OPERATING & SERVICE MANUAL

K-LINE AUTOMATIC & FAUCET MODELS

<table>
<thead>
<tr>
<th>FRONT-TO-BACK</th>
<th>SIDE-TO-SIDE</th>
<th>WARMERS</th>
<th>AIRPOTS</th>
<th>TEA URN</th>
</tr>
</thead>
<tbody>
<tr>
<td>KP1A, KP1AF</td>
<td>KSP1A, KSP1AF</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>KP2A, KP2AF</td>
<td>KSP2A, KSP2AF</td>
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</tr>
<tr>
<td>KP3A, KP3AF</td>
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<tr>
<td>KP4A, KP4AF</td>
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</tr>
<tr>
<td>KPPA, KPPAF</td>
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</tr>
<tr>
<td>K3A, K3AF</td>
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<tr>
<td>K5A, K5AF</td>
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<td>5</td>
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</tr>
<tr>
<td>KT3</td>
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<td>1</td>
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</tbody>
</table>

TEA BREWER (KT-3)

KP-2A

KSP-4AF

AIRPOT BREWER (KP-PAC)

CONTENTS

Initial Operation Instructions ....................... 2
Trouble Shooting Guide ............................... 3-6
Component Replacement Instructions ............... 7 & 8
Conversions ......................................... 8 & 9
Schematic ........................................... 9
Parts List & Fig. 2, 3, 4, 5 ....................... 10 & 11

WARNING
DISCARD GLASS DECANTER IF

- CRACKED
- SCRATCHED
- BOILED DRY
- HEATED WHEN EMPTY
- USED ON HIGH FLAME OR OPEN ELECTRIC ELEMENTS.

FAILURE TO DO SO MAY RESULT IN BODILY INJURY

Part No. 700088
PLUMBER’S INSTALLATION INSTRUCTIONS

CAUTION: Power to brewer must be OFF before proceeding with plumbing installation.

1. Flush water line before installing brewer. Brewer should be connected to COLD WATER LINE for best operation.
2. Water pressure should be at least 20 lbs. For less than a 25 ft. run, use 1/4" copper tubing & connect to 1/2" or larger water line. For more than a 25 ft. run, use 3/8" copper tubing & connect to 1/2" or larger water line, and provide an adapter fitting for connection to the brewer.
3. If installed with saddle valve, should have minimum of 1/8" port hole for up to 25 ft., and 5/16" port hole for over 25 ft.
4. Connect incoming water line to the incoming male fitting on the back of brewer. Manufacturer recommends connecting to copper tubing.

INITIAL OPERATION INSTRUCTIONS

WARNING: — Read & follow initial operation instructions before plugging or wiring in machine to electrical circuit. Warranty will be void if machine is connected to any voltage other than that specified on the serial plate.

Newco automatic coffee brewers are designed with the feature of brewing as a pour over, except models K3A, K3AF, K5A and K5AF.

ALL MODELS (EXCEPT KT-3 TEA BREWER)

1. **BEFORE PLUGGING OR WIRING BREWER INTO PROPER VOLTAGE CIRCUIT:** Place empty decanter under brew basket. For airpot brewers, open airpot lid and remove stem from airpot. Place airpot under brew basket. Brewer must be manually filled by pouring three decanters (180 oz.) of water into top pour-in assembly. Water should come through brew basket as third decanter drains out of pour-in basin. If brewer does not have pour in dish, models K3A, K3AF, K5A and K5AF remove top cover of brewer and pour 3 decanters of water into pour-in basin.
2. Adjust timer to deliver desired amount of water. To brew into a regular 60 oz. decanter, little adjustment should be needed. For brewing with the airpot brewer into a 72 oz. airpot, the adjustment should be increased. To increase amount of water, increase time of water flow by turning timer dial slightly clockwise. To decrease amount of water, decrease time of water flow by turning timer dial slightly counter clockwise.
3. Return power to the brewer.
4. Allow 10-15 minutes for water in tank to heat to brewing temperature. (Additional water may drip from brew basket on initial expansion of water in tank, this will not occur thereafter.) If brewer has ready light, brewer is ready when light is on.
5. After water has reached brewing temperature (thermostat will click off and heating noise will stop), place empty decanter under brew basket. Depress start switch & run a cycle of water to remove expanded water from tank.
6. Run one cycle to check for proper temperature with an accurate thermometer. Take the temperature of this water at a point below the brew basket opening, at the start of the cycle and when the decanter is half full. Recommended temperature of the water is approximately 195 degrees Fahrenheit.
7. Do not use this tea brewer at higher altitude locations (5,000 ft. above sea level) — thermostat may have to be re-adjusted to prevent boiling.
8. **CAUTION:** Do not let water flow through sprayhead when handle is depressed. The faucet system is independent of the brewing system and can be operated during the brew cycle. Once brewer is pressurized operate faucet until water flows smoothly.

MODEL KT-3 (TEA BREWER)

1. Remove back panel from brewer.
2. Place tea urn under brewer.
3. Fill tank with water by pouring 3 decanters (180 oz.) of water into receiving pan. Some water will flow through sprayhead. Empty tea urn.
4. Plug in brewer. Close needle valve (Fig. 5A) in tea brewer control panel by turning clockwise.
5. Set timer (Fig. 5B) to 180 seconds. Start brew cycle by pressing start switch.
6. Tea urn should fill with one brew cycle. If not, adjust timer until desired level in tea urn is achieved (3 gallons).
7. Open needle valve by turning counter clockwise 3 to 4 full revolutions. This will give 2 gals. of cold water flowing through dilution tube and 1 gal. of hot water concentrated through sprayhead.
8. Replace back panel.

LIMING

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 every day; this takes less than a minute. In all areas sprayhead should be cleaned at least once a week. Time involved is about thirty seconds. Where hard liming has already occurred, a new complete tank assembly can be installed in five minutes.

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<table>
<thead>
<tr>
<th>MODEL</th>
<th>WIDTH</th>
<th>LENGTH</th>
<th>WEIGHT</th>
<th>DIMENSIONS</th>
<th>ELECTRICAL</th>
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<tbody>
<tr>
<td>KPA</td>
<td>9½&quot;</td>
<td>18&quot;</td>
<td>17½&quot;</td>
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<td>1400 WATT</td>
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<td>KPA2A</td>
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<td>20½&quot;</td>
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<td>1600 WATT</td>
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<tr>
<td>KPA4A</td>
<td>19&quot;</td>
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<td>20½&quot;</td>
<td>45</td>
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<tr>
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<td>17½&quot;</td>
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<tr>
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<td>18&quot;</td>
<td>20½&quot;</td>
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<td>1500 WATT</td>
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<tr>
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<td>17½&quot;</td>
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<td>1400 WATT</td>
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<td>20½&quot;</td>
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<td>17½&quot;</td>
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<td>20½&quot;</td>
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<tr>
<td>K3A</td>
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<td>1600 WATT</td>
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<td>1600 WATT</td>
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<td>17½&quot;</td>
<td>21¼&quot;</td>
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<td>1300 AMPS</td>
</tr>
<tr>
<td>KPPAF</td>
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<td>21¼&quot;</td>
<td>39</td>
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<td>KT-3</td>
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<td>1300 AMPS</td>
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<td>20½&quot;</td>
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<td>1800 AMPS</td>
</tr>
<tr>
<td>K5AF</td>
<td>19&quot;</td>
<td>18&quot;</td>
<td>20½&quot;</td>
<td>53</td>
<td>1800 AMPS</td>
</tr>
</tbody>
</table>

WARRANTY

Newco Coffee Brewers are warranted against defects in workmanship or materials, under normal use, for 90 days from the date of purchase. Brewer parts are warranted against defect for 12 months from date of purchase.

Liability in all events is limited to the purchase price paid and liability under the aforesaid warranty is limited to replacing or repairing any part or parts which are defective in material or workmanship, and returned to our factory, shipping cost prepaid. No warranty expressed or implied, other than the aforesaid is made or authorized by Newco Enterprises, Inc.

Prompt disposition will be made if item proves to be defective, within warranty. Before returning any item, write or call Newco, or the Dealer from whom the product was purchased, giving model number, serial number, and date of purchase, and describe the nature of the defect. If damaged in transit during shipment, file a claim with the carrier.
# TROUBLE SHOOTING GUIDE

## MODELS KP1A, KP2A, KP3A, KP4A, KSP1A, KSP2A, KSP3A, KSP4A, KP1AF, KP2AF, KP3AF, KP4AF, KSP1AF, KSP2AF, KSP3AF, KSP4AF, K3A, K3AF, KPPA, KPPAF AND KT-3

<table>
<thead>
<tr>
<th>SYMPTOM</th>
<th>POSSIBLE CAUSE</th>
<th>WHAT TO CHECK</th>
<th>REMEDY</th>
</tr>
</thead>
<tbody>
<tr>
<td>CANNOT START BREW CYCLE</td>
<td>1. No Water.</td>
<td>1. Incoming water lines &amp; water shut off valve.</td>
<td>1. Be sure water shut off valve is open.</td>
</tr>
<tr>
<td></td>
<td>2. No Power</td>
<td>2. Cord set &amp; plug connections. Fuse or circuit breaker.</td>
<td>2. Check voltage at convenience outlet on component panel.</td>
</tr>
<tr>
<td></td>
<td>3. ON/OFF Switch.</td>
<td>3. Switch continuity. (Normally closed 1 &amp; 2)</td>
<td>3. If ON/OFF switch does not make &amp; break contact, replace ON/OFF switch.</td>
</tr>
<tr>
<td></td>
<td>4. Brew Start Switch.</td>
<td>4. Switch continuity. (Normally open)</td>
<td>4. If brew start switch does not make &amp; break contact, replace brew start switch.</td>
</tr>
<tr>
<td></td>
<td>5. Loose connections in harness.</td>
<td>5. Check 9 pin plug. Socket connections from timer to 9 pin plug, and terminal to solenoid.</td>
<td>5. Be sure these connections are tight.</td>
</tr>
<tr>
<td></td>
<td>6. Timer</td>
<td>6. Socket connects from timer to 9 pin plug, and terminal to solenoid, and black 3 pin plug.</td>
<td>6. (A) Be sure these connections are tight. (B) If connections are tight, replace timer.</td>
</tr>
<tr>
<td></td>
<td>7. Solenoid Valve.</td>
<td>7. (A) Voltage at solenoid valve terminals. Start a brew cycle &amp; check for 120 volts A.C. at terminals. (B) If voltage is present at terminals, check for water at line pressure on the inlet side of solenoid valve.</td>
<td>7. (A) If voltage is not present at terminals refer to step 2 through 6. (B) If voltage is present at terminals &amp; water at line pressure is present on the inlet side of the solenoid, but not present on the outgoing side, replace solenoid.</td>
</tr>
</tbody>
</table>

<p>| NO HOT WATER             | 1. Tank heater | 1. Check the voltage at the tank heater terminals. Voltage should be 120 volts. | 1. (A) If correct voltage is present at the tank heater terminals &amp; water in tank is not being heated, replace tank heater. (B) If voltage is not present at tank heater terminals, refer to step 2. (C) If incorrect voltage is present on tank heater terminals, check voltage at receptacle of brewer. Voltage should be 120 volts. |
|                          | 2. Limit Thermostat or Control Thermostat | 2. With Control thermostat in fully counter clockwise position, check the voltage between the tank heater terminal (white wire) and the incoming terminal on the limit thermostat (blue wire) then the outgoing terminal on the limit thermostat (black wire). Voltage should be 120 volts. | 2. (A) If voltage is present on incoming terminal on the limit thermostat, but not on the outgoing terminal, replace limit thermostat. (B) If voltage is present on the incoming terminal (blue wire) on the control thermostat, but not on the outgoing terminal (black wire), replace control thermostat. |</p>
<table>
<thead>
<tr>
<th>SYMPTOM</th>
<th>POSSIBLE CAUSE</th>
<th>WHAT TO CHECK</th>
<th>REMEDY</th>
</tr>
</thead>
<tbody>
<tr>
<td>STEAMING OR SPITTING</td>
<td>1. Control Thermostat</td>
<td>1. Thermostat points stuck</td>
<td>1. Thermostat should be calibrated or replaced.</td>
</tr>
<tr>
<td>AROUND FUNNEL</td>
<td>2. High Altitude.</td>
<td>or out of calibration.</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>2. For altitudes above 5000 ft. see</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>initial operation instructions.</td>
<td></td>
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</tr>
<tr>
<td>DRIPPING</td>
<td>1. Not siphoning properly</td>
<td>1. Water should flow from</td>
<td>1. (A) Clean sprayhead holes.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>sprayhead for approximately 20</td>
<td>(B) Check tightness of sprayhead tube.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>seconds after timer shuts off.</td>
<td>(C) Insert delimiting spring in water tube all the way into tank and</td>
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<td></td>
<td></td>
<td></td>
<td>saw back &amp; forth five or six times.</td>
</tr>
<tr>
<td></td>
<td>2. Solenoid valve not</td>
<td>2. Solenoid valve assembly.</td>
<td>2. Be sure spring is in place &amp; any particles are cleaned from valve</td>
</tr>
<tr>
<td></td>
<td>seating properly.</td>
<td></td>
<td>seat. If valve seat is worn or mutilated, replace solenoid valve.</td>
</tr>
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<td></td>
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</tr>
<tr>
<td>FAUCET MODELS only</td>
<td>3. Faucet coil is leaking</td>
<td>3. Hot water coil.</td>
<td>3. Tighten fittings or replace coil.</td>
</tr>
<tr>
<td></td>
<td></td>
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</tr>
<tr>
<td>(brewer won’t shut off</td>
<td>2. Start Switch</td>
<td>step 2.</td>
<td></td>
</tr>
<tr>
<td>electrically)</td>
<td>3. Timer</td>
<td>2. Remove wires from switch &amp; check</td>
<td>2. If start switch does not make &amp; break contact, switch should be</td>
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<tr>
<td></td>
<td></td>
<td>continuity.</td>
<td>replaced.</td>
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<td>3. Solid state timer models are</td>
<td>3. Replace timer</td>
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<tr>
<td></td>
<td></td>
<td>not repairable. If timer does not</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>turn off, timer should be replaced.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Timer</td>
<td>step 1.</td>
<td></td>
</tr>
<tr>
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<td>3. Fluctuating water pressure.</td>
<td>2. Timer consistency. Check timer</td>
<td>2. If times are irregular, timer should be replaced.</td>
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<tr>
<td></td>
<td></td>
<td>consistency several times with a</td>
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<td></td>
<td></td>
<td>watch — should be 120 to 150</td>
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<td></td>
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<td>seconds (KT-3 Tea brewer 180</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>seconds)</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>3. Check water pressure.</td>
<td>3. If pressure fluctuates 10-20 PSI during operation of brew cycle,</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>add a pressure regulator to inlet side of brewer. Set regulator</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>pressure at lowest pressure level registered. Readjust timer to give</td>
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<td></td>
<td></td>
<td></td>
<td>correct water level.</td>
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<td>4. Refer to “Dripping” section</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>step 2.</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>5. Flow Washer.</td>
<td>5. Replace flow washer and clean lime from flow control.</td>
</tr>
<tr>
<td>FAUCET MODELS only</td>
<td>6. Coil assembly.</td>
<td>5. Possible lime build up in flow</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>washer.</td>
<td></td>
</tr>
<tr>
<td>FAUCET MODELS only</td>
<td>7. Strainer.</td>
<td>6. Check coil assembly for possible</td>
<td>6. Retighten fittings on coil or replace coil.</td>
</tr>
<tr>
<td>TEA BREWER</td>
<td>8. Strainer.</td>
<td>leak.</td>
<td></td>
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<td>8. Strainer built into flow</td>
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<td></td>
<td></td>
<td>control.</td>
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<tr>
<td>WARMER PLATES RED HOT — OR</td>
<td>1. Brewer wired to wrong voltage.</td>
<td>1. Voltage at brewer receptacle.</td>
<td>1. Check serial tag for correct voltage and correct as necessary.</td>
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<tr>
<td>SOLENOID COIL SMOKING — OR</td>
<td></td>
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<tr>
<td>WATER IN TANK HEATS</td>
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<td>EXCESSIVELY FAST.</td>
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<tr>
<td>SYMPTOM</td>
<td>POSSIBLE CAUSE</td>
<td>WHAT TO CHECK</td>
<td>REMEDY</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>--------------------------------</td>
<td>-------------------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>DRY COFFEE REMAINING IN BREW BASKET AFTER BREW CYCLE IS COMPLETED.</td>
<td>1. Filters.</td>
<td>1. Check if correct filters are being used.</td>
<td>1. Insert correct filter.</td>
</tr>
<tr>
<td></td>
<td>2. Not siphoning properly.</td>
<td>2. Refer to &quot;Dripping&quot; section step 1.</td>
<td>2. Refer to &quot;Dripping&quot; section step 1.</td>
</tr>
<tr>
<td></td>
<td>3. Improper loading of brew basket.</td>
<td>3. Filter &amp; coffee in brew basket.</td>
<td>3. Filter should be centered in basket &amp; coffee bed should be level.</td>
</tr>
<tr>
<td>WEAK COFFEE</td>
<td>1. Filters.</td>
<td>1. Check if correct filters are being used.</td>
<td>1. Insert correct filter.</td>
</tr>
<tr>
<td></td>
<td>2. Water temperature too low.</td>
<td>2. Check water temperature. Refer to &quot;initial operation&quot; instructions.</td>
<td>2. Adjust control thermostat pin wheel to high setting.</td>
</tr>
<tr>
<td></td>
<td>3. Not siphoning properly.</td>
<td>3. Refer to &quot;Dripping&quot; section step 1.</td>
<td>3. Refer to &quot;Dripping&quot; section step 1.</td>
</tr>
<tr>
<td></td>
<td>4. Improper loading of basket.</td>
<td>4. Filter &amp; coffee in basket.</td>
<td>4. Filters should be centered in basket &amp; coffee bed should be level.</td>
</tr>
<tr>
<td></td>
<td>5. Missing sprayhead.</td>
<td>5. Check for sprayhead.</td>
<td>5. Install sprayhead.</td>
</tr>
<tr>
<td>SOLENOID CHATTER OR HOWLING</td>
<td>1. Brewer connected to hot water line.</td>
<td>1. Incoming water line.</td>
<td>1. Brewer should be connected to cold water line.</td>
</tr>
<tr>
<td></td>
<td>2. Vibration.</td>
<td>2. If brewer is on a metal stand or counter, check to see that neither bottom pan or copper tubing to brewer is touching counter.</td>
<td>2. Adjust as necessary.</td>
</tr>
<tr>
<td></td>
<td>3. High water pressure.</td>
<td>3. Water pressure on incoming line.</td>
<td>3. If water pressure is over 90 PSI install pressure regulator &amp; adjust to 50 PSI.</td>
</tr>
<tr>
<td></td>
<td>4. Water hammer.</td>
<td>4. Incoming plumbing.</td>
<td>4. This is not the fault of the brewer. It can usually be corrected by rearranging some plumbing or adding an air chamber to the incoming water line.</td>
</tr>
<tr>
<td></td>
<td>5. 60 Cycle vibration.</td>
<td>5. Check tightness of nut on top of the solenoid valve.</td>
<td>5. Tighten nut on top of solenoid valve.</td>
</tr>
<tr>
<td>COLD WARMER</td>
<td>1. Warmer defective.</td>
<td>1. Voltage at warmer terminals. Should be 120 volts A.C.</td>
<td>1. If voltage is present on terminals but warmer will not heat, replace warmer.</td>
</tr>
<tr>
<td></td>
<td>2. Warmer ON/OFF switch.</td>
<td>2. If voltage is not present on warmer terminals, check continuity of switch.</td>
<td>2. If switch does not make &amp; break when turned on &amp; off, replace switch.</td>
</tr>
<tr>
<td></td>
<td>3. Bad Harness.</td>
<td>3. Check connections between harness &amp; switch &amp; switch &amp; warmer.</td>
<td>3. Be sure all connections are tight.</td>
</tr>
<tr>
<td>SYMPTOM</td>
<td>POSSIBLE CAUSE</td>
<td>WHAT TO CHECK</td>
<td>REMEDY</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>------------------------------</td>
<td>--------------------------------------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>CONDENSATION INSIDE OF CABINET</td>
<td>1. Tank lid gasket.</td>
<td>1. Check tank lid gasket for nicks or cuts.</td>
<td>1. Replace gasket.</td>
</tr>
<tr>
<td></td>
<td>2. Sprayhead tube assembly.</td>
<td>2. Check tightness of sprayhead tube assembly to tank lid.</td>
<td>2. Tighten sprayhead tube assembly to tank lid.</td>
</tr>
<tr>
<td></td>
<td>3. Thermostat grommet.</td>
<td>3. Check grommet for tight fit or nicks or cuts.</td>
<td>3. Readjust grommet to fit tank lid or replace thermostat.</td>
</tr>
<tr>
<td></td>
<td>4. Receiving pan nut.</td>
<td>4. Receiving pan nut loose.</td>
<td>4. Tighten receiving pan nut.</td>
</tr>
<tr>
<td></td>
<td>5. Water thermostat above 210 degrees.</td>
<td>5. Check thermostat calibration.</td>
<td>5. Calibrate or replace thermostat.</td>
</tr>
<tr>
<td>FAUCET WATER FLOW TOO FAST OR TOO SLOW (Faucet models only)</td>
<td>1. No water.</td>
<td>1. (A) Incoming water line shut off valve. (B) Needle valve. (C) Faucet clogging.</td>
<td>1. (A) Water shut off valve should be open. (B) Needle valve should be open. (C) Clean or rebuild faucet.</td>
</tr>
<tr>
<td></td>
<td>2. Slow Flow.</td>
<td>2. Turn needle valve counter clockwise.</td>
<td>2. Increase flow.</td>
</tr>
<tr>
<td></td>
<td>3. Fast Flow.</td>
<td>3. Turn needle valve clockwise.</td>
<td>3. Decrease flow.</td>
</tr>
<tr>
<td>FAUCET DRIPPING (Faucet models only)</td>
<td>1. Clogged valve seat.</td>
<td>1. Valve seat.</td>
<td>1. Disassemble &amp; clean, or replace as necessary. Refer to faucet replacement and repair kit.</td>
</tr>
</tbody>
</table>
CAUTION: Disconnect brewer cord from electrical outlet before removal of any panel or replacement of any component.

COMPONENT REPLACEMENT INSTRUCTIONS

To access tank assembly; limit thermostat; control thermostat; tank heating element; switches; faucet; & hot water coil, proceed as follows:

1. Remove sprayhead & sprayhead nut (Fig. 1 No. 12) by unscrewing in counterclockwise direction.
2. Remove brewer lid. For models with upper warmer, disconnect electrical plug (Fig. 4A) from upper warmer.
3. Unscrew inlet/discharge tube (Fig. 2 O) from upper right hand side of automatic control panel then remove inlet/discharge tube from receiving pan.
4. Remove pour-in basin assy (Fig. 2 N).

TANK ASSEMBLY, AUTOMATIC (704124)

1. Disconnect polarized plug (Fig. 3 B) connected to tank.
2. Lift tank completely out of brewer. Replace with new tank assembly by following reverse procedures.

TANK ASSEMBLY, FAUCET (704125)

1. Disconnect polarized plug (Fig. 4 B) connected to tank.
2. Disconnect flex tubing from hot water coil elbows (Fig. 4, E & F).
3. Lift tank completely out of brewer. Replace new tank assembly by following reverse procedures.

THERMOSTAT, HI LIMIT (1000174) (Fig. 4 I)

1. Remove wires from limit thermostat.
2. Lift retaining spring slightly to remove old limit thermostat.
3. Check continuity of the new limit thermostat before installing.
4. Slide new limit thermostat into place under the retaining spring. Reconnect wire leads to new limit thermostat.
5. Make sure the limit thermostat is securely mounted & that all electrical connects are tight & isolated.

THERMOSTAT, MAIN (704227) (Fig. 3 Y)

1. Remove the two screws (Fig. 3 Z) from the back of bracket.
2. Remove grommet (Fig. 1 No. 13) from top of tank lid by pressing up with thumbs. Pull capillary bulb (Fig. 1 No. 14) out through hole.
3. Unplug thermostat black & blue wires from tank lid harness.
4. Replace thermostat by following reverse procedures.
5. To calibrate thermostat, rotate pin wheel adjustment (Fig. 3 P) counter clockwise to increase temperature.

ELEMENT, TANK HEATING (202067) (Fig. 1 No. 15)

1. Follow instructions for tank assembly removal.
2. Remove the 8 tank lid retaining nuts (Fig. 4 G).
3. Disconnect black & white wires from the tank heating element (Fig. 4 H).
4. Remove the 2 nuts holding the tank heating element.
5. Install the new tank heating element. Replace tank heating element washers & tighten nuts securely to insure proper sealing.
6. Inspect tank lid gasket & replace when necessary.
7. Reassemble by reversing steps 3 through 1.

ELEMENT, WARMING (100187) (Fig. 2 No. 16)

1. Remove screws holding warmer plate (Fig. 2 V)
2. Lift plate up & disconnect wire leads.
3. Remove 2 nuts holding the retaining plate & warmer element to plate.
4. Replace warmer element following reverse procedures.

SWITCH, BREW (201985) (Fig. 4 K) and SWITCH, LIGHTED ROCKER (100085) (Fig. 4 L)

1. Disconnect wires from switch, noting location of each wire.
2. Remove switch by compressing spring clip on top & bottom of switch, press forward.
3. Replace switch following reverse procedures.

FAUCET ASSEMBLY (100145) (Fig. 4 M)

1. Disconnect flex tube from faucet fitting.
2. Remove brass nut & washer from faucet fitting.
3. Pull out faucet assembly from front of brewer. Replace new faucet following reverse procedures.

COIL, HOT WATER (771031)

1. Follow instructions for tank assembly removal.
2. Remove the 8 tank lid retaining nuts (Fig. 4 G).
3. Lift the tank lid assembly from tank.
4. Remove the 2 compression nuts from top of hot water coil. (Inspect tank lid gasket & replace if necessary)
5. Replace with new hot water coil by following reverse procedures.

FIGURE 1
CAUTION: Disconnect brewer cord from electrical outlet before removal of any panel or replacement of any component.

CONTROL PANELS

To gain access to the automatic control panel or tea brew control panel remove brewer lid. On models with an upper warmer disconnect electrical plug from upper warmer, remove back panel. Disconnect 9 pin plug. Remove control panel by loosening the 2 knurled nuts.

COMPONENT REPLACEMENTS FOR AUTOMATIC CONTROL PANEL (781061)

TIMER ASSEMBLY (700062) (Fig. 3 No. 4)
1. Disconnect electrical plug (Fig. 3 No. 6) from timer.
2. Remove white & gray wire tabs from solenoid valve terminal tabs (Fig. 3 No. 7).
3. Remove screws from timer assembly bracket.
4. Replace timer assembly by reversing procedure.

FLOW CONTROL ASSEMBLY (101190) (Fig. 3 No. 3)
1. For easy access remove timer assembly (see instructions).
2. Remove 1/4" swivel nut (Fig. 3 No. 10) from flow control.
3. From opposite end of L-shaped copper tubing disconnect 1/4" flare nut (Fig. 3 No. 9).
4. Replace new fast control & follow reverse procedure.

SOLENOID (100250) (Fig. 3 No. 2)
1. Follow steps through 3 of flow control replacement.
2. Unscrew 1/4" swivel nut from solenoid. Replace solenoid following reverse procedure (insuring all arrows on flow control & solenoid point to the right side of automatic control panel).

STRAINER (202003) (Fig. 3 No. 5)
1. For easy access remover timer assembly (see instructions).
2. Remove 1/4" flare nut from each side of strainer.
3. Remove strainer & replace with new strainer following reverse procedure.

CONVERSIONS

FRONT-TO-BACK to SIDE-TO-SIDE (or visa versa) SWITCH PLATES
1. Remove brewer lid. For models with upper warmer, disconnect electrical plug (Fig. 4 A) from upper warmer plate.
2. Remove pour in basin assy (Fig. 2 N).
3. Remove desired blank panel by unscrewing 4 nuts.
4. Remove knurled nuts (Fig. 2 W) on switch plate.
5. Slide switch plate panel through opening to inside of brewer by turning panel. Continue sliding switch panel through to desired opening.
6. Reassemble by reversing steps 4 through 1.

BREW RAILS
1. Loosen brew rail screws. DO NOT REMOVE. Slide off brew rails.
2. Reposition brew rails. The narrow part of brew rail denotes entrance of brew basket.
3. Slide brew rails under screws & tighten screws.

ROTATION OF WARMERS
UPPER STEP-UP WARMER (Two and four burner models)
1. Remove brewer lid. Disconnect electrical plug from upper warmer plate.
2. Turn brewer lid upside down. Remove screws.
3. While holding warmer to brewer lid turn lid right side up.
4. Reposition warmer by increments of 90 degree turns.
5. While holding warmer to brewer lid turn upside down.
6. Align 4 holes of brewer lid to the holes on warmer base.
7. Reassemble by reversing steps 2 and 1.

3-WARMER BASE WITH STEP UP WARMER (Three and four burner models)
1. Remove screws from porcelain plate.
2. Gently lift porcelain plate & place to side.
3. Remove the 2 screws from bracket.
4. Rotate step-up warmer to desired position & align bracket with 2 holes in the base.
5. Reverse steps 3 through 1.

BASE CHANGES
1. Follow instructions for tank assembly removal.
2. Remove control panel by loosening the 2 knurled nuts. Lift control panel approx. 1", pull the base out while pushing back & down on the top.
3. For all models (except Airpot & Tea), unplug red, white & black wire lead for base warmer.
4. Remove the 2 knurled screws & the 4 screws (Fig. 2 U) located on base of housing.
5. Remove housing from base. On all models (except Airpot and Tea) pull warmer wires out through plate on base of housing.
6. Replace housing on new base. On all but airpot & tea bases pull red, white & black warmer wires through hole in base plate. Align holes of new base with holes on brewer housing. Align warmer wire hole on base with large hole in base plate (On all bases except airpot & tea).
7. Reverse steps 6 through 1.

LID CHANGES
POUR-IN ONLY to POUR-IN WITH STEP-UP WARMER or 2 BURNER STEP-UP WARMER
2. Replace 6 brewer lid screws & tighten.

POUR-IN WITH STEP-UP WARMER to POUR-IN ONLY
1. Remove brewer lid. Disconnect electrical plug for upper warmer.
2. Replace with pour-in only lid. Replace 6 brewer lid screws & tighten.
CAUTION: Disconnect brewer cord from electrical outlet before removal of any panel or replacement of any component.

CONVERSIONS (Continued)

TO ACCESS INSIDE OF BREWER
1. Remove sprayhead & sprayhead nut (Fig. 1 No. 12) by unscrewing in counter-clockwise direction.
2. Remove brewer lid. For models with upper warmer disconnect electrical plug (Fig. 4 A) from upper warmer.
3. Unscrew inlet/discharge tube (Fig. 2 O) from upper right hand side of automatic control panel. Then remove inlet/discharge tube from receiving pan.
4. Remove pour in basin assy (Fig. 2 N).
5. Remove back panel.

AUTOMATIC TO POUR-OVER
1. Loosen 2 knurled nuts on automatic control panel (Fig. 2 R). Remove automatic control panel & replace with pour-over control panel.
2. Disconnect black & blue wires on start switch (Fig. 4 K). Refasten black & blue wires with a line splice connector.
3. Replace start switch with a blank dummy switch cover. Connect wires for start switch (now unused) together with line splice connector.
4. Plug receiving pan hole with screw & washer.
5. Reassemble by reversing "access" steps.

AUTOMATIC TO FAUCET
1. Remove plug (Fig. 2 X) in switch panel to provide opening for faucet.
2. Remove brass nut & star washer from faucet assembly. Insert faucet through opening in switch panel. Position faucet then fasten with brass nut & star washer.
3. Remove tank assembly by unscrewing sprayhead & sprayhead nut (Fig. 1 No. 12). Unplug polarized plug (Fig. 4 B) & lift tank assembly out of brewer. Place faucet tank assembly in brewer. Reconnect polarized plug, sprayhead nut & sprayhead.
4. Connect the 12" flex tubing to faucet & to the hot water outlet (Fig. 4 F) on tank lid.
5. Connect the 10" flex tubing to cold water inlet on tank lid (Fig. 4 E) & to the top left hand fitting (Fig. 2 No. 8 B) on automatic control panel.
6. Replace pour in basin assy. Remove screw plugging hole in pour in basin.
7. Insert inlet/discharge tube into pour in basin. Slide gasket up to seal hole in basin. Tighten flare nut to top right hand fitting on automatic control panel.
8. Adjust water flow to water faucet by adjusting needle valve (Fig. 2 No. 1). (Turn counter-clockwise to open.)
9. Replace back panel. Reconnect electrical plug to warmer (on models with upper warmer). Replace brewer lid.
10. Refer to Plumber's Installation Instructions.

AUTOMATIC to TEA BREWER
1. Follow instructions for base changes. Do not replace brewer lid, tank assembly, back panel and pour in basin.
2. Replace left hand track guide with tea brewer track guide.
3. Remove plug from sprayhead plate. Insert 1/4" flared male connector, with longer side on inside of brewer. Fasten with star washer & nut.
4. Place tank assembly into brewer. Fasten sprayhead nut. Replace 5 hole sprayhead with 6 hole sprayhead.
5. Insert tea brewer control panel and fasten knurled nuts.
6. Reconnect polarized plug.
7. Connect int. dilution tube by connecting to fitting on top right hand side of tea brewer control panel & to 1/4" flared male connector on sprayhead plate.
8. Replace pour in basin assy. Insert tea brewer inlet/discharge tube through hole in basin (sliding gasket up to seal hole). Insert tea brewer inlet/discharge tube into basin. Connect opposite end of tea brewer inlet/discharge tube to fitting on top left hand side of tea brewer control panel.
9. Attach ext. dilution tube to 1/4" flared male connector located on outside of brewer on sprayhead plate.
10. Refer to plumber's installation instructions.
11. Refer to Tea Brewer initial operation instructions for dilution setting.
12. Replace back panel.
13. Replace step-up cover with "pour-in screen only" cover. (On models with upper step-up warmer).

WIRING SCHEMATIC — ALL MODELS

[Diagram of wiring schematic with labels and connections, including one warmer base, three warmer base, and automatic circuit diagrams.]

Electrical Schematic: K-Model
Voltage 120V - 14 1000 Watt
By J.P.W. 11/87

-9-
FIGURES 1, 2, 3, 4 & 5 PARTS LIST

A. Electrical plug, upper warmer
B. Wire Harness Tank Lid (700008)
C. Flex Tube 10 1/4" (700050)
D. Flex Tube 12 1/2" (700048)
E. Cold water inlet elbow, hot water coil (201247)
F. Hot water outlet elbow, hot water coil (201247)
G. Nuts, tank lid, 8/32 hex s/s (100061)
H. Terminals, tank element
I. Thermostat, Hi Limit (100174)
J. Retaining Spring
K. Switch, brew (201985)
L. Switch, Lighted Rocker (100085)
M. Faucet Assembly (100145)
N. Pour In Basin Assy (704110)
O. Inlet/Discharge tube (771001)
P. Thermostat pin wheel
Q. 9 pin main harness plug (701201)
R. Component Panel Assy, Auto/Faucet (781061)
S. Tank assembly, with sprayhead, Automatic (700295), Faucet (704287)
T. Plate, switch
U. Screw, 8/32 x 3/8, base (511027)
V. Screw, 4/40 x 3/38, warming plate (100055)
W. Nut, knurled, 8/32, brass, panel (700021)
X. Plug, faucet hole cap (511026)
Y. Thermostat, Main (704227)
Z. Screw, 8/32 x 3/4, thermostat bracket (100242)

1. Needle valve, 1/4" flare x 1/8 NPT (767115)
2. Solenoid Valve, Skinner (100250)
3. Flow control assembly (101190)
4. Timer assembly (700082)
5. Strainer, water 1/4" flare (202003)
6. Electric plug, timer
7. Terminal tabs, solenoid
8. Male connector, control panel (100176)
   (a) right hand side
   (b) left hand side
9. 1/4" male flare nut
10. 1/4" swivel flare nut for flow control
11. 1/4" swivel flare nut for strainer
12. Sprayhead, 5 hole s/s (100024)
13. Grommet
14. Capillary bulb
15. Element, tank heating, 1250W, 120V (202067)
16. Plate, porcelain, brown (100020)
17. Element, warming, 100W, 120V (100187)

Tea Brewer Component Panel Assembly Replacement Parts
18. Needle valve, angle 1/4" flare (767110)
19. Flow control assembly, 1.0 GPM (101100)
20. Internal dilution tube, tea (800008)
21. External dilution tube, tea (701157)
22. Inlet/discharge tube, tea (701158)
23. Tee, street 1/8 x 1/8 x 1/8 NPT (767105)
# K Brewer Parts List

## Containers:
- 700900  AIRPOT, 72 OZ.
- 800005  TEA URN, 3 GALLON
- 800010  HANDLE, TEA URN
- 800015  TEA URN W/HANDLE 3 GALLON

## Bases:
- 781005  BASE WARMER 1 STATION
- 781010  BASE AIRPOT
- 781036  BASE WARMER 3 STATION
- 781115  BASE TEA

## Covers:
- 100015  POUR IN DISH W/SCREEN
- 700051  COVER POUR IN ONLY
- 700058  COVER W/2 WARMERS NO POUR IN
- 781017  COVER POUR IN & STEP UP/WARMER

## Panels:
- 781060  COMPONENT PANEL ASSY, POUR OVER
- 781061  COMPONENT PANEL ASSY, AUTO/FAUCET
- 781062  COMPONENT PANEL ASSY, TEA

### Component Panel Assy Parts
#### For Pour Over & Auto/Faucet:
- 100250  SOLENOID VALVE SKINNER
- 700062  TIMER ASSY
- 101190  FLOW CONTROL ASSY W/.190 GPM
- 202003  STRAINER, WATER 1/4" FLARE

### Component Panel Assy Parts
#### For Tea:
- 100250  SOLENOID VALVE SKINNER
- 700082  TIMER ASSY
- 101100  FLOW CONTROL ASSY W/1.0 GPM

## Tanks:
- 704119  TANK ONLY
- 704120  TANK ASSY, POUR OVER/AUTO, WITH SPRAYHEAD
- 704124  TANK ASSY, POUR OVER/AUTO, W/O SPRAYHEAD
- 704287  TANK ASSY, FAUCET, WITH SPRAYHEAD
- 704125  TANK ASSY, FAUCET, W/O SPRAYHEAD
- 100633  THERMOSTAT, HI LIMIT
- 700008  WIRE HARNESS, TANK LID
- 704221  GASKET, TANK
- 704227  THERMOSTAT, MAIN
- 704236  ELEMENT, TANK HEATING, 1250W
- 705538  TANK LID W/ THERMOSTAT BRACKET
- 771031  COIL, HOT WATER

## Miscellaneous Parts:
- 100008  PLATE, PORCELAIN, BLACK
- 100010  PLATE ASSY, PORCELAIN, BLACK
- 100020  PLATE, PORCELAIN, BROWN
- 100032  PLATE ASSY, PORCELAIN, BROWN
- 100187  ELEMENT, WARMING, 100 W, 120V
- 781030  BREW RAIL R.H.
- 781031  BREW RAIL L.H.
- 800016  BREW RAIL L.H. TEA
- 771001  INLET/DISCHARGE TUBE - REGULAR
- 701157  DILUTION TUBE TEA BREWER - EXT.
- 800008  DILUTION TUBE TEA BREWER - INT.
- 701158  INLET/DISCHARGE TUBE - TEA
- 100079  FAUCET ASSEMBLY
- 700048  FLEX HOSE 12 1/2"
- 700050  FLEX HOSE 10 1/4"
- 705561  FAUCET W/FLEX HOSES
- 100385  BREW BASKET, UNIVERSAL
- 704110  POUR IN BASIN ASSY
- 201173  NUT, SPRAYHEAD, 7/16-20
- 700004  SPRAYHEAD TUBE ASSY
- 100024  SPRAYHEAD 5 HOLE
- 100225  GASKET, SPRAYHEAD
- 100095  SWITCH, LIGHTED ROCKER
- 201985  SWITCH, BREW
- 100425  SCREW, KNURLED
- 700021  NUT, KNURLED, BRASS, 8/32
- 201991  SOLENOID, REPAIR KIT SKINNER
- 202010  DIAPHRAGM FLOW CONTROL .190 GPM
- 800001  DIAPHRAGM FLOW CONTROL 1.0 GPM
- 700039  POWER CORD
- 700042  WIRE HARNESS, UPPER
- 700043  WIRE HARNESS, LOWER

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