NEWCO OPERATING & SERVICE MANUAL

K-LINE POUR OVER MODELS

FRONT-TO-BACK
KP-1
KP-2
KP-3
KP-4
KP-P

SIDE-TO-SIDE
KSP-1
KSP-2
KSP-3
KSP-4

WARMERS
1
2
3
4
0

AIRPOTS
0
0
0
2

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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
INITIAL OPERATION INSTRUCTIONS

WARNING — Read and follow installation 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 name plate.

1. Place empty decanter under brew basket, raise top evaporation cover and pour three decanters of water into the top pour-in screen. Water should come through brew basket as the third decanter of water drains out of pour in basin.
2. Brewer is shipped with thermostat turned on, (full counter clockwise position). Plug or wire in machine to 120 V. circuit.
3. Allow 10 to 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).
4. After water has reached brewing temperature (thermostat will click off and heating noise will stop) pour 1 decanter (60 oz.) of water in pour-in screen. More than 1 decanter of water will flow into decanter below brew basket due to water expansion in the tank. Machine is now ready to use. (Brewers with optional heating lights will give visual signal).
5. Pour one decanter of water through pour-in screen to check for proper temperature setting with an accurate thermometer. Take the temperature of this water at a point below the brew basket opening, at the start of the cycle and when the decanter is half full. Recommended temperature of the water is approximately 195° F.
6. Due to higher altitude locations (5000 ft. above sea level) thermostat may have to be readjusted lower to prevent boiling.

OPERATING AND BREWING PROCEDURE

1. Place filter into brew basket.
2. Put the proper amount of coffee into the filter
3. Slide brew basket into holder.
4. Place empty decanter on warmer located directly under brew basket and turn corresponding warmer switch to ON position.

NOTE: For airports, open airpot lid and remove pump stem from airpot. Place airpot under brew basket and turn ON/OFF switch to "ON" position
5. Pour decanter of water through pour-in screen into pour in basin.
6. Hot water will be delivered through the sprayhead. This distributes the hot water evenly over the coffee bed within the brew basket. The coffee brew will drain from the brew basket into the decanter below.
7. The resultant coffee brew should be crystal clear and have the desired properties attainable through excellent extraction.
8. TURN OFF WARMER WHEN NOT IN USE. (Red light indicates warmer is on.)
9. To clean brew basket simply remove from brew basket holder and dump filter into waste basket. The brewing process, as described above, can now be started again.

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 bad liming has already occurred, a new complete tank assembly can be installed in five minutes.

<table>
<thead>
<tr>
<th>MODEL</th>
<th>WIDTH</th>
<th>LENGTH</th>
<th>HEIGHT</th>
<th>SHIPPING WEIGHT</th>
<th>WATTS</th>
<th>AMP</th>
<th>WARMERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>KP-1</td>
<td>9 1/4&quot;</td>
<td>18&quot;</td>
<td>17 1/2&quot;</td>
<td>33</td>
<td>1400</td>
<td>13.5</td>
<td>1</td>
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<td>18&quot;</td>
<td>20 1/2&quot;</td>
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<td>18&quot;</td>
<td>17 1/2&quot;</td>
<td>41</td>
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<td>14</td>
<td>1</td>
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<td>18&quot;</td>
<td>20 1/2&quot;</td>
<td>45</td>
<td>1700</td>
<td>15</td>
<td>4</td>
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<td>35</td>
<td>1300</td>
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</tbody>
</table>

WARRANTY

Newco Coffee Brewers are warranted against defects in workmanship or materials, and to normal use, for 90 days from the date of purchase. Parts and labor are warranted for defects in workmanship, and returned to our factory, shipping cost prepaid. No warranty 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 damage was incurred during transit to you, file a claim with the carrier.
<table>
<thead>
<tr>
<th>SYMPTOM</th>
<th>POSSIBLE CAUSE</th>
<th>WHAT TO CHECK</th>
<th>REMEDY</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO HOT WATER</td>
<td>1. Tank Heater. 2. Hi-Limit Thermostat or Main Thermostat</td>
<td>1. Check the voltage at the tank heater terminals. Voltage should be 120 volts A.C. or 240 A.C. Check serial tag for proper voltage. 2. Check the voltage between the white wire on the tank heater terminal and incoming terminal (blue wire) on the hi-limit thermostat, then the outgoing (black wire) terminal on the hi-limit thermostat.</td>
<td>1. (A) If correct voltage is present at the tank heater terminals and water 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 at tank heater terminals, check voltage at outlet. 2. (A) If voltage is present on incoming terminal on the hi-limit thermostat, but not on the outgoing terminal, replace hi-limit thermostat. (B) Check voltage between black and white wire on receptacle. If voltage is not present check outlet or circuit breaker. (C) If voltage is not present on incoming terminal of hi-limit thermostat, replace main thermostat.</td>
</tr>
<tr>
<td>STEAMING OR SPITTING AROUND FUNNEL</td>
<td>1. Main Thermostat 2. High Altitude</td>
<td>1. Thermostat points stuck or out of calibration. 2. For altitude above 5,000 ft. see initial operation.</td>
<td>1. (A) Adjust thermostat (B) Thermostat should be calibrated or replaced.</td>
</tr>
<tr>
<td>DRIPPING</td>
<td>1. Not Siphoning properly</td>
<td>1. Water should flow from sprayhead freely!</td>
<td>1. (A) Clean sprayhead holes. (B) Check tightness of sprayhead tube. (C) Insert deliming spring in water tube and air tube all the way into tank and saw back and forth five or six times.</td>
</tr>
<tr>
<td>DRY COFFEE REMAINING IN BREW BASKET AFTER BREW CYCLE HAS BEEN COMPLETED</td>
<td>1. Filters. 2. Not siphoning properly. 3. Improper loading of brew basket.</td>
<td>1. Check if correct filters are being used. 2. Refer to &quot;Dripping&quot; section, step 1. 3. Filter and coffee in brew basket.</td>
<td>1. Insert correct filter. 2. Refer to &quot;Dripping&quot; section, step 1. 3. Filter should be centered in brew basket and coffee bed should be level.</td>
</tr>
<tr>
<td>COLD WARMER STATION (All models except KP-P)</td>
<td>1. Warmer — defective. 2. Warmer On-Off Switch. 3. Bad harness.</td>
<td>1. Voltage at warmer terminals should be 120 volts A.C. 2. If voltage is not present on warmer terminals, check continuity of switch. 3. Check connections between harness and switch and switch and warmer.</td>
<td>1. If voltage is present on terminals, but warmer will not heat, replace warmer. 2. If switch does not make and break when turned on and off, replace switch. 3. Be sure all connections are tight.</td>
</tr>
<tr>
<td>OVER FLOWING DECANTER</td>
<td>1. Receiving decanter not completely empty when brew cycle is started. 2. Not siphoning properly.</td>
<td>1. Operating instructions. 2. Water should flow from sprayhead freely.</td>
<td>1. Always start cycle with receiving decanter empty. 2. Refer to dripping section.</td>
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</tbody>
</table>
COMPONENT REPLACEMENT INSTRUCTIONS

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

TANK ASSEMBLY, POUR OVER (704120)
To replace tank, tank heater and hi-limit or main thermostat.
1. Remove sprayhead & sprayhead nut (Fig 1 No. 1) by unscrewing in counter clockwise direction.
2. Remove brewer lid. Disconnect electrical plug from upper warmer plate. (Not necessary on models KP-1, KSP-1, KP-3, KSP-3 & KP-P).
3. Remove pour in basin assembly (Fig 4 No. 4)
4. Disconnect polarized plug that connects to tank (Fig 1 No. 2).
5. Lift tank completely out of brewer.

THERMOSTAT, HI LIMIT (100174)
1. Remove wires from hi-limit thermostat. (Fig 2 No. 1)
2. Lift retaining spring slightly to remove old hi-limit thermostat.
3. Check continuity of new hi-limit thermostat before installing.
4. Slide new hi-limit thermostat into place under the retaining spring. Reconnect wire leads to new hi-limit thermostat.
5. Make sure the hi-limit thermostat is securely mounted & that all electrical connections are tight & isolated.

THERMOSTAT, MAIN (704227)
1. Remove the two screws from the back of bracket.
2. Remove grommet (Fig 2 No. 4) from top of tank lid by pressing up with thumb. Pull capillary bulb (Fig 1 No. 3) out through hole.
3. Unplug thermostat black & blue wires from tank lid harness.
4. Replace main thermostat by following reverse procedure.
5. To calibrate thermostat, rotate pin wheel adjustment counter clockwise to increase temperature. (Fig 2 No. 3).

ELEMENT, TANK HEATING (202067)
1. Remove the 8 lid retaining nuts. (Fig 2 No. 5)
2. Lift tank lid assembly out of tank.
3. Disconnect black & white wires from the tank heating element.
4. Remove the 2 nuts (Fig 2 No. 6) holding the tank heating element. Remove 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.

SWITCH, LIGHTED ROCKER (100085)
1. Remove brewer lid.
2. Remove pour in basin. (Fig 4 No. 4)
3. Disconnect wires on back of switch, noting location of each wire. (Fig 3).
4. Compress spring clip on top & bottom of switch & remove by pressing forward.
5. Replace switch following reverse procedure.

FIGURE 1
1. Sprayhead (100024)
2. Wire harness, tank lid (700008)
3. Capillary bulb.
4. Tank heating element (704236)
5. Grommet

FIGURE 2
1. Thermostat, Hi Limit (100174)
2. Main Thermostat (704227)
3. Pin Wheel Adjustment
4. Grommet
5. 8-32 Retaining nut (100061)
6. Tank heating element nuts (100190)

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

CONVERSIONS

FRONT-TO-BACK to SIDE-TO-SIDE (or visa versa)

SWITCH PLATES
1. Remove brewer lid. Disconnect electrical plug from upper warmer plate. (Not necessary on models KP-1, KSP-1, KP-3, KSP-3 & KP-P)
2. Remove pour in basin assembly. (Fig. 4 No. 4)
3. Remove desired blank panel by unscrewing 4 nuts. (Fig. 4 No. 5)
4. Remove knurled nuts on switch plate. (Fig. 4 No. 6)
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 narrower part of brew rail denotes entrance of brew basket.
3. Slide brew rails under screws & tighten screws.

ROTATION OF BASES

UPPER STEP-UP WARMER
(Model KP-2, KSP-2, KP-4, KSP-4)
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" 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
(Model KP-3, KSP-3, KP-4, KSP-4)
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 back panel. Unplug main wiring harness. (Fig. 4 No. 1)
3. Remove component panel by loosening the 2 knurled nuts. (Fig. 4 No. 2). Lift component panel approx. 1", pull the base out while pushing back & down on the top.
4. For all models (except KP-P & KT) unlock red, white & black wire lead for base warmer.
5. Remove the 2 knurled screws & the 4 screws located on base of housing. (Fig. 4 No. 3)
6. Remove housing from base. On all models except KP-P & KT pull warmer wires out through plate on base of housing.
7. Replace housing on new base. On all, except 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).
8. Reassemble by reversing steps 6 through 1.

LID CHANGES

POUR IN ONLY TO POUR IN WITH 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.
POUR-OVER to AUTOMATIC

1. Remove brewer lid. Disconnect electrical plug from upper warmer (not necessary on models KP-1, KSP-1, KP-3, KSP-3, KP-P).
2. Remove back panel.
3. Disconnect 9 pin plug (Fig. 4 No. 1). Remove pour-over component panel by loosening 2 knurled nuts. Lift component panel approx. 1", pull base out while pushing back & down on the top.
4. Insert automatic component panel (Fig. 5) by reversing step 3.
5. Remove pour in basin assembly (Fig. 4 No. 4).
6. Remove blank switch cover by squeezing tabs & pushing out (Fig. 4 No. 8).
7. Pull apart black & blue wires from line splice connector.
8. Insert start switch with #1 terminal tab on bottom side. Connect blue wire to #3 terminal tab & black wire to #2 terminal tab.
9. Replace pour in basin. Remove screw that plugs hole in basin (Fig. 4 No. 9).
10. Insert inlet tube through hole in basin. Slide gasket up to seal hole in basin. Tighten flare nut to male connector on top right hand side of automatic component panel (Fig. 5 No. 1). Make sure needle valve (Fig. 5 No. 33) is shut-off (clockwise — all the way to the right) and the faucet outlet tube on top left hand side of automatic component panel is capped off (Fig. 5 No. 2).
11. Reverse steps 2 through 1.
12. Refer to Plumber's Installation Instructions.

POUR-OVER to FAUCET

1. Follow steps 1 through 8 on POUR-OVER to AUTOMATIC conversion.
2. Remove plug in switch panel to provide opening for faucet (Fig. 4 No. 10).
3. Remove brass nut & star washer from faucet assembly. Insert faucet through opening in switch panel. Position faucet then fasten with brass nut & star washer.
4. Remove tank assembly by unscrewing sprayhead & sprayhead nut (Fig. 1 No. 1). Unplug polarized plug (Fig. 4 No. 11) & lift tank assembly out of brewe. Place faucet tank assembly in brewe. Reconnect polarized plug, sprayhead nut & sprayhead.
5. Connect the 1/2" flex tubing (Fig. 7 No. 1) to faucet & hot water outlet on tank lid (Fig. 7 No. 2).
6. Connect the 10" flex tubing (Fig. 7 No. 3) to cold water inlet (Fig. 7 No. 4) on tank lid & to the top left hand fitting on automatic component panel (Fig. 5 No. 2).
7. Replace pour in basin assembly. Remove screw that plugs hole in basin (Fig. 4 No. 9).
8. Insert inlet/discharge tube into basin. Slide gasket up to seal hole in basin. Tighten flare nut to top right hand fitting on automatic component panel (Fig. 5 No. 1).
9. Adjust water flow to water faucet by adjusting needle valve. (Turn counter-clockwise to open.) (Fig. 5 No. 3)
10. Replace back panel. Reconnect electrical plug to warmer (not necessary on models KP-1, KSP-1, KP-3, KSP-3, KP-P). Replace brewer lid.
11. Refer to Plumber's Installation Instructions.

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 and connect to 1/4" or larger water line. For more than 25 ft. run, use 1/2" copper tubing and 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 1/4" 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.

Figure 4
1. Main wire harness plug (7091201)
2. Nut, knurled, 8/32, brass, panel (700021)
3. Screw, knurled (100425)
4. Pour in Basin Assembly (704110)
5. Nuts for blank panel
6. Nuts, knurled, 8/32, brass (700021)
7. Component panel assembly, pour over (781060)
8. Switches
   a. Blank dummy (100496)
   b. Lighted Rocker (100685)
9. Screw, pour in basin plug (100214)
10. Plug, faucet hole cap (51026)
11. Wire harness, tank lid (709008)

POUR-OVER 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 (Fig. 7 No. 5). Insert 1/4" flared male connector, with longer side on inside of brewer. Fasten with star washer & nut.
4. Remove blank switch cover by squeezing tabs & pushing out (Fig. 4 No. 8). Pull apart black & blue wires from line splice connector. Insert start switch with #1 terminal tab on bottom side. Connect blue wire to #3 terminal tab & black wire to #2 terminal tab.
5. Place tank assembly into brewer. Fasten sprayhead nut. Replace 5 hole sprayhead with 6 hole sprayhead.
6. Insert tea brewer component panel (Fig. 6) and fasten knurled nuts.
7. Connect main wire harness (Fig. 4 No. 1) & polarized plug (Fig. 4 No. 11).
8. Connect tea brewer int. dilution tube by connecting to fitting on top right hand side of tea brewer component panel (Fig. 6 No. 1) & 1/4" flared male connector on sprayhead plate.
9. Replace pour in basin assembly. Remove screw plunging hole in basin (Fig. 4 No. 9). Insert int. dilution tube through hole in basin (sliding gasket up to seal hole). Insert discharge tube into basin. Connect opposite end of int. dilution tube to fitting on top left hand side of tea brewer component panel (Fig. 6 No. 2).
10. Attach ext. dilution tube to 1/4" flared male connector located on outside of brewer on sprayhead plate.
11. Refer to plumber's installation instructions.

TO SET TEA BREWER DILUTION
1. Place tea dispenser under brewer.
2. Fill tank with water by pouring 3 pints of water into basin. Some water will flow through sprayhead. Empty tea dispenser.
3. Plug in brewer. Close needle valve (Fig. 6 No. 4) in tea brewer control panel by turning clockwise.
4. Set timer (Fig. 6 No. 3) to 180 seconds. Start brew cycle by pressing start/stop.
5. Tea dispenser should fill with one brew cycle. If not, adjust timer until desired level in tea dispenser is achieved (3 gallons).
6. Open needle valve by turning clockwise 3 to 4 full revolutions. This will give 2 gals. of cold water flowing through dilution tube and 1 gal. of hot water concentrate through sprayhead.
13. Replace back panel.
14. Replace cover with "pour-in" "screen only" cover. (On models KP-2, KSP-2, KP-4, KSP-4)