

INSTALLATION AND OPERATION INSTRUCTIONS

LT-D SERIES TEA CONCENTRATE BREWER

PLUMBER'S INSTALLATION INSTRUCTIONS

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

Water pipe connections and fixtures directly connected to a potable water supply shall be sized, installed and maintained in accordance with Federal, State and Local codes.

- 1) Flush water line before installing brewer.
- 2) Water pressure should be at least 20 psi. For less than a 25 ft run, use 1/4" copper tubing and connect to 1/2" or larger water line. For longer runs, 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, the valve should have a minimum of 1/8" port hole for up to 25 ft run, and 5/16" port hole for over 25 ft runs.
- 4) For applications without a filter. Connect the incoming water line to the fitting on back of brewer.
- 5) For applications with a filter. Flush the filter cartridge per the manufacturers recommendations. Attach the cartridge replacement instructions to this manual for future reference. Attach the filter assembly to the rear of brewer using 8-32 screws and mounting holes provided. Use the copper tube provided to connect the filter to the inlet fitting which protrudes from the rear of the unit. The fittings on the filter feature a simple push in connection.
- 6) For applications with a filter. Shutoff valve on filter should be in the off position. Connect the incoming water line to the fitting extending from the shutoff valve. With power to brewer shutoff and water supply turned on slowly open shutoff valve to allow system to fill with water. Depress the pressure relief button on the filter to release trapped air. Check for leaks. Turn shutoff valve on filter to the off position for initial setup outlined below.

INSTALLATION 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. Initial setup should be done by qualified personnel only.

INITIAL SETUP

- 1) Before proceeding you may wish to check the concentrate setting to verify that it is appropriate. The factory setting may require adjustment for specific conditions in your installation. The faucet flow rate is approximately 130 oz per minute in most applications. For sweetened tea a ratio of 1 part concentrate to 11 parts of water should deliver approximately 1/12 of the 130 ozs or 10.8 ozs within a one-minute time frame. For unsweetened tea a ratio of 1 part concentrate to 127 parts of water should deliver approximately 1/128 of the 130 ozs or 1.0 ozs within a one-minute time frame. Procedures for priming the pump and checking/adjusting the concentrate setting are detailed in the next several steps.
- 2) Turn off water supply. Remove the front access door from the unit by lifting up, tilting bottom forward, and then lowering the door to clear drip angle. Place the concentrated product in place in the appropriate compartment as indicated by unit labeling. The lower product compartment and pump supply the right side faucet. The upper product compartment and pump supply the left side faucet. Remove the protective cap from the product spout. Attach the connector from the lower pump to the lower product, and the connector from the upper pump to the upper product.

INSTALLATION INSTRUCTIONS (CONT'D)

- 3) The pumps may now be primed. When priming the pumps you **MUST OPEN THE FAUCETS** to avoid pressure buildup in the lines, which may cause the tubing to burst or to become disconnected from the fittings. Some units are equipped with a pair of pressure switches, which will not allow the pumps to run when the concentrate line becomes pressurized. If the pump stops running due to operation without opening the faucet, simply open the faucet to release pressure in the line and the pump will again operate. The prime switches are located below the pumps. The left switch controls the upper pump, which supplies the left faucet. The right switch controls the lower pump, which supplies the right faucet. Supply power to brewer. Actuate the handle of the faucet(s) to be primed to place it in the locked open position. Hold a cup or other vessel below the faucet and depress the appropriate prime switch. Continue to depress the switch until the concentrate begins to flow from the faucet. Release the switch and close the faucet. Repeat for remaining faucet. The faucets and concentrate lines are now primed.
- 4) Disconnect power to unit. To check the concentrate setting you will need a suitably graduated container to measure the concentrate and a jumper wire with alligator clips and a stopwatch or a watch with a second hand. The Ratio of concentrate is set independently for each faucet. Remove the unit top cover. Observe the rear of the faucet to be calibrated. A stainless steel tube probe is connected in the bottom port of the faucet. If you wish to skip this procedure, skip to step 6.
- 5) Connect one end of the jumper wire to the probe and keep the other end isolated from the metal components of the unit until ready to begin. Resupply power to brewer. Open the faucet to be calibrated and hold the graduated container beneath it. Touch the free end of the jumper wire to the exterior of the metal cabinet and the pump will activate. Maintain the connection for a fixed amount of time, say 1 minute. Compare the volume of concentrate delivered to that indicated in step 1 above. To adjust the setting remove the right side panel by loosening the retaining screws and sliding plate up until the screw heads clear the keyhole slots. The control board is centrally mounted in this service compartment. The dials on the board are labeled to indicate which product they control. The fine adjustment may be used to refine the setting. Clockwise rotation increases beverage strength, or the volume of concentrate, while counterclockwise rotation decreases it. The coarse adjustment may be used if larger adjustments are required. Repeat for other faucet.
- 6) Turn on water supply. The internal water supply circuit incorporates a pressure regulating valve that is factory set to 30 PSI. Actuate all the faucets on the machine to remove air from the lines and to ensure that the pumps actuate when the water and concentrate make contact internally in the faucet.
- 7) Replace all covers previously removed. Brewer is now ready to operate.

CLEANING OF EXTERIOR PARTS

Using a daily routine of cleaning all external surfaces and product compartments should maintain the brewer's new appearance.

IMPORTANT – Do not use cleansers, bleach liquids, powders or other substances that contain chlorine. These products promote corrosion and will pit the stainless steel.

1. Use a soft cloth to wipe off any spills, dust or debris from exterior surfaces including upper and lower product compartments.
2. Clean the outside of brewer with stainless steel polish where stainless steel shows. Use mild soap and water on plastic parts. Coarser agents, scratch pads, steel wool etc. may scratch the brewer.

CLEANING PRODUCT FAUCETS

Using a daily routine of cleaning the plastic product faucets is recommended.

1. **CAUTION:** Turn off electrical power (120V models have switch located on back of brewer) and shut-off water supply before proceeding with next step.
2. Place a suitable container below coffee faucets and open faucets to drain water below inlet fittings.
3. Remove the entire upper bonnet assembly of faucet by unscrewing the plastic bonnet cap. At this point, the bonnet assembly may be submerged in hot soapy water and then rinsed with clean hot water. Inspect the silicone seat cup for wear or abrasions and replace if necessary. The bonnet assembly may then be submerged in a sanitizing solution of one tablespoon of household bleach in a gallon of water for one minute, rinse with clean water.
4. Reassemble the upper bonnet assembly to faucet body by **Hand tightening only** until all play is out. Turn electricity and water on and restart system. After cleaning, priming the pumps may be necessary to get the concentrate flowing.

CLEANING AND SANITIZING INTERNAL CONCENTRATE LINE SURFACES

Using a weekly routine of cleaning and sanitizing all internal surfaces in contact with the concentrate is recommended in order to keep the system bacteria free. This brewer is designed so that cleaning and sanitizing solutions can be circulated throughout the concentrate system without having to remove or disassemble those parts.

Recommended Sequence of Events:

1. Clean with hot soapy water.
2. Rinse with clean hot water.
3. Sanitize for one minute with a solution made from one tablespoon of household bleach in a gallon of water.
4. Rinse with clean water.

Procedure:

1. **CAUTION:** Shut off the water supply before proceeding with next step.
2. Remove any existing concentrate containers from the upper and lower product compartments by disconnecting at the product line connector. Reconnect this connector to a mating connector, which will insure that the check valve in the product line connector will be held open.
3. Submerge connector in a container of cleaning solution. Each concentrate system must be cleaned and sanitized separately. Position a container under the appropriate product faucet to catch the cleaning solution that will be pumped through the concentrate system.
4. Place the appropriate product faucet in the locked open position. The concentrate pump may begin running until sufficient water is drained from the line at which time the pump will stop running. At this point, depress the appropriate prime switch. Continue depressing prime switch while allowing the cleaning solution to be circulated through the product lines and out through the faucet and into the receiving container.

USE CAUTION WHEN WORKING WITH VERY HOT WATER.

5. Repeat steps 3 and 4 with clean hot water to rinse.

CLEANING AND SANITIZING INTERNAL CONCENTRATE LINE SURFACES (CONT'D)

6. Repeat steps 3 and 4 with sanitizing solution allowing for solution to be in contact with surfaces for at least one minute.

IMPORTANT - Do not allow sanitizing solution to come in contact with stainless steel surfaces. Wipe up spills immediately.

7. Repeat step 5 for at least one minute. Remove connector from rinse water and continue to run pump until water from faucet has stopped.

8. Repeat above procedure for other product faucet.

9. This step is to flush any remaining cleaning solution from faucet and lines. Place available empty container below each coffee faucet. Lock both faucets open. Turn water supply back on. Water will run from faucets. Allow flow to continue for 1 minute.

10. Close all faucets. Operate each faucet to ensure normal water flow by drawing off approximately one cup of water.

After installing fresh concentrate you may have to prime the pumps to get the concentrate flowing.

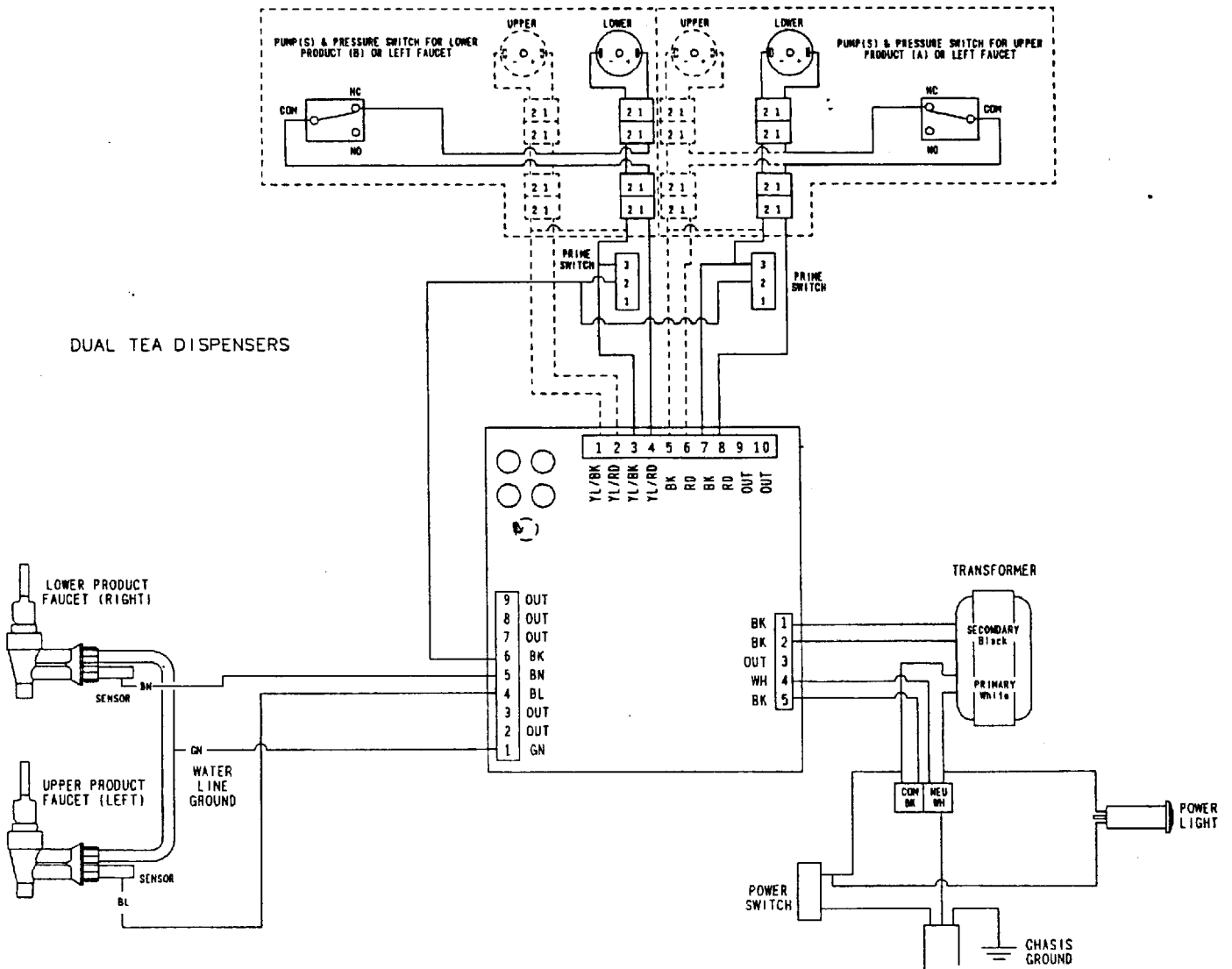
REPLACEMENT PARTS LIST

Part No	Description	Part No	Description
700050	Hose, Flex, 10"	107285	Drip Tray Assy
107114	Tubing, Silicone, 3/16 ID X 2.25 L	107115	Flow Control Assembly
107076	Tubing, Superthane, 1/4 ID X 12.0 L	800001	Washer, Flow Control
107182	Tubing, Teflon, 3/16 ID X 9.0 L	790019	Gasket, Flow Control, Nylon
107183	Tubing, Teflon, 3/16 ID X 2.5 L	107151	Tube/Hose Barb, 1/4 X 3/16
107184	Tubing, Teflon, 3/16 ID X 6.625 L	205189	Elbow, Tube To Hose, Trimmed
107244	Tubing, Teflon, 3/16 ID X 5.5 L	205084	Plug In Elbow, 1/4 X 1/4
107246	Tubing, Teflon, 3/16 ID X 6.5 L	205080	Union Elbow, 1/4 Tube
107061	Faucet Assy, Product Line	205086	Male Connector, 1/4 NPT X 1/4 Tube
107062	Faucet Nut	205104	Union Tee, 1/4 Tube
107117	Product Valve, Schollee	107123	Union Connector, 1/4 Tube
107058	Pump Assy, Peristaltic SR10/107	100500	Switch, On/Off Black Rocker
107059	Pump Assy, Peristaltic SR10/50	201985	Switch, Black Start
107099	Pressure Gauge, Wika	107385	Switch, Pressure
201197	Pressure Regulator	152290	Pilot Light, Green
201295	Nut, Pressure Regulator, Plastic	107082	Control Board
107165	Filter Assy, Cold Water	107140	Transformer
107038	Filter Housing, Cold Water		

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 damage was incurred during transit to you, file claim with the carrier

WIRING DIAGRAM



Newco Enterprises, Inc. * 1735 South River Rd. * P.O. Box 852 * St. Charles, MO 63303