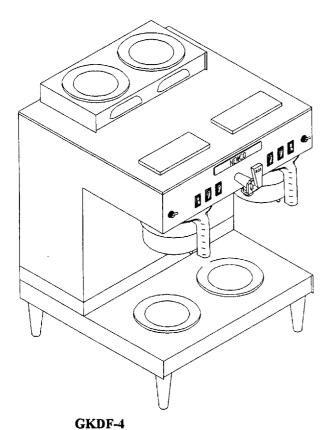
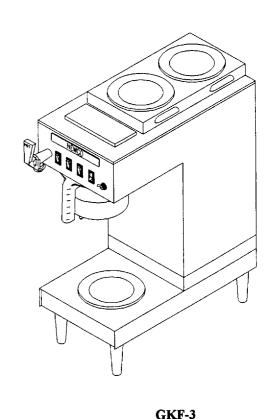
Amps

15.2

NEWCO ENTERPRISES

INSTALLATION, OPERATION, AND SERVICE MANUAL FOR GK SERIES BREWERS





Model Warmers Width Length Height Weight Watts GKF-1 1 9-1/2", 19" 23-1/2" 35 lbs. 1820

37 lbs. 1920 16 GKF-2 2 25-1/2" 9-1/2" 19" 25-1/2" 2020 16.8 GKF-3 3 9-1/2" 19" 39 lbs. **GKDF-2** 2 23-1/2" 62 lbs. 5240 21.8 19" 19" **GKDF-4** 22.7 19" 19" 25-1/2" 64 lbs. 5440 23.5 **GKDF-6** 19" 19" 25-1/2" 66 lbs. 5640

NOTE: Pour over models also available.

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.

PLUMBER'S INSTALLATION INSTRUCTIONS (AUTOMATIC BREWERS)

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

- 1) Attach flow/strainer assembly to back of brewer. Strainer inlet will point down.
- 2) Flush water line before installing brewer. Brewer should be connected to COLD WATER LINE for best operation.
- Water pressure should be at least 20 lbs. 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.
- 4) 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.
- 5) Connect incoming water line to the strainer on the back of the brewer. Manufacturer recommends connecting to copper tubing.

INSTALLATION INSTRUCTIONS

FILL BREWER TANK WITH WATER BEFORE CONNECTING TO POWER SUPPLY!

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.

- Place the decanter under brew basket, raise top evaporation cover and pour three decanters of water through the top pourin screen. Water should come through the brew basket as the third decanter of water drains out of the pour in basin. If brewer does not have a pour in opening remove top cover and pour water directly into receiving pan.
- 2) For Automatic Models: Adjust timer to deliver desired amount of water (Timer is located behind front access panel). Set volume selection switch to the "1 POT" setting. To brew into a regular 60 oz. decanter, little adjustment should be needed. Turn timer dial clockwise to increase volume of water, and counter clockwise to decrease volume. The "2 POT" setting will yield twice the volume of water as the "1 POT" setting.
- Brewer is shipped with thermostat turned on, (full clockwise position). Plug or wire in machine to appropriate voltage circuit as noted on the brewers serial tag. Serial tag is located on rear of brewer.
- 4) Allow 10 to 15 minutes for water in tank to heat to brewing temperature. (Additional water may drip from brew basket due to initial expansion of water in the tank). This will not occur thereafter.
- After water has reached brewing temperature (thermostat will click off and heating noise will stop.) turn lower warmer switch to the ON position. To remove expanded water from tank, run one cycle by pouring one decanter of water through pour-in screen (pour over models) or by depressing brew start switch (automatic models). (Brew cycle may be canceled by turning the rocker switch back to the OFF position.)
- Run one cycle to check for the 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 brew cycle and when the decanter is half full.

 Recommended temperature of the water is approximately 195 F.
- 7) In higher altitude locations (5000 feet above sea level) the thermostat may have to be adjusted lower to prevent boiling.
- 8) CAUTION: On faucet models the water faucet will dispense hot water when the handle is depressed. The faucet system is independent of the brewing system and can be operated during brew cycle. Once brewer is pressurized, operate faucet until water flows smoothly.

COFFEE PREPARATION PROCEDURES

- 1) Place filter into brew basket. Set the volume selector switch to the desired brew volume.
- 2) Put the proper amount of coffee into the filter.
- 3) Slide the brew basket into holder.
- 4) Place empty decanter on warmer located directly under the brew basket and turn corresponding warmer switch to ON position.
- 5) Pour decanter of water through pour-in screen into pour in basin (pour over models) or depress brew start switch (automatic models).
- 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 rails and dump filter into waste basket. The brewing process, as described above, can now be started again.

TROUBLE SHOOTING GUIDE

SYMPTOM	POSSIBLE CAUSE	WHAT TO CHECK	REMEDY
NO HOT WATER	1. Tank heater.	Check the voltage at the tank heater terminals. Proper voltage is designated on the serial tag located on the rear of the brewer.	(A) If correct voltage is present at the tank heater terminals and water in tank is not being heated, replace the tank heater. (B) If voltage is not present at the tank heater terminals refer, to step 2. (C) If incorrect voltage is present at the tank heater terminals, check voltage at outlet.
	Hi-limit thermostat or main thermostat.	2. Check the voltage between the white wire on the tank and the incoming terminal (blue wire) on the hi-limit thermostat, then the outgoing terminal (black wire) on the hi-limit thermostat.	2. (A) If voltage is present on the incoming terminal of the hi-limit thermostat, but not on the outgoing terminal, replace the hi-limit thermostat. (B) Check voltage between black and white wire on the receptacle. If voltage is not present check outlet or circuit breaker. (C) If voltage is not present on the incoming terminal of the hi-limit thermostat, replace the main thermostat.
DRIPPING	1. Not siphoning properly.	Water should flow freely from the sprayhead.	(A) Clean sprayhead holes. (B) Check tightness of sprayhead tube. (C) See "LIMING", Page 6.
	Automatic Models: Solenoid valve not seating properly.	2. Solenoid valve assembly.	Be sure spring is in place and any particles are cleaned from valve seat. If valve seat is worn or mutilated, replace solenoid valve.
	Faucet Models: Faucet coil is leaking.	3. Hot water coil.	3. Tighten fittings or replace coil.
STEAMING OR SPITTING AROUND FUNNEL	1. Main thermostat.	Thermostat points stuck or out of calibration.	(A) Adjust thermostat. (B) Thermostat should be calibrated or replaced.
	2. High altitude.	2. Located above 5,000 feet.	2. See "INSTALLATION INSTRUCTIONS", Page 2
WEAK COFFEE /	1. Filters.	Are correct filters being used.	1. Insert correct filter.
DRY COFFEE REMAINING IN BREW BASKET AFTER	2. Not siphoning properly.	2. Refer to "DRIPPING", Step 1.	2. Refer to "DRIPPING", Step 1.
BREWING	3. Improper loading of the brew basket. *y	3. Filter and coffee in brew basket.	Filter should be centered in the brew basket and coffee bed should be level.
CONDENSATION ON INSIDE OF CABINET	1. Tank lid gasket.	1. Nicks or cuts in the gasket	1. Replace gasket.
	2. Sprayhead tube ass'y.	2. Tightness of ass'y to lid.	2. Tighten sprayhead tube ass'y to tank lid.
	3. Thermostat grommet.	3. Tight fit. Nicks or cuts.	3. Adjust or replace grommet.
	4. Receiving pan nut.	4. Receiving pan nut loose.	4. Tighten nut.
	Main thermostat set above 210 degrees.	5. Check thermostat calibration.	5. Calibrate or replace thermostat.
COLD WARMER STATION	1. Warmer - defective.	Voltage at warmer terminals should be 120 volts AC.	I. If voltage is present on terminals, but warmer will not heat, replace warmer.
	2. Warmer ON/OFF Switch.	If voltage is not present on warmer terminals, check continuity of switch.	If switch does not make and break continuity when turned off, replace switch.
	3. Bad harness.	Check connections between hamess and switch, and between switch and warmer.	3. All connections should be tight.

TROUBLE SHOOTING GUIDE

SYMPTOM	POSSIBLE CAUSE	WHAT TO CHECK	REMEDY
IRREGULAR YIELD	1. Not siphoning properly.	1. Refer to "DRIPPING", Step 1.	1. Refer to "DRIPPING", Step 1.
	Steps 2 thru 8 refer to Automatic Models 2. Timer.	2. Timer consistency. Time several	2. If times are irregular, replace timer.
	3. Fluctuating water pressure.	brew cycles. 3. Water pressure.	3. If pressure fluctuates 10-20 PSI during operation of brew cycle, add a pressure regulator to inlet side of brewer, set to lowest pressure level registered. Adjust timer to yield correct water level.
	4. Solenoid valve.	4. Refer to "DRIPPING", Step 2.	4. Refer to "DRIPPING", Step 2.
	5. Flow washer.	Possible lime build up in flow control.	Replace flow washer and clean lime from flow control.
	6. Flow control screen.	6. Screen built into flow control.	Replace or clean screen. Clean lime from flow control.
	7. Faucet coil is leaking.	7. Refer to "DRIPPING", Step 3.	7. Refer to "DRIPPING", Step 3.
	8. Strainer.	8. Water pressure at output.	If pressure is low, clean or replace strainer.
WATER KEEPS RUNNING (AUTOMATIC MODELS)	1. Solenoid valve.	1. Refer to "DRIPPING", Step 1.	1. Refer to "DRIPPING", Step 1.
(ACTOMATIC MODELS)	2. Start switch.	Remove wires from switch and check continuity.	If start switch does not make and break contact, switch should be replaced.
	3. Timer	Solid state timers are not repairable. If timer will not shut off, replace timer.	3. Replace timer.
CAN'T START BREW CYCLE (AUTOMATIC MODELS)	1. No water.	Incoming water lines & water shut off valve.	1. Be sure water shut off is open.
	2. No power.	Fuse or circuit breaker. Power cord and plug connections.	2. Replace or reset circuit protector
	3. ON/OFF switch.	3. Switch continuity. (Normally open.)	If ON/OFF switch does not make and break contact, replace ON/OFF switch.
	4. Brew start switch.	4. Switch continuity. (Normally closed.)	If brew start switch does not make and break contact, replace brew start switch.
	5. Timer or timer harness.	Wire leads to solenoid and black 3-pin connector.	 Make sure these connections are tight. If so, and all else checks out OK, replace timer.
	6. Solenoid valve.	6. (A) Voltage at solenoid valve terminals. Start a brew cycle and check for 120 volts AC. (B) If voltage is present at terminals, check for water at line pressure on the inlet side of solenoid valve.	6. (A) If voltage is not present at terminals, refer to steps 2 through 5. (B) If voltage is present at terminals and water at line pressure is present on the inlet side of the solenoid, but not present on the outgoing side, replace solenoid.
SOLENOID CHATTER OR HOWLING	Brewer connected to hot water line.	Incoming water line.	Brewer should be connected to cold water line.
(AUTOMATIC MODELS)	2. Vibration.	If brewer is on a metal stand or counter, neither the bottom pan nor copper tubing to the brewer should touch the counter.	2. Adjust as necessary.
	3. High water pressure.	3. Water pressure on incoming line.	If water pressure is over 90 PSI install a pressure regulator and adjust to 50 PSI.
	4. Water hammer.	4. Incoming plumbing.	This not the fault of the brewer and can usually be corrected by rearranging some plumbing or adding an air chamber to the incoming water line.
	5. 60 cycle vibration.	5. Nut on top of solenoid.	5. Nut should be tight. Tighten as required.

TROUBLE SHOOTING GUIDE CONTINUED

SYMPTOM	POSSIBLE CAUSE	WHAT TO CHECK	REMEDY 1. Disassemble and clean or replace as required. 1. (A) Water shut off valve should be open. (B) Clean or rebuild faucet. (C) Needle valve should be open. 2. Increase flow by turning needle valve counter clockwise, decrease flow by turning clockwise.	
FAUCET DRIPPING (FAUCET MODELS)	1. Clogged valve seat.	1. Valve seat.		
FAUCET WATER FLOW TOO FAST OR TOO SLOW (FAUCET MODELS)	No water. 2. Flow too slow or too fast.	(A) Incoming water line shut off valve. (B) Faucet clogging. (C) Needle valve. Needle valve.		

COMPONENT REPLACEMENT INSTRUCTIONS

CAUTION: DISCONNECT BREWER CORD FROM ELECTRICAL OUTLET BEFORE REMOVAL OF ANY PANEL OR REPLACEMENT OF ANY COMPONENT!

NOTE: IN CANADA REPAIRS ARE TO BE DONE BY CERTIFIED ELECTRICIAN OR BREWER MUST BE RE INSPECTED TO MAINTAIN APPLICABLE CERTIFICATION

These steps apply to replacement of tank, tank heater, faucet coil, and hi-limit or main thermostat.

- 1. Remove sprayhead and sprayhead nut by unscrewing in counter clockwise direction.
- 2. Remove brewer lid. Disconnect electrical connectors from upper warmer plate if applicable.
- 3. Remove slotted receiving pan nut. Remove receiving pan by raising the front of the pan while simultaneously pulling forward to clear the inlet tube.
- 4. Disconnect electrical terminals connected to tank element. Disconnect black lead from main thermostat.
- 5. Disconnect the inlet to coil and coil to faucet tubes from attached fittings, if applicable.
- 6. Lift tank completely out of brewer.

TANK ASSEMBLY

7. To install new tank ass'y, reverse steps 6 through 1 above.

THERMOSTAT, HI-LIMIT

- 1. Disconnect wires to hi-limit thermostat.
- 2. Lift retaining spring slightly to remove old hi-limit thermostat.
- 3. Check continuity of the new hi-limit thermostat before installing.
- 4. Slide new hi-limit thermostat into place under the retaining spring. Reconnect wire leads.
- 5. Insure that hi-limit thermostat is securely mounted & all electrical connections are tight and isolated.

THERMOSTAT, MAIN

- 1. Remove two screws which secure thermostat to bracket.
- 2. Remove grommet from top of tank lid by pressing up with thumb. Pull capillary bulb out through hole.
- 3. Disconnect thermostat wires.
- 4. Installation is reverse of removal.

ELEMENT, TANK HEATING

- 1. Remove the 8 tank lid retaining nuts. Lift tank lid assembly out of tank.
- 2. Disconnect wire leads from the tank element.
- 3. Remove the 2 brass nuts, on top side of tank lid, from tank element. Remove element.
- 4. Install the new tank heating element, washers, and nuts. Tighten securely to insure proper sealing.
- 5. Inspect tank lid gasket and replace if necessary.
- 6. Assemble by reversing steps 2 through 1.

COMPONENT REPLACEMENT INSTRUCTIONS, CONTINUED

HOT WATER COIL (FAUCET MODELS)

- 1. Remove the 8 tank lid retaining nuts. Lift tank lid assembly out of tank.
- 2. Remove the 2 compression nuts from top of hot water coil and remove old coil.
- 3. Installation is reverse of removal.

WARMER ELEMENT

- 1. Remove retaining screws from warmer plate.
- 2. Lift plate and disconnect leads.
- 3. Remove nuts and washers holding retaining plate and warmer element to plate.
- 4. Installation is reverse of removal.

FAUCET ASSEMBLY

- 1. Follow steps 1-3 above for removing receiving pan.
- 2. Disconnect tank to faucet water line from faucet fitting.
- 3. Remove stainless steel nut and washer from faucet fitting.
- 4. Pull out faucet ass'y from front of brewer. Reverse steps for installation of new faucet.

TIMER ASSEMBLY

- 1. Disconnect timer plug from timer.
- 2. Remove retaining screws from timer.
- 3. Remove timer.
- 4. Installation is reverse of removal.

SOLENOID

- 1. Disconnect wire leads from solenoid coil.
- 2. Disconnect brass fitting from inlet side of solenoid assembly.
- 3. Disconnect brass fitting from outlet side of solenoid assembly.
- Remove solenoid.
- 5. Install solenoid insuring proper flow:

Solenoid with an arrow - arrow points toward left side of brewer.

Solenoid with ports labeled IN and OUT - IN port connected to incoming water line.

6. Installation is reverse of removal.

FLOW CONTROL

- 1. Disconnect lower brass fitting on flow body.
- 2. Disconnect upper brass fitting on flow body.
- 3. Remove flow body.
- 4. Install flow body insuring arrow points towards the top of the brewer.
- 5. Installation is reverse of removal.

BREW START AND WARMER SWITCHES

- 1. Remove wire leads from terminals on switch.
- 2. Remove switch by pressing tabs in while pushing switch out towards front of brewer.
- 3. Installation is reverse of removal.

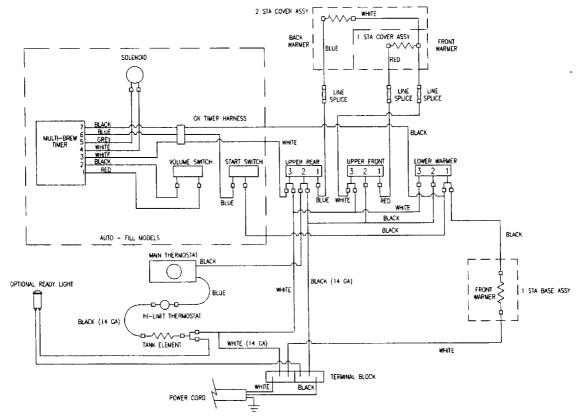
LIMING

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 everyday. This process takes approximately one minute. In all areas the sprayhead should be cleaned at least once a week. Where bad liming has already occurred, a new complete tank assembly may be installed. The tank may be changed in approximately 5 minutes time.

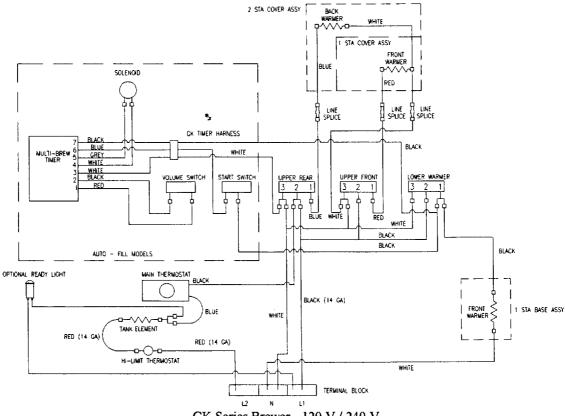
GK SERIES PARTS LIST - (See pictorial on fold out page)

			-		
Index	Part No	Description	Index	Part No	Description
1	705229	GKF-1 cover, assembly	36	705634	GK front panel, dual
1		GKF-2 cover, assembly	37	705224	Brace, front panel, single
1	705420	GKF-3 cover, assembly	37	705632	Brace, front panel, dual
1	705591	GKDF-2 cover assembly	38	701279	Rail, L.H.
1	705592	GKDF-4 cover assembly	39	701280	Rail, R.H.
1	705541	GKDF-6 cover assembly	40	705295	Brew basket assembly, black
1	705414	GK 1 station cover ass'y w/ pour in	41	700464	Base ass'y, single
1	705420	GK 2 station cover ass'y w/ pour in	41	700480	Base ass'y, dual
2	100010	Warming plate assembly, black, 100W 120V	42		Warming plate assembly, black, 120W 120V
3	100008	Plate, black porcelain	43	202053	Element, warmer 120W 120V
4	100187	Element, warmer 100W 120V	44	700454	Base top, single
5	100086	Support plate, warming element	44	700449	Base top, dual
6	100197	Tinnerman clip, #8	45	700459	Base trim plate, single
7	700198	Dust cover, front pour in	45	700460	Base trim plate, dual
8	700186	Wire for dust cover	46	700456	Base bottom , single, spotwelded
9	705401	GK automatic tank ass'y 1700W 120V	46	700451	Base bottom, dual, spotwelded
9	705402	GK faucet tank ass'y 1700W 120V	47	100078	Foot, bumper with screw
9	705403	GK pour over tank ass'y 1700W 120V	48	704103	Tinnerman nut, retainer Leg, black plastic 4"
9	705408	GK automatic tank ass'y 2500W 240V	49	100542	Snap bushing, 3/4, plastic
9	705660	GK faucet tank assly 2500W 240V, L.H.	50	100003	Slotted hex nut, 3/4-16, brass
9	705661	GK faucet tank assly 2500W 240V, R.H.	51	701200	Washer, 1" OD x 3/4, S/S
9	705677	GK pour over tank ass'y 2500W 240V	52 53	700015 700060	Basin, pour in
10	704223	Bushing, siphon cup	55 54	700016	Gasket, 1.062 OD X .578, silicone
11	704222	Gasket, delivery tube, 3 hole	55	100025	Gasket, sprayhead
12	700069	Sprayhead tube assembly	56	100023	Jam nut, 1/2-20, brass
13	100175	Grommet, thermostat, silicone	57	100143	Bracket, hi-limit thermostat
14	705595	Copper tube 1/4" OD x 11.38"	58	767110	Valve, needle, angle, 1/4 flare
15	705381	Tube, 1/4" OD x 4.0" x 10.75", copper	59	100633	Hi-limit thermostat, manual reset
16	102299	Main thermostat, knob type	59	100033	Hi-limit thermostat, auto reset
17 18	100177	Elbow, male 1/4F x 1/8 GK automatic tank lid ass'y 1700W 120V	60	101720	Connector, 3/8C x 1/8P, female
18	705398 705400	GK faucet tank lid ass'y 1700W 120V	61	100030	Gasket, .566"ID x .811"OD, brass
18	705399	GK pour over tank lid ass'y 1700W 120V	62	100409	Gasket, .515"[D x .811"OD, brass
18	705405	GK automatic lid ass'y 2500W 240V	63	100431	Nut, 9/16-24, brass
18	705659	GK faucet tank lid ass'y 2500W 240V, L.H.	64	704221	Gasket, tank, silicone
18	705658	GK faucet tank lid ass'y 2500W 240V, R.H.	65	704119	Tank only
18	705678	GK pour over tank lid ass'y 2500W 240V	66	705379	Tube, 13" discharge, S/S
19	705214	GK automatic / pour over tank lid, spotwelded	67	705208	GK rear panel, single
19	705218	GK faucet tank lid, spotwelded	67	705635	GK rear panel, dual
20	705198	Bracket, main thermostat	68	705197	Cabinet shell ass'y, single
21	100043	Thermostat knob	68	705639	Cabinet shell ass,y, dual
22	771031	Coil assembly	69	102126	Power cord, 12/3, 120V 20A
23	704155	Main Element, 1700W 120V	69	100072	Power cord, 10/4, 240V 30A
23	704144	Main Element, 2500W 240V	70	100547	Strain relief, 120V 20A
24	100176	Connector, male, 1/4F-1/4F	70	511054	Strain relief, 240V
25	511046	Washer, 7/16" int tooth S/S	71	102126	Cord plate, 120V 20A 5 11006
26	100281	Plug, 3/8", plastic	71	511007	Cord plate, 240V
27	700519	Switch plate, GKF-1	72	100163	Terminal block, 120 V
27	700522	Switch plate, GKF-3	72	511053	Terminal block, 240 V
27	700406	Switch plate, GKDF-2	73	511023	Nut, 7/16-20, 11/16 hex, brass
27	700329	Switch plate, GKDF-4	74	705228	Snap bushing, 1-1/8", plastic
27	700328	Switch plate, GKDF-6	75	705337	Tube, 1/4" OD x 1.437", S/S
28	100058	Nameplate, NEWCO	76	511063	Flow control assembly
29		Faucet, Tomlinson with flare	77	705338	Tube, 1/4" OD x 1.21" x 1.50", S/S
30	100085	Rocker switch, ON/OFF, lighted	78	100161	Tube, 1/4" OD x .88", copper
31	201985	Start switch, rectangular	79	704190	Melitta adapter, single, spotwelded
32	201162	Switch, toggle	79	700471	Melitta adapter, dual, spotwelded
32	100131	Nut, toggle switch	80	201132	Tee, 1/4" flare
33	704140	Timer, Multi Brew	81	705390	Solenoid assembly
34	201173	Nut, sprayhead	82	100255	Valve, solenoid
35	100024	Sprayhead, 5 hole	83	100154	Connector, male, 1/4"F x 1/8"
36	705210	GK front panel, single	84	705596	Tube, solenoid supply, copper

WIRING DIAGRAMS



GK Series Brewer - 120 V



GK Series Brewer - 120 V / 240 V

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