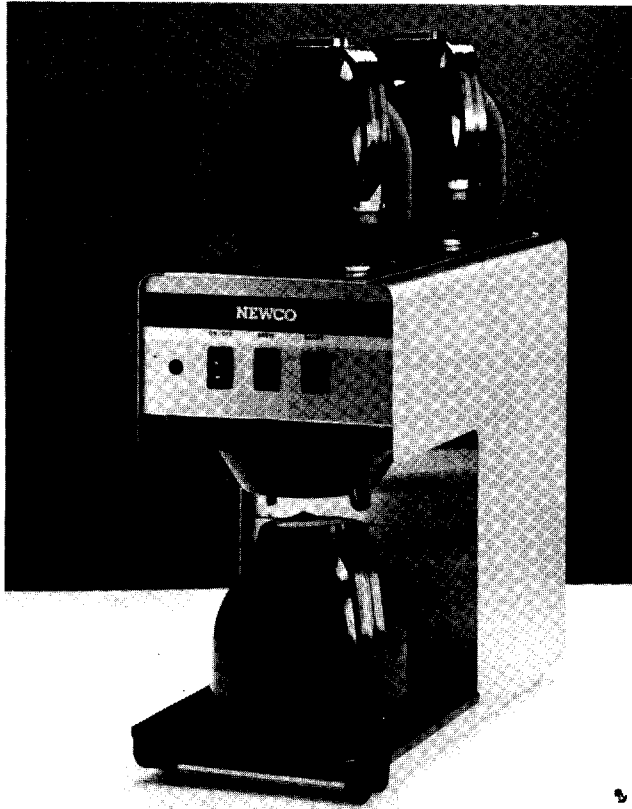


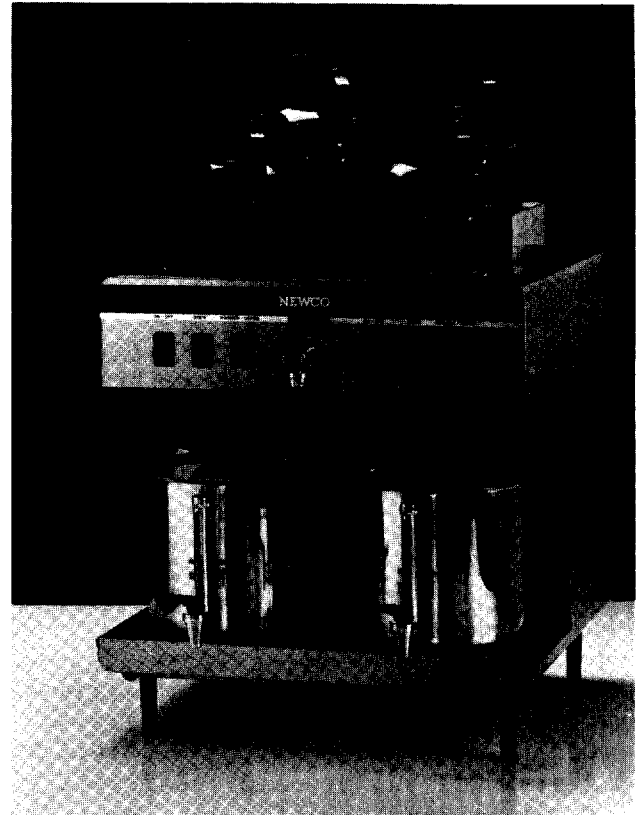
NEWCO

OPERATING & SERVICE MANUAL

MODEL C & D AUTOMATIC & AUTOMATIC W/FAUCET



CT - 3A



DW - 6AF

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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

OPERATING INSTRUCTIONS

Model C — Automatic and Automatic w/Faucet

Model CTA & F brewers are supplied with portable thermos, and do not have warming stations.

Model CWA & F brewers are equipped with lighted rocker switches and warmer station.

WARNING: Read and 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.**

1. Place empty decanter under brew basket. Brewers with manual fill pour four decanters of water into top pour-in assembly. Water should come through brew basket as fourth decanter drains out of receiving pan.
2. Brewer is shipped with **thermostat turned on**. Thermostat must be turned off for automatic filling of brewer. Remove top cover of brewer and turn thermostat knob counter clockwise to off position.
3. Plug or wire brewer in to proper voltage circuit. Turn on lower warmer switch.
4. Push brew start switch. This will start a brew cycle and allow water to flow into the tank, water will run approximately two minutes before timed cycle ends. Repeat brew cycle two additional times, water should overflow into decanter on the fourth brew cycle.
5. Remove power to brewer. Adjust timer to deliver desired amount of water. 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 time dial slightly counter clockwise.
6. Turn thermostat knob on. Full clockwise position, and back off 1/4 turn.
7. Return power to brewer.
8. 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.)
9. After water has reached brewing temperature (thermostat will clock off and heating noise will stop), place empty decanter under brew basket. Depress start switch and run a cycle of water to remove expanded water from tank.
10. Run one cycle 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.
11. Due to higher altitude locations (5,000 ft. above sea level) — thermostat may have to be re-adjusted to prevent boiling.
12. **CAUTION:** On models CT & CW water faucet will dispense hot water when handle is depressed. The faucet system is independent of the brewing system and can be operated during brew cycle.

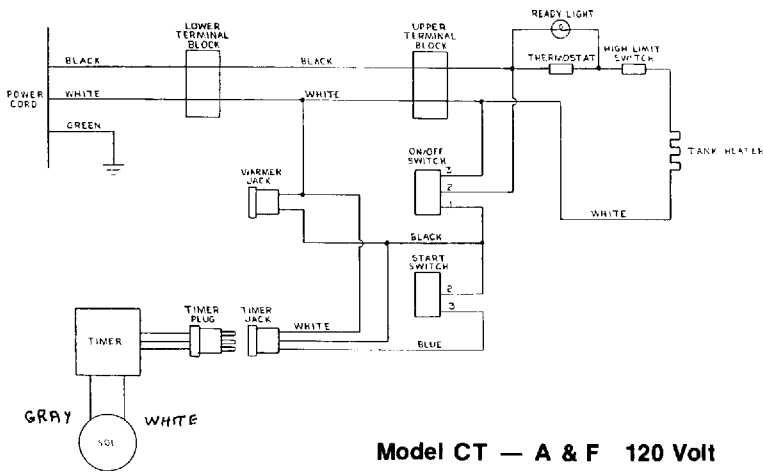
OPERATING AND BREWING PROCEDURE

1. Place filter into brew basket.
2. Put the proper amount of coffee into the filter.
3. Slide brew basket into brew basket holder.
4. Place decanter on left warmer and turn left warmer to on position.
5. Initiate brew cycle by depressing brew start switch.
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. Brew cycle can be stopped at any time by turning off lower warmer/switch. (If brewer is stopped before brew begins to siphon, the next decanter will over fill.)
8. Turn off warmer when not in use. (Red light indicates warmer is on.)
9. The resultant coffee brew should be crystal clear and have the desired properties attainable through excellent extraction.
10. To clean brew basket, remove brew basket from holder and dump filter into waste basket.
11. The brewing process, as described above, can now be started again.
12. Hot water for brewing of tea, coffee, soups, and other beverages is available by depressing handle on faucet. **CAUTION:** Hot water is 200° F.

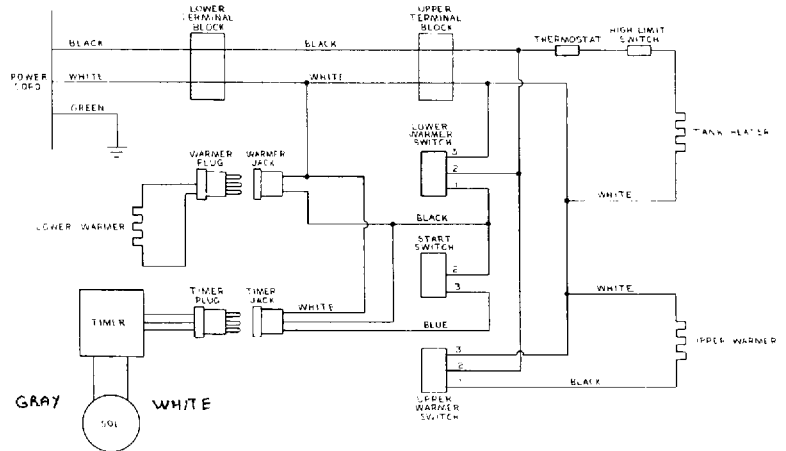
LIMING

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 six 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.

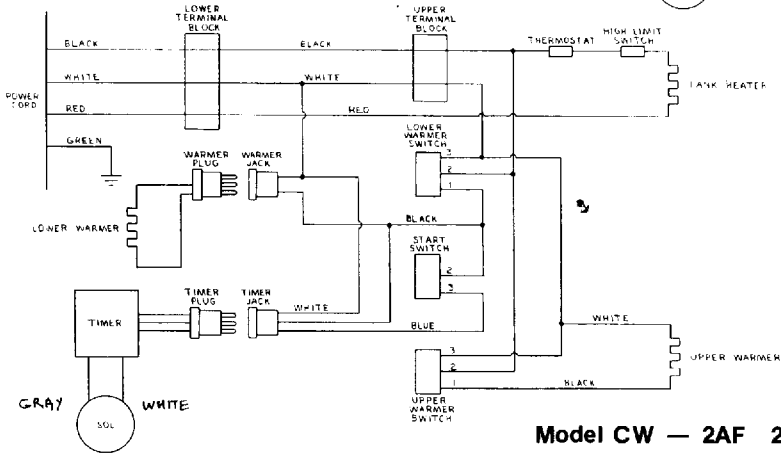
MODEL C — Wiring Schematic



Model CT — A & F 120 Volt



Model CW — 2AF 120 Volt



Model CW — 2AF 240 Volt

MODEL C & D THERMAL MODEL THERMOS BREW OPERATING INSTRUCTIONS



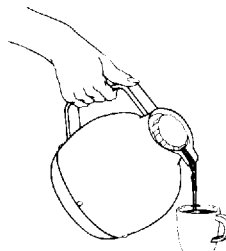
Introducing the Super-bowl, a portable insulated thermos that keeps your coffee fresher longer.



Cleaning Bowl — Remove top, rinse thoroughly with warm water.

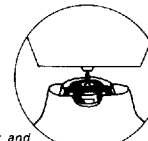


Our insulated glass liner keeps your coffee hot without overcooking, eliminating cups of stale coffee.

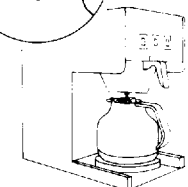


Always leave top on superbowl when brewing or pouring to prevent heat of the coffee from escaping.

HERE'S HOW TO BREW COFFEE



Place filter and coffee into brew basket. Slide brew basket into brewer.



Place Super-bowl under basket.

Fresh hot coffee will automatically stream directly into the superbowl. Note: (leave top on)

OPERATING INSTRUCTIONS

Model D Automatic — Model Automatic with Faucet

Models DTA & F Brewers are supplied with portable thermos and do not have warming stations.

Model DWA & F Brewers are supplied with lighted rocker switch and warmer stations.

WARNING: Read and 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.**

BREWERS WITH POUR-IN

1. Place empty thermos (DT) or decanter (DW) under brew baskets, raise evaporation cover and pour four pitchers or decanters of water into **each** pour-in. Pour-in on the left directs water to the left brew basket, pour-in on the right directs water to the right brew basket. Water should come through brew basket as the fourth pot of water drains out of tank.
2. Brewer is shipped with thermostat turned ON (Full Counter Clockwise Position). Plug or wire in machine to 120V circuit.
NOTE: Brewer may be equipped with individual master (ON-OFF) switch for each tank. Switches located at rear of brewer. Turn on for brewer to operate.
3. Automatic Fill: Plug or Wire brewer into proper voltage circuit.
4. Push brew start switch. This will start a brew cycle and allow water to flow into the tank, water will run approximately two minutes before time cycle ends. Repeat brew cycle three additional times, water should overflow into decanter on the fourth brew cycle.
5. Remove power to brewer. Adjust timer to deliver desired amount of water. 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 time dial slightly counter clockwise.
6. Allow 25 to 30 minutes for water in tank to heat, ready light will signal when each side of brewer has reached brewing temperature.
NOTE: If brewer does not have ready light, brewer has reached brew temperature when thermostat will click off and heating noise will stop.
Dual head brewers have two complete tank systems that operate independently. Follow instructions for each side of brewer.
7. Due to higher altitudes (5,000 ft. above sea level) thermostat may have to be readjusted lower to prevent boiling.

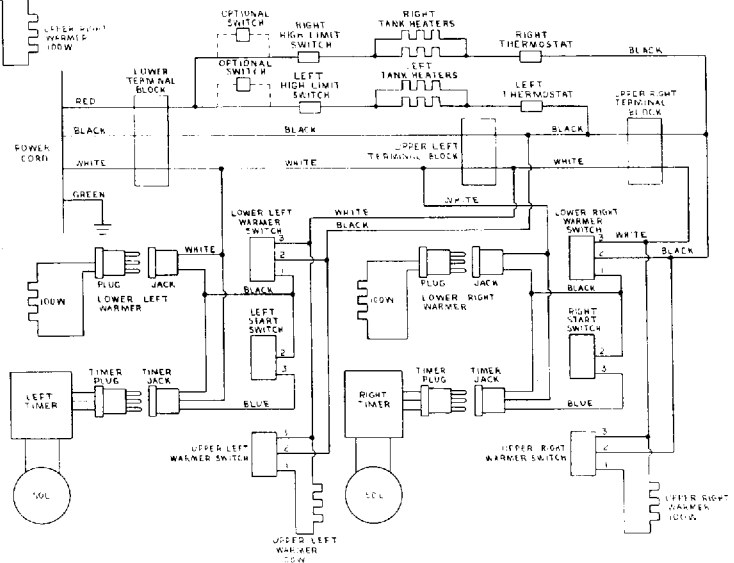
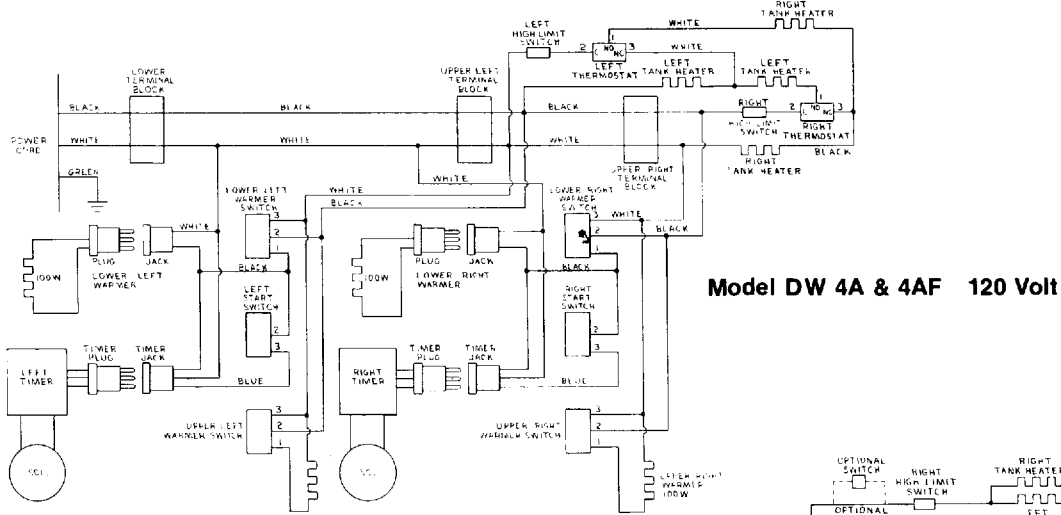
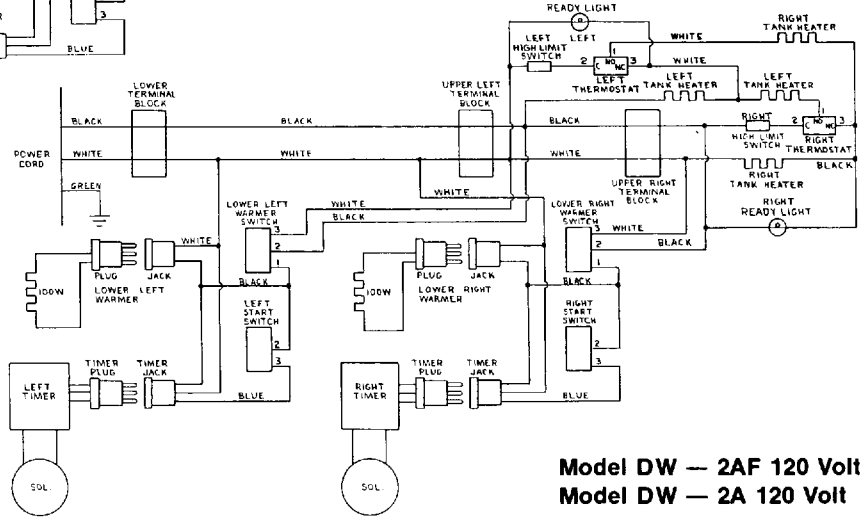
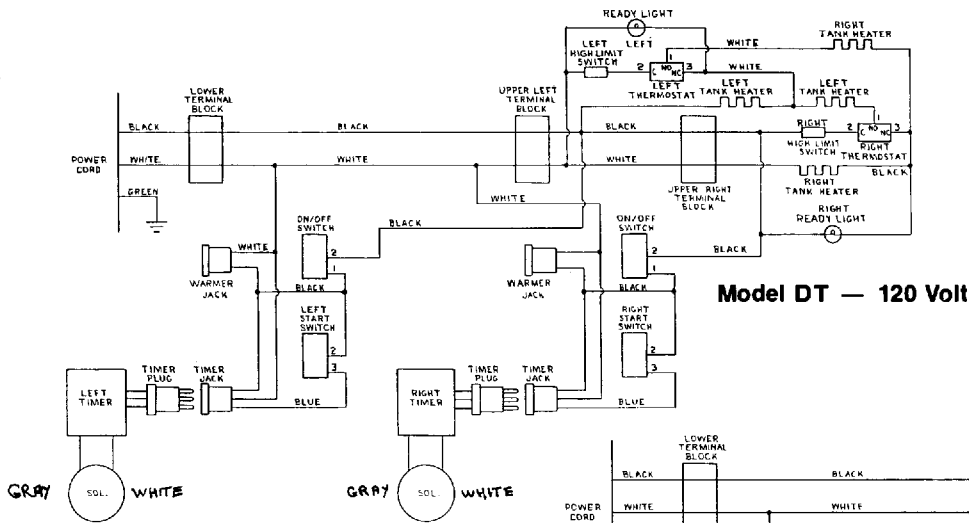
OPERATING INSTRUCTIONS

1. Place filter into brew baskets, you may brew 1 or 2 pots simultaneously.
2. Put proper amount of coffee into filter.
3. Slide brew basket into holder.
4. Place empty pot on lower plate and turn on On/Off switch. (Model DW has lighted rocker switch)
5. Depress Brew Switch.
6. Hot water will be delivered through sprayhead. Coffee will drain from brew basket into pot below.
7. DW - Models — Turnoff warmer when not in use (Red light indicates warmer is on). This switch controls brew circuit switch must be on for brewer to brew.
8. Thermos Models — See instructions for brewers with thermos.

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.

MODEL D — Wiring Schematic

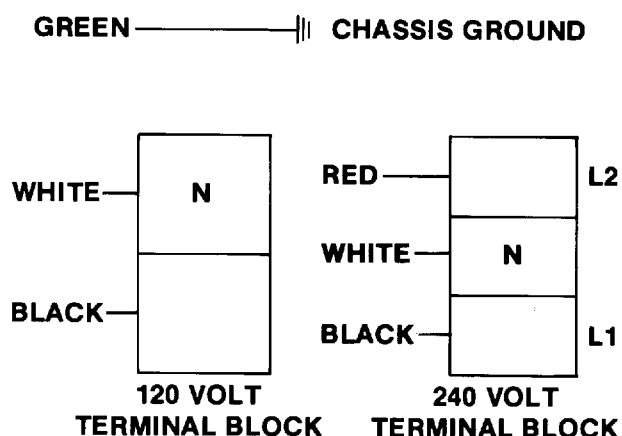


TROUBLE SHOOTING GUIDE
MODELS CTA & F, CWA & F, DTA & F, DWA, DWAF

SYMPTOM	POSSIBLE CAUSE	WHAT TO CHECK	REMEDY
CANNOT START BREW CYCLE	<ol style="list-style-type: none"> 1. No Water. 2. No Power. 3. Brew Start Switch. 4. Loose connections in harness. 5. Timer 6. Solenoid Valve (C & D) 7. Flow Control (C & D) 	<ol style="list-style-type: none"> 1. Incoming water lines and water shut off valve. 2. Cord set and plug connections. Fuse or circuit breaker. 3. Switch Continuity (Normally open) 4. Plug and socket connections between harness and timer, and terminals to solenoid. 5. Solid State timer, check and see if timer is energizing. Depress start switch, check and see if 110 volt present at solenoid coil. Gray and white wire. 6. (A) Voltage at solenoid valve terminals. Start a brew cycle and 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 the solenoid valve. 7. Water pressure at outlet of flow control. 	<ol style="list-style-type: none"> 1. Be sure water shut off valve is open. 2. Check voltage at terminal blkck. Refer to "Electrician's Installation Instructions" for correct voltage. 3. If start switch does not make and break contact, replace start switch. 4. Be sure these connections are tight. 5. If voltage is present to timer, but not solenoid, replace timer. 6. (A) If voltage is not present at terminals refer to steps 2 thru 6. (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 valve P/N 100250. 7. If water pressure is present at outlet of solenoid but not at outlet of flow control, clean or replace flow control.
NO HOT WATER	<ol style="list-style-type: none"> 1. Tank heater. 2. Limit Thermostat or Control Thermostat 	<ol style="list-style-type: none"> 1. Check the voltage at the tank heater terminals with control thermostat knob in the fully clockwise position. Model C. Model D Check voltage at tank heater terminal, with control thermostat fully counter clockwise. 2. With control thermostat turned on, check the voltage between the tank heater terminal (white wire) and the incoming terminal on the limit thermostat (black wire), then the outgoing terminal on the limit thermostat (black wire). Voltage should be 110 Volt or 240 Volt. 	<ol style="list-style-type: none"> 1. (A) If correct voltage is present at the tank heater terminals and 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, refer to "Electrician's Installation Instructions." 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 (black wire) on the control thermostat, but not on the outgoing terminal (black wire), replace control thermostat.
STEAMING OR SPITTING AROUND FUNNEL	<ol style="list-style-type: none"> 1. Control thermostat. 2. High altitude. 	<ol style="list-style-type: none"> 1. Thermostat points stuck or out of calibration. 2. For altitudes above 5000 ft. see initial operation. 	<ol style="list-style-type: none"> 1. Thermostat should be calibrated or replaced.
DRIPPING CAF & DAF Only	<ol style="list-style-type: none"> 1. Not Siphoning properly. 2. Solenoid valve not seating properly. 3. Faucet coil is leaking. 	<ol style="list-style-type: none"> 1. Water should flow from sprayhead for approximately 20 seconds after timer shuts off. 2. Solenoid valve assembly. 3. Check fittings in hot water tank which holds hot water coil to bulk-head fittings. 	<ol style="list-style-type: none"> 1. (A) Clean sprayhead holes. (B) Check tightness of spray head tube. (C) Insert deliming spring in water tube all the way into tank and saw back and forth five or six times. 2. Be sure spring is in place and any particles are cleaned from valve seat. If valve seat is worn or mutilated replace solenoid valve. 3. Lower level in tank, check fitting to see if there is a small leak. Tighten fittings. If fittings do not stop leaking, replace coil.
WATER KEEPS RUNNING (brewer won't shut off electrically)	<ol style="list-style-type: none"> 1. Solenoid Valve 2. Timer 3. Start Switch. 	<ol style="list-style-type: none"> 1. Refer to "Dripping" section, step 2. 2. Water runs when brewer is plugged in. 3. Switch continuity. 	<ol style="list-style-type: none"> 1. Refer to "Dripping" section, step 2. 2. Replace Timer. 3. If start switch does not make and break contact, switch should be replaced.
IRREGULAR YIELD OR FLUCTUATING DECANTER VOLUME	<ol style="list-style-type: none"> 1. Not siphoning properly. 2. Timer 3. Fluctuating water pressure 	<ol style="list-style-type: none"> 1. Refer to "Dripping" section, step 1. 2. Timer consistency. Check timer consistency several times with a watch or clock - (should be 90-135 seconds). 3. Check water pressures. 	<ol style="list-style-type: none"> 1. Refer to "Dripping" section, step 1. 2. If times are irregular, timer should be replaced. 3. If pressure fluctuates 10-20 PSI during operation of brew cycle, add a pressure regulator (P/N 100093) to inlet side of brewer. Set regulator pressure at lowest pressure level registered. Readjust timer to give correct water level.

SYMPTOM	POSSIBLE CAUSE	WHAT TO CHECK	REMEDY
IRREGULAR YIELD OR FLUCTUATING DECANTER VOLUME (Continued)	4. Receiving decanter not completely empty when brew cycle is started. 5. Solenoid valve. 6. Flow washer.	4. Personnel operating machine. Follow operating and brewing procedure. 5. Refer to "Dripping" section, step 2. 6. Flow washer.	4. Always start brew cycle with receiving decanter empty. 5. Refer to "Dripping" section, step 2. 6. Clean flow washers of any particles that may partially or intermittently clog orifice. Replace if necessary.
C & D FAUCET ONLY	7. Overfill; first decanter in morning. 8. Strainer.	7. Check coil assembly for possible leak. 8. Water pressure at out put of strainer.	7. Retighten fittings on coil or replace coil. 8. If pressure is low clean or replace strainer.
WARMER PLATES RED HOT-OR SOLENOID COIL SMOKING-OR WATER IN TANK HEATS EXCESSIVELY FAST.	1. Brewer wired to wrong voltage.	1. Voltage at terminal block.	1. Refer to "Electrician's Installation Instructions" for correct voltage and correct as necessary.
DRY COFFEE REMAINING IN BREW FUNNEL AFTER BREW CYCLE HAS BEEN COMPLETED.	1. Filters. 2. Not siphoning properly. 3. Improper loading of brew basket.	1. Check if correct filters are being used. 2. Refer to "Dripping" section, step 1. 3. Filter and coffee in brew basket.	1. Insert correct filter. 2. Refer to "Dripping" section, step 1. 3. Filter should be centered in funnel and coffee bed should be level.
WEAK COFFEE	1. Filters. 2. Water temperature too low. 3. Not siphoning properly. 4. Improper loading of funnel. 5. Missing sprayhead.	1. Check if correct filters are being used. 2. Check water temperature. Refer to "Initial" Operation Instructions" 3. Refer to "Dripping" section, step 1. 4. Filter and coffee in funnel. 5. Check for sprayhead.	1. Insert correct filter. 2. Adjust control thermostat knob clockwise to a higher setting. 3. Refer to "Dripping" section, step 1. 4. Filters should be centered in funnel and coffee bed should be level. 5. Install sprayhead.
SOLENOID CHATTER OR HOWLING	1. Brewer connected to hot water line. 2. Vibration. 3. High water pressure. 4. Water hammer.	1. Incoming water line. 2. If brewer is on a metal stand or counter, check to see that neither bottom pan nor copper tubing to brewer is touching counter. 3. Water pressure on incoming line. 4. Incoming plumbing.	1. Brewer should be connected to Cold water line. 2. Adjust as necessary. 3. If water pressure is over 90 PSI install pressure regulator and adjust to 50 PSI. 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.
RC2AF and RD3AF ONLY	5. 60 Cycle vibration.	5. Check tightness of the nut on the top of the solenoid valve.	5. Tighten nut on top of solenoid valve.
COLD WARMER	1. Warmer - defective. 2. Warmer On-Off Switch. 3. Bad harness.	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.	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.
CONDENSATION INSIDE OF CABINET.	1. Receiving pan gasket broken or cut. 2. Water thermostat above 210°.	1. Check receiving pan gasket for nicks or cuts. 2. Check thermostat calibration.	1. Replace gasket. 2. Calibrate or replace thermostat.
FAUCET WATER FLOW TOO FAST OR TOO SLOW.	1. No water. 2. Slow flow. 3. Fast flow.	1. a. Incoming water line shut-off valve. b. Faucet needle valve. c. Faucet. 2. Turn faucet needle valve counter clockwise. 3. Turn faucet needle valve clockwise.	1. a. Check water shut-off valve, should be open. b. Check needle valve, should be open. c. Check faucet for clogging. 2. Increase flow. 3. Decrease flow.
FAUCET DRIPPING	1. Clogged valve seat.	1. Valve seat.	1. Disassemble and clean, or replace as necessary.

ELECTRICIAN'S INSTALLATION INSTRUCTIONS



ELECTRICAL REQUIREMENTS

CT-2A, 3A, 2AF, 3AF	120v	1800 watts	15 amp
CT-2A, 3A, 2AF, 3AF	240v	3550 watts	20 amp
CW-2A, CW-2AF	120v	1650 watts	15 amps
CW-3A, CW-3AF	120v	1750 watts	15 amp
CW-3A, CW-3AF	240v	3850 watts	20 amp
DT-2A, 4A, 6A, 6AF	120v	1800 watts	15 amp
DT-2A, 4A, 6A, 6AF	240v	5600 watts	30 amp
DW-2A, 2AF	120v	1600 watts	15 amp
DW-4A, 4AF	120v	1800 watts	15 amp
DW-6A, 6AF	120v	2400 watts	20 amp
DW-2A, 2AF	240v	5800 watts	30 amp
DW-4A, 4AF	240v	6000 watts	30 amp
DW-6A, 6AF	240v	6200 watts	30 amp

1. Electrician must provide the outlet, plug to match, and a suitable length of cord or armored cable if not supplied. (Attached power supply cord provided.)
2. Power is to be left OFF throughout installation.
3. After service is connected, test voltage on the field wired side with a voltmeter. Voltage should be 120 volts A.C. or 240 volts A.C. as prescribed on the serial tag.

WARNING: Chassis must be properly grounded to prevent possible shock hazard. On cord connected models with grounding lead provided, if an adaptive plug must be used, an electrical ground must be provided. Do not assume a plumbing line will provide such a ground.

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 from 1/2" or larger water line. For more than a 25 ft. run, use 3/8" copper tubing from 1/2" or larger water line, and provide an adapter fitting for connection to the brewer.
3. Connect incoming water line to the incoming male fitting on the back of brewer. Note: RC2AF & RD3AF **must be connected to copper tubing.**
4. On Model CF & DF Brewers: Operate and flush faucet after turning on water. Faucet will dispense water when handle is depressed. No Electricity is necessary. Water flow from faucet can be adjusted to desired flow rate. To increase the flow of water, turn the faucet shut-off valve clockwise.

A SHUT OFF VALVE SHOULD BE INSTALLED ON THE INCOMING WATER LINE IN A CONVENIENT LOCATION.

NOTE: The National Sanitation Foundation requests a provision be made in the incoming water line for flexibility. This is necessary to allow tilting or moving the brewer for proper cleaning underneath, etc. A tightly coiled length of copper tubing located ahead of the water strainer would help comply with this request.

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 of 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.

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.

NEWCO

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