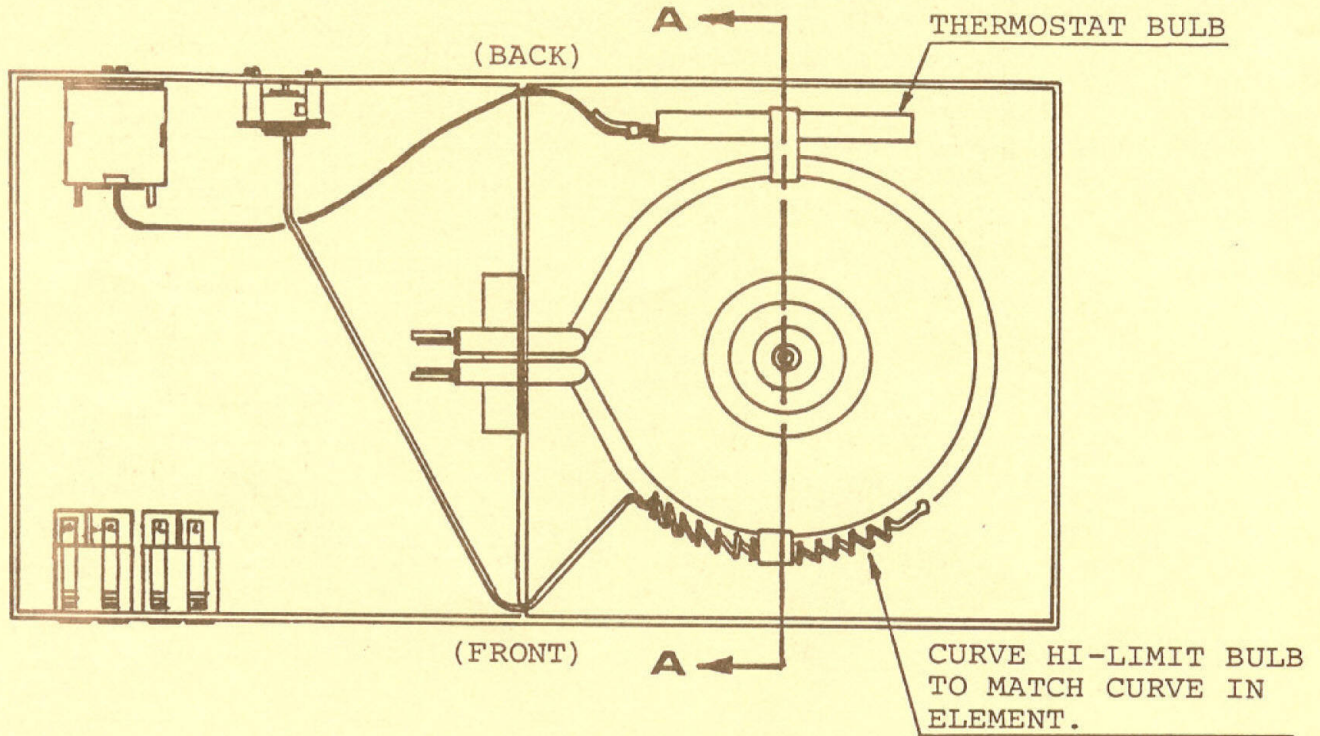
NOTE: Do not pull up on the top cover while the other side is still attached. This may break the plastic snaps that hold the top cover in place.

2. To attach new 3 station top cover remove the outer white wire from the grouping of white wires on the immersion element. Attach white wire (#1 on diagram below) from new top cover to the end of the group of white wires. Connect remaining white wire.
3. Attach black wire (#3 on diagram below) from new top cover to black wires on thermostat terminal #2. There will be a terminal available for this connection.
4. Attach green wire (#2 on diagram below) from new top cover to ground screw on immersion element.
5. Place the top cover on top of the housing making sure the channels in the top cover lines up with the housing edge. Tap firmly on each corner of the top cover to snap cover in place. Install the top cover screw and tighten snug only. Test thoroughly.

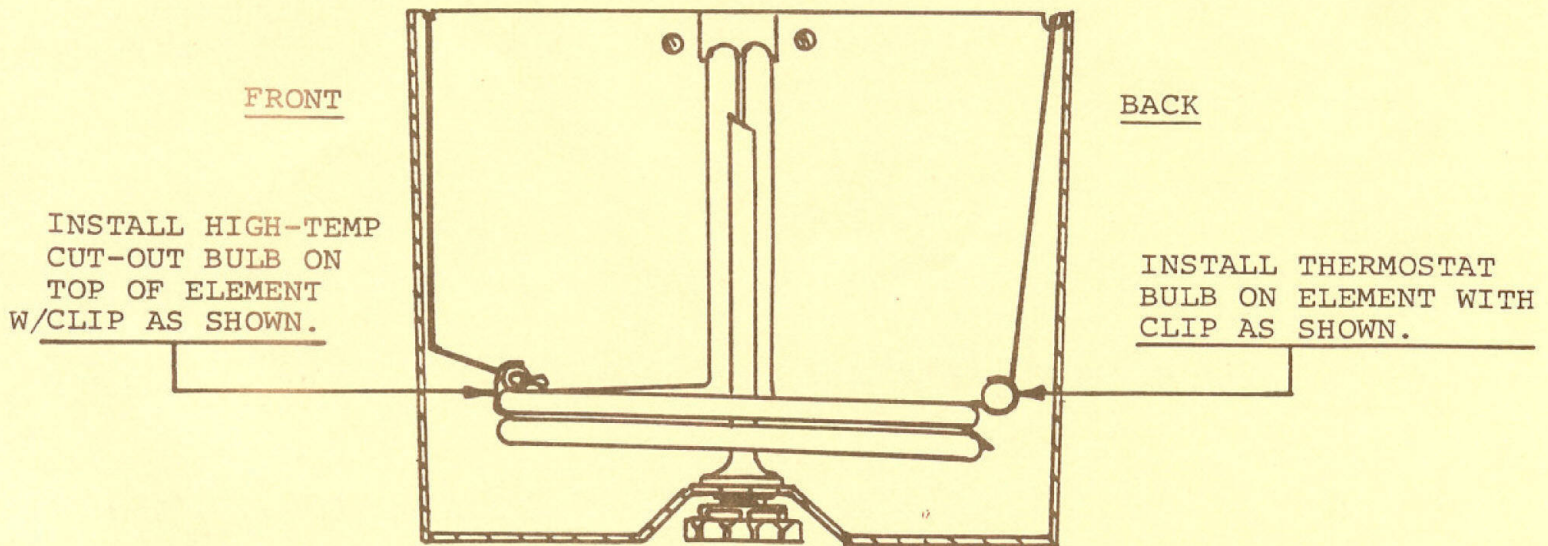
(See machine wiring diagram for specific wiring locations.)



INSTRUCTIONS FOR INSTALLATION
AND PROPER POSITIONING OF
THERMOSTAT BULB & HIGH TEMP
CUT OUT BULB.



TOP VIEW

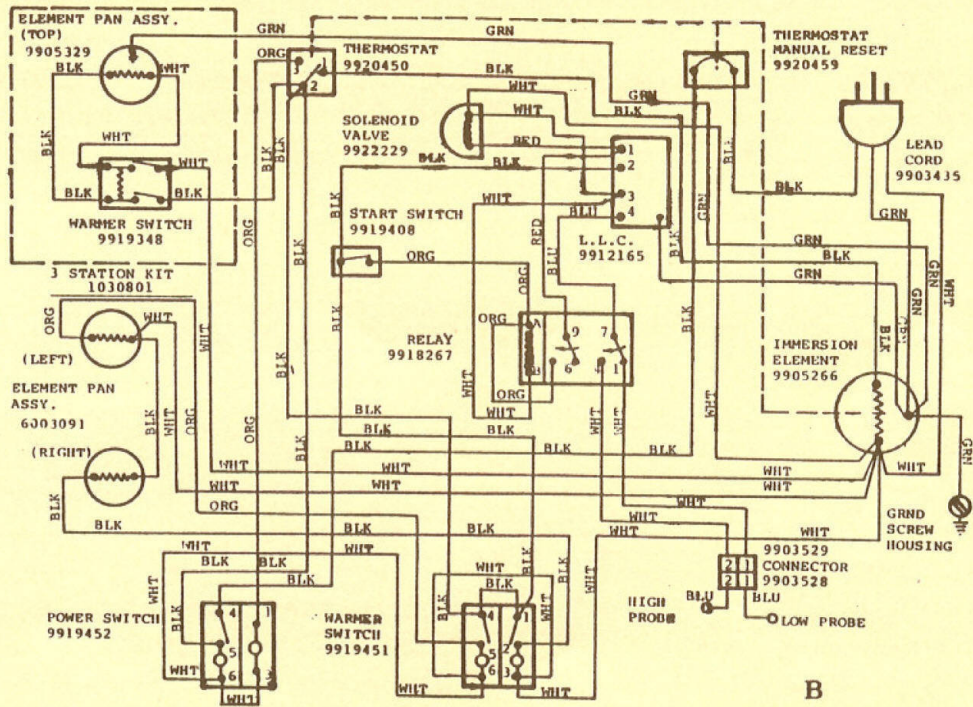


SECTION - AA

(RIGHT SIDE VIEW FROM INSIDE HOUSING)

"WARNING": THERMOSTAT & HIGH-LIMIT THERMOSTAT BULBS MUST BE IN CORRECT POSITION IN CLIP ON ELEMENT FOR PROPER OPERATION.

WIRE DIAGRAM



SERVICE:

This machine should be serviced only by qualified service personnel. If your machine does not function properly, unplug and call your local Brewmatic Representative or the Brewmatic Customer Service Division at 213-233-8204 or toll free at 800-421-6860. There are no user-serviceable parts inside. Do not open the machine. Failure to observe these restrictions will void the warranty and could cause risk of injury or damage.

Disconnect machine and allow to cool before servicing.

WARNING:

This machine is equipped with an automatic temperature limit control designed to turn off the machine if it overheats. In that event, do not reset until a qualified service representative has inspected and repaired the unit. Under no circumstances should the temperature limit control be bypassed or an alternate control used, as a fire risk could result.

This machine must be electrically grounded to avoid possible electrical shock. If an adaptive plug must be used, an electrical ground must be provided.

CLEANING INSTRUCTIONS:

As necessary, the area between the cone slides and above brew cone should be wiped clean with a damp cloth as coffee oils will gradually collect on the surface directly above brew cone.

The brew cone should be rinsed with water after each brew and, occasionally, washed by hand with a mild detergent. Rinse well after washing.

Spray head should be cleaned regularly to prevent blockage. Use cleanout spring regularly to keep fittings and tubes clear.

CAUTION:

DO NOT USE CLEANSING POWDERS, HARSH DETERGENTS, CHEMICALS OR ANY OF THE "SUPER" CLEANERS. SOME OF THESE CLEANERS ARE CAPABLE OF DAMAGING THIS PRODUCT.

READ INSTALLATION INSTRUCTIONS CAREFULLY FOR PROPER CLEANING PROCEDURES.

NOTE:

See the separate instruction sheet included with this manual for servicing and cleaning or delimiting the Diplomat model coffee brewers. These instructions contain valuable information for preventing damage and extending the service life of these brewers.

TRUBLE SHOOTING GUIDE
DIPLOMAT VI AUTOMATIC COFFEE BREWER WITH FAUCET

WARNING:

UNPLUG AND ALLOW TO COOL BEFORE SERVICING UNLESS ELECTRICAL TESTING IS REQUIRED.

UNDER NO CIRCUMSTANCE SHOULD THE HI-LIMIT THERMOSTAT BE BY-PASSED. IN THE EVENT OF FAILURE THE HI-LIMIT THERMOSTAT SHOULD BE REPLACED. USE ONLY ORIGINAL, OR AUTHORIZED, REPLACEMENT PARTS.

INSPECT WIRING CAREFULLY FOR DAMAGE. DAMAGED WIRING MAY CAUSE MALFUNCTIONS AND PREMATURE COMPONENT FAILURE. REPLACE ANY WIRES THAT HAVE LOOSE CONNECTIONS, DAMAGED INSULATION OR SHOW EVIDENCE OF OVER HEATING. WHEN REPLACING WIRES OR TERMINALS USE ONLY LIKE RATED TERMINALS AND WIRES OF THE SAME GAUGE AND INSULATION COVERING.

CHASSIS MUST BE GROUNDED TO PREVENT POSSIBLE ELECTRIC SHOCK.

WATER LEVEL PROBES MUST BE CLEAN AND IN PLACE CORRECTLY FOR LIQUID LEVEL CONTROL SYSTEM TO FUNCTION PROPERLY.

BEFORE CONNECTING TO POWER SUPPLY READ INSTALLATION INSTRUCTIONS COMPLETELY FOR CORRECT PROCEDURES.

BE CERTAIN POWER SUPPLY IS OF THE CORRECT RATING AND POLARITY BEFORE CONNECTING POWER SUPPLY CORD. FAILURE TO HEED THIS WARNING MAY DAMAGE THIS UNIT AND MAY CAUSE INJURY.

1. POWER SWITCH LIGHT DOES NOT COME ON. EQUIPMENT WILL NOT OPERATE:

- A. Is power cord connected to proper, working power supply?
- B. Has power switch been turned on?
- C. Check main circuit breaker in building.
- D. Reset or replace hi-limit thermostat.
- E. Test power switch. Replace if necessary.
- F. Inspect wiring for correct, loose or damaged wires or terminals.
- G. Test power cord. Replace if necessary.

2. UNIT WILL NOT HEAT. POWER SWITCH IS LIGHTED:

- A. Test thermostat. Replace if necessary.
- B. Test immersion element. Replace if necessary.
- C. Inspect wiring for correct, loose or damaged wires or terminals.

3. BREW CYCLE WILL NOT START. UNIT HEATS:

- A. Has start switch been pressed. See liquid level control instruction section.
- B. Inspect, clean or replace spray head, siphon tube and reservoir down spout.
- C. Inspect, clean or replace water level probes. See liquid level control instruction section.
- D. Test optional in-line water filter, check valve or shut-off valve for proper operation or blockage.
- E. Test solenoid valve. Replace if necessary.
- F. Inspect, clean or replace flow control washer or flow control screen.

4. BREW LIGHT DOES NOT COME ON. UNIT HEATS:

- A. Test thermostat. Replace if necessary.
- B. Test brew light. Replace if necessary.
- C. Inspect wiring for correct, loose or damaged wires or terminals.

5. WATER IS TOO HOT OR TOO COLD:

- A. Inspect thermostat bulb for excessive lime buildup.
- B. Is thermostat bulb in clip and attached to immersion element?
- C. Adjust or replace thermostat. (To increase temperature turn adjustment screw in a counter-clockwise direction. To decrease temperature turn adjustment screw clockwise. Turn adjustment screw 1/8 turn maximum per adjustment. Re-test and adjust again if necessary. Recommended temperature is between 182° and 186°. Test below brew cone with water only.) If thermostat cannot be adjusted correctly it should be replaced.
- D. Inspect wiring for correct, loose or damaged wires or terminals.
- E. Test for correct voltage at power supply.

WARNING

IF THE THERMOSTAT CANNOT BE ADJUSTED PROPERLY IT SHOULD BE REPLACED. THE THERMOSTAT IS CALIBRATED AT THE FACTORY AND NO ATTEMPT SHOULD BE MADE TO RECALIBRATE IT. USE ONLY ORIGINAL, OR AUTHORIZED, REPLACEMENT PARTS.

6. BREWER WILL NOT SHUT OFF OR BREWER STARTS BY ITSELF:

- A. Test start switch. Replace if necessary.
- B. Inspect wiring for correct, loose or damaged wires or terminals.
- C. Inspect, clean or replace water level probes. See liquid level control instruction section.
- D. Test liquid level control. Replace if necessary.
- E. Test solenoid valve. Replace if necessary.

7. CONSISTENTLY HIGH OR LOW BEVERAGE LEVEL:

- A. Inspect, clean or replace water level probes. See liquid level control instruction section.
- B. Test optional in-line water filter, check valve or shut-off valve for proper operation or blockage.
- C. Inspect, clean or replace flow control washer or flow control screen.
- D. Test for correct water pressure. Water pressure should be between 30 and 80 PSI.

8. INCONSISTENT BEVERAGE LEVEL:

- A. Inspect and clean spray head, siphon tube and reservoir down spout.
- B. Inspect, clean or replace water level probes. See liquid level control instruction section.
- C. Do not draw water from hot water faucet during brew cycle.
- D. Inspect gaskets. Replace if worn.
- E. Hinged cover must remain closed.
- F. Test brewing temperature. Adjust thermostat if necessary. (See item #5C.)
- G. Test optional in-line water filter, check valve or shut-off valve for proper operation or blockage.
- H. Inspect, clean or replace flow control washer or flow control screen.
- I. Inspect housing for damage.

9. BREW CYCLE TOO SLOW:
 - A. Inspect, clean or replace spray head, siphon tube and reservoir down spout.
 - B. Inspect and clean brew cone. Replace if necessary.
 - C. Test optional in-line water filter, check valve or shut-off valve for proper operation or blockage.
 - D. Inspect, clean or replace flow control washer or flow control screen.

10. BREW CYCLE STOPS AFTER START SWITCH IS RELEASED:
 - A. Inspect, clean or replace water level probes. See liquid level control instruction section.
 - B. Inspect wiring for correct, loose or damaged wires or terminals.
 - C. Test relay. Replace if necessary.
 - D. Test liquid level control. Replace if necessary.

11. BREWS ONLY COLD WATER:
 - A. Test thermostat. Replace if necessary.
 - B. Test immersion element. Replace if necessary.
 - C. Inspect wiring for correct, loose or damaged wires or terminals.

12. WATER DRIPPING FROM SPRAY HEAD:
 - A. Inspect, clean or replace spray head, siphon tube and reservoir down spout.
 - B. Inspect and tighten siphon tube. Replace "O"ring if worn.
 - C. Test brewing temperature. Adjust thermostat if necessary. (See item #5C).

13. WATER LEAKING FROM UNIT:
 - A. Inspect gaskets. Replace if worn.
 - B. Test brewing temperature. Adjust thermostat if necessary. (See item #5C).
 - C. Inspect housing for damage.

14. WATER SIPHONS FROM TANK PERIODICALLY:
 - A. Brew only when brew light is on.
 - B. Inspect, clean or replace spray head, siphon tube and reservoir down spout.
 - C. Inspect, clean or replace water level probes. See liquid level control instruction section.
 - D. Test solenoid valve. Replace if necessary.

15. HI-LIMIT THERMOSTAT KEEPS ACTIVATING:
 - A. Have installation instructions been followed. Tank must be filled with water for hi-limit to function properly.
 - B. Is hi-limit thermostat bulb in clip and attached to immersion element?
 - C. Test hi-limit thermostat. Replace if necessary.
 - D. Test thermostat. Replace if necessary. (See item #5C).
 - E. Inspect hi-limit thermostat for correct, loose or damaged wires or terminals.

WARNING

UNDER NO CIRCUMSTANCE SHOULD THE HI-LIMIT THERMOSTAT BE BY-PASSED. IN THE EVENT OF FAILURE THE HI-LIMIT THERMOSTAT SHOULD BE REPLACED. USE ONLY ORIGINAL, OR AUTHORIZED, REPLACEMENT PARTS.

16. COMPONENTS FAILING REGULARLY:

- A. Inspect wiring for correct, loose or damaged wires or terminals.
- B. Test for correct voltage at power supply.
- C. Test wall receptacle for correct polarity.

17. SOLENOID VALVE CHATTERING OR HOWLING:

- A. Inspect, clean or replace water level probes. See liquid level control instruction section.
- B. Unit should be connected to cold water line only.
- C. Copper tubing should not touch coffee brewer or counter top.
- D. Water pressure should not exceed 85 PSI.
- E. Water hammer. Contact a plumber to correct this problem.

18. TRIPS BUILDING CIRCUIT BREAKER:

- A. Too many appliances on one line.
- B. Circuits amperage rating too low. Call electrician to correct this problem.
- C. Test and inspect wiring for shorting.
- D. Inspect immersion element for damage. Replace if necessary.

19. FAUCET DRIPPING:

- A. Replace seat cup.
- B. Replace faucet.

20. NO WATER AT FAUCET:

- A. Inspect faucet for blockage.

21. WARMERS WILL NOT HEAT. UNIT OPERATES:

- A. Test warmer switch.
- B. Test warmer element.
- C. Inspect wiring for correct, loose or damaged wires or terminals.

22. POOR TASTING COFFEE:

- A. Inspect and clean brew cone, area above brew cone, spray head, siphon tube and reservoir down spout.
- B. Spray head must be in place for proper coffee extraction.
- C. Test brewing Temperature. Adjust thermostat if necessary. (See item #5C)
- D. Incorrect filter paper being used. Try a different brand of filter.
- E. Change amount or brand of coffee being used.

23. WATER OVERFLOWS FILTER PAPER. GROUNDS IN COFFEE:

- A. Inspect brew cone for damage.
- B. Change amount or brand of coffee being used.
- C. Incorrect filter paper being used. Try another brand of filters.
- D. Two filters being used. Use one filter for each brew cycle.
- E. Fine grind coffee may cause over flows. Decrease amount of coffee being used.
- F. If using fine grind coffee use extended brew spray head.
- G. Soft water may cause slowing of water flow through filter paper. Use extended brew spray head and fast flow filter paper

24. LIQUID LEVEL CONTROL SYSTEM:

This coffee brewer uses one liquid level control with two probes and one DPDT relay as its filling control system.

During non-brewing state, the lower probe (faucet probe) keeps water in the housing at a specific level. When water is drawn from the faucet or is lost through evaporation, the lower probe will sense the loss of water and fill the housing up to its normal level.

When coffee is ready to brew, the start button is pressed to energize the relay. Once the relay is energized and the contacts close, the high probe (brew probe) will sense the absence of water and cause the liquid level control to open the solenoid valve and start filling the housing. The filling will stop once the water level reaches the high probe.

NOTE: Water should not be drawn from the faucet during the brew cycle.

FAULT TIMER:

This liquid level control has a fault timer built into it. The fault timer will disable the liquid level control and close the solenoid valve after a continuous filling period of approximately 2 minutes. It serves as an overflow protection.

To reactivate the liquid level control after the fault timer has disabled it, simply turn the power switch off, wait 5 seconds and turn the power switch back on.

A. TYPICAL SYMPTOMS OF FAULT TIMER ACTIVATION:

When starting the brew cycle, the brew cycle stops after the start switch is released.

After resetting the fault timer the brew cycle works correctly once. On subsequent cycles the brew cycle stops after the start switch is released.

B. TO CORRECT FAULT TIMER ACTIVATION:

Adjust brew level to 60 oz.

Time filling cycle. If filling cycle is approximately 2 minutes or more, water pressure may not be correct or water line may be blocked.

Water pressure should be between 30 and 80 p.s.i.

Inspect, clean or replace flow control washer or flow control screen.

Test optional in-line water filter, check valve or shut-off valve for proper operation or blockage.

Clean probes.

C. PROBE LEVEL ADJUSTMENT:

Brew Level Probe: Turn brew level probe in a counter clockwise direction to increase brew level. Clockwise to decrease brew level.

Faucet Level Probe: Faucet level probe should be adjusted to 5/16" from bottom of reservoir to top of screw head. Faucet probe must be tight and in good condition or solenoid valve may chatter.

NOTE: Probes should be clean, in place and adjusted correctly at all times. Dirty or incorrectly adjusted probes may cause malfunctions or may cause fault timer activation.